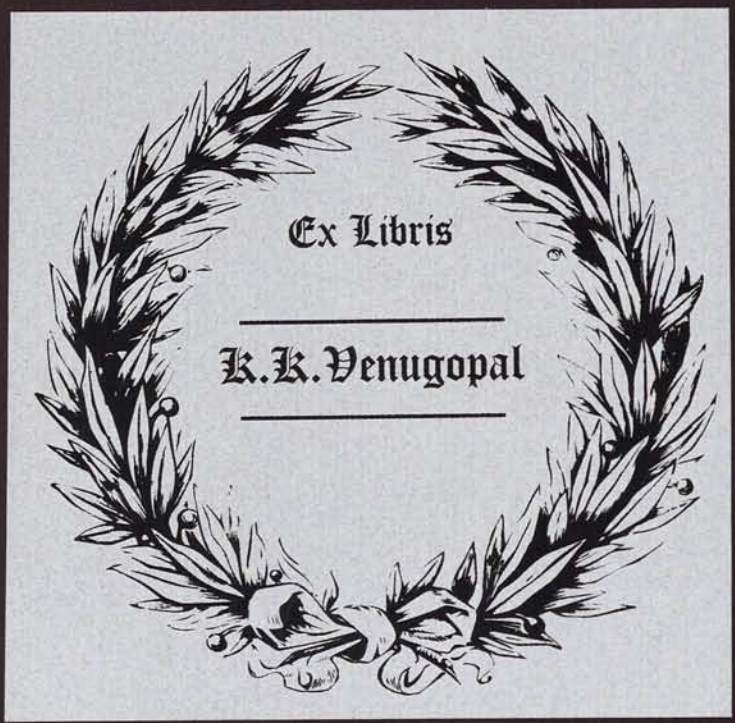
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K.K.Venugopal

A Map of the World by John Speed, 1626

By Courtesy of the British Museum

THE NEW PICTORIAL ATLAS OF THE WORLD

With an Introduction
Encyclopædia of Geographical Terms
Panorama of the World in Photogravure
and Gazetteer Index

THE TIMES OF INDIA
BOMBAY AND CALCUTTA

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MAP SECTION

GENERAL

EUROPE

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The Use of an Atlas

PROBABLY in no direction has culture widened more in recent years than in the use and appreciation of maps. Even in a community of size, a hundred years or so ago an Atlas might probably be found only on the shelves of the Parson and the Squire, and it is doubtful whether the latter would not have had to borrow from the former in case of necessity. True, in those days such necessity would very rarely arise, and the interests of the average man were bounded by his parish or, at most, by his county; travel was the privilege of the very few, and anyone or anything from "foreign parts" was looked upon with suspicion mingled with contempt.

Nowadays, when the ether and the submarine cable are charged night and day with messages of events abroad, "from China to Peru," when almost daily we read of new States arising, new bridges being built and new tunnels pierced, or, unfortunately, a new war being imminent, an up-to-date Atlas of the World becomes an absolute necessity if the various happenings are to be studied with intelligence. Not that an Atlas is a mere pendant to the written word—it is in itself the key to untold instruction and entertainment.

An amusing speculation is to decide what books, assuming one were limited to three only, it would be most desirable to possess upon a desert island. The usual selection includes the Bible and a complete volume of Shakespeare's works, but there is great divergence of choice in regard to the third, ranging from "Pilgrim's Progress" to an illustrated stores catalogue! The man of intelligence and imagination would probably include an Atlas, since every map is a picture and story in one, and here he could turn to his own country and revisit in retrospect the scenes, whose names sound to the exile like a chime of bells!—The Cotswolds, Llanberis, the Weald of Kent, the Broads, the "babbling Wye" . . .

But let us leave our friend on the desert island for a more representative member of the public, one who can use his Atlas as a fireside companion.

In retrospect or as a guide to joys to come it is essential, and it must be a *World Atlas* now, where a few years ago some road maps and guides would have sufficed. For nowadays, thanks to the vogue for cruising, we are all travellers—the man sitting at lunch at the next table to you in the city restaurant sat at the next table to you in Algiers (was it?) last September.

Our Changing World

Planning holidays and re-enacting past experiences is a delightful occupation, but it is in the everyday assistance it renders in amplifying and illustrating the puzzling paragraphs which appear in our newspapers from day to day that the Atlas is so absolutely indispensable nowadays. A new State, "puppet" or permanent time alone will show, has appeared in the news recently—Manchukuo, Japan has named it and sponsored its independence, although it is only the province of Manchuria (the home of the ruling Manchu house in China for many generations) given a new name. Reference to an Atlas at once shows, however, what an enormously important keystone in Japan's scheme of things this "State" forms, and here events take place affecting the future of at least two countries.

Stretching from the Pacific to the shores of the Baltic, that inscrutable Goliath, Soviet Russia, turns uneasily in attempting to organise an industrial future, the outcome of which can at present be only dimly foreseen, but the new towns such as Magnitogorsk, with its immense steel plants, and Dnieprostroy, where the gigantic hydro-electric scheme has been installed, will be found in the Atlas; a convincing proof that progress has undoubtedly been made.

In other directions Russia has kept cartographers busy by renaming the towns—in some cases more than once—where the older form of name suggested the old Tzarist regime. Turkey, too, guided by the Ghazi Kemal Pasha, has taken a hand in fostering

national sentiment by changing names to the purely Turkish form—gone is Constantinople and become Istanbul, and Izmir usurps the place of Smyrna, while further east Persia becomes Iran. Central Europe in particular is a welter of such changes, owing to the new "national" frontiers traced as a sequel to the war, but this is a matter for study in itself.

Not so many people realise that no fewer than four Scottish Counties have changed their names during the last few years, but such is the case, while Ireland, in addition to changing a large number of established spellings, aims further at re-introducing the old Celtic script.

Mention of Ireland reminds one of the hydro-electric scheme, based upon Ardnacrusha near Limerick, from which great benefits are expected, while the "Electric Grid" which is to cover England and Wales, and whose gigantic pylons already take form, is mapped for the first time in this Atlas.

Upon other pages the progress made in the electrification of British railways is portrayed—a story of surprisingly slow development (except in the case of the Southern Railway) compared with the record of several other European countries, but here the explanation is simple : the lack of the source of hydro-electric power, the mountain torrent.

Some Popular Misconceptions

Apart from the mine of information that an Atlas contains, its study acts as a very useful corrective to many preconceived ideas, and with the use of a pair of compasses and the scales upon the maps some quite surprising facts are brought to light. It astonishes most people to learn that Edinburgh is further west than Bristol, but such is the case. We are so accustomed to consider the journey to Scotland as trending due north that we overlook the westerly direction even of the "East Coast" route.

Again, many of us thinking of sailing to New York in a vaguely westerly direction imagine that city roughly to be in the latitude of Liverpool or Southampton; actually it is about as far south as Naples, and realising that fact one can understand and appreciate the colourful literature of the American metropolis much more readily. New York has nothing to learn from India or elsewhere on the subject of "heat waves," and a visitor in August may well discover a "City of Dreadful Night."

Canada has nursed a grievance against Rudyard Kipling ever since he picturesquely described her as "Our Lady of the Snows"—she would surprise and attract visitors perhaps if she made it clear that her southern extremity (the Ontario peninsula) reaches as far south as Rome! True, if you sally forth in a northerly direction you *can* reach a point in the Dominion (the Boothia peninsula) where you are north of North itself—in other words, you have left the Magnetic North Pole to the south and the compass-needle swings in that direction! Tricky navigation if there were any needed round here, but the region is too remote for any settlement, and the Hudson Bay trapper and the Royal Canadian Mounted Police practically share a monopoly of the paradoxes that present themselves.

Near at hand we should, however, note the new "Hudson Bay Route" from Churchill, which it is hoped will provide a shortened outlet from the Western prairies for shipping their wheat during the short period of open navigation.

Time, Flight, and the Future

Nothing has caused such a new conception of "distance" (in the "time" sense) as recent developments in flying. We have grown to consider places as remote simply because channel-crossings have to be made, mountain barriers tunnelled, and so on; yet starting from Croydon by air you could reach Italian soil more quickly than you could reach Wick in Scotland! We are apt to forget that Britain is the sixth largest island in the World.

The study of a suitable World map will resolve some very interesting problems in connexion with "Time," and it is suggested that map 4–5 should be referred to as a suitable one. Amongst other features it indicates the Time in other parts of the World when noon at Greenwich, every 15° of longitude representing one hour of time until at 180°, in the Pacific Ocean, the full 12 hours are completed, and midday at Greenwich is midnight there.

Along this meridian of 180° has been traced the artificial boundary known as the "International Date Line," dividing one day from another, but a few divergencies have been made so as to throw one or two island groups definitely to one side or the other of the line, as obviously it would be commercially inconvenient to have two different times kept

within one group. Apart from these minor adjustments, it will be noted that this lonely region of the Pacific, occurring as it does exactly half-way round the globe from Greenwich, lends itself most admirably to such a purpose.

A curious position happens when a ship, travelling east or west, crosses this line; not only must a change of hour be made here, but also a change of day—otherwise ships' crews returning to England, say, after a voyage round the World, find themselves keeping a different day on their arrival from the date being kept by those who had stayed at home! So, in order to obviate this confusion, a ship travelling in an eastward direction *adds* a day to the calendar, while travelling in the opposite direction a day is *dropped*.

The speed achieved by modern aeroplanes has already reached approximately 440 miles per hour, and if (theoretically) an aeroplane could maintain such a speed uninterruptedly in the latitude of New York—Naples—Peking, it would complete the circuit of the globe in less than 48 hours.

Round the World in a Day?

440 miles per hour would have appeared fantastic twenty years ago, far more fantastic than a speed of 900 miles in 1950 appears to us to-day. But, when an aeroplane does reach for such a period those latter figures, strange things will begin to happen. First of all it will be possible to fly *round the World in 24 hours*. If you leave Naples, say, at noon and travel westward you can "hold" the sun in the noontide sky throughout the journey, having followed it round the World. It will be "noon" when you start, and noon when you land, but noon of another day—also it will be "noon" at every hour of your flight!

Should such a speed be exceeded, and flight started westward at sunset, the "setting" sun will rise up to meet you travelling itself apparently eastward—indeed, you may leave at 6 P.M. solar time and arrive back at the same place quite possibly at 4 P.M. solar time; in other words, you have "travelled" faster than the sun!

Future Development of Air Travel

Intelligent study of maps will indicate along what lines the future development of Air Travel is most likely to take place, particularly those maps upon which the principal services already operating upon a commercial basis are shown. In the first place, long-distance flights are the justification for air-travel as against that by rail and sea, and in this respect the British Isles, owing to its limited size and the highly developed network of its railway system, offers rather a poor field—the possible time-saving over such comparatively short distances being relatively only slight. Edinburgh, Glasgow and Belfast are, however, already connected with London by air, and also a service linking Great Britain and Dublin, avoiding the inconvenience of transhipment.

The North Atlantic, already spanned during the summer months by German airship, is shortly to be flown throughout the year by powerful seaplanes. Europe is in regular communication with South America, while India, Malaya, Australia, South and West Africa, are all linked up with the Mother Country, and in the Pacific, the United States have inaugurated an experimental service from San Francisco via Honolulu, Midway Island and Guam, to the Philippines. In the future, long-distance flights will make more and more use of the "great circle"—that is, the shortest distance between any two points over the curve of the globe.

Maps and World Politics

Perhaps it is in connexion with the study of World Politics (which we are now painfully aware affect each one of us) that the Atlas proves itself to be the most indispensable book of reference we can have on our shelves to-day, and it may be of interest to glance at the regions which are most likely to claim attention during the next few years.

While we are still constantly encountering references in the Press to the "Polish Corridor," how few of us really understand the implications of this curiously-named strip of land, or why the question it raises should hover like a storm-cloud over Central Europe. And it is not only the miner or agriculturalist in Poland, nor the miner or agriculturalist in Prussia whose interests and future are involved in the question of the "Corridor"; it affects

also the cotton spinner in Lancashire and the London clerk—in short, it affects the whole of civilisation. So it is well worth our while to turn to the Atlas and to attempt to envisage (as maps alone will enable us to do) what this " Corridor " is, and why, all these years after the Treaty of Versailles was signed, it still appears to threaten the future peace of Europe. If we turn to the map of Germany (40–41) we find, apart from the map of Germany as it is to-day, there is a small inset map showing the limits of the country prior to the outbreak of war in 1914. Apart from minor areas (which will be referred to later), it will be noted that Germany's principal losses in territory—ignoring her Colonies—have been in the extreme south-west (Alsace and Lorraine) and on her eastern or Polish frontier, where not only Posen and much of West Prussia were allotted to Poland, but East Prussia was isolated from the rest of Germany. This narrow neck of land, dismembering Germany, is the so-called " Polish Corridor," its purpose being, of course, to give Poland, through her own territory entirely, an outlet to the sea, but the result so far seems to be proving a temporary and unsatisfactory solution to an almost insoluble problem.

First of all, we must consider the circumstances out of which Poland's claim to such an outlet came to be upheld when the fateful treaties were signed, not overlooking the fact that in the seventeenth century the then Kingdom of Poland included the Baltic coastlines of the present-day states of Latvia and Lithuania, as well as the narrow strip west of Danzig now known as the " Corridor." Since those days, however, Poland's sun has been until recently in eclipse, and by the successive partitions which she suffered at the hands of Russia, Prussia, and Austria-Hungary she shrank to the limits shown in the inset map on pages 42–43, and to a state of mere vassalage to Russia. But the feeling of nationalism never expired, and thousands of Poles outside Russian territory looked to the day when a " re-united " and consolidated Poland should again arise and take her place in the comity of Europe. Now there are within her extended boundaries over 30 millions of people, increasing in numbers more rapidly than any other European race.

The Versailles Treaty and the Future

So much for Poland's claim, and it would be unjust to condemn her feelings of triumph at such a great part of her dream thus having been realised as a result of the Great War ; but what Poland failed to realise was that her aggrandisement was not entirely altruistic on the part of the treaty-makers, an overwhelming element amongst whom favoured any solution which served permanently to weaken Germany and at the same time provided a buffer against possible irruptions westward of Soviet Russia. But, following the old-established technique of treaty-making, the victors could do no wrong and the vanquished could do nothing right—Germany having to pay the penalties of being numbered among the latter. She had always envisaged herself as Europe's eastern bulwark against the advance of Slavdom, and here not only had she to relinquish that rôle, but found her own territory handed over to Polish Slavs. Admittedly this territory contained large elements of Polish stock, but the principle of " self-determination of Nations " was not carried out ; no plebiscite as to the inhabitants' wishes being taken, as in the smaller instances of Marienwerder and Allenstein, where an overwhelming majority voted for retention within the boundaries of Germany. The loss of Alsace and Lorraine was accepted by the vanquished almost as a natural corollary to her defeat, and acquiescence in this settlement was ratified explicitly by Germany's adhesion to the Locarno Pact.

But bitter and undiminished resentment is still felt regarding the partition of Eastern Prussia, and her constricted eastern frontier, so much so that no German leader statesman has dared to bind his country down to accept the provisions of the Treaty Versailles relating to them as inviolable. So time passes, and Poland " digs herself in " at Gdynia, the new port which she has constructed west of the Free Territory of Danzig (itself under the control of the League of Nations), while Germany sets her teeth and hopes sooner or later for the rehabilitation of her cherished eastern provinces.

France and some of her late Allies still favour the sacrosanctity of at least the territorial clauses of the Treaty, but, now that so much of its fabric has been demolished, he would be bold indeed who prophesied finality for the map of Europe as it is to-day. Whatever the outcome may be, this illustration serves to demonstrate how necessary an Atlas is for the intelligent study of only one problem. Lord Salisbury, when Prime Minister, is reported to have said, " Study large-scale maps," and who shall say how much we are dependent upon advice of this kind for our Empire of to-day ? Another Minister of the nineteenth century, on his appointment to the Colonial Office, turned to his subordinates and, pointing to a map of the World, said : " Now which are these d——d Colonies of ours ? " The name of one Minister lives ; that of the other is dead—or mercifully suppressed !

Further Work for the Cartographer?

Before, however, finally leaving the subject of international boundaries, it might be well to glance at a few other regions where there are countries not entirely satisfied with the shape and size allotted to them either by treaties in the past or by the popular interpretation of affairs as shown upon current maps.

In Europe itself Germany is not the only country dissatisfied with its present frontiers, and one of the unsettled disputes is concerned with the southern boundary of Lithuania, which on map 42-43 is shown as following the lines recommended by the Council of Ambassadors but not as accepted by Lithuania, who actually claims Vilna (Wilno) as her capital, although it lies well within the area at present occupied by Poland.

Hungary (see map 46-47 and inset) finds herself restricted by the Treaty of Trianon within boundaries which exclude many of her nationals, who are themselves now reckoned as inhabitants of Czechoslovakia, Yugoslavia, and Rumania. A feeling that he has been unjustly treated in this matter smoulders unquenched in the Magyar (Hungarian) heart, and this is another problem that will require sympathetic adjustment sooner or later if stability is to be assured.

Rumania has been rather embarrassed by the accessions of territory which she received on all sides as a result of the various Treaties. Not only are there the discontented groups of Magyars along her north-western margins, but entirely detached " colonies " of them in Transylvania, while on her eastern flank Russia has never accepted Rumania's right to Bessarabia.

Although no question of dispute arises out of it, it is a curious fact that, owing to the internal re-organisation of Soviet Russia there is no longer any actual political frontier to " Europe " as a Continent, between the Caspian Sea and the Arctic Ocean, for Russia's political subdivisions, such as the " Ural Area," etc., lie astride the old boundary, and the Ural Mountains, themselves but an unimportant physical feature in height, are the only sign of a division between Europe and Asia.

The little area known as the Saar Basin (map 36-37), coveted because of its important iron and coal deposits, was by the Treaty of Versailles placed under the control of the League of Nations, the mines meanwhile being worked for the benefit of France. Originally a part of Germany, a plebiscite was taken in January 1935, when by an overwhelming majority the population decided again to throw in their lot with the Reich.

South America is the continent where there are the largest areas whose final allocation still gives rise to sporadic disputes or occasionally even more active hostilities. There is a region where Colombia, Peru and Ecuador meet, still largely unorganised and likely to be for some time to come, for while fairly recently the frontier as shown upon the maps was agreed upon by the two former States, Ecuador accepts nothing of this, and claims a large extension of her territory eastward. Meanwhile there is frequently guerrilla fighting by outposts in the area where the boundaries of Colombia and Peru adjoin Brazil, struggles which the latter State naturally watches with interest. Here the country is almost impassable "jungle," and the organisation of warfare or of a peaceful settlement appear to present equal difficulties. Bolivia, cut off entirely from the sea, desires ardently a port upon the Pacific, to which she has herself built a railway terminating at Arica ; but the likelihood of this dream materialising seems to have been rendered more remote by the recent understanding arrived at by Peru and Chile regarding their own " Tacna-Arica " dispute.

In another direction there lies upon the margins of Argentina, Bolivia and Paraguay a disputed " No-man's-land " known as the Gran Chaco, a zone of virgin sandy grassland containing much of the valuable quebracho wood. Bolivia and Paraguay have never agreed definitely as to the ownership of this extensive tract, and quite recently there have been clashes between the troops of the two countries.

The most important changes in Africa concern Abyssinia (Ethiopia), where certain political boundaries have disappeared, and others will require more definite demarcation.

In the troubled Far East of Asia we have already glanced at the position of the new State of Manchukuo, but apart from that troublous region Asiatic boundaries appear to be reasonably stable, although the realm of Ibn Saud, now known as Saudi Arabia, will no doubt be more exactly defined later on.

Early Maps and Geographical Discoveries

The very first "maps" of all were probably mental images of his environment formed by prehistoric man, which together with his "homing" instinct, no doubt highly developed, enabled him to find his way about within a certain narrow circle, but unless he were nomadic and "lived on the land," largely indifferent to where he slept, his wanderings must have been confined to a very restricted area. True, if he lived in the tropics, he could not in time fail to notice that the sun rose and set always in almost exactly the same spot, and in any case that certain constellations wheeled round an immovable point, so that he was not without "sky-marks" as well as landmarks, should he desire to wander further afield. Probably some savage felt the urge to put on record one of his journeys, or to direct another how to reach a certain place, and with a flint upon the wall of a cave, or a stick pressed into the sand, the first map was drawn.

The Egyptians were the first civilised race of antiquity whose geographical knowledge reached beyond the bounds of their own country, and commencing with the survey of the river Nile, and a computation of its seasonal rise, their horizon extended eventually so as to embrace at least the greater part of the Mediterranean.

The Phoenicians with their strong commercial instincts were the first "merchant adventurers," trading as far afield in one direction as India and Ceylon, and westward through the Pillars of Hercules (Strait of Gibraltar) to the Cassiterides or Tin Islands (Great Britain) in the north and the Crocodile River (Senegal) to the south.

The Greeks were, however, of all the peoples of antiquity most instrumental in widening the geographical horizon; Homer himself being regarded by some as the father of geography.

The first attempt at a map of the World was probably that of Anaximander of Miletus (610-547 B.C.), who is also credited with having first put forward the theory of the Earth's rotundity.

Herodotus, whose historical writings added much to the fund of geographical knowledge, flourished in the middle of the fifth century B.C., and was himself a great traveller, having visited Asia Minor, Persia, the shores of the Black Sea, and penetrated Egypt as far as Assuan.

Pytheas of Massilia, in the fourth century B.C., pushed back still further the veil of darkness towards the north, voyaging to and describing the coasts of Iberia, France, and Britain as far north as the Shetland Isles, then turning eastward to the Baltic where the much-prized amber was found. He noted the high tides in the North Sea and how, near the Arctic Circle, the sun in summer never sank beneath the horizon, while further north still he described "land and water as not separated, but an admixture of each other," probably owing to encounters with ice-floes.

Alexander the Great, through his military expeditions, added much to current geographical knowledge of south-western Asia, and brought India, with its then apparently boundless riches, within the scope of western enterprise, while The Ptolemies of Egypt preserved and fostered at Alexandria the culture of the Greeks.

Eratosthenes of Cyrene (born 276 B.C.) was for over forty years the custodian of the Alexandrian library, and he it is who may definitely be described as the founder of scientific geography, through his measurement of a "degree," which he arrived at by solar observations between Syene in Upper Egypt and Alexandria, finally computing the circumference of the earth (correctly assumed by him to be spherical) at the amazingly close figure of 25,000 geographical miles, as against the actual measurement of 24,860 miles.

The Romans contributed relatively little to the art of map-making, their chief contribution, the "Peutinger Table," being, strictly speaking, not so much a map as a diagram of the stations and distances measured along their military roads and to the coasts.

Ptolemy (A.D. 150) is perhaps the greatest name in the annals of ancient geography, and in the eight books which constituted his life-work he provided a detailed list of places with their latitudes and longitudes, forming the first Atlas-Index, from which it is possible to reconstruct the Greek conception of the size and shape of the world as known in those days. His map of the World will be found reproduced on plate 2-3 with the correct outline of the Eastern hemisphere superimposed in grey—there being in those days, of course, no suspicion that a great western continent existed. In this map it will be noted that while the outlines of Europe and south-western Asia—apart from displacement—are fairly accurate, the Indian Ocean is enclosed to the south by a large Antarctic continent, of which Africa and Asia form only extensions.

From the Middle Ages Onward

In the Middle Ages the art of cartography, in common with progressive culture in other directions, stagnated, or actually declined through falling into monkish rather than scientific hands, and the conception of the Earth as a flat disc was revived. With an outlook unfortunately characteristic of his period, one monk wrote : " What would it profit my Salvation if I were to discover the sources of the Nile, or knew what the doctors were raving about the heavens ? " Maps meanwhile degenerated into the crudest diagrams, innocent of projection or any attempt at accurate delineation, and the so-called " Wheel " maps came into use. A fair representative of this type of map can be made by placing a capital T within an O. These maps all showed the East at the top, and the cross-stroke of the T stood for the Don and the Nile, while the down stroke represented the Mediterranean, respectively dividing Europe, Asia and Africa from each other. Jerusalem lay at the centre, Paradise at the top, Gog and Magog in the far North ; the ocean completely encircling the whole.

The Arabs meanwhile, mainly through their conquests, were extending the geographical horizon, and it will be noted that in the map of *Edrisi*, A.D. 1154 (see plate 2-3) the Greek conception is closely adhered to, and in some respects slightly improved upon, although geographers remained obsessed by the idea of a vast continent to the south.

The Vikings and Northmen were about this period pursuing their meteoric career in an entirely different direction. Conquerors or discoverers of England, Normandy and Sicily, Iceland and Greenland (the last-named being settled by Eric the Red in the tenth century), these intrepid mariners actually discovered America 500 years before Columbus, when Bjorn, sailing to Greenland, was driven far to the south and west, where he discovered an ice-free and wooded coast.

The Portolani Maps (or Compass Charts) of this period issued from Venice are admirable examples of draughtsmanship and accuracy for coastal voyages, and embody for the first time the use of the compass, derived originally from the Chinese, and adapted by the Arabs for navigation. Perhaps the most famous of these is that known as the *Catalan* map.

The world map of *Fra Mauro* (1459), also a Venetian, which is reproduced on plate 2-3, embodies these discoveries and shows a general advance on earlier maps, particularly along its margins.

Behaim's Globe, dated 1492 (see plate 2-3), is of the greatest interest, showing as it does the configuration of the various land masses as they were thought to be on the eve of the most momentous and brilliant era of exploration, initiated by Columbus in the same year. On it are shown the fabulous islands of the Western Ocean and the eastern coasts of Cathay and Cipango (Japan), which Columbus confused with the new-found American continent. Space unfortunately will admit of little more than a summary of some of the intrepid navigators and explorers who from now on broke into the unknown and added to geographical knowledge year by year during this " golden age " of discovery.

The "Golden Age" of Discovery

Christopher Columbus (a Genoese) is perhaps the most famous of all, and his discovery of the New World in 1492, when searching for a westerly route to the Indies, was probably more far-reaching in its effects than any other.

Bartholomew Diaz was the first to reach the Cape of Good Hope, sailing from Portugal in 1486.

Vasco da Gama, another Portuguese navigator (1460-1524), discovered the sea route to India in 1498 by doubling the Cape of Good Hope.

Sebastian Cabot, born at Bristol in 1477, rediscovered Labrador in 1497 and surveyed nearly two thousand miles of the American coast.

Amerigo Vespucci, an Italian (1451–1512), in 1500 explored the American coast as far south as latitude 25° S., but his chief claim to fame is that his name was given to the whole of the New World.

Ferdinand Magellan, a Portuguese (1470-1521), set sail in 1519 westward with five ships and threading the tortuous strait named after him, traversed the Pacific, where in the Philippine Islands he was murdered. But one ship out of the original five eventually

reached Lisbon via the Cape of Good Hope, having completed the circuit of the globe, and, considering the attendant circumstances, probably the most wonderful voyage of all time.

Jacques Cartier, a Frenchman, about 1534 explored the gulf and river of St. Lawrence, leading to the French settlements in lower Canada, while from now onward numerous attempts were made to discover a "North-West" passage north of America, or a "North-East" passage, north of Euro-Asia, so as to provide an alternative route to the Spice Islands and the riches of the Indies. In this connexion the names of *Frobisher*, *Davis*, *Hudson*, *Baffin* and others will be found to-day inscribed upon the maps of sub-arctic Canada.

Sir Francis Drake is notable, apart from his privateering exploits, as being in 1577-1579 the first commander to circumnavigate the globe in his own ship.

Abel Tasman, the Dutchman, in 1642 discovered Van Diemen's Land (Tasmania), and Staaten Land (New Zealand), but earlier navigators, Torres, Quiros, Hirtog and others had already sighted points on the western and northern coasts of Australia. The sum total of their reports still, however, left undisturbed the theory that all formed part of a land-mass linked up with a huge antarctic continent.

Captain Cook, perhaps the most indefatigable of all navigators, was from 1768 onward instrumental in clearing up this error, by his survey of the New Zealand and east Australian coasts, while later he reduced the presumed area of Antartica by circumnavigating the ice-barrier, work in which *Bellinghausen*, *Weddell* and others also took part.

Cook's voyages extended from the Antarctic to Bering's Strait in the north, and his traverses of the Pacific (together with the discoveries of the Frenchman *La Perouse*, and others) revealed the existence of numerous island groups, but at the same time proved the non-existence of any extensive land in those regions.

So at this point it may be said that the sailor completed his task of exploration, although of course many minor details remained to be filled in, and to conclude this very brief summary of Geographical Discovery it remains now only to glance at the principal steps in the progress of *land* exploration, much of which entailed heroism as great, toil as arduous, and faith as unshakable, as did the perhaps more spectacular voyages of the mariners. In doing so it will be most convenient to deal with the continents separately, omitting Europe and Asia, which, as the centres of early civilisation, can scarcely be said to have been "discovered" in the same sense as were the two Americas, the dark heart of Africa, and, finally, Australia and the Polar Regions.

Exploration on Land

NORTH AMERICA

We have already noted how the Northmen, the Genoese, the Spaniards and others successively touched at various points of the North American mainland, but the subsequent internal exploration of the continent was so closely associated with its settlement (or in Mexico (Cortes) and Central America (sixteenth century) with conquest) that a surprisingly small number of actual "explorers'" names have survived.

Champlain (1607), with Quebec as a base, explored the lake country, while in 1673 another Frenchman, *Marquette*, discovered the Mississippi, and later *La Salle* explored a great part of its huge basin.

The emissaries of the Hudson Bay Company and other independent venturers later pressed forward into central and western Canada, and in 1793 *Mackenzie* crossed the continent from the Atlantic to the Pacific.

Lewis and *Clarke* between 1804 and 1807 explored the Missouri basin, and *Pike* investigated the country between the Mississippi and Red rivers, but from about this date onward each pioneer settler and railroad constructor helped in the "discovery" of the country, and the era of true exploration closed.

SOUTH AMERICA

The stories of fabulous wealth ("El Dorado") acted as an incentive to the first expeditions into the interior of South America, and *Francisco Pizarro* in 1531, through his conquest of Peru, with the almost incredibly small force of under 200 men, figures as an imposing pioneer. His brother, *Gonzales Pizarro*, eight years later, led an expedition

across the Andes and discovered the headwaters of the Amazon, which was navigated to its mouth by *Orellana* in 1541, a feat which inspired the unfortunate venture of *Sir Walter Raleigh* in the Guianas. The Portuguese meanwhile penetrated and settled Brazil at various points, but, scientifically speaking, the outstanding names in the annals of South American exploration occur later, when between 1797 and 1804 the German, *Humboldt*, travelled widely in the interior, followed by *Spix* and *Martius*, who explored Brazil in 1817-1820, and *Schomburg*, who later on explored the region of the Guianas.

AFRICA

The interior of the "Dark Continent" offered such a fascinating field for exploration that only a very incomplete list of those who helped to reveal its mysteries in relatively recent times can be inserted here. *Mungo Park* in 1795, and again in 1805, starting from Gambia, traced a considerable part of the Niger's course, but never reached its mouth, and *Denham* and *Clapperton*, in 1822, travelled in the same region, as did *Barth* in 1850.

Livingstone probably opened up to civilisation greater tracts than any other explorer. In his first expedition in 1849, starting from the Cape, he penetrated northward to the Zambesi and then westward to Loanda. Reversing his course, he traced the same river to its mouth, and later, in 1859, reached Lake Nyasa via the River Shire. Further expeditions were to Lakes Tanganyika and Bangweulu, but his failure to return in 1871 led to the expedition headed by *H. M. Stanley* being sent to his relief. He was found, but died at Ujiji two years later. A little earlier the Frenchman, *du Chaillu*, had travelled in Central Africa, and in 1858-1860 *Burton*, *Speke*, and *Grant* had between them discovered Lakes Tanganyika and Victoria. *Stanley*, in 1877-78, traced the entire length of the Congo, while the Portuguese, *Serpa Pinto*, twice subsequently traversed the continent.

It would, however, be invidious to close this short review without a mention at least of *René Caillé's* journey to Timbuctu in 1827, *Baker's* discovery of Lake Albert in 1864, and *Schweinfurth's* and *Nachtigall's* exploration of the southern Sudan and Lake Chad in 1869-1874.

AUSTRALIA

The hope of discovering an inland sea, or a fertile interior, prompted the first traverses of the great island-continent—a hope which proved only to be a chimera.

The Blue Mountains for long proved a barrier to progress from the east coast, but *Sturt* in 1828-31 succeeded in tracing the courses of the rivers Darling and Murray, and later on reached Central Australia.

In 1841 *Eyre* traversed the southern part of Western Australia, and in 1844 the German, *Leichhardt*, explored Southern Australia, but later on (1848) was lost in the interior.

Burke, in 1860, was the first to traverse the continent from south to north, followed by *MacDonnal Stuart* (in 1868-1874); while *Forrest* (1868-1874), *Giles* (1872-1876), *Warburton* (1873), and *Carnegie* (1897) are the other outstanding names in Australian exploration.

THE POLAR REGIONS

The following is a list of notable dates in the conquest of the Polar Regions (see plate 128) :—

NORTH POLE.

Year.	*Commander.*	*Latitude reached.*
1607	Henry Hudson	80° 23′
1806	Scoresby	81° 31′
1827	Sir W. E. Parry	82° 45′
1868	Baron Nordenskiold	81° 42′
1875	A. H. Markham	83° 20′
1893–5	Fridtjof Nansen	86° 14′
1897	S. A. Andrée (balloon)	83° 10′
1909	Admiral Peary	90° (the Pole).

SOUTH POLE.

Year.	*Commander.*	*Latitude reached.*
1774	Captain Cook	71° 10′
1823	J. Weddell	74° 15′
1839	Admiral Wilkes	70° 0′
1842	Captain J. C. Ross	78° 10′
1900	C. E. Borchgrevin	78° 50′
1902	Captain Scott	82° 17′
1909	Sir Ernest Shackleton	88° 23′
1911 (Dec.)	Roald Amundsen	90° (the Pole).
1912 (Jan.)	Captain Scott	" "

PRINCIPAL PIONEER FLIGHTS

Since man took to himself wings, it may be said that a new sphere of heroic rivalry has been opened up. Listed beneath are the principal Pioneer and Record Flights with dates, and in most cases the time occupied in each flight.

Date.	*Aviator.*	*Route.*	*Distance in miles.*	*Time.*
1909	L. Bleriot (F.)	Across the Channel	26	—
1910	L. Paulhan (F.)	London to Manchester	186	—
1919	Sir J. Alcock and Sir J. W. Brown ..	Newfoundland to Ireland ..	1,890	16 hrs. 12 mins.
1919	Sir Ross Smith and Sir Keith Smith ..	England to Australia	11,294	124 flying hours.
1925–6	Sir Alan Cobham	England to S. Africa and back..	17,000	175 flying hours.
1926	Commandante Franco (S.)	Spain to S. America	6,259	59½ flying hours.
1926	Lieut. Comm. R. E. Byrd (A.) ..	Spitsbergen to N. Pole and back	1,300	15¾ flying hours.
1926	Sir Alan Cobham	England to Australia and back..	28,000	230 flying hours.
1927	Capt. Lindbergh (A.)	New York to Paris	3,639	33½ flying hours.
1928	Bert Hinkler	England to Australia	10,340	15½ days.
1928	Koehl (G.), Hunefeld (G.), E. Fitzmaurice (I.).	Ireland to Labrador	2,300	36 hours.
1928	Capt. Kingsford Smith and companions	San Francisco to Sydney ..	7,300	79 flying hours.
1929	Squadron-Leader Jones-Williams and Lieut. N. H. Jenkins.	England to India (non-stop) ..	4,130	50½ hours.
1930	Miss Amy Johnson	England to Australia	9,960	19 days.
1930	Capt. Costes and M. Bellonte (F.) ..	Paris to New York	3,700	37 hrs. 17 mins.
1931	Boardman and Polando (A.)	New York to Istanbul	4,984	49 hours.
1931	J. A. Mollison	Australia to England	10,000	8 days 22½ hrs.
1932	C. W. A. Scott..	England to Australia	9,500	8 days 20¾ hrs.
1932	Miss Earhart (A.)	Newfoundland to Ireland ..	2,026	13½ hours.
1932	J. A. Mollison	Ireland to New Brunswick ..	2,600	30½ hours.
1932	Mrs. J. A. Mollison (Miss Amy Johnson)	England to Capetown	6,300	4 days 7 hrs.
1932	Mrs. J. A. Mollison „ „	Capetown to England	6,300	7 days 7 hrs.
1933	Squadron-Leader Gayford and Flight-Lieut. Nicholetts	England to Walvis Bay (non-stop)	5,341	57 hrs. 25 mins.
1933	J. A. Mollison	England to Natal (Brazil) ..	4,800	82 hrs. 8 mins.
1933	Codos and Rossi (F.)	New York to Rayak (Syria) (non-stop).	5,600	55 hours.
1933	Sir Charles Kingsford Smith.. ..	England to Australia	9,600	7 days 4¾ hours.
1933	Charles Ulm and companions ..	England to Australia	9,520	6 days 18 hours.
1934	Scott and Black	England to Melbourne	11,323	70 hrs. 54 mins.
1936	Scott and Guthrie	England to Johannesburg ..	6,150	52 hrs. 56 mins.

NOTE.—(A.) American, (F.) French, (G.) German, (I.) Irish, (S.) Spanish. All others British.

Map Projections

The map-maker is all the time attempting the impossible. The map he produces aims at being a correct picture in miniature of the whole or part of the Earth's surface, but, unfortunately for him, the Earth has a curved surface, whilst his representation must be upon a flat sheet of paper. (We are leaving out of consideration for the moment the geographical globe, to which these remarks do not apply.) Maps of very small areas, town plans, and similar productions do not present this difficulty, since the areas themselves are too small for the curvature of the globe to operate within their limits. Even maps of small countries, such as England and several other European States, can be mapped with fair accuracy, but larger countries and continents cover so much of the earth's curvature as to render their accurate representation upon a flat surface increasingly difficult.

What the curvature of the earth really means within the bounds of a small country such as England and Wales may perhaps be understood most clearly when it is realised that a point at *sea-level* in the centre of England stands four miles above a straight line (were it possible to draw one) from Berwick-on-Tweed to the south coast of England.

In the first place, all projections are based upon the globe being divided by 360 equidistant lines of longitude running from pole to pole, together with 180 lines (or parallels) of latitude, cutting them at right-angles and also equidistant, the centre one forming the Equator. This " projection " or " net " (or a portion of it) will be found upon all maps ; it is the framework or background upon which all maps are drawn, and as it has to be distorted when reproduced upon a flat surface, so the map itself—drawn to " fit " it—has to be distorted too. Examples of distortion will be found by comparing the shapes of the continents upon the " World in Hemispheres " (plate 2-3) with those upon the World map which follows it (plate 4-5).

In the former, drawn upon what is known as *Lambert's equal-area projection*, the

areas are relatively about correct, and distances can be measured accurately from the map centre, but *distortion* increases towards the margins of the maps.

In the latter, drawn upon *Gall's Cylindrical Projection*, the central zone (say from London in the north to Dunedin in the south) gives approximately correct outlines of individual areas, but the scale expands in an east-west direction increasingly the further one goes from the Equator, so that the distortion of areas such as Northern Asia, Canada, Alaska, and Greenland becomes very marked. An example of a map on *Mercator's Projection* follows ("The Atlantic Ocean," plate 6-7), and this well-known projection, having the advantage of preserving direction correctly throughout its area, is used for Marine charts and all navigational purposes. It suffers, however, from an exaggeration in scale in high latitudes to an even greater extent than does "Gall's"; and Greenland, for instance, which is actually only about one-eighth the size of South America, on this projection appears fully as large. For maps of limited area, simple or modified *Conical Projections* are used, so called because the map-maker imagines a paper cone to be placed over a transparent globe, with its sides resting on the middle parallel of the area to be depicted. From the centre of the transparent globe (which is marked with the lines of longitude and latitude described above), he would, by means of an internal light, see projected or thrown forward on the inner side of the cone, the "net" of lines covering the globe, and the cone on being opened out flat after these "lines" had been traced upon it would provide a conical projection of any portion of the globe's surface desired.

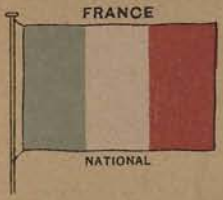
The great majority of maps in this Atlas are based upon some type or modification of a conical projection.

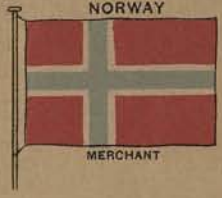
One other projection, not used in the body of the Atlas, but one which is coming increasingly into favour for portraying the World where *equality of area* is to be maintained, is known as "*Mollweide's.*" An example of this projection is utilised here to display Density of Population throughout the world, and it will be noted that it is elliptical in shape, the Equator forming the major axis, which is twice the minor (north-south) axis in length. Although the shapes are badly distorted around the margins (*e.g.*, New Zealand and Japan), it is an *equal area* projection, and on that account is admirable for world maps featuring the distribution of population, vegetation, products, etc., where the correct *shape* of the land masses is of little importance, but the fidelity to relative *size* is essential.

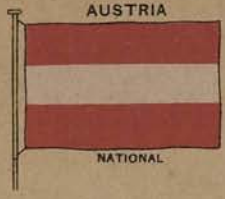
The Density of Population map given here is of interest, apart from the projection, showing clearly as it does the four great areas where the human race is most densely crowded, namely, China-Japan, India, Central and Western Europe, and to a smaller degree the Eastern United States. The large "empty" spaces in all the continents except Europe follow closely the barriers set by physical or climatic conditions.

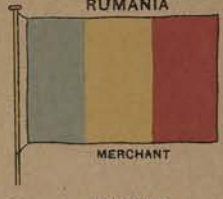
MOLLWEIDE'S PROJECTION

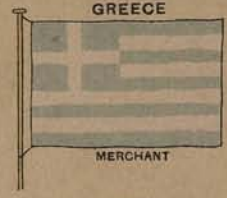
FLAGS OF FOREIGN COUNTRIES

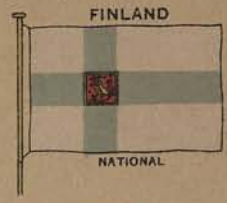


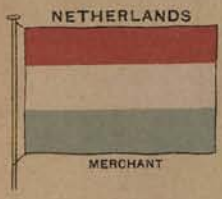


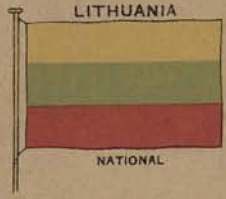


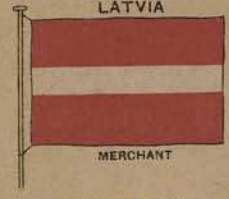


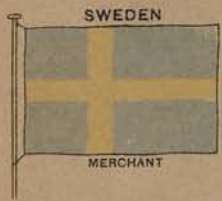


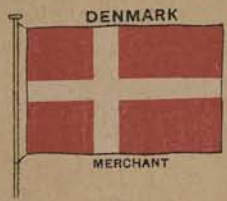


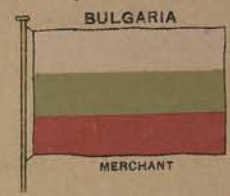


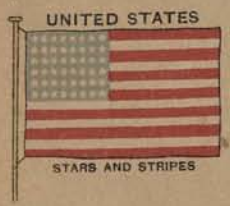


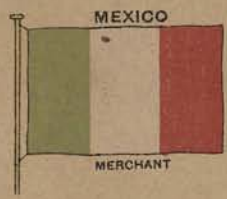


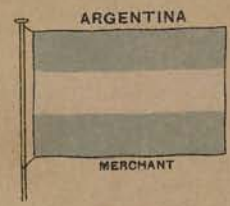


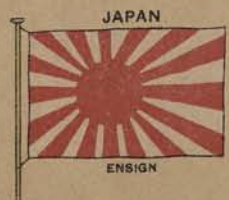


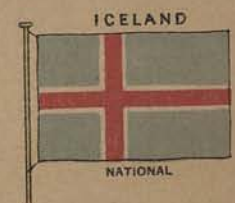












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THE WORLD

IN HEMISPHERES

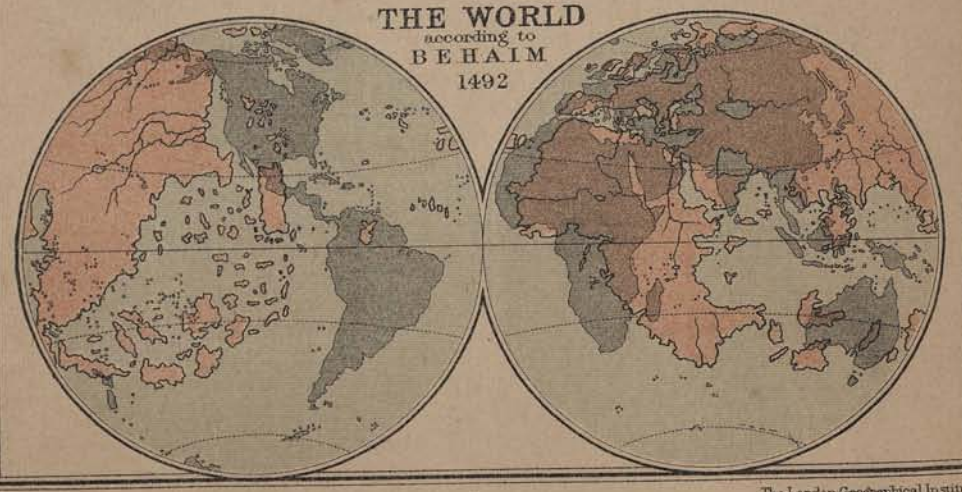
THE WORLD as known at various periods.

THE WORLD according to PTOLEMY: 150

THE WORLD according to EDRISI: 1154

THE WORLD according to FRA MAURO: 1459

THE WORLD according to BEHAIM 1492



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THE WORLD
showing
COLONIAL POWERS
and
COMMERCIAL HIGHWAYS

Principal Railways
Shipping Routes (Distances in Nautical Miles)
Principal Air Mail Routes

British Empire
French Possessions
Dutch ,,
Portuguese ,,
Spanish ,,
Italian ,,

ARCTIC OCEAN
PACIFIC OCEAN
SOUTHERN OCEAN
INDIA OCEAN
Greenland (To Denmark)
Alaska
Dominion of Canada
United States
Mexico
Brazil
Argentina
Falkland Is Dependencies
Union of S.S. Republics
Siberia
Mongolia
Chinese Republic
Tibet
India
Japan
Commonwealth of Australia
Dominion of New Zealand
Australian Dependency
Ross Dependency
Union of South Africa

Greenwich Mean Time

UNION JACK
BRITISH ROYAL STANDARD
BRITISH MERCANTILE ENSIGN
DOMINION OF CANADA
COMMONWEALTH OF AUSTRALIA
DOMINION OF NEW ZEALAND
UNION OF SOUTH AFRICA
IRISH FREE STATE
NEWFOUNDLAND
INDIA

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THE ATLANTIC OCEAN

on Mercators Projection

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Principal Shipping Routes 1355 (Distances in Nautical Miles) 5 days

Principal Air Mail Routes

Pioneer Atlantic Flights

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THE BASIN OF THE MEDITERRANEAN

Statute Miles
0 50 100 200 300

0-100 Fathoms | 100-500 Fathoms | Over 500 Fathoms
Shipping Routes | Principal Railways

5 Long. West of Greenwich 0 Long. East of Greenwich 5 10 20 25 30 35

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ENGLAND & WALES

SOUTH EASTERN SECTION

Scale 1:1,500,000 (24 Miles=1 Inch)

Statute Miles 0 5 10 20 30 40 50

Kilometres 0 5 10 20 30 40 50 60 70 80

Electrified Railways Canals

475 Shipping Routes (Distances in Nautical Miles)

2678 Heights in feet

2° Yorkshire 0° 1° 2°

54° 53° 52° 51° 50°

Lancashire Somerset

West from Greenwich 0° East from Greenwich

ENGLISH CHANNEL

FRANCE

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SOUTH WESTERN SECTION

Scale 1:1,500,000 (24 Miles-1 Inch)

Statute Miles 0 5 10 20 30 40

Kilomètres 0 5 10 20 30 40 50 60 70

Railways — Canals

473 Shipping Routes (Distances in Nautical Miles)

2678 Heights in feet

Electrified Railways

6° 5° 4° 3° LANCASHIRE 2° YORKSHIRE

IRISH SEA

Liverpool Bay

Caernarvon Bay

Cardigan Bay

Bristol Channel

ATLANTIC OCEAN

ENGLISH CHANNEL

Lyme Bay

West Riding

Cheshire

Derby

Flint

Denbigh

Caernarvon

Merioneth

Montgomery

Cardigan

Radnor

Shropshire

Stafford

Worcester

Hereford

Pembroke

Glamorgan

Somerset

Devon

Cornwall

Dorset

Wiltshire

Dorset Heights

Salisbury Plain

Mendip Hills

Exmoor

Lundy I.

Scilly Is. St Mary I.

Liverpool to Dublin 122

Liverpool to New York 3043 · Queenstown (Cobh) 241

Cardiff to Belfast 269 · Glasgow 371

Bristol to Cork 228

Plymouth to Cork 224

Plymouth to Southampton 129

Southampton to New York 3091

Southampton to Oporto 1203 · Rio de Janeiro 5034

Southampton to Gibraltar 1203 · Town 5047

To Douglas 70 · Ireland to Belfast 137

To Rosslare 55 · To Cork 140

Fleetwood · Blackpool · Preston · Burnley · Blackburn · Bradford · Halifax · Huddersfield · Rochdale · Southport · Bolton · Bury · Oldham · Barnsley · Ashton · Stockport · Rotherham · SHEFFIELD · LEEDS · Wigan · Warrington · Runcorn · Macclesfield · Chesterfield · Derby · Crewe · Stoke on Trent · Wrexham · Chester · Holyhead · Bangor · Caernarvon · Denbigh · Flint · Rhyl · Llandudno · Conway · Menai Strait · Porth Dinllaen · Pwllheli · Portmadoc · Barmouth · Aberystwyth · Cardigan · Newquay · Padstow · Bodmin · Launceston · Tavistock · Callington · Liskeard · Saltash · Devonport · PLYMOUTH · Torquay · Newton Abbot · Exeter · Teignmouth · Dawlish · Sidmouth · Exmouth · Budleigh Salterton · Honiton · Axminster · Lyme Regis · Bridport · Weymouth · Dorchester · Poole · Bournemouth · Christchurch · Isle of Wight · Portland I. · Portland Bill · Swanage · Wareham · Swindon · Marlborough Downs · Berks · Newbury · Marlborough · Trowbridge · Devizes · Wilton · Salisbury · Andover · Romsey · Southampton · Lymington · New Forest · Ringwood · Blandford · Sherborne · Yeovil · Taunton · Bridgwater · Wells · Glastonbury · Frome · Bath · Bristol · Cardiff · Newport · Swansea · Merthyr · Aberdare · Pontypridd · Llanelly · Carmarthen · Milford Haven · Pembroke · Fishguard · Cardigan · Aberystwyth · Aberdovey · Machynlleth · Welshpool · Montgomery · Newtown · Llandrindod Wells · Radnor · Knighton · Ludlow · Shrewsbury · Oswestry · Llangollen · Bala · Dolgelley · Barmouth · Portmadoc · Pwllheli · Porth Dinllaen · Caernarvon · Bangor · Holyhead · Amlwch · Beaumaris · Menai Bridge · Llanfairfechan · Conway · Llandudno · Colwyn Bay · Abergele · Rhyl · St Asaph · Mold · Ruthin · Denbigh · Llangollen · Wrexham · Whitchurch · Market Drayton · Newcastle under Lyme · Stafford · Burton on Trent · Uttoxeter · Ashbourne · Matlock · Chesterfield · Leek · Buxton · Macclesfield · Knutsford · Northwich · Frodsham · Runcorn · Warrington · Wigan · Bolton · Manchester · Liverpool · Birkenhead · Wallasey · Southport · Preston · Blackpool · Fleetwood · Lancaster · Morecambe · Skipton · Keighley · Bradford · Leeds · Wakefield · Huddersfield · Halifax · Rochdale · Oldham · Ashton · Stockport · Sheffield · Barnsley · Doncaster · Rotherham · Chesterfield · Derby · Nottingham · Leicester · Coventry · Warwick · Birmingham · Wolverhampton · Walsall · Dudley · Stourbridge · Kidderminster · Worcester · Evesham · Cheltenham · Gloucester · Stroud · Cirencester · Swindon · Oxford · Reading · Basingstoke · Winchester · Southampton · Portsmouth · Chichester · Brighton · Eastbourne · Hastings · Dover · Canterbury · Ashford · Maidstone · Rochester · Chatham · Gravesend · Tilbury · London · Watford · Luton · Bedford · Northampton · Rugby · Lichfield · Cannock · Wolverhampton · Shrewsbury · Wellington · Telford · Ironbridge · Bridgnorth · Kidderminster · Worcester · Malvern · Hereford · Ross · Monmouth · Chepstow · Newport · Cardiff · Barry · Penarth · Bridgend · Port Talbot · Swansea · Llanelly · Carmarthen · Haverfordwest · Milford Haven · Pembroke · Tenby · Saundersfoot · Narberth · Whitland · Cardigan · Aberystwyth · Machynlleth · Welshpool · Oswestry · Whitchurch · Crewe · Nantwich · Sandbach · Congleton · Macclesfield · Buxton · Matlock · Derby · Nottingham · Grantham · Peterborough · Ely · Cambridge · Bedford · Luton · Watford · London · Gravesend · Chatham · Rochester · Maidstone · Ashford · Canterbury · Dover · Hastings · Eastbourne · Brighton · Chichester · Portsmouth · Southampton · Winchester · Basingstoke · Reading · Oxford · Swindon · Cirencester · Gloucester · Cheltenham · Worcester · Evesham · Stratford on Avon · Warwick · Leamington · Coventry · Rugby · Northampton · Bedford · Luton · Watford · London

Lundy I. · Scilly Is. · St Mary I. · Land's End · Lizard Pt · Start Pt · Portland Bill · The Needles · Beachy Head · North Foreland · Dungeness · Selsey Bill · Hurst Castle · Eddystone · Bishop Rock

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ENGLAND & WALES

NORTHERN SECTION

Scale 1:1,500,000 (24 Miles=1 Inch)

Statute Miles 0 5 10 20 30 40

Kilometres 0 5 10 20 30 40 50 60 70

Electrified — Railways — Canals

475 Shipping Routes (Distances in Nautical Miles)

2678 Heights in Feet

THE ISLE OF MAN

On same scale

Liverpool to Belfast 137

Heysham 121

Peel

Port Erin

Port St Mary

Castletown

Douglas

Ramsey

Laxey

Foxdale

Langness

Calf of Man

From Liverpool 70

SCOTLAND

ENGLAND

WALES

IRELAND

Northumberland

Cumberland

Westmorland

Durham

North Riding

East Riding

Yorkshire

West Riding

Lancashire

Cheshire

Flint

Denbigh

Caernarvon

Merioneth

Montgomery

Shropshire

Radnor

Cardigan

Lincolnshire

Lindsey

Kesteven

Holland

Lincoln

Notts

Derby

Staffordshire

Stafford

Worcestershire

Worcester

Hereford

Warwick

Leicester

Rutland

Soke of Peterborough

Isle of Ely

Huntingdon

Northampton

Cambridge

Norfolk

Suffolk

Cheviot Hills

Pennines

Cambrian Mts

Glee Hills

Liverpool Bay

Solway Firth

Wash

Humber

Holderness

Lincolnshire Wolds

Yorkshire Wolds

York Moors

Hambleton Hills

Cleveland Hs

Pennine Chain

Roman Wall

Newcastle to Bergen 411

London to Newcastle 314

Edinburgh 404

Heysham to Belfast 121

Liverpool to Belfast 137

Liverpool to Douglas 70

to Oslo (Christiania) 552

to Antwerp 245

West from Greenwich 0° East from Greenwich

George Philip & Son, Ltd

The London Geographical Institute

SCOTLAND

Scale 1:1700000 (27 miles=1 inch)

Statute Miles
0 5 10 20 30 40

Kilometres
0 5 10 20 30 40 50 60

Railways ..... Shipping Routes
Canals (Distances in Nautical Miles)
Heights in Feet

ORKNEY ISLANDS
SHETLAND ISLANDS
On half the scale of General Map

Caithness
Sutherland
Ross & Cromarty
Inverness
Nairn
Moray
Banff
Aberdeen
Kincardine
Angus
Perth
Argyll
Dumbarton
Stirling
Clackmannan
Kinross
Fife
Clackmannan
Edinburgh
W. Lothian
E. Lothian
Midlothian
Berwick
Peebles
Selkirk
Roxburgh
Lanark
Renfrew
Ayr
Dumfries
Kirkcudbright
Wigtown

Lewis
Harris
North Uist
South Uist
Benbecula
Barra
Skye
Mull
Islay
Jura
Colonsay
Oronsay
Coll
Tiree
Canna
Rum
Eigg
Muck

Inner Hebrides
Outer Hebrides
The Minch
Little Minch
Sound of Harris
Inner Sound
Firth of Lorne
Firth of Clyde
Firth of Forth
Moray Firth
Dornoch Firth
Pentland Firth
North Channel
Solway Firth
North Sea
England

IRISH FREE STATE
NORTHERN IRELAND

Londonderry
Belfast
Lough Neagh
Lough Foyle
Lough Swilly
Ballymena
Larne
Strabane
Portrush
Ballycastle
Carrickfergus
Bangor
Portpatrick
Stranraer
Glenluce
Newton Stewart
Whithorn
Wigtown Bay
Luce Bay
Port William
Drummore
Mull of Galloway
Burrow Head
Maryport
Carlisle
Longtown
Gretna Green
Annan
Dumfries
Moffat
Hawick
Galashiels
Kelso
Berwick
Tweedmouth
Holy I.
Eyemouth
Dunbar
Leith
Edinburgh
Musselburgh
Cockburnspath
Haddington
Bass Rock
Tantallon Cas.
North Berwick
Inchkeith
Inchcolm
Inchgarvie
Forth Br.
Queensferry
Linlithgow
Falkirk
Grangemouth
Alloa
Stirling
Dunblane
Callander
Crieff
Perth
Dundee
Arbroath
Montrose
Carnoustie
Forfar
Brechin
Aberdeen
Peterhead
Fraserburgh
Banff
Macduff
Buckie
Cullen
Findochty
Portsoy
Keith
Huntly
Elgin
Forres
Nairn
Inverness
Fort Augustus
Fort William
Ben Nevis
Oban
Dunstaffnage
Tobermory
Mull of Kintyre
Campbeltown
Ardrossan
Saltcoats
Ayr
Girvan
Stranraer
Wigtown
Kirkcudbright
Castle Douglas
Dalbeattie
Gretna
Carlisle
Penrith
Keswick
Cockermouth
Workington
Whitehaven
Barrow
Ulverston
Grange
Morecambe
Lancaster
Preston
Blackpool
Fleetwood
Liverpool
Manchester
Warrington
Wigan
Bolton
Bury
Rochdale
Oldham
Stockport
Crewe
Chester
Holyhead
Anglesey
Bangor
Caernarvon
Conway
Llandudno
Rhyl
Prestatyn
Flint
Mold
Wrexham
Shrewsbury
Ludlow
Hereford
Leominster
Worcester
Malvern
Gloucester
Cheltenham
Tewkesbury
Evesham
Stratford-on-Avon
Warwick
Leamington
Coventry
Rugby
Northampton
Peterborough
Wisbech
Boston
Spalding
Grantham
Stamford
Lincoln
Gainsborough
Scunthorpe
Doncaster
Sheffield
Barnsley
Wakefield
Huddersfield
Halifax
Bradford
Keighley
Skipton
Ripon
Harrogate
Knaresborough
York
Selby
Goole
Hull
Beverley
Driffield
Bridlington
Scarborough
Whitby
Middlesbrough
Stockton
Darlington
Durham
Newcastle
Gateshead
Sunderland
Hartlepool
Consett
Hexham
Alnwick
Berwick
Tweedmouth
Holy I.
Farne Is.
Coquet I.
Cheviot
Windygate H.
Pease Dean
Lauder
Gala Water
Tweed
Teviot
Jed Water
Kelso
Roxburgh
Yetholm
Coldstream
Greenlaw
Duns
Cockburnspath
Dunbar
Eyemouth
Berwick
Tweedmouth
Holy I.
Farne Is.
Coquet I.
Cheviot
Windygate H.
Pease Dean
Lauder
Gala Water
Tweed
Teviot
Jed Water
Kelso
Roxburgh
Yetholm
Coldstream
Greenlaw
Duns
Cockburnspath
Dunbar

West of 4 Greenwich

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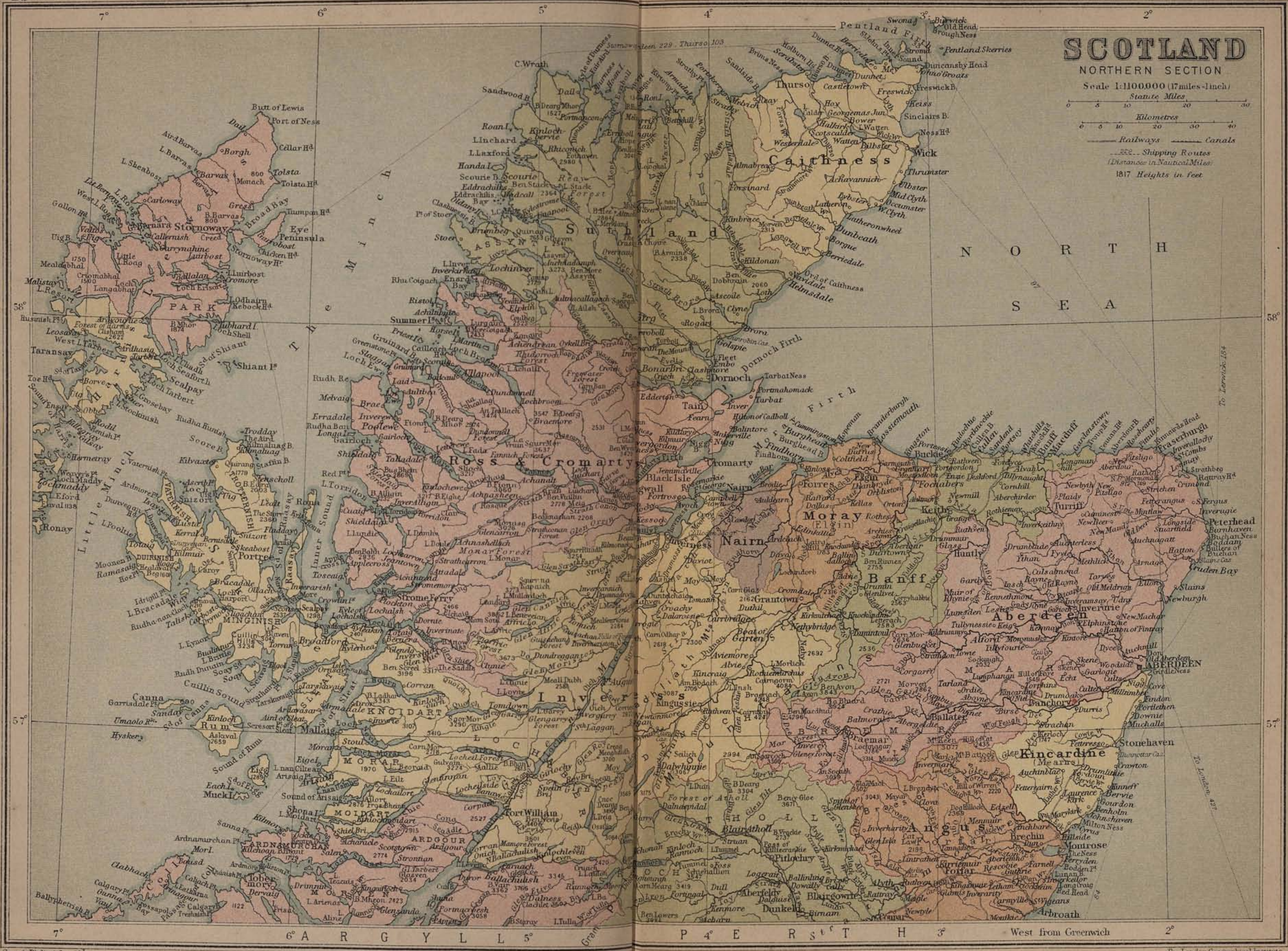

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SCOTLAND

(SOUTHERN SECTION)

Scale 1:1100,000 (17 miles = 1 inch)

Statute Miles 0 5 10 20 30

Kilometres 0 5 10 20 30 40

Railways ——— Canals ———

1817 Heights in feet

7° 6° 5° 4° 3° 2°

West from 4° Greenwich

56° 55°

George Philip & Son, Ltd.

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IRELAND

Scale = 1:1,700,000 (27 miles = 1 inch)

Statute Miles
0 5 10 20 30 40

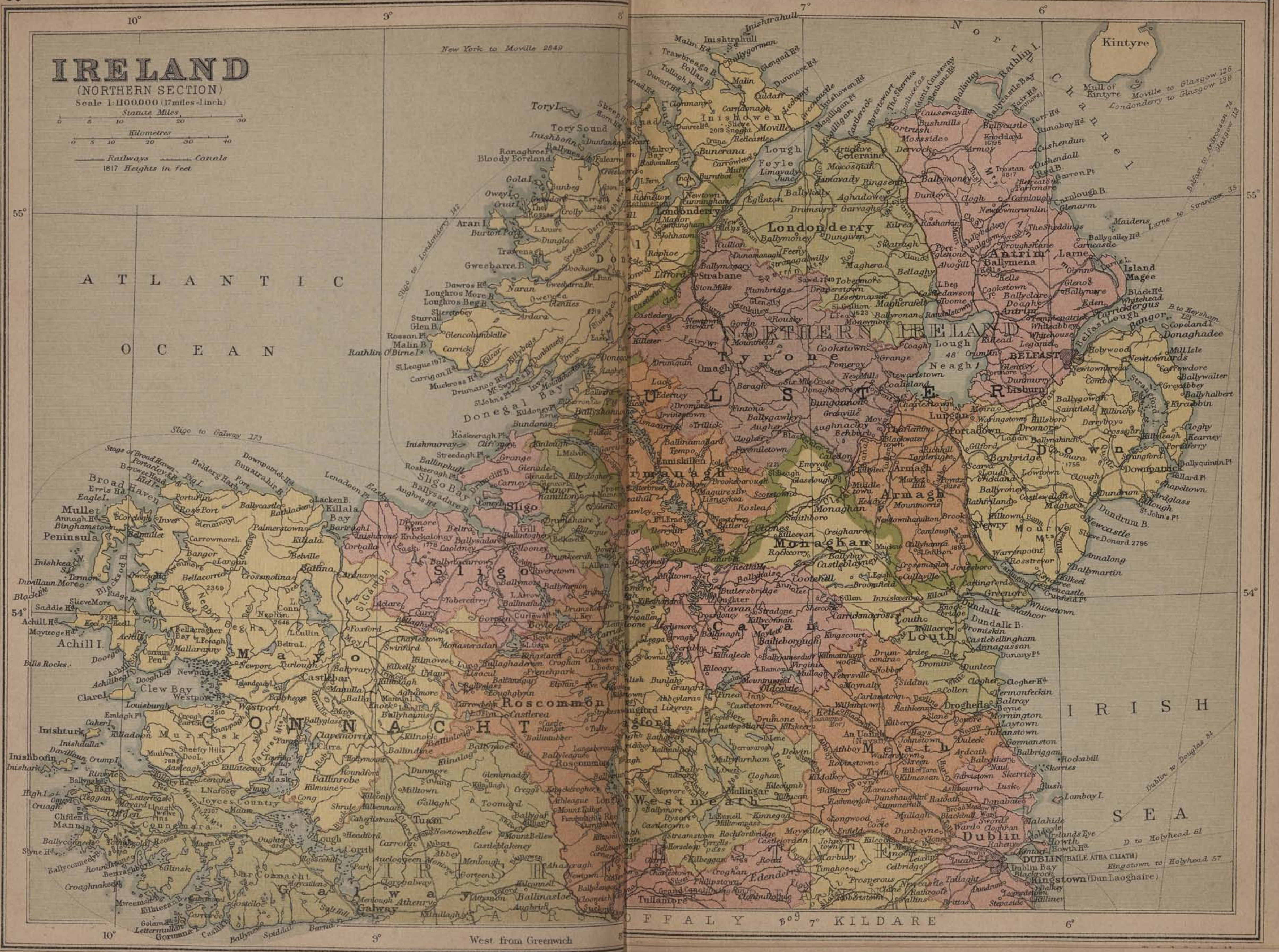
Kilometres
0 5 10 20 30 40 50 70

Railways — Shipping Routes
Canals — (Distances in Nautical Miles)
344 Heights in Feet

Boundary between the Irish Free State and Northern Ireland according to "Government of Ireland Act 1920" Confirmed by Treaty of 1925

Longitude West 8 from Greenwich

George Philip & Son, Ltd. The London Geographical Institute.


IRELAND
(NORTHERN SECTION)
Scale 1:1100000 (17 miles-1 inch)
Statute Miles
Kilometres
Railways
Canals
1817 Heights in feet
ATLANTIC
OCEAN
North Channel
IRISH SEA
NORTHERN IRELAND
ULSTER
CONNACHT
Londonderry
Antrim
Tyrone
Armagh
Down
Monaghan
Cavan
Louth
Meath
Westmeath
Dublin
Sligo
Mayo
Roscommon
Galway
Kintyre
New York to Moville 2849
Sligo to Galway 273
Moville to Glasgow 126
Londonderry to Glasgow 138
D. to Holyhead 61
Kingstown to Holyhead 57
Dublin to Douglas 84
OFFALY
KILDARE
West from Greenwich

IRELAND

(SOUTHERN SECTION)

Scale 1:1100,000 (17 miles=1inch)

Statute Miles 0 5 10 20 30

Kilometres 0 5 10 20 30 40

Railways — Canals

2843 Shipping Routes (Distances in Nautical Miles)

3039 Heights in Feet

Projection: Conical with two Standard Parallels

George Philip & Son, Ltd.

The London Geographical Institute.

FRANCE

Scale 1:4500000 (72 miles - 1 inch)

Statute Miles 0 10 20 30 40 50 100

Kilometres 0 50 100 200

Railways — Canals — Shipping Routes — Heights in feet

NORTH SEA — ENGLISH CHANNEL — Bay of Biscay — MEDITERRANEAN SEA

ENGLAND — HOLLAND — BELGIUM — LUXEMBURG — Westphalia — Rhine-land-Nassau — Palatinate — LORRAINE — ALSACE

AMSTERDAM — The Hague — Rotterdam — Utrecht — Arnhem — Zuider Zee

LONDON — Bristol — Bristol Channel — Southampton — Portsmouth — Dover — Calais — Boulogne — Dunkirk — Ostend — Antwerp — BRUSSELS — Ghent — Bruges — Liège — Namur — Mons — Lille — Roubaix — Valenciennes — Dieppe — Amiens — Cherbourg — Le Havre — Rouen — Caen — Channel Islands — Guernsey — Jersey — Alderney — Sark

PARIS — Versailles — Fontainebleau — Melun — Chartres — Orléans — Rheims — Metz — Nancy — Strasbourg — Verdun — Sedan — Luxemburg — Trèves — Coblence — Cologne — Aix-la-Chapelle — Bonn — Düsseldorf — Essen — Dortmund — Bielefeld — Münster — Osnabrück — Hanover — Hamm — Wiesbaden — Mayence — Worms — Kaiserslautern — Spires — Carlsruhe — Baden-Baden — Strasbourg

Brest — St Malo — Cherbourg — Le Havre — Rouen — Caen — Nantes — Lorient — Quimper — Rennes — Le Mans — Angers — Tours — Orléans — Blois — Bourges — Nevers — Dijon — Besançon — Belfort — Basel — Lorrach — Freiburg — Mulhouse — Colmar — Epinal — Toul — Verdun — Metz — Thionville — Sedan — Mézières — Charleville — Laon — Soissons — Compiègne — Beauvais — Abbeville — St Quentin — Arras — Lens — Douai — Lille — Roubaix — Tourcoing — Courtrai — Ypres — Dunkirk — Calais — Boulogne — Dieppe — Le Tréport — Etaples — Montreuil — St Omer — Hazebrouck — Armentières — Bethune — Namur — Liège — Maestricht — Aix-la-Chapelle — Düren — Cologne — Coblence — Trèves — Luxemburg — Arlon — Longwy — Metz — Nancy — Epinal — Belfort — Mulhouse — Basel — Lorrach — Freiburg — Colmar — Strasbourg — Spires — Carlsruhe — Baden-Baden — Kaiserslautern — Worms — Mayence — Wiesbaden — Hanover — Münster — Bielefeld — Osnabrück — Westphalia — Rhine-land-Nassau — Palatinate — LORRAINE — ALSACE — Bay of Biscay — Bordeaux — Toulouse — Montpellier — Nîmes — Arles — Avignon — Marseilles — Toulon — Nice — Monaco — Cannes — Grasse — Aix — Draguignan — Fréjus — St Tropez — Les Iles d'Hyères — Lyons — St Etienne — Grenoble — Chambery — Turin — Geneva — Lausanne — Bernese Alps — Penine Alps — Mont Blanc — Mont Cenis — Col de Larche — Cuneo — Alps — Rhone — Saône — Loire — Seine — Somme — Meuse — Moselle — Rhine — Aisne — Marne — Oise — Garonne — Dordogne — Lot — Tarn — Adour — Gironde — Lot-et-Garonne — Basses-Pyrénées — Hautes-Pyrénées — Ariège — Haute-Garonne — Aude — Hérault — Gard — Vaucluse — Bouches-du-Rhône — Var — Basses-Alpes — Hautes-Alpes — Isère — Savoie — Haute-Savoie — Ain — Jura — Haute-Saône — Vosges — Meurthe-et-Moselle — Ardennes — Pas-de-Calais — Somme — Seine-Inférieure — Eure — Calvados — Manche — Finistère — Côtes-du-Nord — Morbihan — Ille-et-Vilaine — Mayenne — Sarthe — Eure-et-Loir — Loiret — Yonne — Aube — Haute-Marne — Meuse — Ardennes — Aisne — Seine-et-Marne — Marne — Meurthe-et-Moselle — Vosges — Haute-Saône — Côte-d'Or — Nièvre — Cher — Loir-et-Cher — Indre-et-Loire — Maine-et-Loire — Loire-Inférieure — Vendée — Deux-Sèvres — Vienne — Indre — Allier — Saône-et-Loire — Haute-Vienne — Charente — Charente-Inférieure — Gironde — Landes — Lot-et-Garonne — Dordogne — Corrèze — Creuse — Haute-Vienne — Puy-de-Dôme — Cantal — Haute-Loire — Lozère — Ardèche — Drôme — Isère — Hautes-Alpes — Basses-Alpes — Var — Bouches-du-Rhône — Vaucluse — Gard — Hérault — Aude — Ariège — Haute-Garonne — Tarn-et-Garonne — Gers — Landes — Basses-Pyrénées — Hautes-Pyrénées — Corsica — Strait of Bonifacio — Ajaccio — Bastia — Corte — Calvi — Sardinia — Barcelona — Tarragona — Lerida — Saragossa — Pyrenees — Andorra — Roussillon — Perpignan — Narbonne — Carcassonne — Toulouse — Bayonne — Biarritz — Pau — Bilbao — Basque Provs — Lion Gulf (Golfe du Lion)

FRANCE in 1914 showing Provinces

West from Greenwich 0 East from Greenwich

George Philip & Son Ltd — The London Geographical Institute

NORTH & CENTRAL FRANCE

Scale 1:1,900,000 (30 miles = 1 inch)

Statute Miles 0 10 20 30 40 50

Kilometres 0 10 20 30 40 50

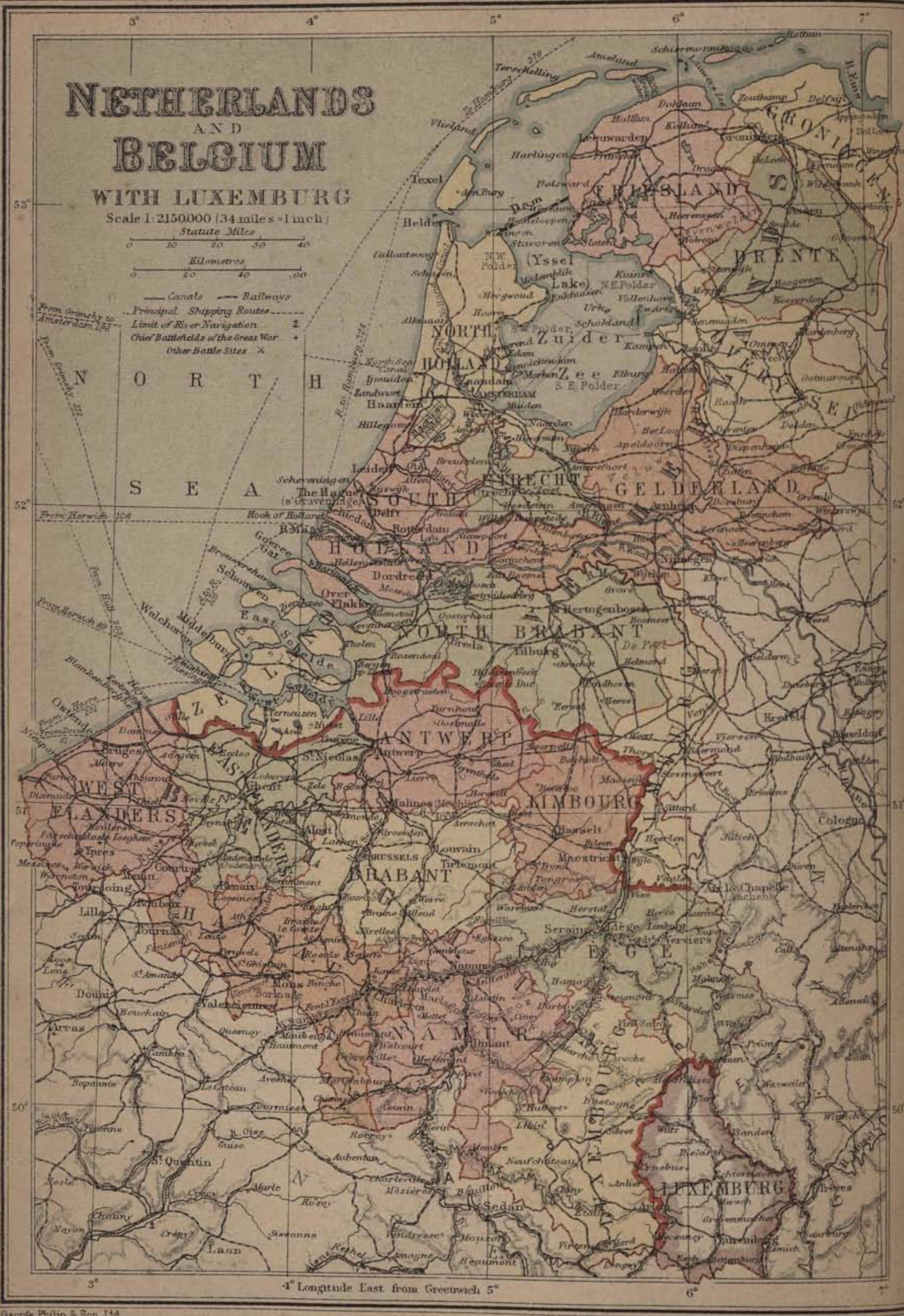
Projection: Conical with two standard parallels

Railways ——— Canals

Territory until 1935 administered through the League of Nations (now German)

Zone of Military Occupation until June, 1930, according to Treaty of Versailles.

Zone of Military Occupation until January, 1935, according to Treaty of Versailles.



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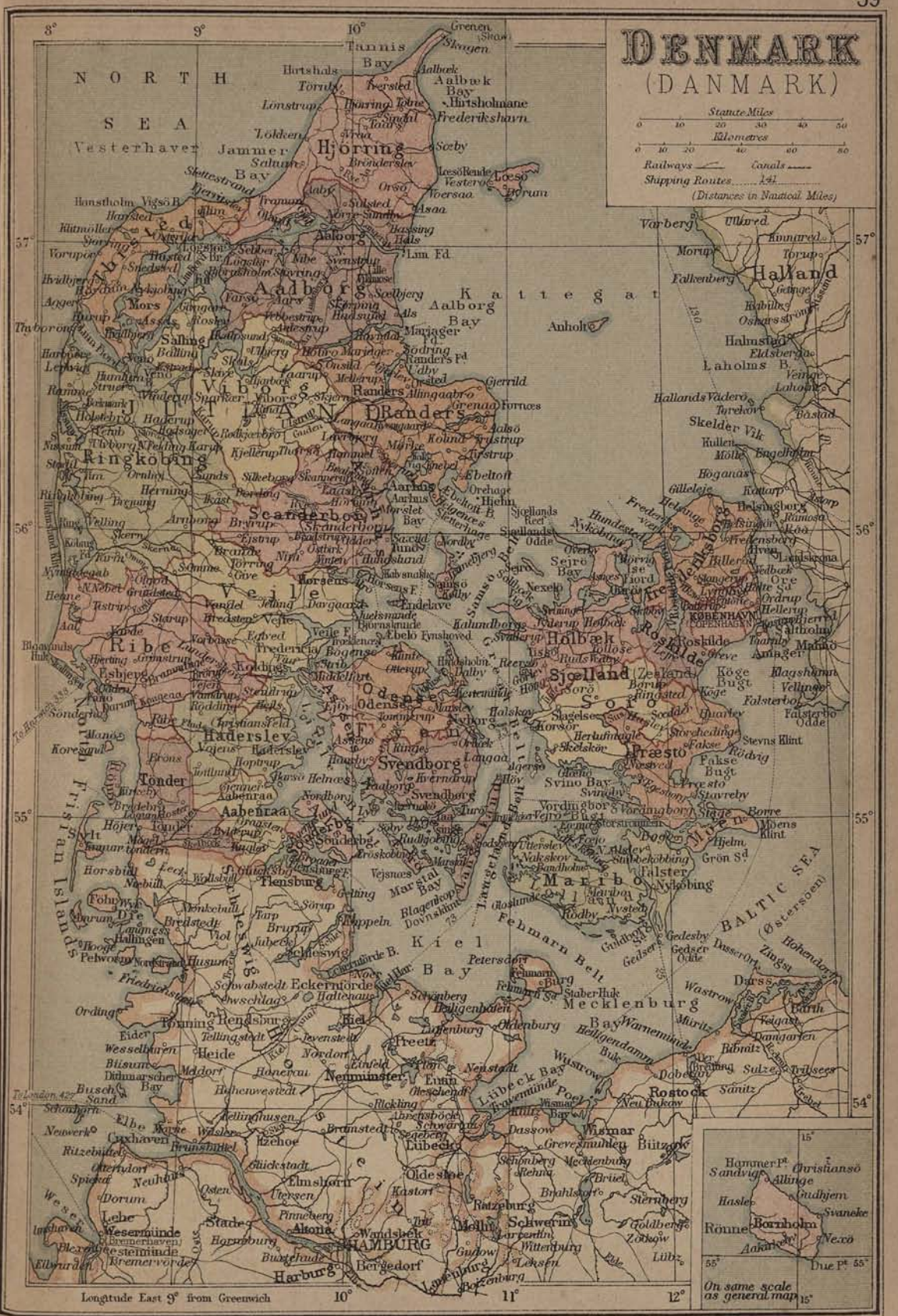
DENMARK
(DANMARK)
Statute Miles
Kilometres
Railways
Canals
Shipping Routes
(Distances in Nautical Miles)
NORTH SEA
Vesterhaver
Jammer Bay
Hjörring
Aalborg
Aalborg Bay
Kattegat
Anholt
Skagen
Grenen
Tannis Bay
Hirtshals
Aalbæk Bay
Frederikshavn
Løkken
Lönstrup
Sæby
Løsö
Læsö Rende
Vestero
Voersaa
Asaa
Sulsted
Nörre Sundby
Aalborg Fd.
Lim Fd.
Hals
Hobro
Mariager
Mariager Bay
Randers
Randers Fd.
Grenaa
Fornæs
Ebeltoft
Aarhus
Aarhus Bay
Hjelm
Orehage
Sjellands Odde
Sjellands Reef
Kalundborg
Nyborg
Svendborg
Svendborg Sund
Langeland Belt
Svino Bay
Præsto
Fakse Bugt
Stavreby
Vordingborg
Stege
Møens Klint
Nyköbing
Falster
Maribo
Rödby
Fehmarn Belt
Kiel Bay
Kiel Canal
Flensburg
Flensburg Fjord
Tönder
Aabenraa
Sylt
Föhr
Amrum
Die
Husum
Schleswig
Eckernförde
Rendsburg
Heide
Neumünster
Itzehoe
Elmshorn
Uetersen
Pinneberg
Altona
HAMBURG
Bergedorf
Harburg
Lübeck
Lübeck Bay
Travemünde
Poel
Wismar
Wismar Bay
Rostock
Neu Bukow
Warnemünde
Gedser
Gedser Odde
Darss
Zingst
Hohendorf
Wustrow
Barth
Stralsund
Greifswald
Oldenburg
Heiligenhafen
Burg
Staberhuk
Fehmarn
Meckelnburg Bay
Travemünde Bay
Neustadt
Oldesloe
Ratzeburg
Schwerin
Boitzenburg
Brahlstorf
Sternberg
Goldberg
Zodow
Lübz
Plau
Parchim
Malchin
Demmin
Anklam
Ueckermünde
Stettin
Swinemünde
Wittenburg
Gudow
Lauenburg
Bergedorf
Varberg
Ullared
Kinnared
Halland
Falkenberg
Torup
Halmstad
Laholms B.
Hallands Väderö
Torekov
Båstad
Skelder Vik
Helsingborg
Ramlösa
Råå
Helsingör
Fredensborg
Hillerød
Landskrona
Ystad
Ahlbeck
Ore
Lyngby
Ordrup
Hellerup
Gentofte
Charlottenlund
Klampenborg
Skodsborg
Elsinore
Kronborg
Helsingör Roads
Frederiksværk
Hundested
Kjöbing
Nykjöbing
Sejrö Bay
Sejrö
Nexelö
Holbæk
Roskilde
Roskilde Fjord
Tuse
Tisö
Ruds Vedby
Sjælland (Zealand)
Soro
Ringsted
Slagelse
Korsör
Skelskör
Herlufmagle
Storchedinge
Stevns Klint
Köge
Köge Bugt
Hagshamn
Vallensbæk
Falsterbo
Falsterbo Odde
Amager
Malmö
Kjöbenhavn
(Copenhagen)
Altholm
Tarnby
Dragör
Saltholm
Drogden
Flakfort
Middelgrund
Saltholm Deep
Kalundborg Bay
Isefjord
Nyborg Bay
Odense Fjord
Odense
Middelfart
Fredericia
Vejle
Vejle Fjord
Horsens
Horsens Fjord
Aarhus Bay
Ribe
Ribe Fjord
Esbjerg
Fanø
Sönderho
Varde
Varde Aa
Blaavands Huk
Hjerting
Grindsted
Kolding
Kolding Fjord
Vejen
Vamdrup
Rödding
Aabenraa Fjord
Apenrade Bay
Hadersley
Hadersley Fjord
Christiansfeld
Brons
Hoptrup
Tinglev
Bredsted
Viol
Bruraa
Lübeck
Schwabstedt
Husum
Friedrichstadt
Tönning
Eider
Wesselburen
Büsum
Dithmarscher Bay
Meldorf
Honerau
Heide
Nordorf
Elmshorn
Uetersen
Pinneberg
Stade
Lehe
Wesermünde
Geestemünde
Bremerhaven
Elbmünden
Cuxhaven
Elbe Mouth
Neuwerk
Ritzebüttel
Brunshüttel
Brunsbüttel
Glückstadt
Itzehoe
Elmshorn
Uetersen
Pinneberg
Altona
Wandsbek
Hamburg
Bergedorf
Harburg
Lauenburg
Ratzeburg
Oldesloe
Neustadt
Travemünde
Poel
Wismar
Rostock
Neu Bukow
Warnemünde
Gedser
Gedser Odde
Darss
Zingst
Hohendorf
Wustrow
Barth
Stralsund
Greifswald
Oldenburg
Heiligenhafen
Burg
Staberhuk
Fehmarn
Meckelnburg Bay
Travemünde Bay
Neustadt
Oldesloe
Ratzeburg
Schwerin
Boitzenburg
Brahlstorf
Sternberg
Goldberg
Zodow
Lübz
Plau
Parchim
Malchin
Demmin
Anklam
Ueckermünde
Stettin
Swinemünde
Wittenburg
Gudow
Lauenburg
Bergedorf
Varberg
Ullared
Kinnared
Halland
Falkenberg
Torup
Halmstad
Laholms B.
Hallands Väderö
Torekov
Båstad
Skelder Vik
Helsingborg
Ramlösa
Råå
Helsingör
Fredensborg
Hillerød
Landskrona
Ystad
Ahlbeck
Ore
Lyngby
Ordrup
Hellerup
Gentofte
Charlottenlund
Klampenborg
Skodsborg
Elsinore
Kronborg
Helsingör Roads
Frederiksværk
Hundested
Kjöbing
Nykjöbing
Sejrö Bay
Sejrö
Nexelö
Holbæk
Roskilde
Roskilde Fjord
Tuse
Tisö
Ruds Vedby
Sjælland (Zealand)
Soro
Ringsted
Slagelse
Korsör
Skelskör
Herlufmagle
Storchedinge
Stevns Klint
Köge
Köge Bugt
Hagshamn
Vallensbæk
Falsterbo
Falsterbo Odde
Amager
Malmö
Kjöbenhavn
(Copenhagen)
Altholm
Tarnby
Dragör
Saltholm
Drogden
Flakfort
Middelgrund
Saltholm Deep
Kalundborg Bay
Isefjord
Nyborg Bay
Odense Fjord
Odense
Middelfart
Fredericia
Vejle
Vejle Fjord
Horsens
Horsens Fjord
Aarhus Bay
Ribe
Ribe Fjord
Esbjerg
Fanø
Sönderho
Varde
Varde Aa
Blaavands Huk
Hjerting
Grindsted
Kolding
Kolding Fjord
Vejen
Vamdrup
Rödding
Aabenraa Fjord
Apenrade Bay
Hadersley
Hadersley Fjord
Christiansfeld
Brons
Hoptrup
Tinglev
Bredsted
Viol
Bruraa
Lübeck
Schwabstedt
Husum
Friedrichstadt
Tönning
Eider
Wesselburen
Büsum
Dithmarscher Bay
Meldorf
Honerau
Heide
Nordorf
Elmshorn
Uetersen
Pinneberg
Stade
Lehe
Wesermünde
Geestemünde
Bremerhaven
Elbmünden
Cuxhaven
Elbe Mouth
Neuwerk
Ritzebüttel
Brunshüttel
Brunsbüttel
Glückstadt
Itzehoe
Elmshorn
Uetersen
Pinneberg
Altona
Wandsbek
Hamburg
Bergedorf
Harburg
Lauenburg
Ratzeburg
Oldesloe
Neustadt
Travemünde
Poel
Wismar
Rostock
Neu Bukow
Warnemünde
Gedser
Gedser Odde
Darss
Zingst
Hohendorf
Wustrow
Barth
Stralsund
Greifswald
Oldenburg
Heiligenhafen
Burg
Staberhuk
Fehmarn
Meckelnburg Bay
Travemünde Bay
Neustadt
Oldesloe
Ratzeburg
Schwerin
Boitzenburg
Brahlstorf
Sternberg
Goldberg
Zodow
Lübz
Plau
Parchim
Malchin
Demmin
Anklam
Ueckermünde
Stettin
Swinemünde
Wittenburg
Gudow
Lauenburg
Bergedorf
Hammer Pt.
Sandvig
Christiansö
Allinge
Hasle
Gudhjem
Svaneke
Rönne
Bornholm
Nexö
Aakirkeby
Due Pt.
On same scale as general map
Longitude East 9° from Greenwich
8°
9°
10°
11°
12°
57°
56°
55°
54°


GERMANY
Scale 1:4,500,000 (72 miles = 1 inch)
Statute Miles
0 10 20 30 40 50 100
Kilometres
0 50 100 200
Projection: Conical with two Standard Parallels
Railways
Shipping Routes
Canals
Heights in feet
Territory administered through the League of Nations
NORTH SEA
BALTIC SEA
DENMARK
SWEDEN
COPENHAGEN (KØBENHAVN)
Bornholm (Den.)
Jutland
Zealand
Fyen
Laaland
Kattegat
Heligoland
Heligoland Bay
Frisian Is.
North Frisian Is.
NETHERLANDS
AMSTERDAM
The Hague
Rotterdam
Zuider Zee
BELGIUM
BRUSSELS
LUXEMBURG
FRANCE
LORRAINE
SWITZERLAND
Zurich
BASLE (BASEL)
LITHUANIA
Klaipeda (Memel)
Schleswig
Holstein
HAMBURG
Bremen
Hanover
OLDENBURG
Lübeck
Kiel
Kiel Bay
MECKLENBURG
MECK. STRELITZ
Pomerania
Stettin
Brandenburg
BERLIN
Danzig
Danzig Bay
Free City
Königsberg
East Prussia
Polish Corridor
Pomorze
Westphalia
Rhineland
COLOGNE
Hessen-Nassau
Frankfurt
LIPPE
WALDECK
Cassel
Brunswick
Magdeburg
ANHALT
Prussian Saxony
SAXONY
DRESDEN
THURINGIA
HESSEN
Darmstadt
Palatinate
Mannheim
BADEN
WÜRTTEMBERG
Stuttgart
BAVARIA
MUNICH
Nuremberg
Franconia
Swabia
Silesia
Breslau
Poznan (Posen)
POLAND
WARSAW
Warszawa
Lodz
Kielce
Krakow
Cracow
CZECHOSLOVAKIA
PRAGUE (PRAHA)
Bohemia
Moravia
Sudetes
Upper Austria
Lower Austria
VIENNA
Salzburg
HUNGARY
West Beskids
East Beskids
High Tatra
White Mountains
Little Carpathians
Erz Geb.
Vosges
Black Forest
Alps
East of 14 Greenwich
GERMANY IN 1914
Prussia
Poland
Bohemia
Bavaria
AUSTRIA-HUNGARY
HOLLAND
Alsace
Lorraine
Waldeck
Lippe
Brunswick
Anhalt
Thuringia
Saxony
Hesse
Palatinate
Baden
Wurtemberg
Mecklenburg
Oldenburg
Lübeck
Hamburg
Bremen
Berlin
Dresden
Stuttgart
Munich
Vienna
North Sea
BALTIC SEA

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The London Geographical Institute

THE ALPS

Scale 1:5,000,000 (80 miles = 1 inch)
Statute Miles
0 20 40 60 80 100

Highlands over 3000 feet
Uplands 600–3000 "
Lowlands below 600 "

Canals ± Limit of River Navigation
Projection Conical with two Standard Parallels

Abbreviations

Peaks

A. Adula 11148 Ft.
Ar. Argentera 10790
F. Finsteraarh.n 14025
J. Jungfrau 13670
T. Todi 11900
Tr. Triglav 9400
W. Wildspitze 12390

Passes

B.P. Brenner 4470
C.L.P. Col de Larche 6546
F.P. Furka 7990
G.P. Grimsel 7104 Ft.
Gem.P. Gemmi 7550
G.S.B.P. Gr.St.Bernard 8110
L.P. Laibl 4495
L.S.B.P. Lit.St.Bernard 7080
M.P. Maloja 5940
S.P. Simplon 6600
Sch.P. Schober 2770
Sem.P. Semmering 3250
Sp.P. Splügen 6946
St.P. Stelvio 9040
St.G.P. St.Gotthard 8890
T.P. Tenale 8150

Longitude East of Greenwich

SWITZERLAND

Scale 1:1,500,000 (24 miles = 1 inch)
Statute Miles

Projection Conical with two Standard parallels

Longitude East of Greenwich

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AUSTRIA, HUNGARY CZECHOSLOVAKIA, & YUGOSLAVIA

Scale 1 : 4500000 (72 miles - 1 inch)

Statute Miles
0 10 20 30 40 50 100

Kilometres
0 10 20 30 40 50 100 150 200

Railways — Canals — Shipping Routes (Distances in N. Miles) — Heights in feet

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SPAIN AND PORTUGAL

Scale 1:4500000 (72 miles = 1 inch)

Statute Miles 0 10 20 30 40 50 100

Kilometres 0 50 100 200

Railways — Shipping Routes

Canals — Heights in feet

The Capitals of the 49 Spanish Provinces and of the 17 Portuguese Districts are underlined in black. The Colouring shows the Historical Divisions

Basque Provinces

1. Biscay
2. Guipuzcoa
3. Alava

West from Greenwich 10 8 6 4 2 0 East from Greenwich 2 4

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ITALY

Scale 1: 4,500,000 (72 miles = 1 inch)

Statute Miles 0 10 20 30 40 50 100

Kilometres 0 50 100 150

Railways ..... Shipping Routes

Canals Heights in feet

Boundaries of Administrative divisions (Provincie)

Boundaries of Historical Divisions (Compartimenti Territoriali)

Towns giving their names to the Administrative divisions are underlined

AUSTRIA

SWITZERLAND

FRANCE

YUGOSLAVIA

Bosnia

Venezia Tridentina

Veneto

Lombardia

Piedmont

Emilia

Liguria

Tuscany

Marche

Umbria

Abruzzi and Molise

Campania

Basilicata

Apulia

Calabria

Sicily

Sardinia

Corsica

MILAN

Venice

Gulf of Venice

Istria

Trieste

Fiume

Zagreb (Agram)

Graz

Klagenfurt

Ljubljana

Gulf of Genoa

LIGURIAN SEA

TYRRHENIAN SEA

ADRIATIC SEA

IONIAN SEA

MEDITERRANEAN SEA

Gulf of Taranto

Dalmatia

MONTE NEGRO

NAPLES

ROME

Florence

Bologna

Ravenna

Messina

Catania

Siracusa

Palermo

Trapani

Egadi Is.

Lipari Is.

Stromboli

Ustica

Pantellaria

Malta

Gozo

Comino

Valetta

TUNIS

Tunis

Bizerta

G. of Tunis

G. of Hammamet

Susa

Monastir

Zaghwan

Nabeul

Hammamet

C. Bon

C. Mustapha

Lampedusa

Linosa

Longitude East 14 from Greenwich

8 10 12 14 16 18

42 44 46 40 38 36

ITALY IN 1914

SWITZERL.

FRANCE

Piedmont

Lombardy

Venetia

AUSTRIA-HUNGARY

Liguria

Emilia

Tuscany

Marches

Umbria

Rome

Abruzzi e Molise

Campania

Apulia

Basilicata

Calabria

Corsica

Sardinia

Sicily

Tunis

Malta

ADRIATIC SEA

MEDITERRANEAN SEA


THE BALKAN STATES & RUMANIA
Scale 1:4,500,000 (72 Miles = 1 inch)
Statute Miles
Kilometres
Railways
Shipping Routes
Canals
Heights in feet
THE BALKAN STATES in 1914
CRETE (CANDIA)
On same scale
East from Greenwich
HUNGARY
RUMANIA
Bessarabia
Bukovina
Moldavia
Transylvania
Walachia
Ukraine Rep.
YUGOSLAVIA
Bosnia
MONTENEGRO
ALBANIA
GREECE
MACEDONIA
THRACE
THESSALY
TURKEY
ASIA MINOR
ITALY
BLACK SEA
AEGEAN SEA
IONIAN SEA
ADRIATIC SEA
SEA OF MARMARA
CYCLADES
Northern Sporades
BUCHAREST
BELGRADE
SOFIA
ATHENS
Salonika
Adrianople
Constantinople
Smyrna
ODESSA
Danube
Morea
EUBOEA OR NEGROPONT
Rhodes

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RUSSIA

Scale 1:14,000,000 (220 miles = 1 inch)

Statute Miles 0 50 100 200 300

Kilometres 0 50 100 200 300 400

Railways ——— Canals

179 Shipping Routes (Distances in Nautical Miles)

4760 Heights in Feet

1. Karachaevo
2. Kabardino Balkat
3. N.Ossetia
4. Chechen
5. S.Ossetia
6. Adjaria
7. Ingushetia
8. Adigeisk
9. Nagorny Karabagh
10. Cherkess

Longitude East 40 from Greenwich

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ASIA

Scale 1:40000000 (640 miles-1inch)

Statute Miles 0 100 200 300 400 500 1000

Kilometres 0 500 1000 1500

Projection: Bonne's

Principal Railways — 1320 Shipping Routes

British Possessions coloured red

Heights in feet Distances in Nautical Miles

Territory administered through the League of Nations

Principal Air Mail Routes

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SOUTH WESTERN ASIA
with the
VALLEY OF THE NILE

Statute Miles
0 50 100 200 300 400
Principal Railways
Principal Shipping Routes
Limit of River Navigation

ENGLAND & WALES
same scale as general map

PALESTINE
Scale 1:2000000
Statute Miles
0 10 20 30 40
Hebrew and Greco-Latin names are placed within brackets. Periodical streams
Railways Chief Roads
British Mandate

Territory administered through the League of Nations

George Philip & Son Ltd

The London Geographical Institute

ASIA MINOR
AND THE
EUPHRATES VALLEY
Scale 1:9,500,000 (150 miles=1inch)
Statute Miles
0 50 100 200
Railways — Roads & Tracks
Heights in feet
Territory administered through the League of Nations

(IRAN) PERSIA
Scale 1:9,500,000 (150 miles=1inch)
Statute Miles
0 50 100 200
Railways — Roads & Tracks
Heights in feet
Projection Conical with two standard parallels

30° 35° 40° 45° 50° 55° 60°
East from 55° Greenwich

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BCH.

THE INDIAN EMPIRE

ENGLAND & WALES
on same scale as general map

Statute Miles 100 50 0 100 200
Kilometres 100 50 0 100 200 300
Railways thus —— Heights in Feet
Principal Shipping Routes ----------
Limit of River Navigation ± Canals ——
British, Feudatory & Protected States are coloured yellow

George Philip & Son, Ltd
BCH.

The London Geographical Institute


THE
INDIAN EMPIRE
(NORTHERN SECTION)
Scale 1:10,000,000 (160 miles = 1 inch)
Statute Miles
0 50 100 150 200
Railways
Canals
Cables
Shipping Routes
(Distances in nautical miles)
29002 Heights in feet
British Feudatory & Protected States are coloured yellow
East from 70° Greenwich
RUSSIA
Turkistan
AFGHANISTAN
Baluchistan
PERSIA
TIBET
Kashmir
North West Frontier Province
Punjab
Rajputana
Sind
Nepal
Bhutan
Bengal
Bihar
United Provinces
Central Provinces
Berar
Hyderabad
Madras
ARABIAN SEA
BAY OF BENGAL
Tropic of Cancer
Kabul
Herat
Kandahar
Quetta
Karachi
Delhi
Lahore
Bombay
Calcutta
Lucknow
Benares
Allahabad
Nagpur
Ahmadabad
Baroda
Surat
Poona
Jubbulpore
Mouths of the Indus
Mouths of the Ganges
Gulf of Cutch
Cutch

George Philip & Son, Ltd.

THE EAST INDIES AND FURTHER INDIA

Scale 1:17,000,000 (270 miles = 1 inch)

Statute Miles 0 50 100 200 300 400

Kilometres 0 100 200 300 400 500 600 700 800

Railways ..... Shipping Routes (Distances in Nautical Miles)

Heights in feet

British — Dutch

French — Portuguese

Territory administered through the League of Nations

The Unfederated Malay States are as follows
1 Kedah 3 Trengganu
2 Perlis 4 Kelantan
5 Johore

ENGLAND & WALES
on same scale as general map

Longitude East 105 from Greenwich

George Philip & Son Ltd.

The London Geographical Institute.

CHINA & JAPAN WITH KOREA

Scale 1:20,275,000 (320 miles-1 inch)

Statute Miles 0 50 100 200 300 400 500

Kilometres 0 100 200 300 400 500

Heights in Feet. Principal Railways ------

Names of Open Ports & Marts are underlined.

Caravan Routes —— Principal Shipping Routes - - -

Limit of River Navigation ⚓

Projection: Bonne's

ENGLAND & WALES on same scale as general map

George Philip & Son, Ltd.

The London Geographical Institute

JAPANESE EMPIRE
with
EASTERN CHINA

Scale 1:10,000,000 (160 miles-1inch)

Statute Miles 0 50 100 150 200 250

Kilometres 0 100 200 300 400 500

Principal Railways ——— Shipping Routes - - - -

Names of Treaty Ports are underlined.

East from 130° Greenwich

CONTINUATION OF JAPAN
On same scale

George Philip & Son, Ltd.

The London Geographical Institute

POLITICAL MAP OF AFRICA

Scale 1:35,000,000 (550 miles = 1 inch)

Statute Miles 0 200 400 600 800 1000

Kilometres 0 500 1000 1500

Reference to colouring

British · Portuguese · Spanish
French · Belgian · Italian

Principal Railways —— Caravan Routes ——
Shipping Routes, with Distances in Nautical Miles 462
Periodical Streams
Limit of River Navigation from the Sea ⚓
Limits of Inland River Navigation ⚓

Boundary of the Union of South Africa
Territory administered through the League of Nations

Projection: Sanson-Flamsteeds Sinusoidal

Principal Air Mail Routes
Principal Wireless Stations

BRITISH ISLES on the same scale

Meridian of 0 Greenwich

George Philip & Son, Ltd
The London Geographical Institute

EGYPT

Scale 1:4000000 (64 miles-1inch)

Statute Miles 0 10 20 40 60 80 100

Kilometres 0 20 40 60 80 100 120 140

Railways ... Shipping Routes (Distances in Nautical Miles)

Caravan Routes ... Canals

Wells △ Pyramids

Heights in feet

SOUTH EAST ENGLAND
on same scale as general map

George Philip & Son Ltd
The London Geographical Institute

CENTRAL AFRICA

ENGLAND & WALES
on same scale as general map

Reference to colouring
British
French
Italian
Portuguese
Spanish
Belgian
Principal Railways
Shipping Routes (Nautical Miles)
Heights in feet
Territory administered through the League of Nations

Scale of Statute Miles
0 20 40 60 80 100 200 300 400
Kilometres
0 50 100 200 300 400 500 600

S. W. AFRICA East from 20° Greenwich

Geo. Philip & Son Ltd.

The London Geographical Institute

SOUTH AFRICA

Scale 1:10,000,000 (160 miles=1 inch)

Statute Miles 0 50 100 200

Kilometres 0 50 100 200 300 400

Heights in Feet. Railways
Principal Shipping Routes with Distances in Nautical Miles
Limit of River Navigation
Boundary of Union of South Africa

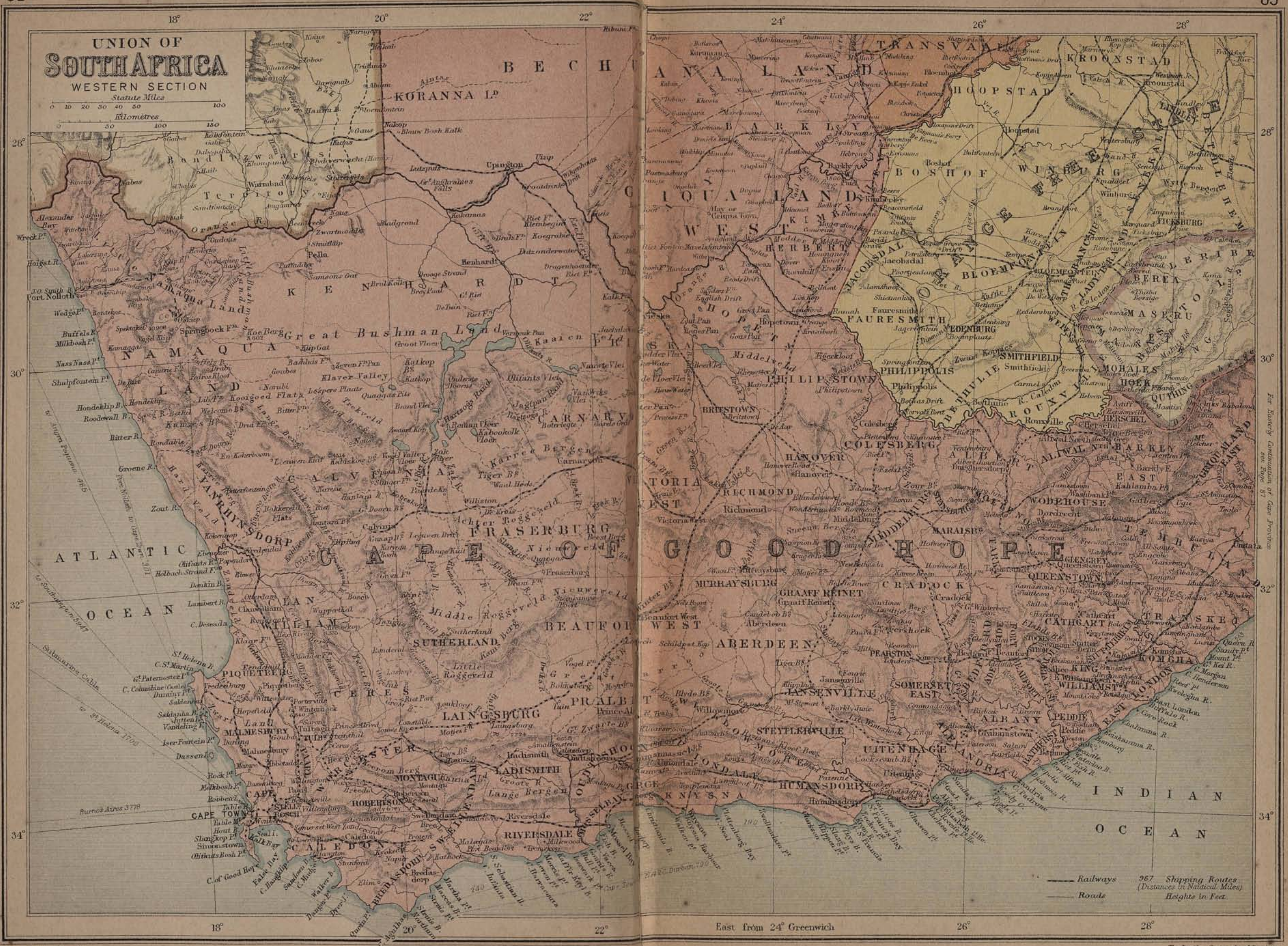
Projection: Bonne's

WALES on same scale

Longitude East 25 of Greenwich

George Philip & Son, Ltd

The London Geographical Institute.



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UNION OF SOUTH AFRICA
(EASTERN SECTION)

Scale 1:3,800,000 (60 miles-1inch)

Statute Miles 0 10 20 30 40 50 100

Kilomètres 0 50 100 150

Railways — Roads — Shipping Routes (Distances in Nautical Miles) — Heights in Feet

Projection: Conical with two Standard Parallels

26° 28° 30° 32°

East from 30° Greenwich

CAPE OF GOOD HOPE

George Philip & Son, Ltd. The London Geographical Institute.

GUINEA

Statute Miles
0 50 100 200 300
Kilometres
0 100 200 300 400
Railways — Shipping Routes
Roads — Heights in feet

British
French
Portuguese
Territory administered through the League of Nations

GULF OF GUINEA

St Iago to P.I. 2080

RHODESIA

Statute Miles
0 50 100 150
Kilometres
0 50 100 150 200
Railways — Roads
Heights in feet
Territory administered through the League of Nations

15° 10° 5° 0° 5° 10° 15°

20° 25° East from 30° Greenwich 35°

George Philip & Son Ltd.

The London Geographical Institute

ENGLAND & WALES
on same scale

POLITICAL MAP OF NORTH AMERICA

Scale 1:30,000,000 (480 miles-1 inch)

Statute Miles 0 100 200 400 600 800

Kilometres 0 200 400 600 800

Principal Shipping Routes

Limit of Navigation

Projection - Bonne's

Principal Air Mail Routes

Principal Wireless Stations

Longitude West 100 from Greenwich

George Philip & Son, Ltd.

The London Geographical Institute

DOMINION OF
CANADA
WITH
NEWFOUNDLAND
Scale 1:20000000 (320 miles=1inch)
Statute Miles
Kilometres
Projection: Bonne's

ENGLAND & WALES
on same scale as general map

Principal Railways
Shipping Routes
Limit of River Navigation
Heights in Feet, Canals

George Philip & Son, Ltd

The London Geographical Institute

THE MARITIME PROVINCES

Scale 1:3,168,000 (50 miles-1 inch)

Statute Miles 0 10 20 40 60 80

Kilomètres 0 50 100

Railways open ——— under construction

Sub. Cable Submarine Telegraph

2710 Shipping Routes (Distances in Nautical Miles)

Projection: Conical with two Standard Parallels

72° 71° 70° 69° 68° 67° 66° 65° 64° 63° 62° 61° 60°

49° 48° 47° 46° 45° 44°

West from 67° Greenwich

George Philip & Son Lᵗᵈ

The London Geographical Institute ACH

ONTARIO AND WESTERN QUEBEC

Statute Miles 0 10 20 40 60 80

Kilometres 0 50 100

Railways

George Philip & Son Ltd

The London Geographical Institute

CENTRAL & WESTERN CANADA

Scale 1:12,500,000 (200 miles - 1 inch)

Statute Miles 0 50 100 200 300

Kilometres 0 100 200 300 400 500

Principal through Railways

2966 Shipping Routes (Distances in Nautical Miles)

Projection: Bonne's

WALES on same scale

150° 140° 130° 120° 110° 100° 90° 80° 70°

60° 50°

From Greenwich

UNITED STATES

Scale 1:16,000,000 (256 miles = 1 inch)

Statute Miles 0 50 100 150 200 250

Kilometres 0 50 100 200 300 400 500

Railways 562 Shipping Routes (Distances in Nautical Miles)

14147 Heights in Feet ..... Canals

Mass. Massachusetts
Conn. Connecticut
R.I. Rhode Island
N.J. New Jersey
D. Delaware

ENGLAND & WALES
on same scale as general map

George Philip & Son, Ltd

The London Geographical Institute.

EASTERN UNITED STATES

Scale 1:10,000,000 (160 miles = 1 inch)

Statute Miles 0 50 100 200 300

Kilometres 0 50 100 200 300 400 500

Principal Railways

Projection: Bonne's

WALES on same scale

95° 90° 85° 80° 75° 70°

50° 45° 40° 35° 30° 25°

West from 85° Greenwich

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UNITED STATES

NORTH EASTERN SECTION

Statute Miles 0 10 20 30 40 50 100

Kilometres 0 50 100 150

Railways — 3091 Shipping Routes (Distances in Nautical Miles)

6203 Heights in feet

West from 74° Greenwich

George Philip & Son, Ltd.

The London Geographical Institute

WESTERN UNITED STATES

Scale 1:10,000,000 (160 miles = 1 inch)

Statute Miles: 0 50 100 200 300

Kilometres: 0 50 100 200 300 400 500

Principal Railways

Projection: Bonnes

WALES on same scale

CONTINUATION OF TEXAS

West from Greenwich

George Philip & Son, Ltd

The London Geographical Institute

MEXICO

Scale 1:10,000,000 (160 Miles = 1 inch)

Statute Miles 0 50 100 150 200 250

Kilometres 0 100 200 300 400

Railways 282 Shipping Routes (Distances in Nautical miles)

Heights in feet

A. Aguascalientes
Q. Queretaro
Me. Mexico
M. Morelos
G. Guanajuato
H. Hidalgo
FD. Federal District
T. Tlaxcala

Capitals of States are underlined

WALES on same scale

George Philip & Son, Ltd.

The London Geographical Institute

WEST INDIES AND CENTRAL AMERICA

Scale 1:12,000,000 (190 miles-1 inch)

Statute Miles 0 50 100 200 300 400

Kilometres 0 50 100 200 300 400 500 600

Railways — Canals

967 Shipping Routes (Distances in Nautical Miles)

Heights in feet

Projection: Conical with two Standard Parallels

WALES on same scale

George Philip & Son, Ltd

The London Geographical Institute

SOUTH AMERICA

Scale 1:30000000 (473 miles = 1 inch)

Statute Miles 0 100 200 300 400 500 600

Kilometres 0 100 200 400 600 800

Railways 550 Shipping Routes (Distances in Nautical Miles)

23081 Heights in Feet.

1 Espirito Santo
2 Rio de Janeiro

ENGLAND & WALES on same scale

Wellington to Montevideo 5989. Rio de Janeiro 6883
Cape Horn 4619

Principal Air Mail Routes — Principal Wireless Stations

George Philip & Son, Ltd.

The London Geographical Institute.

CENTRAL SOUTH AMERICA

Scale 1:14500000 (230 miles 1 inch)

Statute Miles 0 50 100 200 300 400

Kilometres 0 100 200 400 600

Principal Railways ..... Principal Shipping Routes ---

Submarine Cables Sub. Cable Heights in feet

Projection: Sanson Flamsteed Sinusoidal

WALES on same scale

George Philip & Son, ltd

THE PACIFIC OCEAN

Principal Railways

Principal Shipping Routes (Distances in Nautical Miles)

Territory administered thro the League of Nations

Principal Air Mail Routes

Pioneer Pacific Flights

East from 140° Greenwich

George Philip & Son Ltd.

ENGLAND & WALES
on same scale as general map

THE COMMONWEALTH OF AUSTRALIA

Scale 1:15,000,000 (240 miles=1 inch)
Statute Miles 0 100 200 300 400
Kilometres 0 100 200 300 400 500
Railways
Shipping Routes Distances in Nautical Miles
Limit of Navigation (flat-bottomed boats)
Projection: Bonne's

Principal Air Mail Routes
Principal Wireless Stations

TASMANIA
on same scale

George Philip & Son, ltd

The London Geographical Institute

George Philip & Son, Ltd.

The London Geographical Institute.

WALES on same scale

BRITISH NEW GUINEA

QUEENSLAND

Scale 1:7,476,480 (118 miles-1 inch)

Statute Miles 0 50 100 150 200

Kilometres 0 50 100 200 300

Railways ..... 1067 Shipping Routes (Distances in Nautical Miles)

Principal Telegraph Lines

Artesian Basins

Heights in feet

Projection: Bonne's

Statute Miles 0 50 100 200

NEW GUINEA (PAPUA)

TERRITORY OF NEW GUINEA

Australian Mandate

Bismark Archo

New Ireland (New Mecklenburg)

New Britain (New Pomerania)

PACIFIC OCEAN

Gulf of Papua

Gulf of Carpentaria

Torres Strait

Coral Sea

NORTHERN TERRITORY

SOUTH AUSTRALIA

NEW SOUTH WALES

Cape York Peninsula

Gregory North

Gregory South

Mitchell

Leichhardt

Burnett

Darling Downs

Moreton

Wide Bay

Kennedy

Central Highlands

Northern Districts

Southern Districts

Coastal Districts

Great Dividing Range

Great Barrier Reef

Capricorn Channel

Torres Strait

Gulf of Papua

Coral Sea

Gulf of Carpentaria

Great Australian Bight

Great Sandy Desert

Simpson Desert

Sturt Stony Desert

Channel Country

Lake Eyre

Lake Gregory

Lake Blanche

Lake Yamma Yamma

Goyder's Lagoon

Cooper Creek

Diamantina Lakes

Georgina

Barcoo

Thomson

Flinders

Gilbert

Leichhardt

Mitchell

Nogoa

Comet

Dawson

Burdekin

Herbert

Tully

Johnstone

Mulgrave

Barron

Daintree

Normanby

Jardine

Fly

Strickland

Purari

Kikori

Aird

Vailala

Sepik

Ramu

Markham

Torres Strait Islands

Bismarck Range

Owen Stanley Range

Victor Emanuel Mts

Mt Wilhelm 14,820

Mt Victoria 13,363

Mt Albert Edward 13,000

Mt Yule 13,205

Mt Obree 13,000

Mt Lamington 5,500

Mt Garnet 2,438

Mt Surprise 2,438

Mt Isa 2,164

Mt Domville 2,069

Mt Pluto 2,057

Mt Morgan 1,200

Mt Perry 1,200

Mt Lindesay 4,064

Mt Warning 3,800

Mt Hutton 3,000

Mt Elliott 3,000

Mt Mulligan 3,000

Mt Malloy 3,000

Mt Alexander 3,000

Mt Hawitt 3,000

Mt Horrible 3,000

Mt Grey 3,000

Mt Brassey 13,000

Mt Murray 13,000

Mt Chapman 13,000

Mt Macgillivray 13,000

Mt Suckling 13,000

Mt Haig 13,000

Mt Hagen 13,000

Mt Kubor 13,000

Mt Kerigomna 13,000

Mt Scratchley 13,000

Mt Trafalgar 13,000

Mt Albert Edward 13,000

Mt Victoria 13,363

Mt Wilhelm 14,820

Mt Yule 13,205

Mt Obree 13,000

Mt Lamington 5,500

Mt Garnet 2,438

Mt Surprise 2,438

Mt Isa 2,164

Mt Domville 2,069

Mt Pluto 2,057

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Mt Perry 1,200

Mt Lindesay 4,064

Mt Warning 3,800

Mt Hutton 3,000

Mt Elliott 3,000

Mt Mulligan 3,000

Mt Malloy 3,000

Mt Alexander 3,000

Mt Hawitt 3,000

Mt Horrible 3,000

Mt Grey 3,000

Mt Brassey 13,000

Mt Murray 13,000

Mt Chapman 13,000

Mt Macgillivray 13,000

Mt Suckling 13,000

Mt Haig 13,000

Mt Hagen 13,000

Mt Kubor 13,000

Mt Kerigomna 13,000

Mt Scratchley 13,000

Mt Trafalgar 13,000

Bougainville Reef

Moore Reefs

Holmes Reefs

Flora Reef

Herald Cays

Herald's Surprise

Dart Reef

Flinders Reefs

Diamond Islets & Cays

Tregrosse Is

Abington Reef

Swain Reefs

Lihou Reefs & Cays

Willis Is

Percy Is

Northumberland Is

Whitsunday I.

Hook I.

Dunk I.

Bedford I.

Flattery

Murray Is

Darnley I.

Saibai I.

Boigu I.

Deliverance I.

Turnagain I.

Jervis I.

Dungeness I.

Mulgrave I.

Banks I.

Thursday I.

Prince of Wales I.

Wellesley Is

Bentinck I.

Mornington I.

Sweers I.

Pellew Is

Vanderlin I.

Groote Eylandt

Bickerton I.

Chasm I.

Centre I.

Forsyth I.

Sir Charles Hardy Is

Lizard I.

Fitzroy I.

Hinchinbrook I.

Palm Is

Halifax Bay

Rockingham Bay

Trinity Bay

Cleveland Bay

Upstart Bay

Repulse Bay

Broad Sound

Keppel Bay

Port Curtis

Hervey Bay

Moreton Bay

Port Denison

Edgecumbe Bay

Princess Charlotte Bay

Temple Bay

Albatross Bay

Weymouth Bay

Lloyd Bay

Archer Bay

Newcastle Bay

Endeavour Strait

Torres Strait Islands

Normanton to Thursday I. 460

From Batavia 2164

From Darwin 725

To Rabaul 1067

To Hermit I. 438

To Sydney 474

To New Caledonia

Statute Miles 0 50 100 200

140° 145° 150°

15° 20° 25°

George Philip & Son, Ltd

The London Geographical Institute

WESTERN AUSTRALIA

Scale 1: 7,603,320 (120 miles = 1 inch)

Statute Miles: 0 50 100 150 200

Kilometres: 0 50 100 200 300

Railways — 1902. Shipping Routes (Distances in Nautical Miles)
Principal Telegraph Lines
Rabbit-proof fences — Artesian Basins
Land Divisions — Lands Districts in separate tints
Heights in feet

115° 120° 125° 130°

15° 20° 25° 30°

INDIAN OCEAN

WESTERN AUSTRALIA

NORTHERN TERRITORY

STH. AUSTRALIA

DUNGAN MARNDOR KWINANA KIMBERLEY NUMALGUN OMALINDE KING LUMAN DIVISION MEDA FITZROY DAMPIER JARMURA URABI BULARA PARDU Desert Basin

DE WITT PEAWAH FORREST DE GREY ASHBURTON GREGORY WINDELL HARDEY LYONS DIVISION GASCOYNE DIVISION NOOKAWARRA MURCHISON YELINA KALUWIRI NULERI CENTRAL MACKAY DIVISION WARRAMBOO VICTORIA NINGHAN DIVISION MALCOLM MARMION EUDINA DELISSER SOUTH YILGARN MELBOURNE Plains SOUTH WEST DIVISION JILBADJI JAURDI HAMPTON BUNINGONIA NGALBAIN NUYTS DIVISION NURINA MUNDRABILLA Eucla Basin PERTH Fremantle ROE WILLIAM KOJONUP KENT NELSON PLANTAGENET HAY LEAKE DUNDAS FRASER FITZGERALD DEMPSTER ESPERANCE NERIDUP

Great Australian Bight

1. CANNING
2. COCKBURN SOUND
3. MURRAY
4. WELLINGTON

WALES on same scale

120° To Adelaide 1036

Longitude East 125° from Greenwich

George Philip & Son, Ltd.
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DEPENDENCIES OF NEW ZEALAND

Scale 1:50000000 (800miles-1inch)

Dependencies underlined in red.

Takelau or Union Is
Manahiki Is
Penrhyn I.
Pukapuka
Rakaanga
Manahiki
Danger Is
Nassau I.
Samoa Is
Savaii
Upolu
Tutuila (US)
Swains I.
Vanua Levu
Fiji Is
Viti Levu
Rotuma
Palmerston I.
Niue or Savage I.
Aitutaki
Hervey Is
Cook Is
Atui
Mitiaro
Mauke
Rarotonga
Mangaia
Tonga or Friendly Is
Hunter I.
Ata I.
Tropic of Capricorn
Kermadec Is
Raoul or Sunday I.
Curtis I.
Macaulay I.
L'Esperance Rk
Three Kings Is
North I.
New Zealand
South I.
Chatham I.
Pitt I.
Stewart I.
Bounty I.
Antipodes I.
Auckland Is
Campbell I.

SOUTH EAST ENGLAND
on same scale as general map

To Sydney 1233
Australian Cables

DOMINION OF NEW ZEALAND

Scale 1:5,000,000 (80 Miles-1inch)

Statute Miles 0 50 100 150
Kilometres 0 50 100 150 200
Railways — Shipping Routes
Heights in Feet
Projection: Conical with two Standard Parallels

NORTH ISLAND
(TE IKA-A-MAUI)

Three Kings Is
C. Reinga
C. Maria van Diemen
North C.
To Sydney 1263
Tasman Sea
Hokianga
Kaipara Harb.
Manukau Harb.
Waitakere
Auckland
Waitemata Harb.
Mercury B.
Tauranga Harb.
Bay of Plenty
East C.
Whale I.
White I.
C. Runaway
Hauraki Gulf
Barrier I.
Gt. Barrier I.
Cuvier I.
Coromandel
Thames (Grahamstown)
Mayor I.
Matakana I.
Tauranga
Whakatane
Opotiki
Waipiro
Gisborne
Poverty B.
Mahia Peninsula
Portland I.
Hawke Bay
Napier
Kidnappers
Hawkes Bay
Cape Egmont
Mt. Egmont
New Plymouth
North Taranaki Bight
South Taranaki Bight
Wanganui
Taranaki
Wellington
Manawatu
Rangitikei
Palmerston
Wairarapa
Cape Palliser
Cape Turnagain
Castle Pt.
Farewell Spit
To Panama 6488
To Rio de Janeiro 6883
To Cape Horn 5534
To Fiji 1350
To Sydney 1263

SOUTH ISLAND
(MIDDLE ISLAND)
(TE WAI POUNAMU)

Karamea Bight
Tasman Bay
Cook Str.
Marlborough
Blenheim
Kaikoura
Inland Kaikoura Range
Westland
Southern Alps
Canterbury
Pegasus Bay
Christchurch
Lyttelton
Banks Pen.
Akaroa
Canterbury Bight
Timaru
Oamaru
Otago
Dunedin
Otago Harb.
Taieri Plain
Clutha R.
Southland
Foveaux Str.
Stewart I.
Rakiura
Solander I.
Puysegur Pt.
Chalky Inlet
Preservation Inlet
Dusky Sd.
Breaksea Sd.
Resolution I.
Doubtful Sd.
Secretary I.
Caswell Sd.
George Sd.
Bligh Sd.
Milford Sd.
Mitre Pt.
Jackson B.
Gillespie's
Westport
Greymouth
Hokitika
Ross
Arthur's Pass
Otira Gorge
Jackson's B.
Hanmer
Amberley
Ashburton
Tekapo
Tasman Glacier
Mt. Cook
Mt. Tasman
Mt. Sefton
Mt. Haast
Mt. Aspiring
Mt. Earnslaw
Mt. Pembroke
Mt. Egmont
Mt. Ruapehu
Mt. Tongariro
Mt. Ngauruhoe
Mt. Edgecumbe
Mt. Tarawera
Mt. Ruahine
Mt. Hikurangi
Mt. Holdsworth
Mt. Somers
Mt. Peel
Mt. Hutt
Mt. Arrowsmith
Mt. Richmond
Mt. Robert
Mt. Owen
Mt. Murchison
Mt. Arthur
Mt. Franklin
Mt. Alexandra
Mt. Stokes
Mt. Egmont
Mt. Taranaki
Mt. Ruapehu
Mt. Tongariro
Mt. Ngauruhoe
Mt. Edgecumbe
Mt. Tarawera
Mt. Ruahine
Mt. Hikurangi
Mt. Holdsworth
Mt. Somers
Mt. Peel
Mt. Hutt
Mt. Arrowsmith
Mt. Richmond
Mt. Robert
Mt. Owen
Mt. Murchison
Mt. Arthur
Mt. Franklin
Mt. Alexandra
Mt. Stokes
Cape Farewell
Tasman Sea
Pacific Ocean

SAMOA, OR NAVIGATORS ISLANDS

New Zealand Mandate
Western Samoa
Savaii
Upolu
Tutuila (United States)
Manua
Rose I.
Statute Miles
14° S. Lat.
172° W. Long.
From Fiji 830
To Apia 830

FIJI ISLANDS (British)

Vanua Levu
Viti Levu
Koro
Sea of Fiji Is
Exploring
Nandi
Suva
Lakemba
Mbau
Totoia
Pilanga
Kadavu
Ono
Matuku
Vatoa or Turtle I.
Tongatabu
Eua
Vavau
Haapai I.
Tofoa
Kao
Late
Tafahi
Niuafoo
Nine Islands
Anamooka
Rotuma
Fotuna
Horne Is
Wallis I.
To Tahiti 1930
To Apia 830
To Auckland 1750
To Sydney 1650
To Panama 6488
To Rio de Janeiro 6883
To Cape Horn 5534
To Fiji 1350
To Melbourne 1881
Australian Cables
Statute Miles
178° E. Long.
180° W. Longitude
178° W. Long.
20° S. Lat.

TONGA OR FRIENDLY ISLANDS (Brit.)

East from Greenwich

George Philip & Son, Ltd.
The London Geographical Institute.
8CH.

THE POLAR REGIONS

ARCTIC REGIONS

Statute Miles 0 500 1000

Pioneer Polar Flights

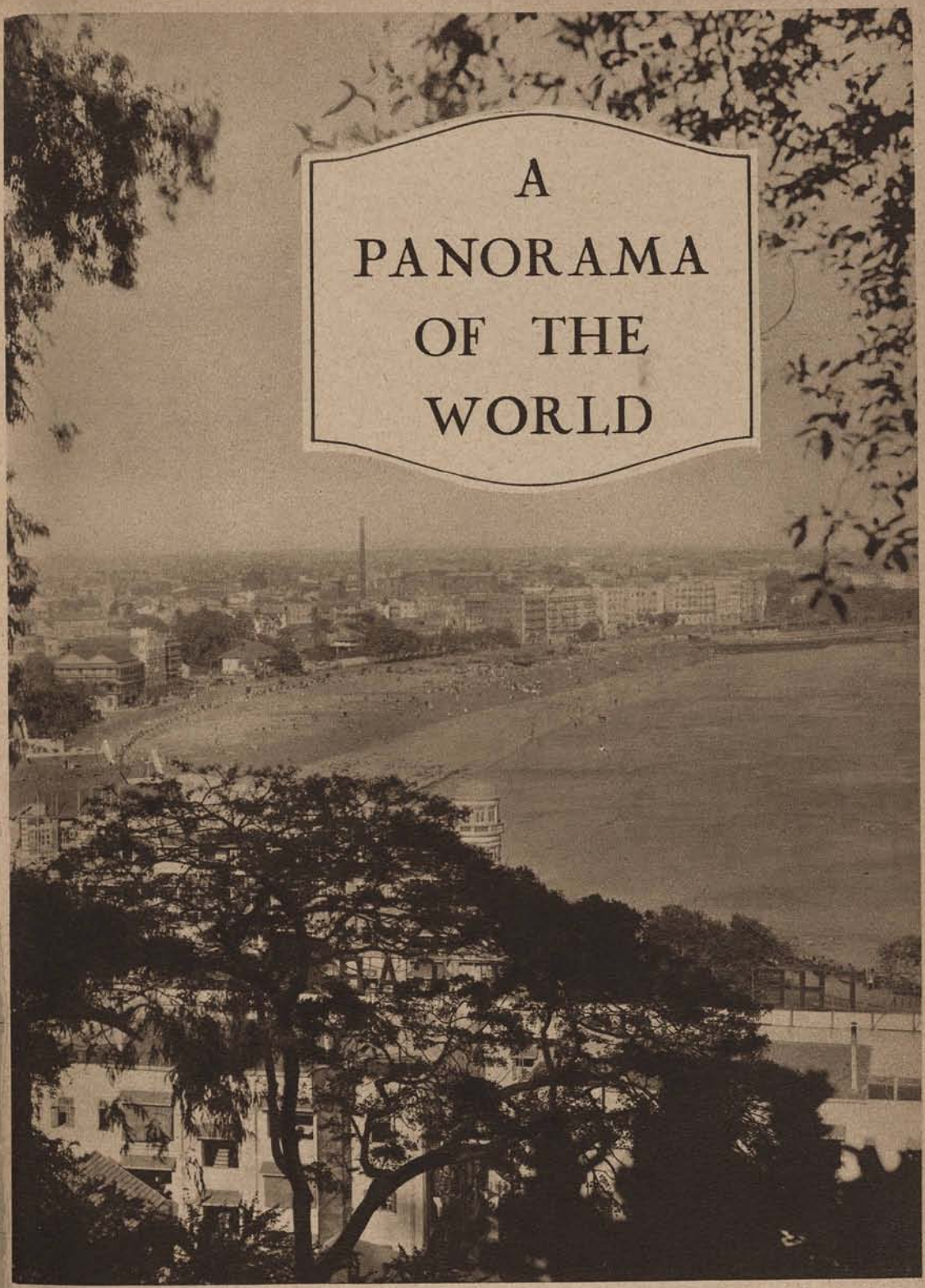
NORTH PACIFIC OCEAN
Bering Sea
Aleutian Is.
Kurile Is.
Japan
Sea of Japan
Sea of Okhotsk
Kamchatka
R. Amur
Columbia R.
Vancouver
Alaska
St. Lawrence
Stanovoi Mts.
Arctic Circle
R. Kolima
Yablonoi Mts.
Baikal L.
Khingan
R. Lena
R. Yukon
Pt. Barrow
Wrangel I.
Beaufort Sea
Bering 1865
New Siberia
Banks Ld.
Mulgrave Str.
Parry Is.
R. Mackenzie
Melville Sea
Nelson
Saskatchewan R.
NORTH AMERICA
ARCTIC OCEAN
Hudson B.
Baffin B.
Baffin I.
Davis Str.
Labrador
Greenland
Greenland Sea
Jan Mayen
Spitsbergen
Spitsbergen
Nova Zemlya
Kara Sea
Bear I.
R. Ob
R. Irtish
Altai
L. Aral
R. Yenisei
Peary 1909
North Pole
Nansen 1895
Fridtjof Nansen L.d
Fr. Josef L.d
Sverdrup Zemlya
Chelyuskin
Amundsen 1926
Wilkins 1928
Nobile 1928
Denmark Str.
Iceland
Norwegian Sea
Newfoundland
British Is.
North Sea
Baltic
Hamburg
London
Paris
Vienna
R. Danube
The Alps
Rome
Lisbon
Azores
NORTH ATLANTIC OCEAN
EUROPE
Scandinavian Peninsula
White Sea
R. Dvina
R. Volga
Moscow
R. Don
Caspian Sea
Caucasus
Black Sea
R. Tigris
Mediterranean Sea
Reds.
Equatorial Limit of Icebergs
Edge of Ice (Spring)

ANTARCTIC REGIONS

Statute Miles 0 500 1000

AUSTRALIA
Sydney
Melbourne
Bass Str.
Tasmania
New Zealand
Christchurch
Chatham I.
Antipodes
Auckland
Campbell
Macquarie
SOUTHERN OCEAN
Ross Dependency
Ross Sea
Balleny Is.
Oates L.d
Adelie L.d
Wilkes L.d
King George V. Land
Edward VII Pen.
Marie Byrd L.d
Ross I.
Erebus & Terror
Mt. Melbourne
Victoria Land
Knox L.d
Antarctic Circle
Australian Dependency
Termination Barrier
Queen Mary Land
ANTARCTICA
Peter I 4200 (to Norway)
Kaiser Wilhelm II Land
King Leopold and Queen Astrid Land
South Pole
Scott 1911-12
Amundsen Dec. 1911
Princess Elizabeth L.d
Robertson L.d
Kemp L.d
Enderby L.d
Queen Maud L.d
Princess Ragnhild L.d
Heard I.
McDonald I.
Kerguelen
Crozet Is.
Chanson I.
Heard Land
Falkland Is.
Graham L.d
Magellan's Str.
Lindenberg
Cairdie
Dependencies
Weddell Sea
Coats L.d
Princess Martha L.d
Norvegia
S. Orkneys
S. Shetlands
C. Horn
South Georgia
South Sandwich Is.
Bouvet I. (to Norway)
Prince Edward Is.
Falkland Is.
SOUTH AMERICA
SOUTHERN OCEAN
SOUTH ATLANTIC OCEAN
C. of Good Hope
Cape Town
Tristan d'Acunha
AFRICA

A PANORAMA OF THE WORLD



Courtesy : Indian State Railway

BOMBAY—THE GATEWAY OF INDIA

E. O. Hoppé

THE TOMB OF AKBAR

Akbar, who reigned from 1555 to 1605 made Agra his capital, and the beauty of the buildings raised by him, and his grandson Shah Jahan, alone are a lasting monument to the might of the Moghuls. Akbar was buried at Sikandra, about five miles from Agra, and this picture shows his magnificent tomb.

Courtesy : Indian State Railways

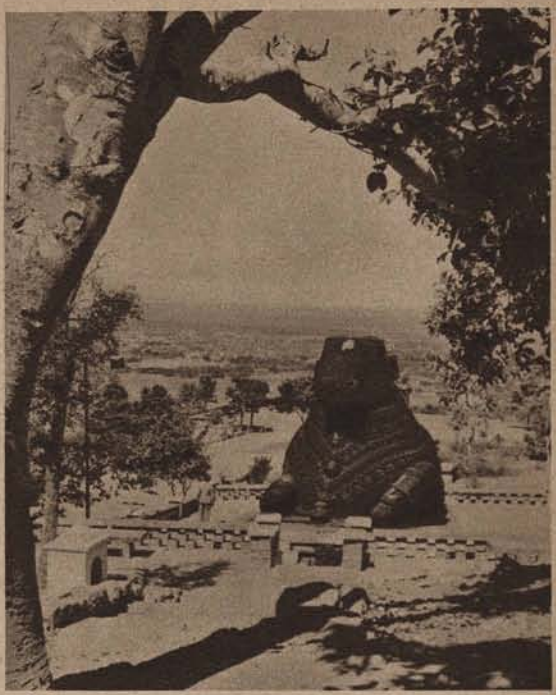
THE HIMALAYAS FROM DARJEELING

Darjeeling, in Bengal, is one of the chief hill stations of India. Here are the Himalayas seen from Darjeeling, with Kanchenjunga, third highest mountain in the world, towering above the rest.

E. O. Hoppé

THE KHYBER PASS

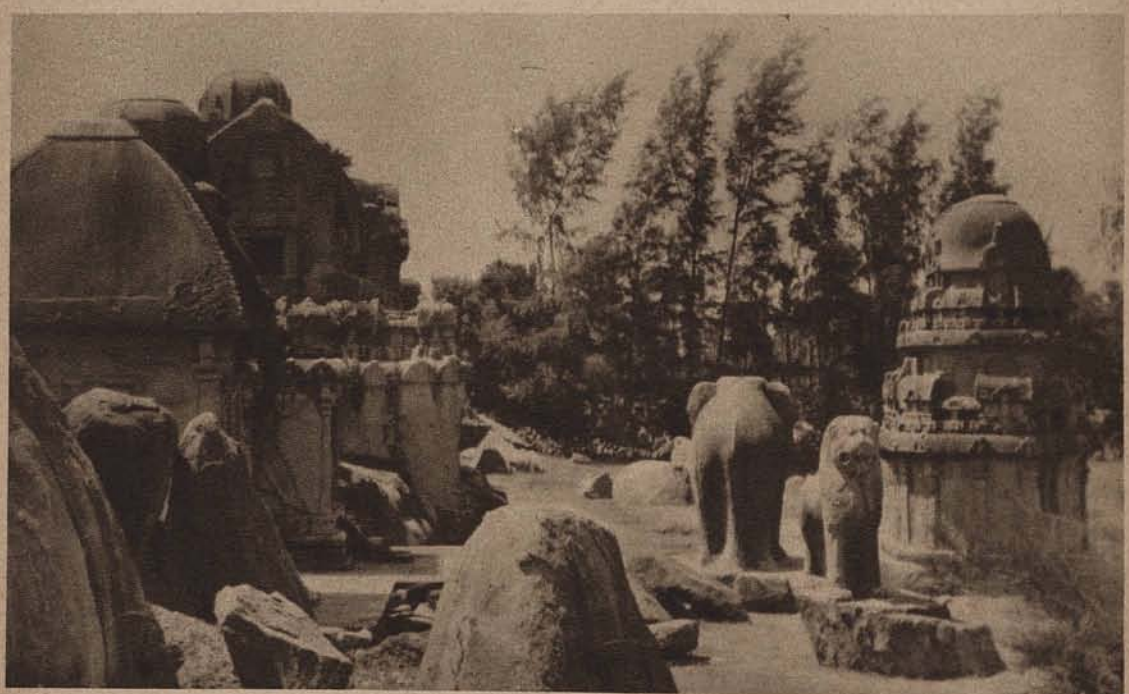
By this desolate mountain pass have swarmed the invaders of India from time immemorial. The North-west passage has always been closely guarded and even to-day a keen watch is kept on the frontier. Now an excellent motor road has superseded the rough track which carried the traffic out of India.



E. O. Hoppé

FATEHPUR SIKRI AND THE GREAT BULL OF MYSORE

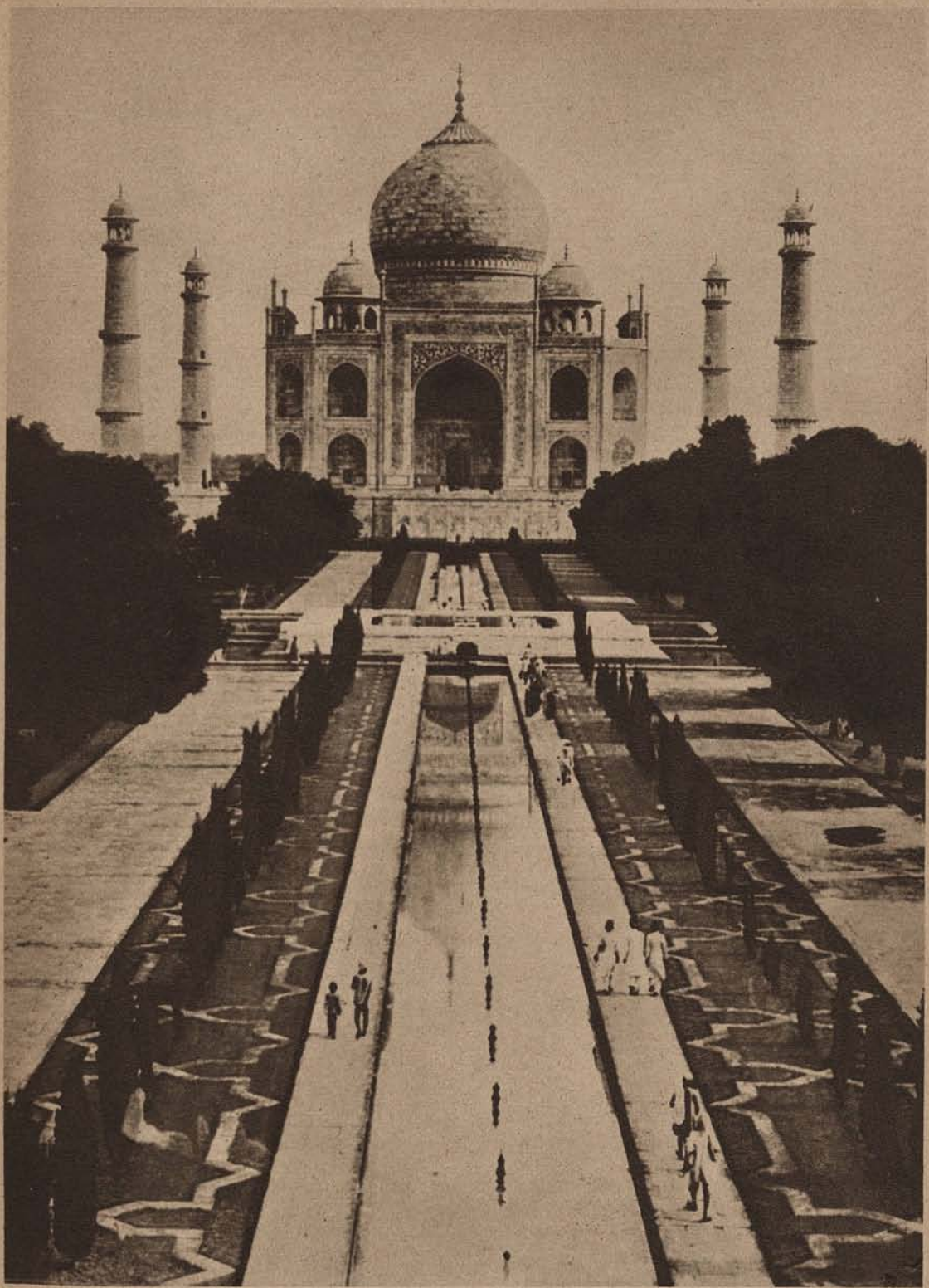
Fifty years after Fatehpur Sikri was founded by Akbar, it was deserted, there being no water supply. On the left is the triumphal gate to the city. On the right is the sacred Bull in Mysore.



E. O. Hoppé

THE SEVEN PAGODAS OF THE RATHS

Not far from Mahabalipuram in Madras are these deserted temples known as the Raths. They are believed to date back to about 650–700 A.D., and the animals are carved out of solid rock. There is a number of the Raths, and the ground plan of the temples cover quite a considerable area.



Courtesy: India Office

THE TAJ MAHAL

The world has talked of the glory of the Taj Mahal for centuries, and with all the magnificence of modern architecture and art, nothing has arisen to rival its beauty. It was built by Shah Jahan, Akbar's grandson as a mausoleum for his beloved wife, Mumtaz Mahal. It is the crowning glory of Agra, that city of beauty.

Courtesy: Canadian Pacific Railway

HOWRAH BRIDGE—CALCUTTA

Rivalling Bombay on the West, Calcutta is the great port of East India. It is also the greatest commercial city in all India, and the second largest in all the British Empire. It lies on the Hoogly River.

K. Byron

THE VICTORIA MEMORIAL

Calcutta is called 'the city of Palaces' and the beautiful building of the Victoria Memorial, shown above, must surely rank as one of the 'palaces.' It lies near the racecourse on the famous Calcutta Maidan, and houses a museum relating to Indian history generally and the Victorian era in particular.

Courtesy, Indian State Railways

THE JAGANNATH CAR PROCESSION

Puri, on the coast of Orissa, is, to the Hindus, one of the most sacred cities in India. The great temple dates back to the twelfth century. Puri is the scene of the famous Jagannath Car Procession.

THE GHATS AT BENARES

Benares, which lies on the Ganges, is the great city of the pilgrims, for there is no day in the year when they do not come in their hundreds to bathe in the sacred river. Here is a typical waterside scene. On both banks, for three miles, stretches a waterfront of temples and palaces.

E. O. Hoppé

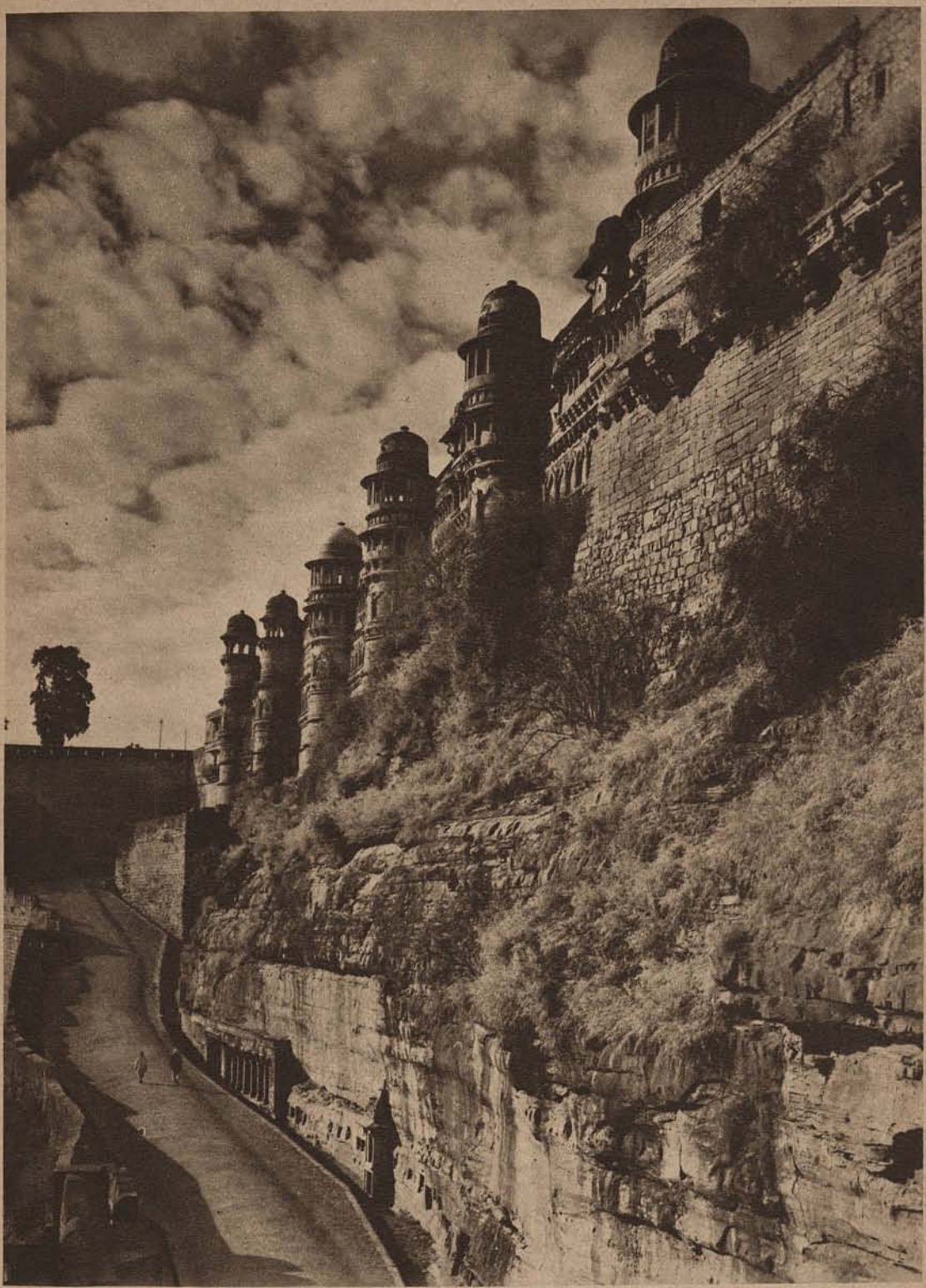
FORT ST. GEORGE—MADRAS

Fort St. George, in Madras, dates back to the days of the East India Company, and it was truly a fort manned against the French. To-day it is the official residence of the Governor of Madras.

E. O. Hoppé

ON THE MALABAR COAST

Stretching down to the most southerly point of India, Cape Cormorin, is beautiful coastal scenery such as that shown in the photograph above. This scene is near Trivandrum, a port on the Malabar coast which is connected with Central India more by waterway than by railway.



Courtesy: Indian State Railways

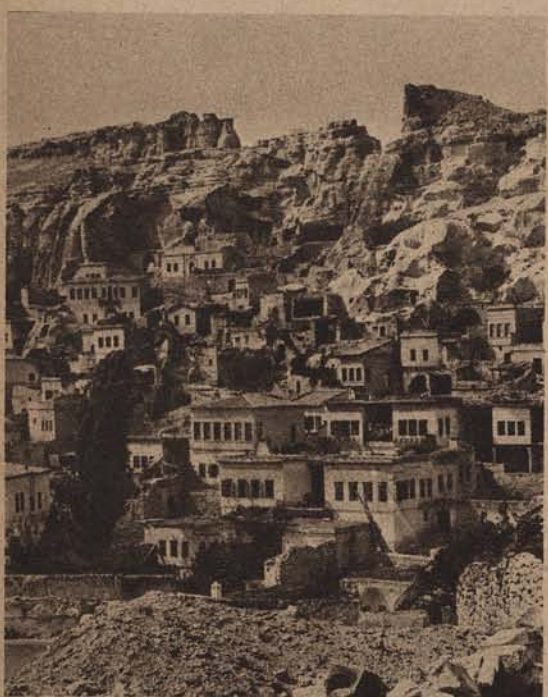
THE FORT AT GWALIOR

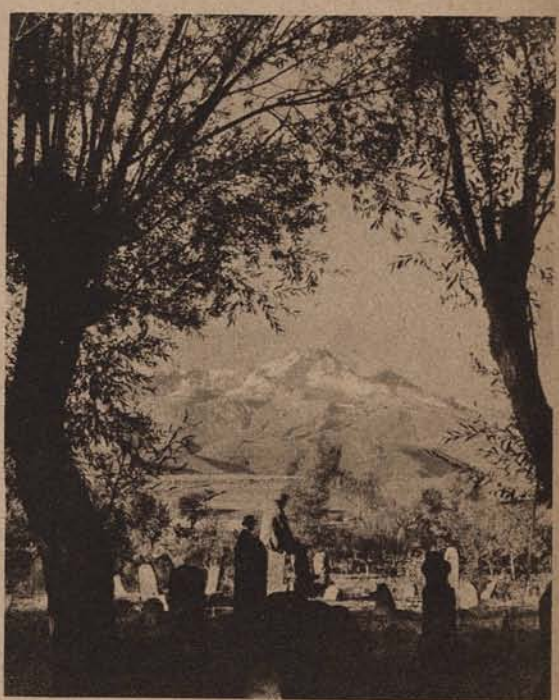
Here is a photograph of the famous Fort at Gwalior 'the pearl in the necklace of the castles of Hind. In the old days this strong fortress, perched on a hill, had enormous strategical importance. In 1886, the then Viceroy, Lord Dufferin, handed over the fort to the Maharaja Sindia, and it is now a palace.

Lubinski

NEW CAPITAL OF OLD TURKEY

Angora, modern capital of the new Turkey, lying in the central steppes of Asia Minor, was planned by the German architect, Professor Herman Jansen. In the background is the old citadel





E. Ritter Mondiale

VILLAS AND VISTAS IN ASIA MINOR

The picture (left) shows part of the famous old city of Urgub, some 150 miles south east of Angora, a city of queer contrasts where old cave dwellings tower above modern villas. On the right is a general view of the Erdjas Dagh, a well-known mountain of central Anatolia, seen from the outskirts of Cæsarea.

K. Byron

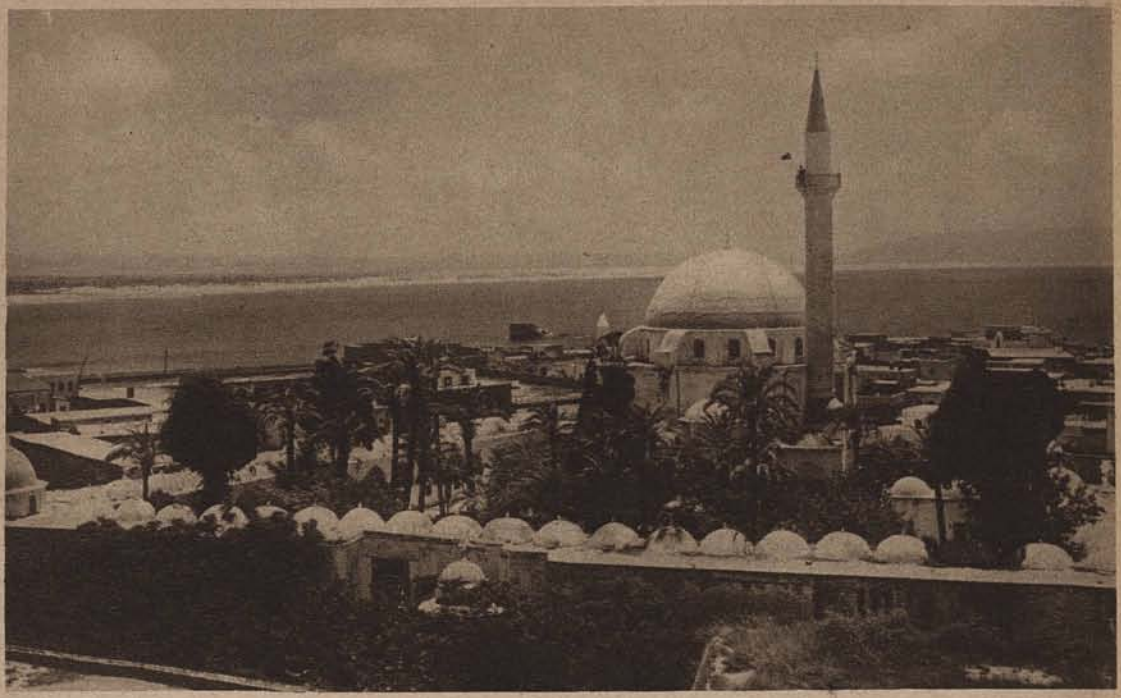
THE WORLD'S OLDEST LIVING CITY

Damascus, famed in legend and story, claims to be the oldest living city in the world. Its origins are buried in the roots of history : its splendour, alas, is buried there too. Here is a general view.

S. J. Schweig

JERUSALEM THE GOLDEN

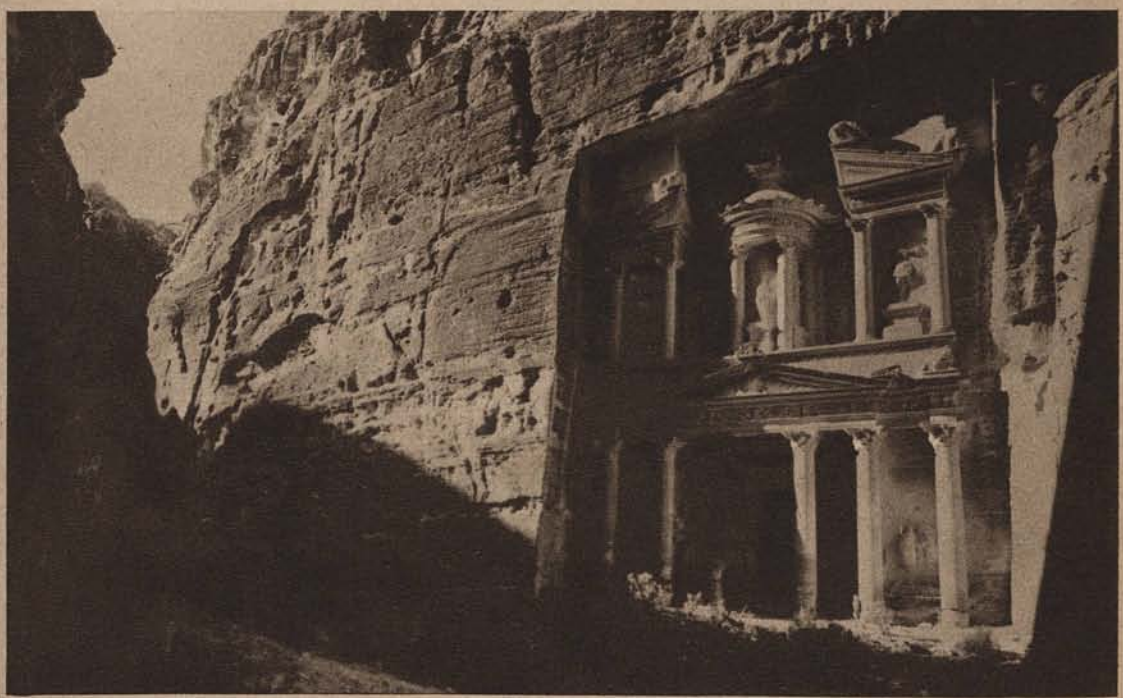
Jerusalem, is not only a Holy City to the Western, but also to the Mahomedan world. Side by side in it are found shrines sacred to Jew, to Arab, and to Christian. This view of the older part of the city shows the majestic Dome of the Rock in the Temple Area, erroneously known as the Mosque of Omar.



S. J. Schweig

AN HISTORIC SEAPORT

Acre, the most northerly port in Palestine, has a remarkable history. Apart from its Biblical associations it is famed for two sieges, during the Crusades and during Napoleonic invasion of Egypt.



S. J. Schweig

IN ARABIA'S HIDDEN CITY

Petra, once a thriving metropolis in north-west Arabia, now a deserted city hidden behind towering cliffs of exquisite rose sandstone, has left to posterity some remarkable tombs. This facade, hewn from the living rock, conceals the entrance to an age-old tomb. It is but one of many in Petra.

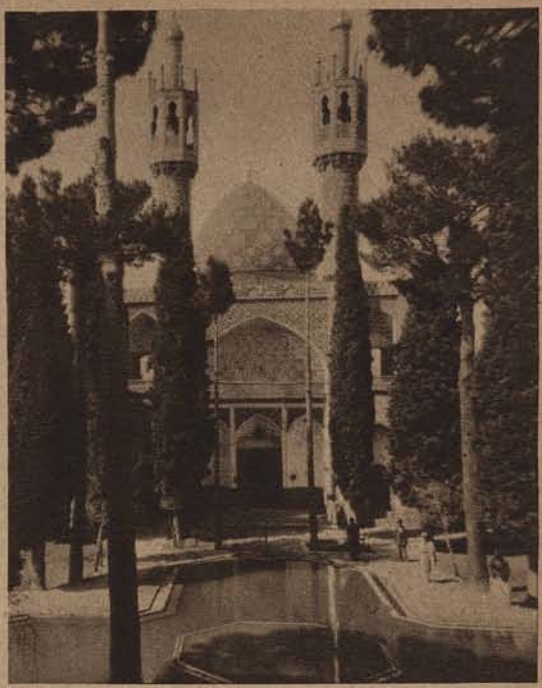


Photo : R. Byron

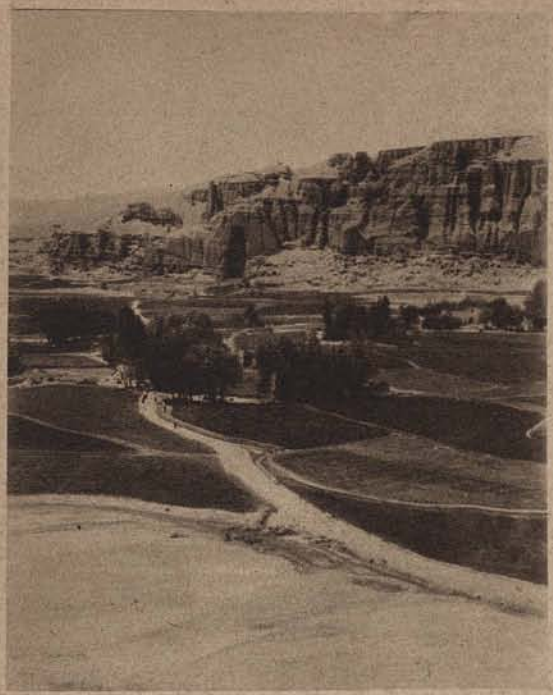
TOMBS AND SHRINES IN OLD PERSIA

Persia is a land of antiquity. These tombs (*left*) at Naksh-i-Rustum, date back to the Achemenid Kings, such as Darius and Xerxes. The Shrine of Niamatullah (*right*) at Mahun is early 15th century.

Photo : R. Byron

A PERSIAN GARDEN

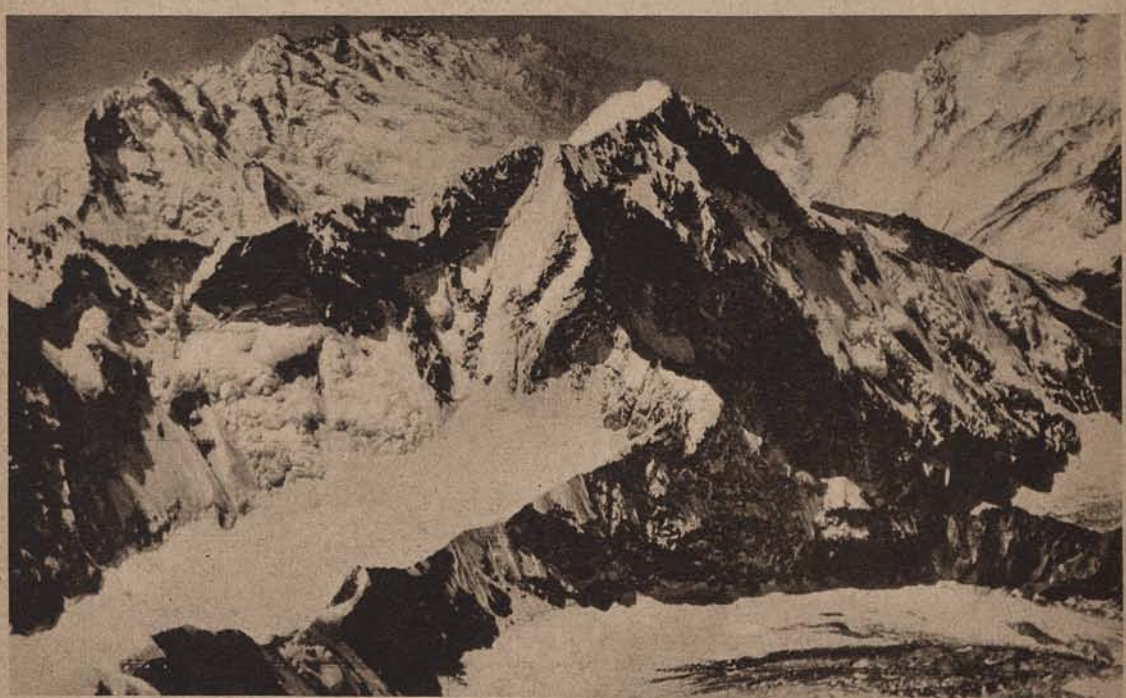
Few features of Persia are more famous than her lovely gardens. This particular garden surrounds the palace of Shah Abbas at Ashraf a few miles south of the Caspian Sea which can be seen in the far distance. Here Shah Abbas received the first British Ambassador, Sir Dodmore Cotton, in 1625.



Photos: R. Byron

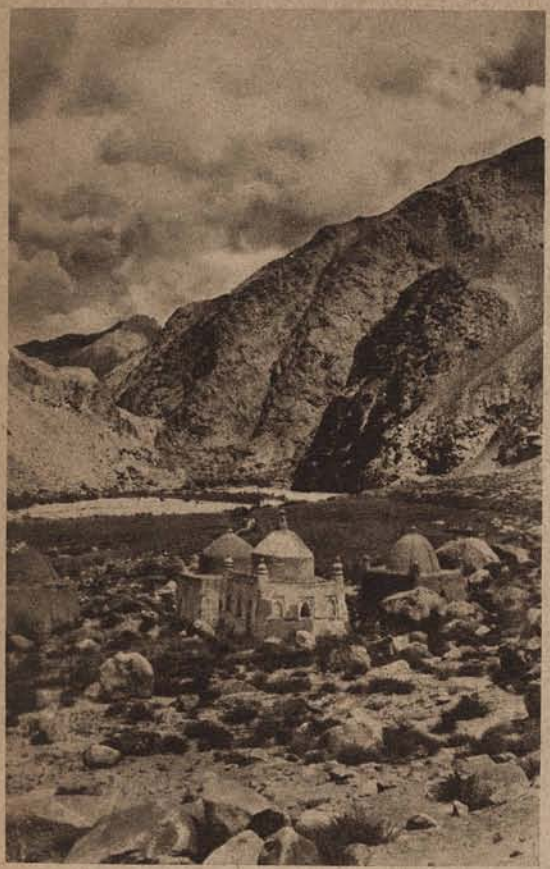
RELICS OF A GREAT PAST

These Bhuddist caves and rock carvings (*left*) at Bamian in Afghanistan, tell of the country's storied past no less than the minaret (*right*) of Sultan Masud III at Ghazni, which dates from the 11th century.



THE WORLD'S MIGHTIEST MOUNTAIN

Mount Everest, giant peak of the Himalayas, on the borders of Nepal and Tibet, rears its summit 29,002 feet into the air, the highest mountain on the face of the globe. Despite a succession of well-equipped European expeditions it has never yet been scaled by man, although it was flown over in 1933



C. F. Skrine
Strong

IN FABLED TURKISTAN

These Kirghiz domes (*left*) in the Chinese Pamirs, mark the burial places of ancient Kings. The scenery is typical of the wild country. *Right*, is a view of one of the many mosques in Samarkand.

Akademia

IN THE GOBI DESERT

One of the least known areas of the world, the Gobi Desert extends across hundreds of miles of northern and western China and Inner Mongolia. The settlement built round a monastery shown here was first visited by Europeans by the Sven Hedin Expedition in 1932.

E. N. A.

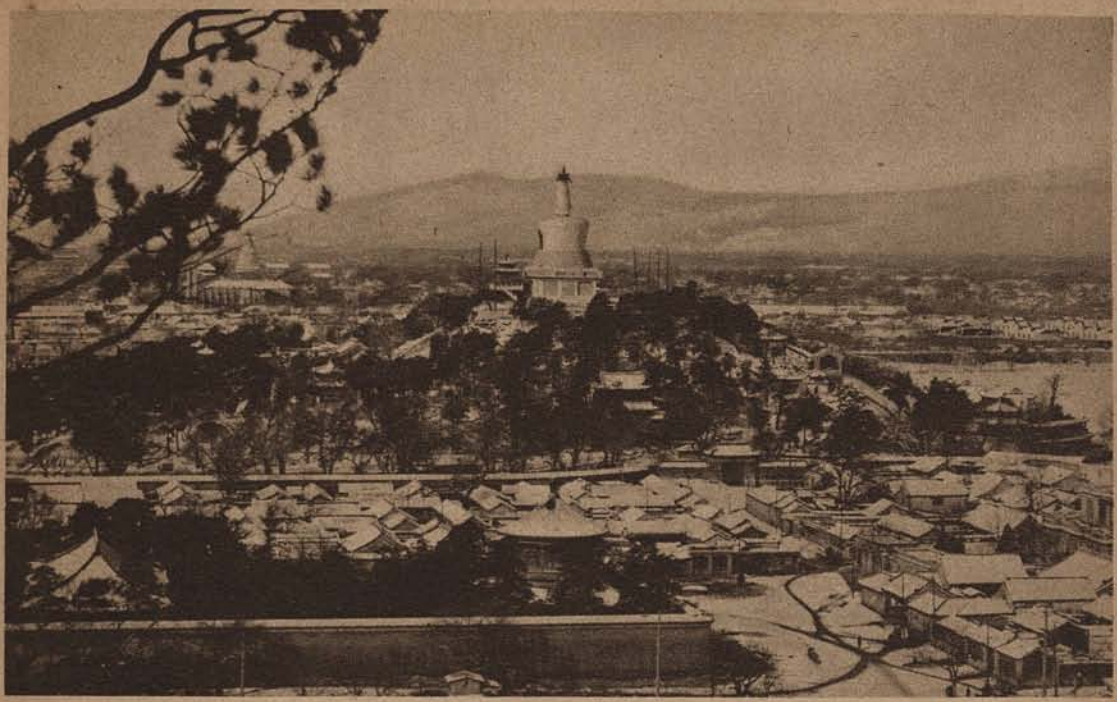
HILL-GIRT PALACE OF TIBETAN PRIESTS

What the Vatican is to Catholics, the wonderful Potala Palace is to Tibetan Buddhists. It lies in the plain a mile from Lhasa and climbs nobly, a miniature city in itself, to the summit of a great crag.

F. Kingdon Ward

RUGGED ROAD OF A GREAT GLACIER

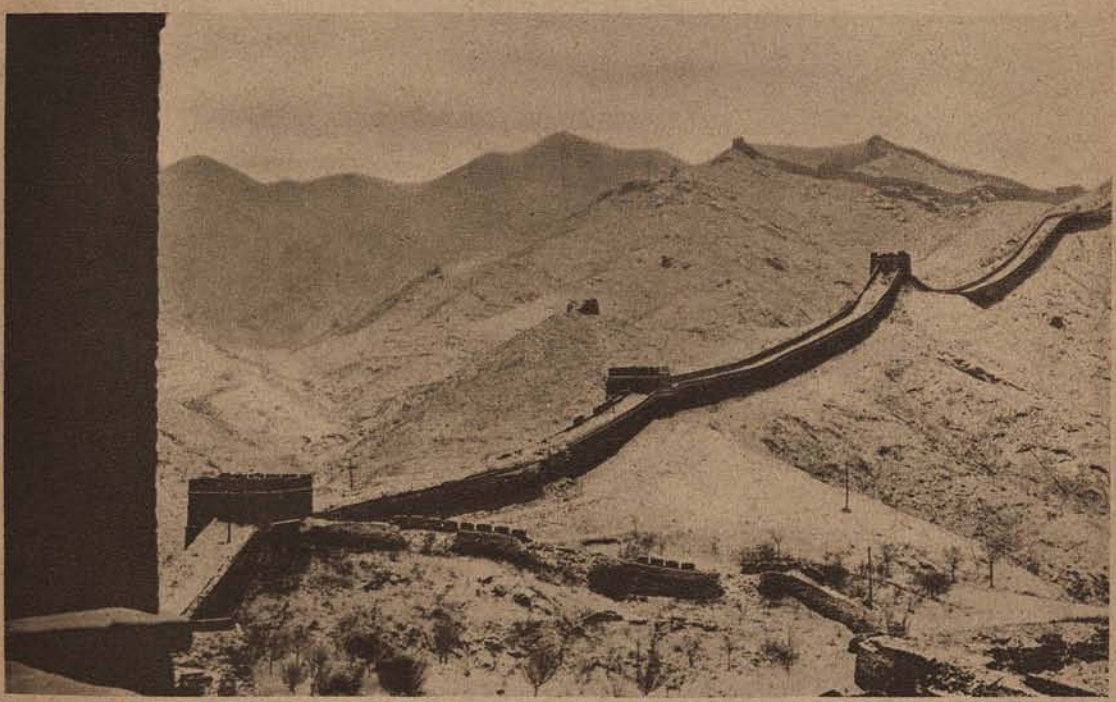
Nearly the whole of Tibet is a plateau elevated some 15,000 feet above sea-level, and mountain scenery predominates. Glaciers abound and this, the Great Chombo, is the largest in the country. It is over 12 miles in length and an average of 1000 yards in width. This view well shows its enormous extent.



R. Byron

PEKING UNDER WINTER SNOWS

This view across the roof tops of Peking, perhaps the most famed city of the Far East, shows the White Dagoba in the Pei Hai, the old royal gardens, and the Western Hills in the far distance.



R. Byron

THE GREAT WALL OF CHINA

To protect his northern boundaries against barbarian hordes the great Chinese emperor, Shih Huang Ti, built the Great Wall of China between 228 and 210 B.C. Winding over hill and dale for 1400 miles, it remains to this day one of the chief wonders of the world. Its average height is 20 feet.

R. Byron

TOMBS OF THE MANCHU DYNASTY IN MUKDEN

Mukden, capital of the Manchu dynasty before they conquered China, is rich in antiquities, amongst which none is more marvellous than the tombs of the emperors. This picture shows the gateway.

Mondiale

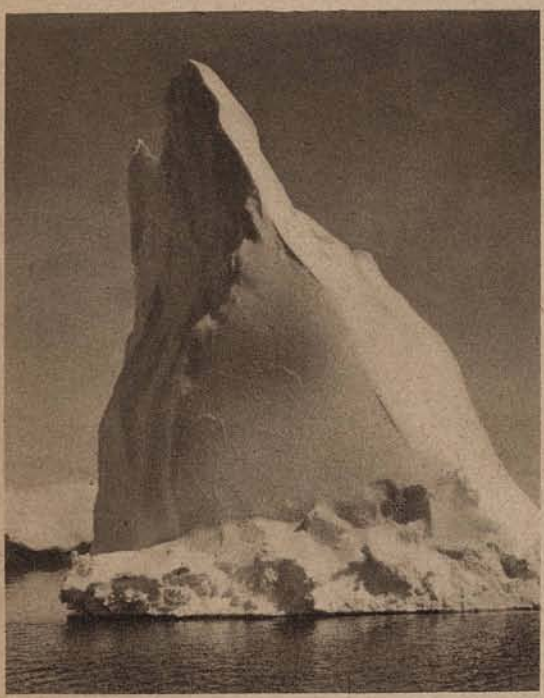
THE GREAT BRONZE BUDDHA OF JAPAN

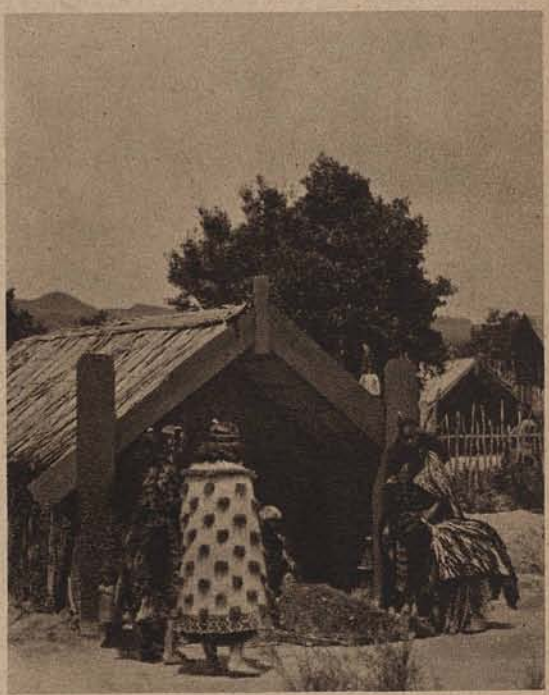
At Kamakura, site of many historic shrines, some 12 miles south-west of Yokohama is the Daibutsu, a gigantic bronze figure of the Buddha. Set on a vast stone pedestal it is 50 feet high and has endured countless earthquakes. The great earth tremors of 1923 considerably damaged the pedestal.

Frank Hurley

JAVA'S MIGHTY VOLCANOES

Java is one of the most volcanic areas of the world. This picture shows three of its chief volcanoes, Mount Sinerue in the background and Mount Batok and Mount Bromo in the foreground.





Mondiale

IN THE FAR SOUTH

Few sights are more awe-inspiring than gigantic icebergs, many of which as this lovely "sugar-loaf" berg of Antarctica are also of great beauty. Maoris still flourish in New Zealand although retaining their own culture. The picture (*right*) shows the commencement of a tattooing ceremony.

A NEW ZEALAND FJORD

The coastal scenery of Scandinavia is reproduced with remarkable fidelity by the inlets and bays of the New Zealand coast. Milford Sound, in South Island, with mountains towering is typical of this coast.

Mondiale

THE TWIN GEYSERS NEAR LAKE TAMPO

Lake Tampo in the centre of North Island, New Zealand, is in the heart of a district famous for its hot-springs and geysers. None is more remarkable than the Twin Geysers seen in this picture. The Maoris make great domestic use of the hot water which New Zealand's thermal springs provide.

SYDNEY HARBOUR BRIDGE

One of the engineering triumphs of the age, Sydney Harbour Bridge, was opened in 1932. The central span, 1650 feet long, allows 170 feet clearance. It carries four lines of railways, a road and footways.

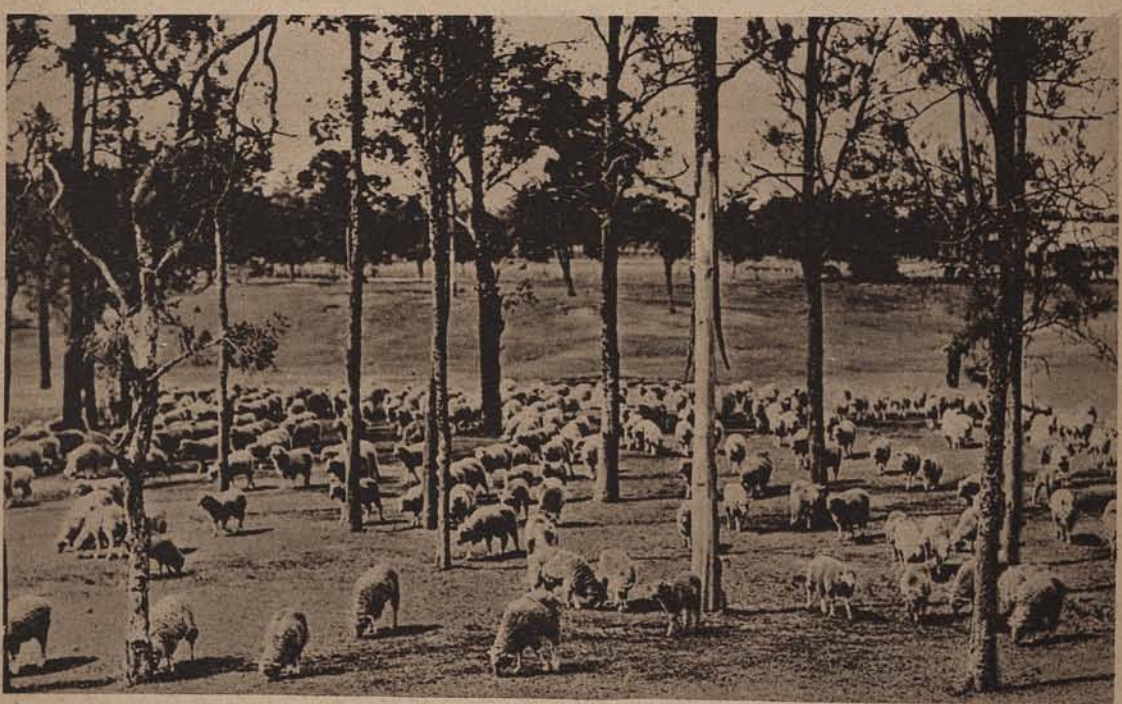
Courtesy: Australian Government

MELBOURNE'S DOMES AND TOWERS FROM THE RIVER

Melbourne, although not the oldest of Australia's great towns may claim to be the most beautiful. This view across the River Yarra upholds its claim. It was founded just over one hundred years ago, in 1835, and to-day its population numbers 1,000,000 and its prosperity is growing.

CANBERRA, FEDERAL CAPITAL OF AUSTRALIA

Canberra, federal capital of Australia, stands in a small district of Murray County, New South Wales. The fine Parliament Buildings seen in this picture, were opened by the Duke of York in 1927.



A NEW SOUTH WALES SHEEP FARM

Australia, the largest island in the world, covers an area of nearly 3,000,000 square miles. Vast territories consist of scrub-covered waterless plains, but there remain huge areas eminently suitable for sheep and cattle grazing. It is these rich pastures, which provide the real wealth of the country.

E. N. A.

NEW YORK'S TOWERING SKY-LINE

Few sights in the world are more impressive than New York's sky-line which first greets the traveller approaching the new world. This view of Manhattan was taken from Governor's Island in the harbour.

C.O. Buckingham Co. Inc.

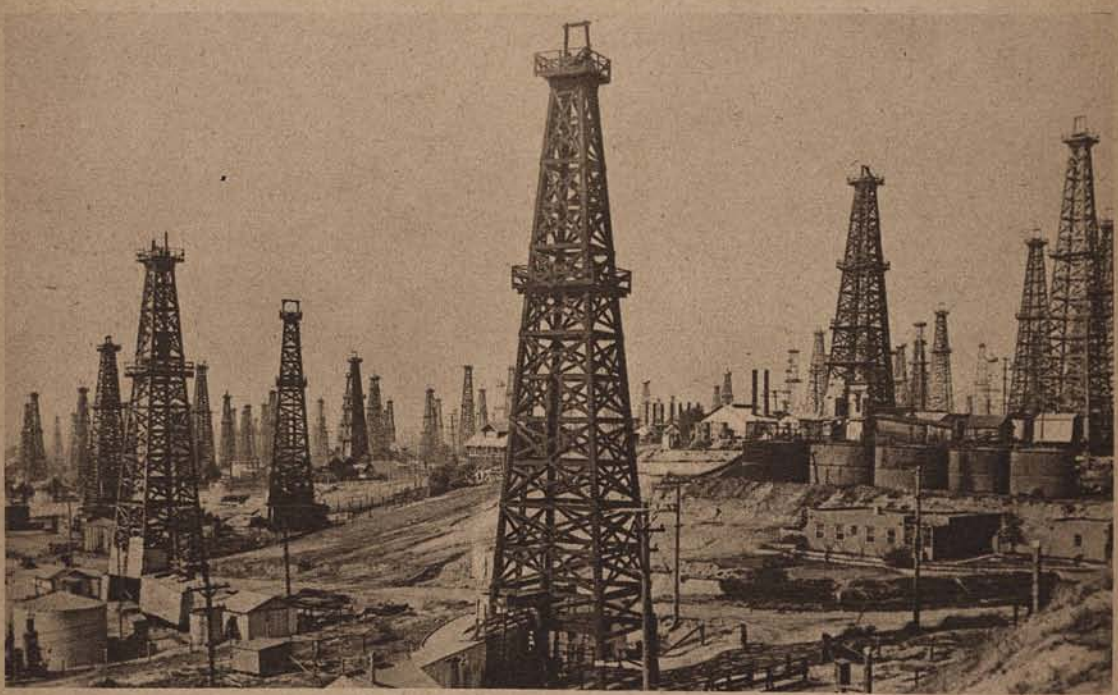
THE MAJESTIC CAPITOL AT WASHINGTON

In the tiny federal District of Columbia, bordering the Potomac River, lies Washington, capital of the United States of America. Here are the executive and administrative offices of the nation. None is more imposing than the great white Capitol, America's Houses of Parliament.

E. N. A.

THE GRANDEUR OF THE YOSEMITE VALLEY

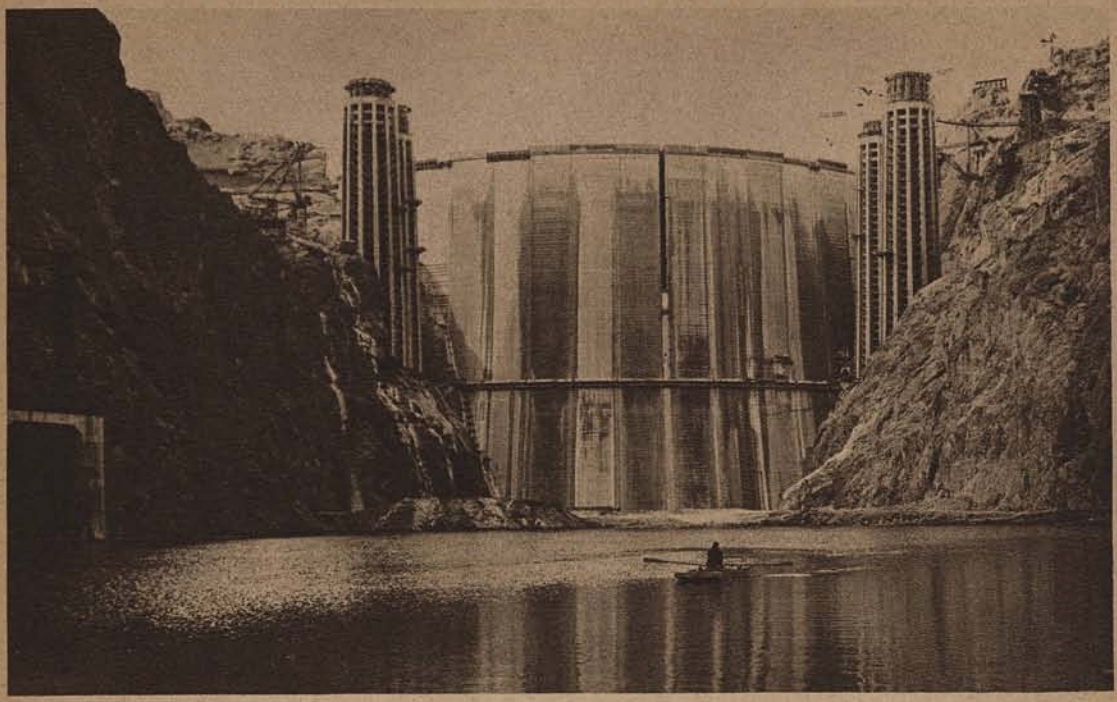
Some of the most magnificent scenery in the world is to be found in the Yosemite Valley, California, created a National Park in 1864. This awe-inspiring view was taken from the Mariposa Trail.



Mondiale

CALIFORNIAN OILFIELDS

Vast fields are found in a great number of the States of the U.S.A., but California, Oklahama and Texas rank as the three chief oil-producing states. In certain areas a forest of derricks has grown up over the well-heads as is seen in this view of the Huntington-Beach oilfield, not far from Hollywood in California.



E. N. A.

THE GREAT BOULDER DAM, NEVADA

Some 300 miles above the mouth of the giant Colorado River, American engineers have built perhaps the most amazing dam in the world, confining over ten million million gallons of water.

Fairchild Aerial Survey Inc.

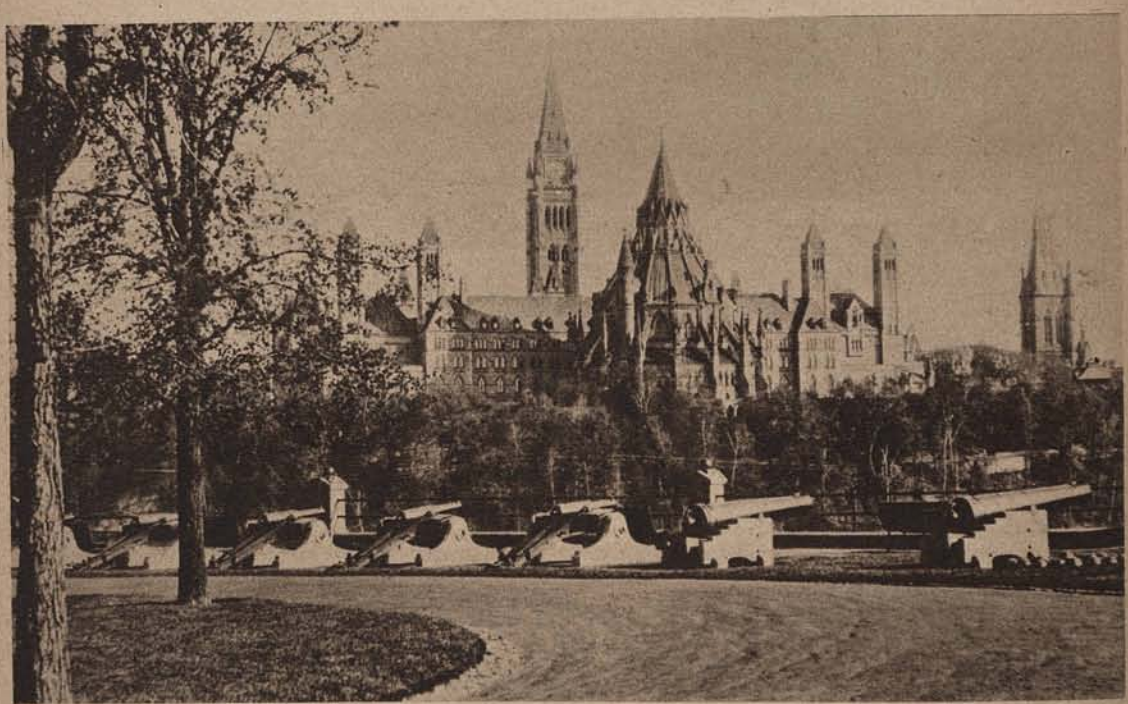
THE NIAGARA FALLS

Accounted among the chief wonders of the modern world, the Niagara Falls are situated on the upper reaches of the St. Lawrence River between Lake Erie and Lake Ontario. This fine panorama show the American Falls, left, and the Horseshoe or Canadian Falls, right. Goat Island separates the two.

Canadian Airways (Fairchild)

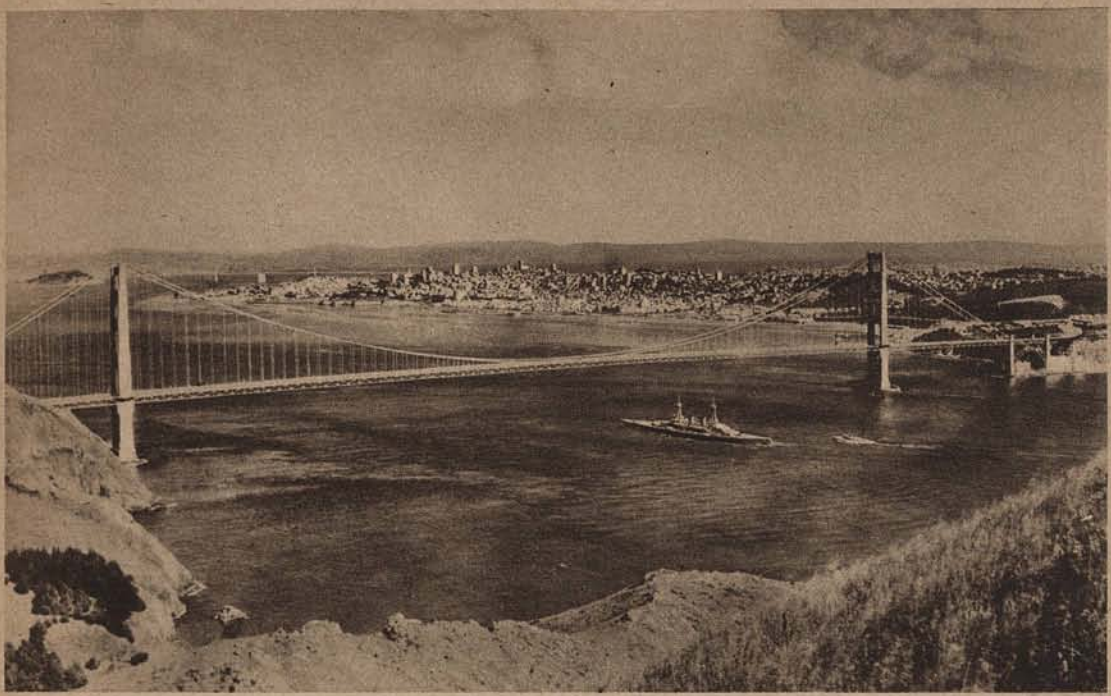
ISLETS IN THE ST. LAWRENCE RIVER

The great highway of north-east America is the St Lawrence River which takes its source in the Great Lakes, and flows past Quebec into the north Atlantic. Here is a typical scene in the upper reaches.



CANADA'S PARLIAMENT BUILDINGS

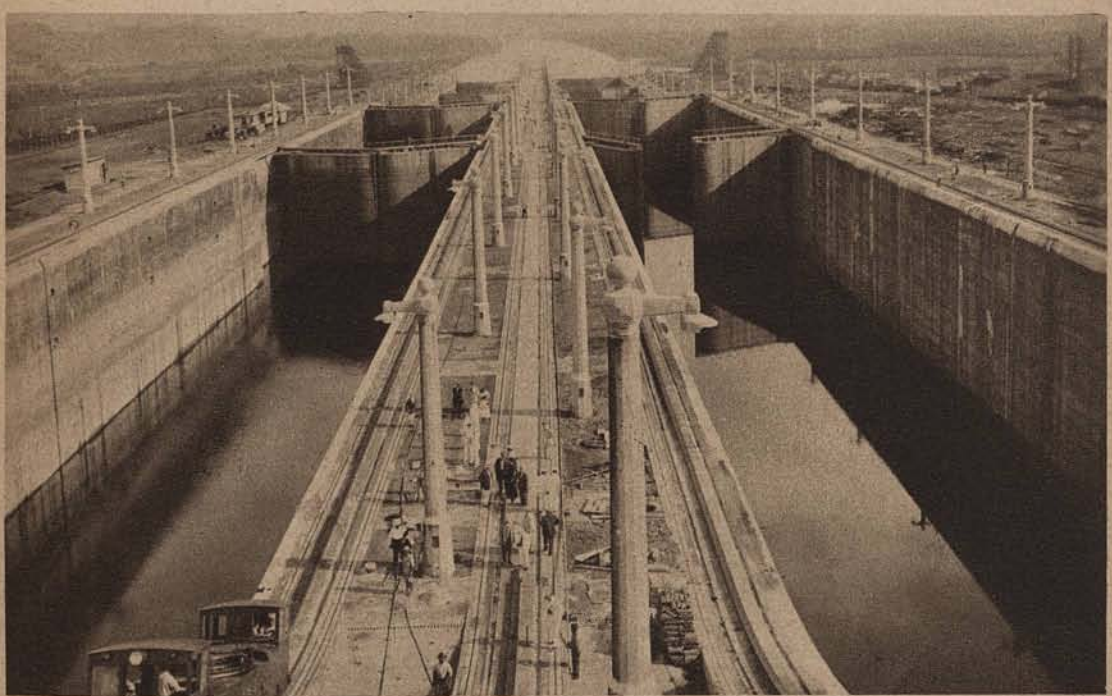
Although not the largest city, Ottawa is the capital of Canada. Here are situated the Parliament Buildings, utterly destroyed by fire in 1916. The rebuilt edifice is a magnificent Gothic pile surmounted by a great tower in which is housed a war memorial chamber and a carillon of bells.



E. N. A.

'FRISCO'S GOLDEN GATE

San Francisco, gateway to America's Far West, has a well-nigh perfect natural setting. This panoramic view of the Golden Gate shows the city's huge suspension bridge, over 2,000 yards in length.



E. N. A.

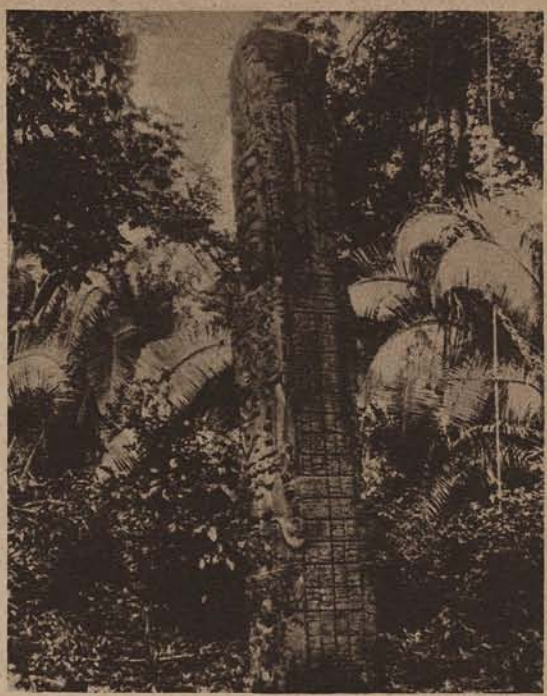
GATUN LOCKS, PANAMA CANAL

The Panama Canal, a stupendous engineering feat, was completed in 1914. This picture shows the Gatun Locks, looking towards the Atlantic, which raise a vessel 85 feet to the level of Gatun Lake. In the left corner can be seen one of the Electric Mules which tow vessels through the locks.

E. N. A.

A THOUSAND YEAR OLD GIANT

Few creations of nature are more impressive than the giant Sequoia trees, the largest of living things. This Californian specimen, known as "Wawara" is 28 feet in diameter and over 1000 years old. Its tunnel is 10 feet high and some 9½ feet wide and could accommodate two cars with ease.



Photos: E. N. A.

WATERFALLS AND RUINS OF SOUTH AMERICA

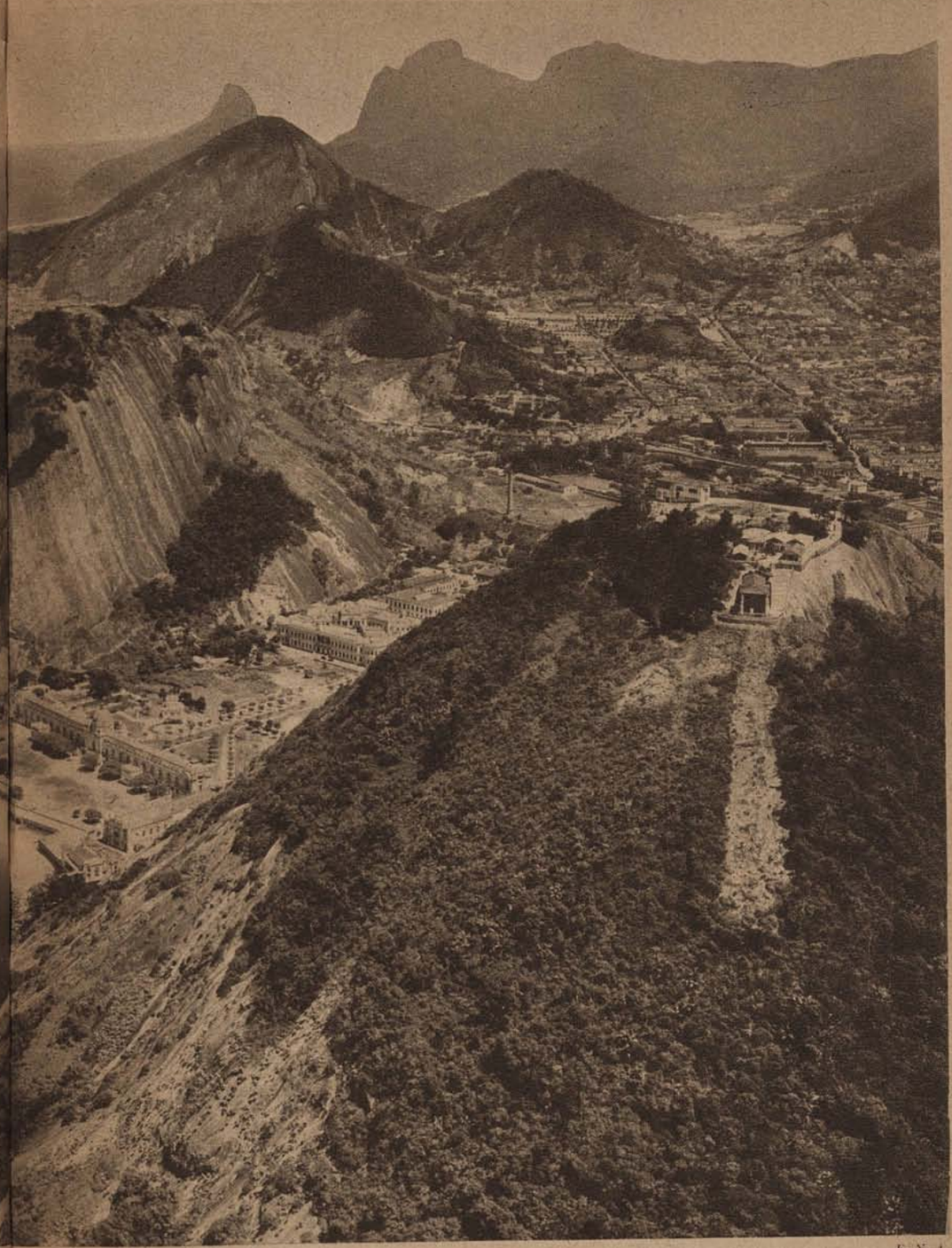
The left-hand picture shows the Kaieteur falls on the Potaro River in the midst of the Highland Forest in British Guiana. On the right is one of the idols in the pre-historic ruins at Quirigua, Guatemala.

E. N. A.

THE CAPITAL OF ARGENTINA

Buenos Aires, the capital of Argentina, is the largest city in South America. This photograph shows the Piaza del Congress. It takes its name from the Palace of the National Congress seen in the picture. There is a strange contrast between the spacious avenues and the narrow streets that surround them.

AMERICA BRAZIL



E. N. A.

THE MOST BEAUTIFUL HARBOUR IN THE WORLD

There is no other city in the world which is comparable with Rio de Janeiro, Brazil's lovely Harbour Capital. This photograph gives a bird's eye view of the city and Harbour from Sugar Loaf Mountain. There is altogether six miles of waterfront bordering the city, intercepted by the rocky wooded spurs running out into the sea. Rio de Janeiro can be seen to perfection from the harbour entrance, and one can look down on it from any of the heights that stand sentinel behind it—the Gavea, Dois Irmãos, Jijuca, Corcovado, and of course, from the Sugar Loaf. Rio is a city of wide avenues and squares.

E.N.A.

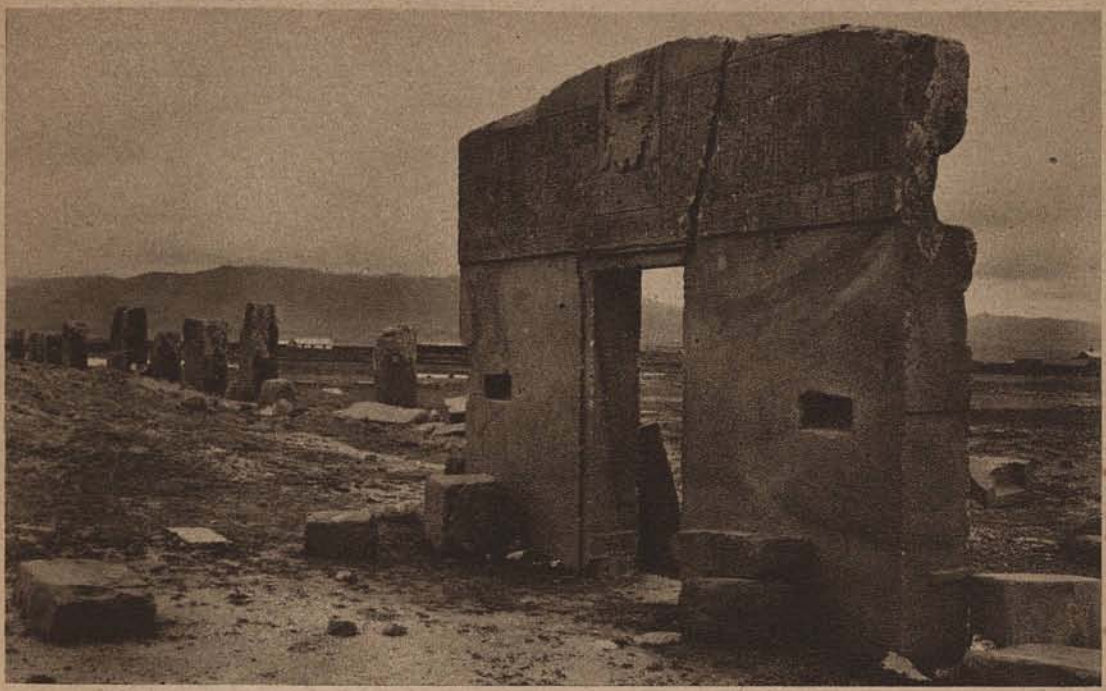
THE LAKE IN THE MOUNTAINS.

Lake Titicaca, shown in the photograph above, is the highest lake in the world, for it lies in the Andes, 12,500 feet above sea level. It is in the region of La Paz, the capital of Bolivia.

E.N.A.

THE FIGURE OF PEACE

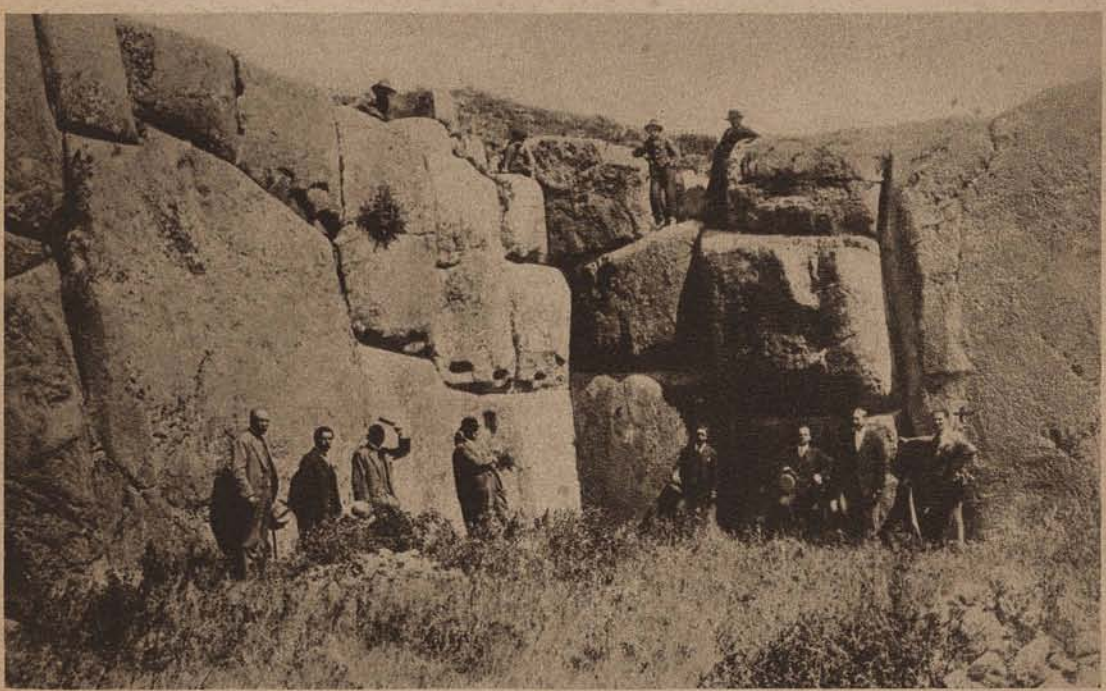
Above is the famous statue of Christ which stands in the Andes on the boundary line between Chile and Argentina. Its inscription tells its story; "Sooner shall these mountains crumble to dust than Argentinians and Chileans break the peace which at the foot of Christ the Redeemer they have sworn to maintain."



E. N. A.

THE GATE OF THE SUN.

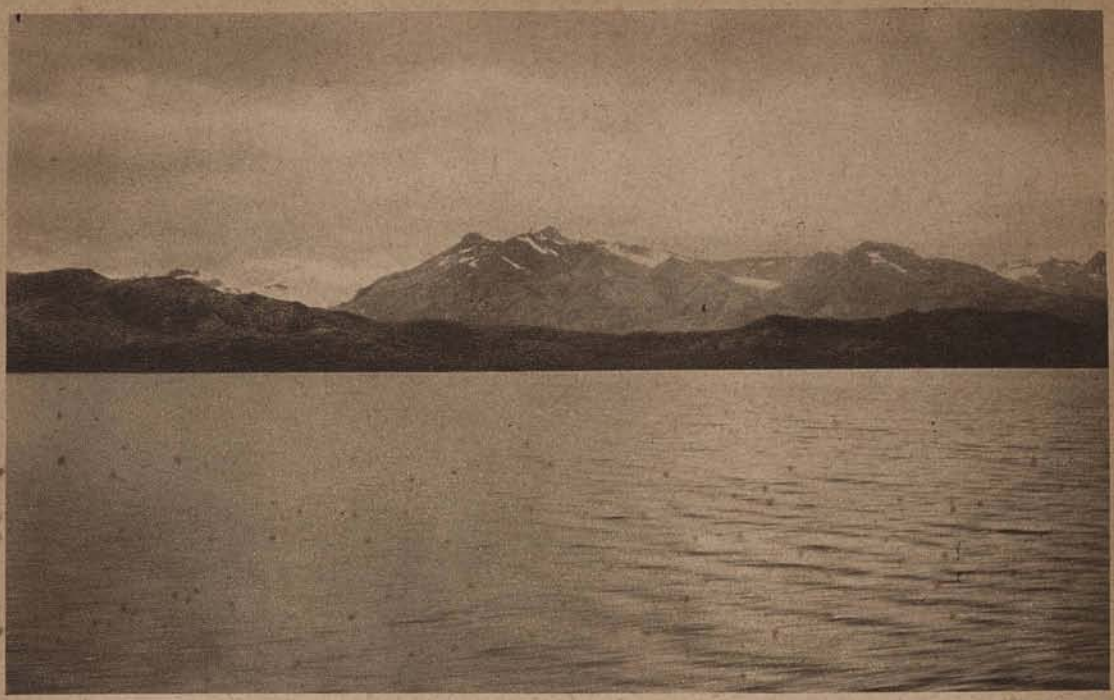
On the southern side of Lake Titicaca lies Tiahuanaco, famous for the group of ruins left by a civilisation prior to the Incas. This photograph shows the Gate of the Sun, carved out of a single block of stone.



E. N. A.

REMAINS OF THE INCA CIVILISATION

All over Peru may be found traces of an Inca civilisation which traditionally flourished in the dawn of time. Of their marvellous building in stone, this photograph is evidence. It is part of an old Inca fortification near Cuzco. These enormously strong walls were built up without mortar.



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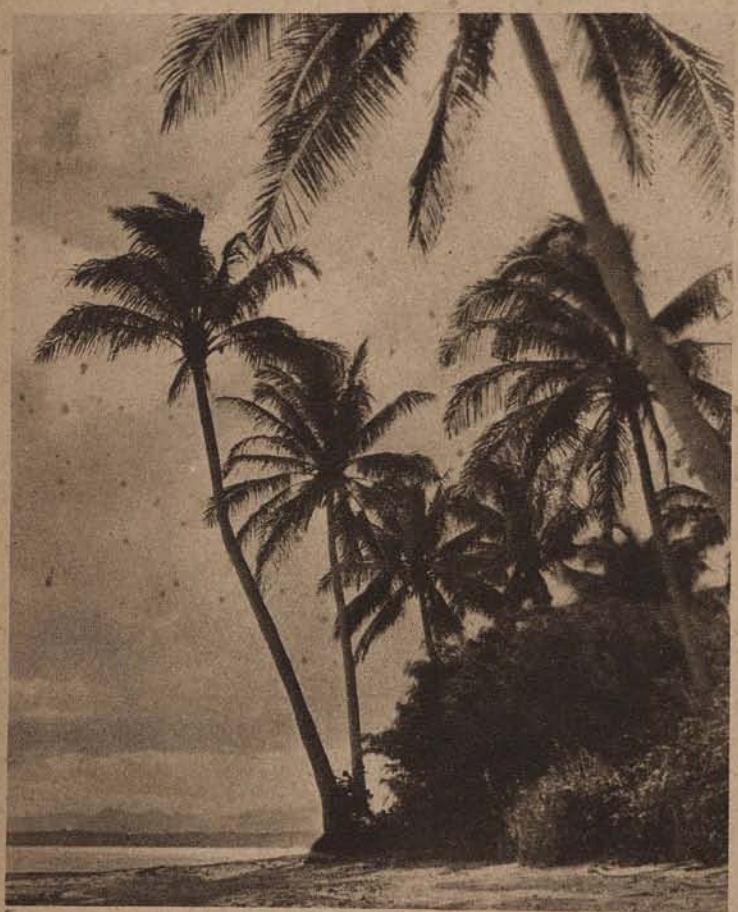


LAND OF ETERNAL COLD

The Straits of Magellan, shown above, were named after Magellan who, in 1520, first discovered this narrow passage, and so circumnavigated the world. It was he who first named the land he saw to the south, Tierra del Fuego. On the left is a scene on the Galapagos Islands, in the Pacific Ocean. Their name is derived from the Spanish for Tortoise. Giant tortoises inhabit the islands, some believed to be 300 to 400 years old, and so the oldest living animals in the world.

Dr. G. Morey

THE SUEZ CANAL

The photograph above shows the Suez Canal at Port Said. It also shows one of the two breakwaters which protect the entrance, and the huge statue of Ferdinand de Lesseps, the engineer who built it.

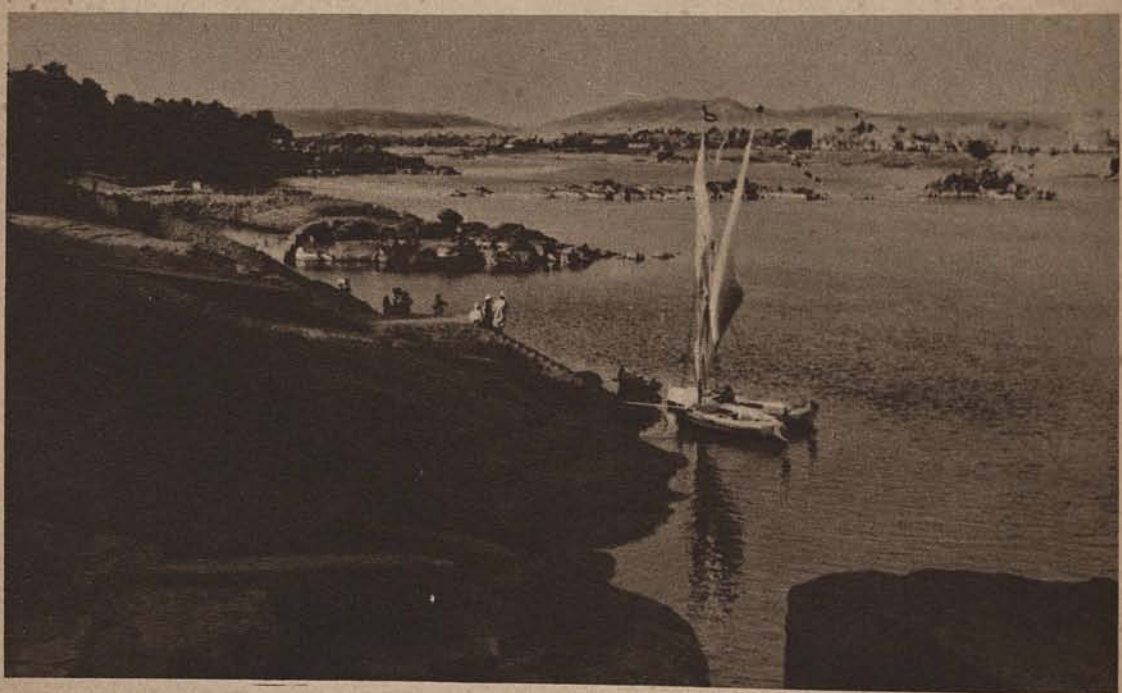
F. Henle

THE CITY OF THE CALIPHS

Here is a view over the roof tops of Cairo, the biggest city in Africa, where modernity and the ancient east jostle each other at every turn. The city is the gateway to the great Sahara desert; it lies on the Nile, one of the most historical rivers in the world, and the scene of the great Egyptian civilisation.

FLYING OVER THE PYRAMIDS

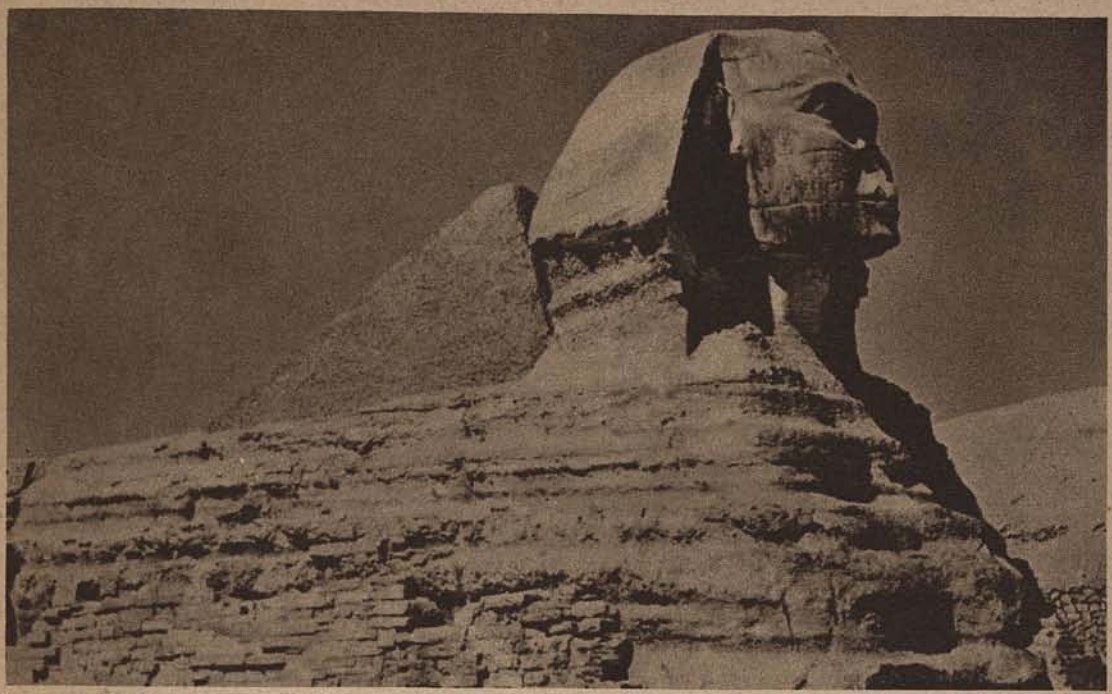
Here is a view from the air of the three best known pyramids : The Great Pyramid (the tombs of Cheops) Khafra and Menkaura. The Great Pyramid dates from about 3000 B.C., a wonder of ancient building.



M. J. Moecra

A SCENE ON THE NILE

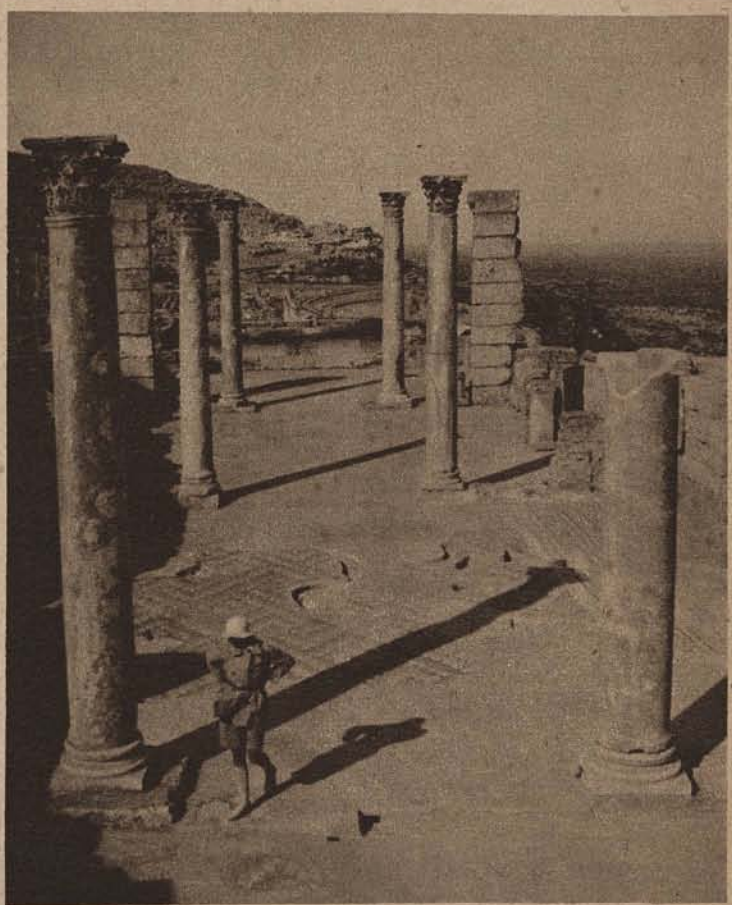
There is very little changed today in this picture of vessels on the river Nile. It is much as it was thousands of years ago when the Children of Israel were in captivity in Egypt. Agriculture still depends on the flooding of the river, though those floods are controlled by scientific irrigation.



Ullstein. F. Salit

EGYPTIAN AND GREEK CULTURE

Still one of the Wonders of the World is the Sphinx, standing beside the pyramids, five miles from Cairo. It dates back to about 2850 B.C. and it was built by Khafra, whose magnificent tomb is one of the pyramids. The photograph on the right shows a scene in Cyrene, an ancient Greek colony where excavation work has brought to light much of the glorious Greek architecture. Here can be seen remains of the great Column hall with rich Corinthian Capitals and beautiful mosaic floors.



Mondiale

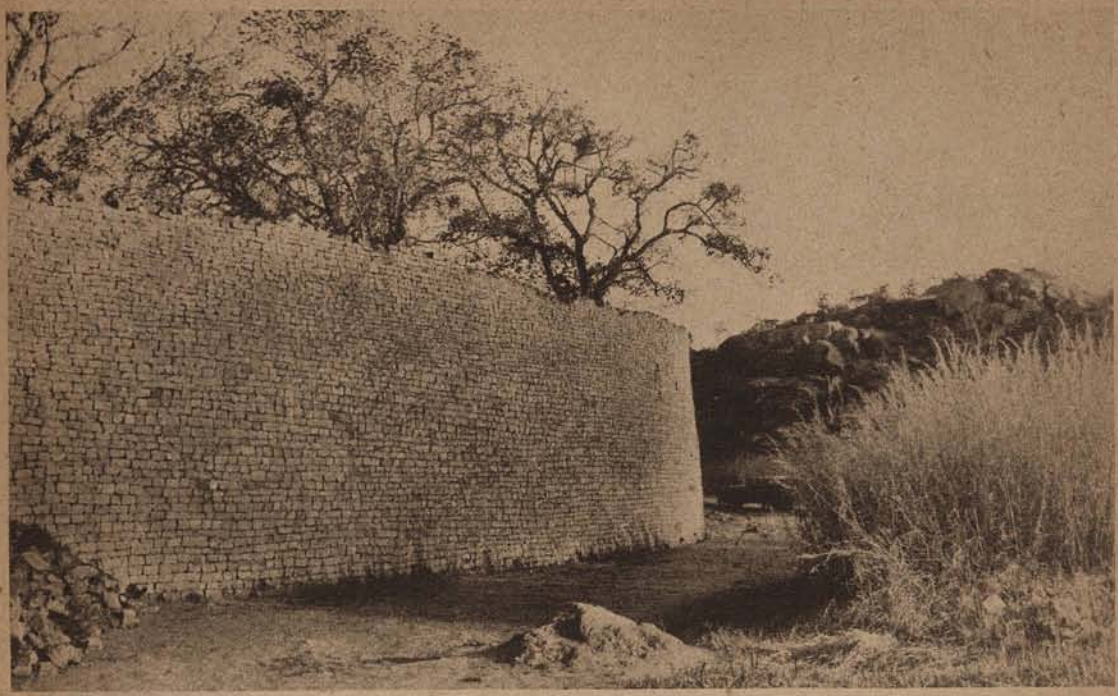
PORT IN THE DESERT

Timbuktu, a view of which is shown above, in the French Sudan is sometimes described as "the port of the Sudan in the Sahara." It is chiefly important now as a trading centre for the Sudan.

P. M. Synge

WHERE THE NILE RISES

This photograph shows a lake in the Ruwenzori range of mountains in Central Africa. It is in this district that the River Nile rises. Mount Stanley is the highest peak in the range, rising to 16,800 feet. There is an average rainfall of 200 inches a year, making it one of the wettest regions in the world



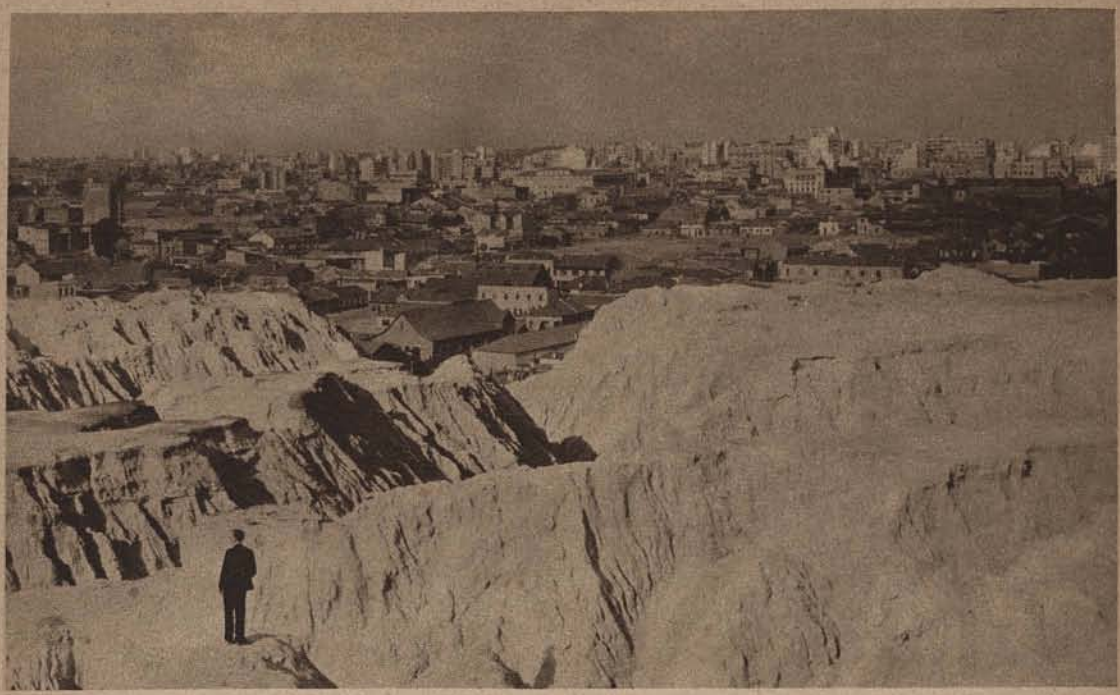
A. J. Braumbur

ZIMBABWE RUINS

The photograph above shows part of the Elliptical Temple of the Zimbabwe ruins in Rhodesia. It is now generally agreed that these massive buildings go back only to the sixteenth century.

THE VICTORIA FALLS

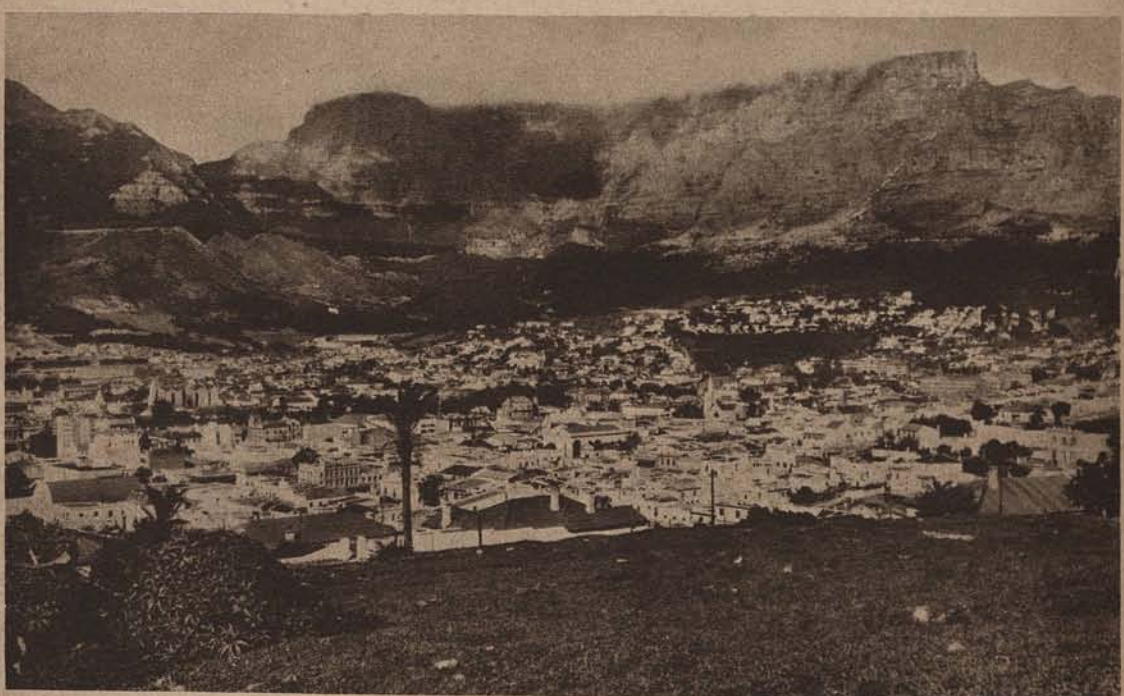
On the Zambezi River in Rhodesia are the Victoria Falls, first discovered by David Livingstone in 1855. He described himself as " creeping with awe to the verge " of the ravine where the Zambezi crashes over its precipice. The natives call the Falls, Mosi-oa-Tunya, " the Smoke that Thunders."



South African Railways and Harbours

MAN-MADE LANDSCAPE OF JOHANNESBURG

Johannesburg sprung up on the gold fields of the Transvaal, almost overnight. Today it is the greatest gold-mining centre in the world. The modern skyline contrasts oddly with the dumps in the foreground.



South African Railways and Harbours

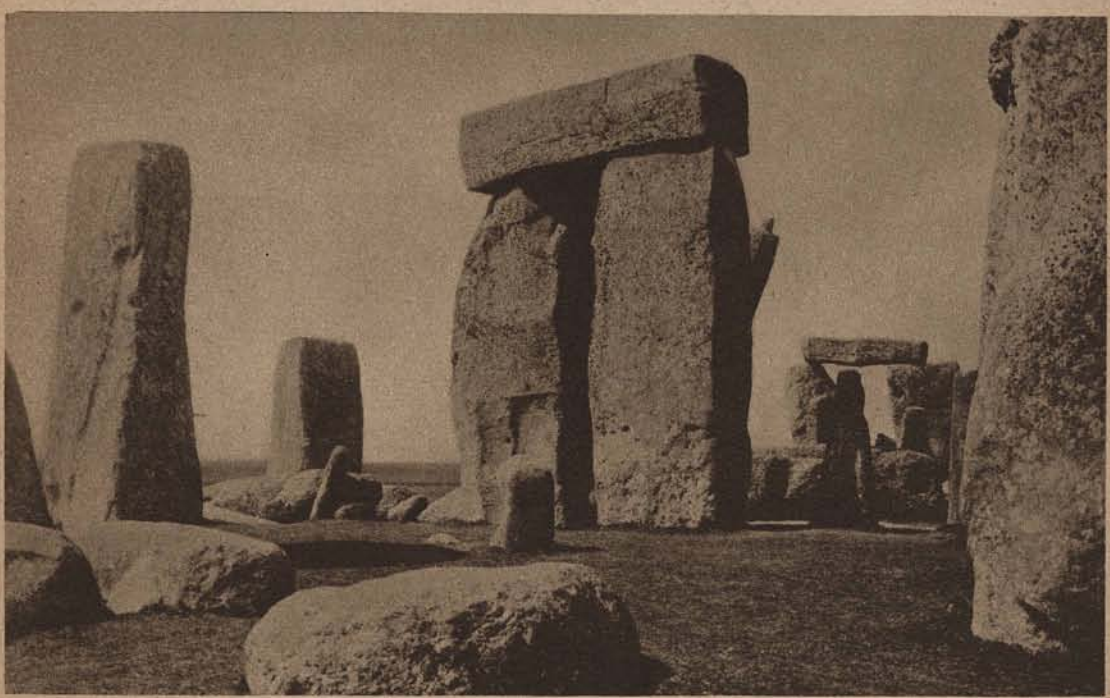
CAPE TOWN AND TABLE MOUNTAIN

Cape Town holds pride of place both for beauty and importance in all South Africa. It is the greatest port in the Union and its position, at the foot of Table Mountain, gives it shelter and beauty of setting. In this photograph the famous " tablecloth " of cloud is just dropping over the edge of Table Mountain.

D. McLeish

GREATEST CITY IN THE WORLD

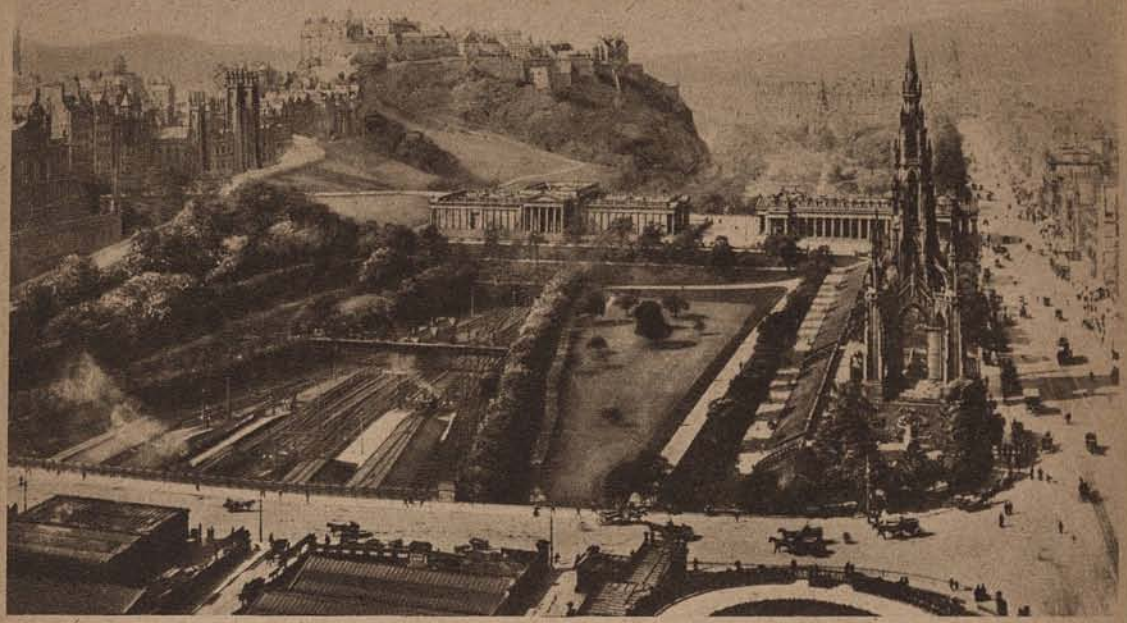
Above is a scene in the busy Pool of London on the Thames. In the background is Tower Bridge. London is still the largest city in the world, and her port, in the heart of the city itself, the greatest.



E. N. A.

THE GREAT DRUIDICAL TEMPLE

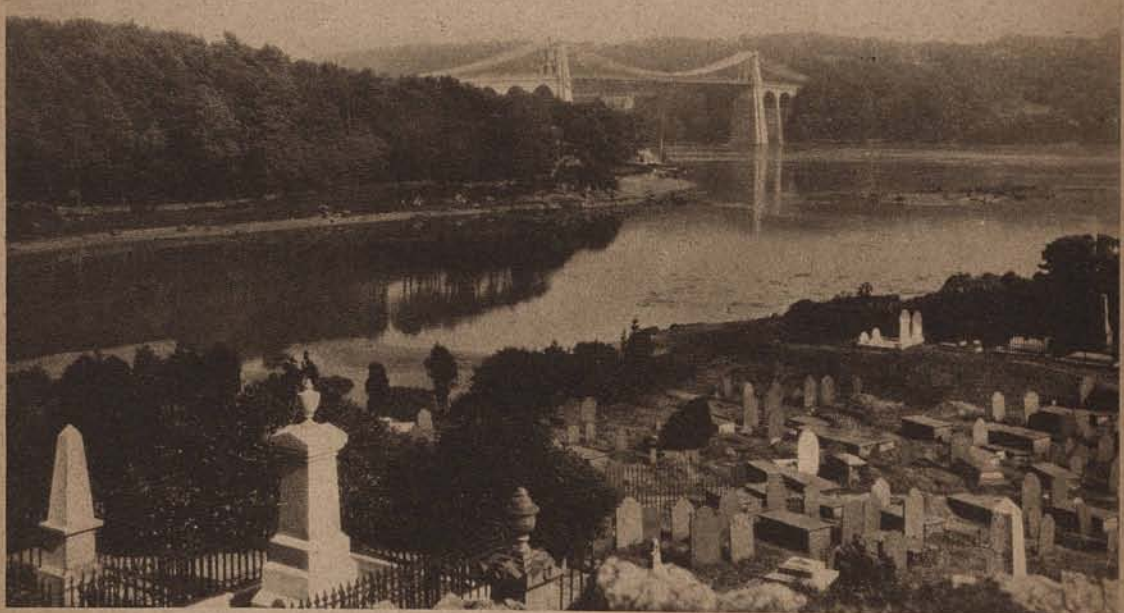
Stonehenge, on Salisbury Plain is England's most famous antiquity. For centuries there has been argument as to the real origin of these massive standing stones, and they are now believed to be a relic of the Druids. The plan of the whole temple is circular, the outer circle having a diameter of 100.75 feet.



E. N. A.

EDINBURGH CASTLE

Above is a view of the Castle and Princes Street, Edinburgh, the capital of Scotland. This particular aspect of the old castle and the famous street, is one of the most famous views in the world.



E. N. A.

THE MENAI BRIDGE

Separating Anglesey from Carnarvonshire, in North Wales, is the Menai Strait, a narrow channel of the Irish Sea. The strait is famous for the suspension bridge seen in this photograph which carries the Holyhead road from Bangor. The bridge was designed by T. Telford, and completed in 1826.

THE MIDNIGHT SUN

One of the most curious natural phenomena in the world is the Midnight Sun, most often observed in the Northern latitudes. This remarkable photograph was taken from the Lofoden Islands, in Norway.

Gunnah Lundh

CLOVER LEAF TRAFFIC—STOCKHOLM

Stockholm possesses the most modern method of dealing with her traffic problem. This picture shows the clover leaf arrangement at Slussen where North and South Stockholm join. Congestion is prevented by splitting up the traffic in all directions on to winding viaduct roads, and so avoiding crossings.

E. N. A.

THE PALACE OF VERSAILLES

Twelve miles from Paris, lies Versailles, and the famous gardens and palace which was built by Louis XIV. In 1919, the peace treaty of the Great War was signed here.

E. N. A.

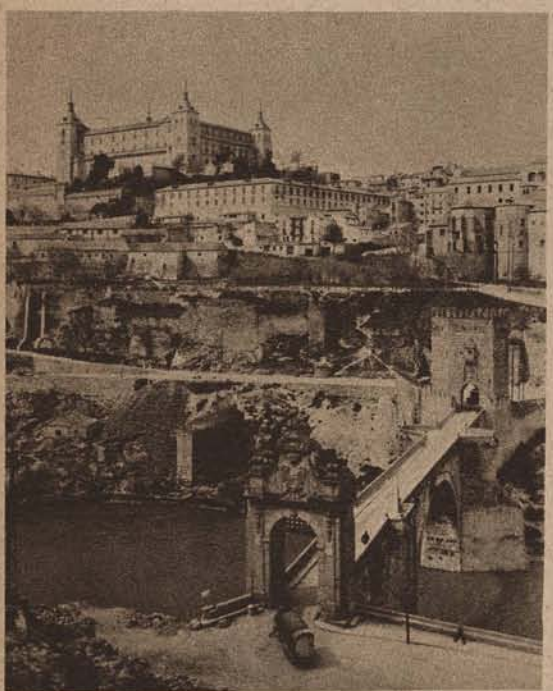
THE CHATEAU AT CARCASSONNE

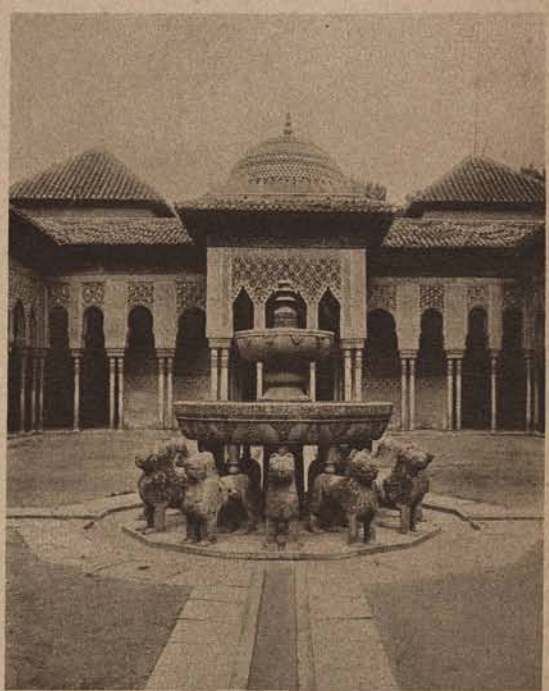
Carcassonne, in southern France, is a marvellous example of the medieval fortressed town. Today, it is very little different in appearance from what it was hundreds of years ago. Two massive ramparts surround the old town. Our photograph shows the medieval fortified Chateau.

D. F. Eberhardt

A TYPICAL DUTCH LANDSCAPE

Holland occupies a proud position in Europe's history. This charming view of the mill overlooking Meppel Harbour is typical of the picturesque dignity of her cities.





E. N. A. Mondiale

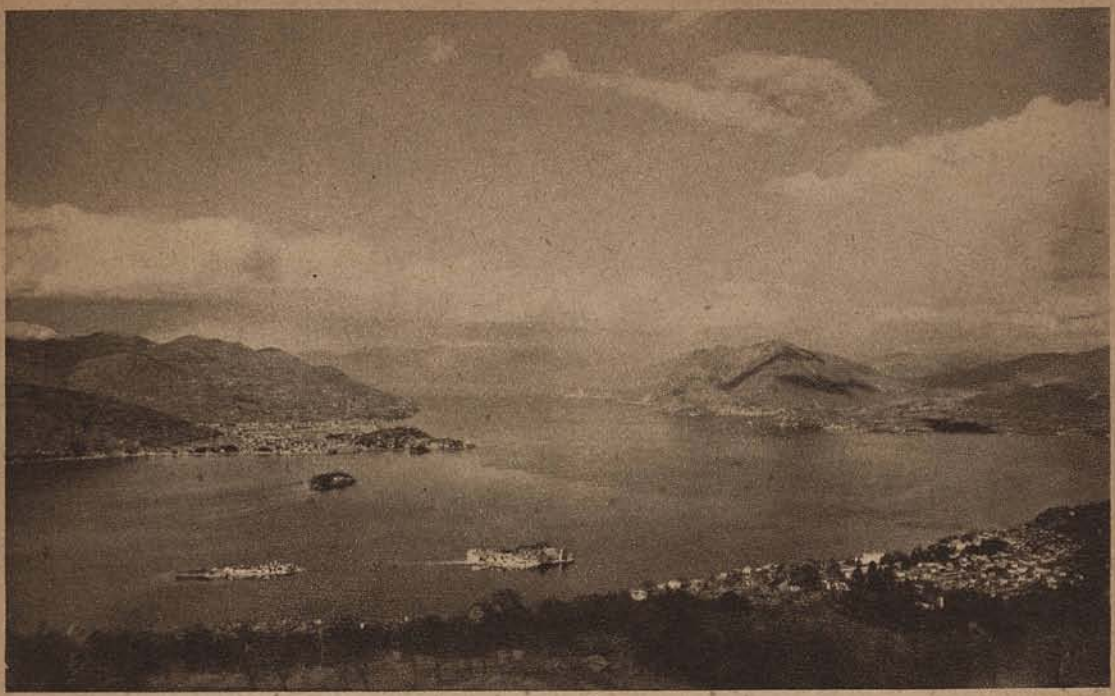
TWO OF SPAIN'S MOST FAMOUS BUILDINGS

This picture of the historic citadel, the Alcazar (*left*) shows how grimly it towers over the city of Toledo. In the foreground is the famous Puerte de Alcantara. On the right is a view of the Court of Lions in the equally famous Alhambra at Granada, a heritage from the days of the Moorish conquest.

Photos: Lubinski

THE COLOSSEUM AND PISA'S LEANING TOWER

The Colosseum (*above*) built by the emperors Vespasian and Titus during the 1st century A.D. was the scene not only of all Imperial Rome's major gladiatorial combats for some four hundred years, but also of the martyrdom of hundreds of early Christians. Vast as are the ruins still existing today, the original building was over twice the size, for much of it was stolen during the Middle Ages for building material. The famous Campanile of Pisa Cathedral (*left*), erected in 1350, is one of Italy's most remarkable sights. The foundations have sunk and the tower now leans 14 feet from the perpendicular.



Lubinski

STRESA'S LOVELY WATERS

This panoramic view of Lake Stresa justifies the extravagant claims that are made for Italian lake scenery. In the foreground is the island of Isole Borromee dell' Alpino, a conference centre for European statesmen.

Mondiale

THE NEW MOTOR ROADS OF ITALY

Modernity in Fascist Italy is not confined only to architecture for it rivals Germany in the magnificence of its new motor roads. This view shows the modern traffic and pedestrian shelter beside the autostrada in the Piazza di Rivoluzione at Sabandia.

E. N. A.

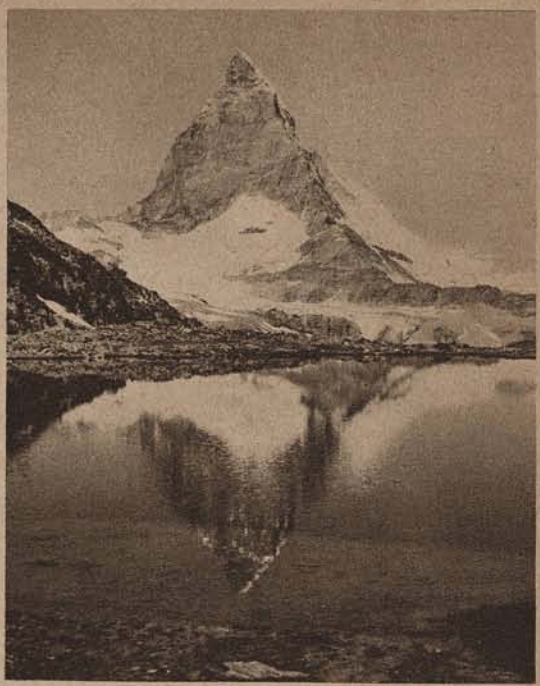
IN AUSTRIA'S SPACIOUS CAPITAL

Despite the Great War, Vienna still remains a city of gaiety, art and culture in central Europe. This view across the Franzenspring looking towards the Reichrath shows the city's essential spaciousness.

Mondadori

BUDAPEST, QUEEN OF THE DANUBE

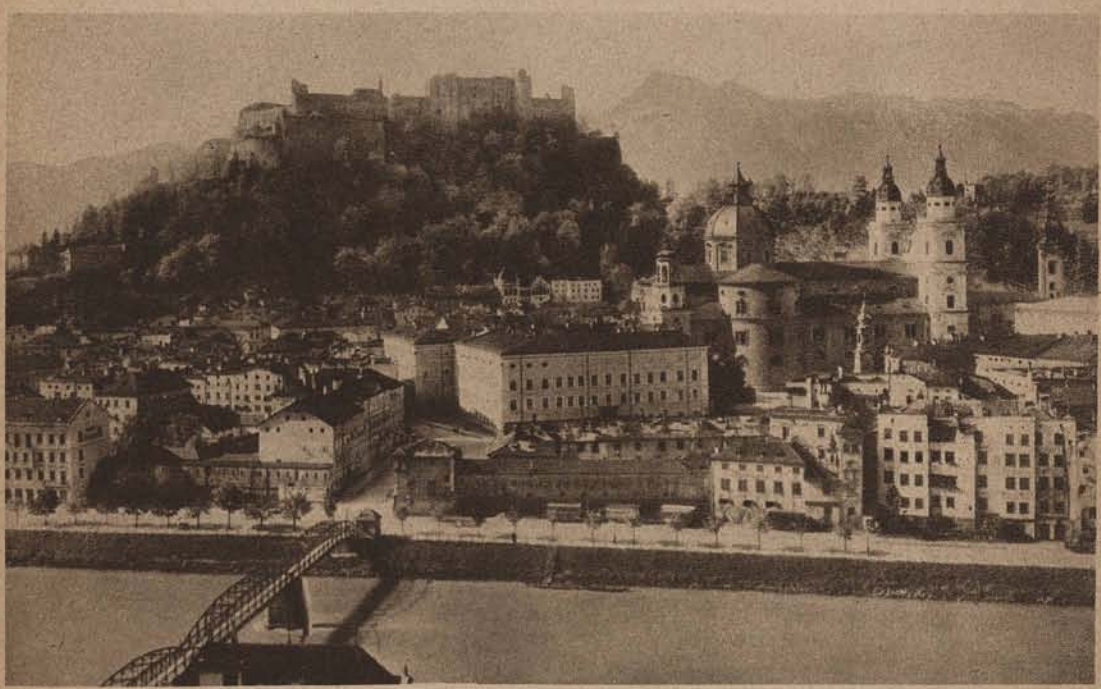
Buda and Pest, on either side of the Danube, were united in 1873. This wide-flung panorama shows how Pest spreads out across the flat plains while Buda climbs up into the hills. The magnificent Royal Palace is seen on the left in front of the graceful Suspension Bridge, one of six, linking the twin cities.



Martin Gerlach
E. Meerkämper

THE WORK OF MAN AND OF NATURE

On the left is part of the façade of the Karl Marx Hof in northern Vienna, a triumph of modern architecture. In effective contrast is this view of the mighty Matterhorn in the Swiss Alps.



E. N. A.

SALZBURG, GEM OF AUSTRIAN CITIES

Justly reputed as one of the most perfect architectural survivals of past ages, Salzburg, mecca of countless thousands of musical pilgrims, is magnificently situated in mountainous scenery some 150 miles west of Vienna. This view shows the famous medieval castle of the Prince-Bishops, on Monk's Hill.

E. N. A.

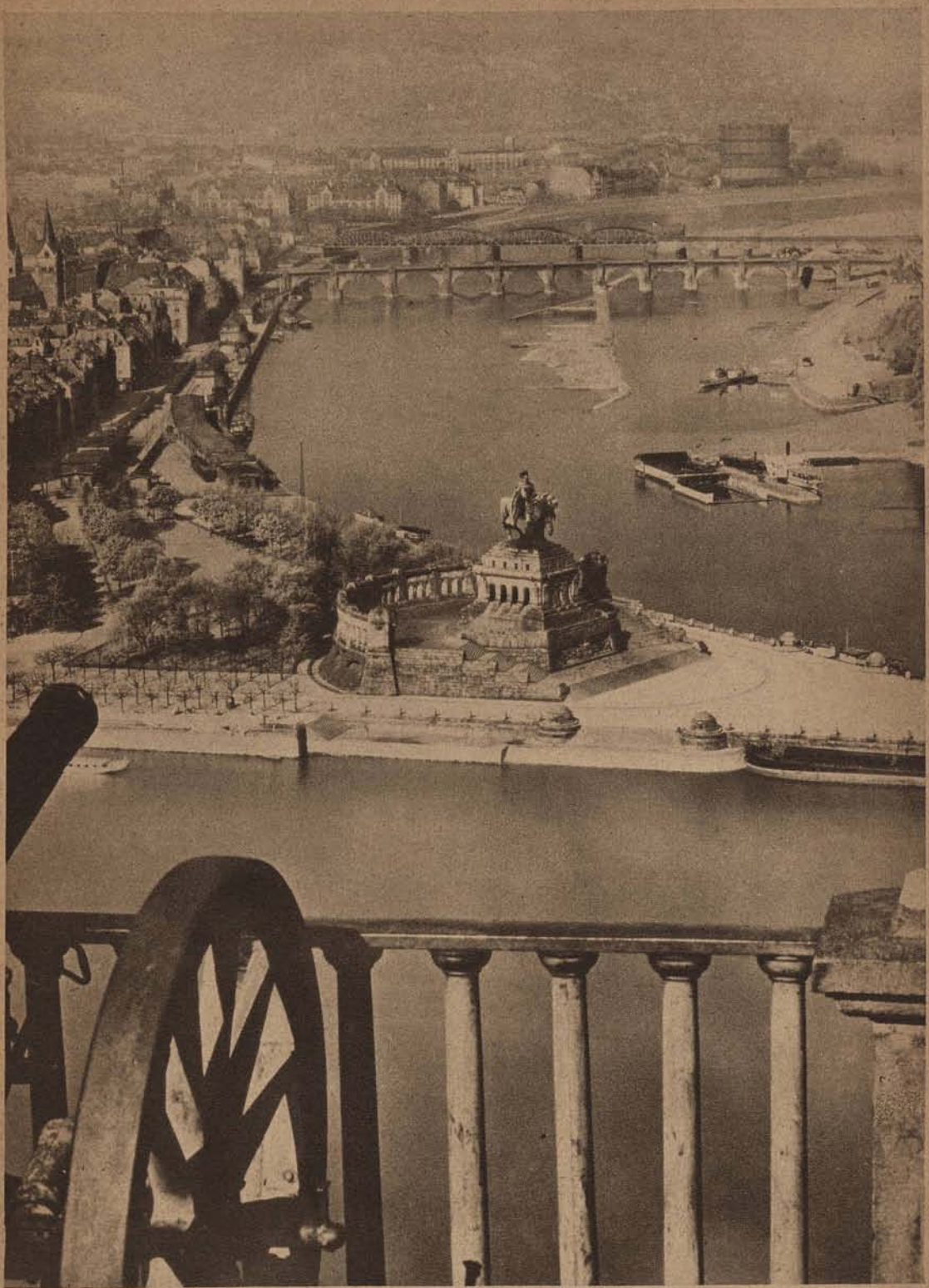
THE HEART OF MODERN MUNICH

Munich is one of the great industrial centres of south-east Germany. This picture shows the new National Museum erected on Museum Island : in the foreground is the new National Library.

E. N. A.

GERMANY'S GREATEST GOTHIC SHRINE

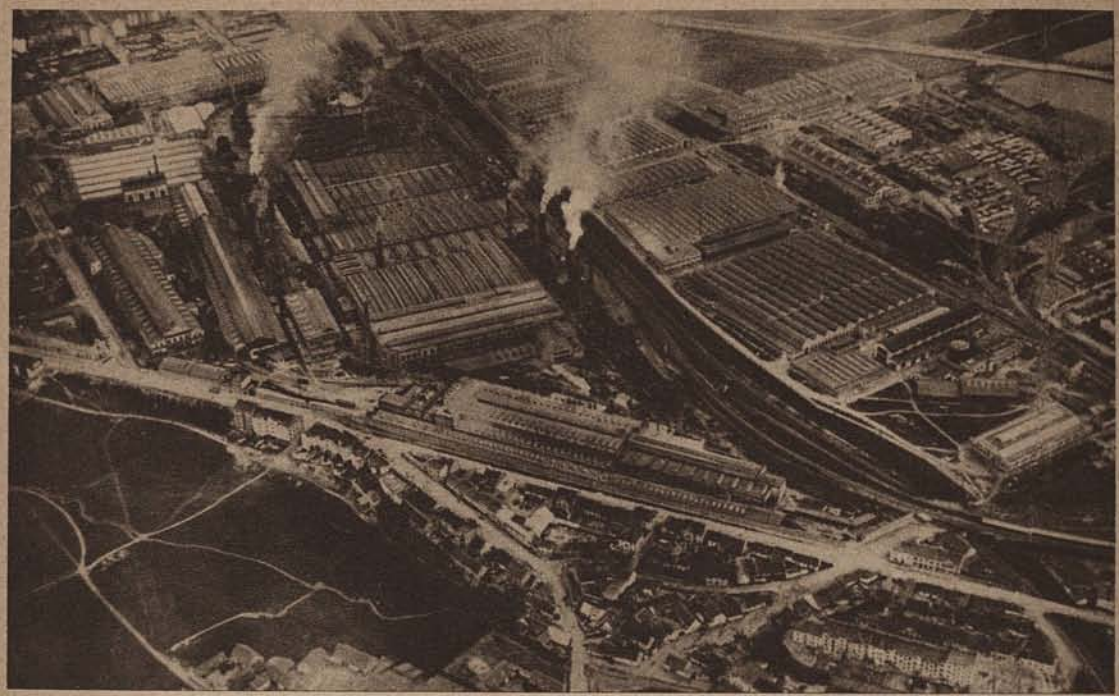
Cologne, old commercial centre of the Rhineland is world famous for its magnificent cathedral, accounted the finest Gothic church in all Germany. It was begun in 1242 but was left unfinished and fell into sad disrepair. The completion and restoration of the building was carried out between 1842 and 1880.



Mondiale

COBLENZ: ANCIENT RIVER CITY OF GERMANY

Coblenz, founded by the Romans and one of Germany's oldest cities, stands at the confluence of the rivers Moselle and Rhine and today plays an important part in the industrial life of the Upper Rhineland. This fine view shows the two rivers clearly. The old bridge dates back to 1440.



E. N. A.

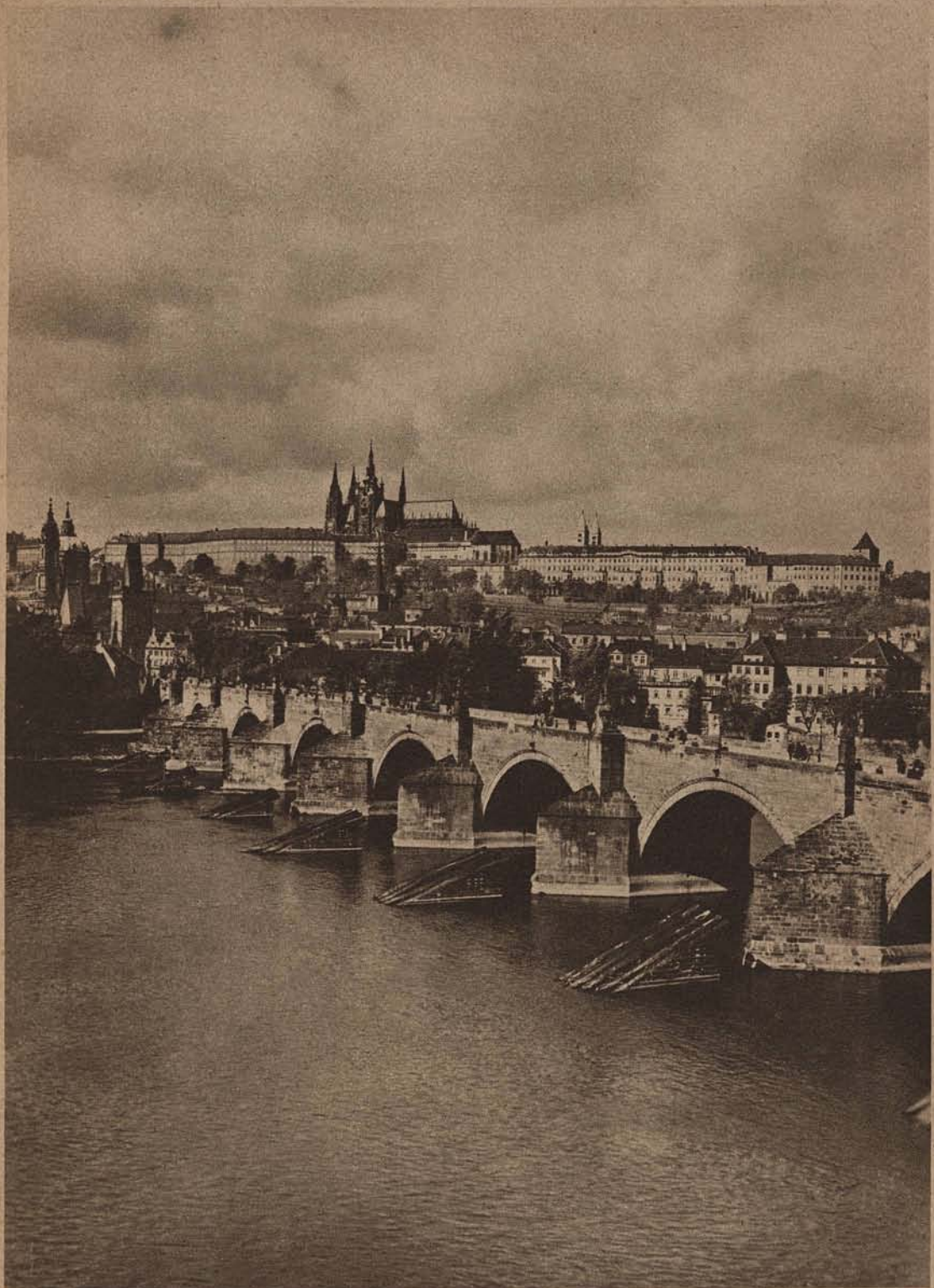
PILSEN, TOWN OF MIGHTY INDUSTRIES

One of the great industrial towns of Central Europe, Pilsen lies 50 miles south-west of Prague in Bohemia It is famous for its beer and its steel works. This aerial view shows the celebrated Skoda factory.

Kondor Pressedienst L. Schur

THE BAY OF CATTARO

The whole of the Dalmatian Coast of Yugoslavia is famous for its exquisite scenery, wild mountains, rocky islands and the blue waters of the Adriatic combining to produce the most lovely effects. This view of Cattaro (modern Kotor) at the head of a winding inlet proves how beautiful this coast is.



Centopress

THE HISTORIC CITY OF PRAGUE

Prague ranks high among the beautiful cities of Europe. This view across the Vlata or Moldau river shows the celebrated Charles Bridge, dating from the 14th century, and beyond, crowning the hill, the cathedral of St. Vitus behind the historic Hradčany, the parliament house of the country.

A. P. B.

MODERN ATHENS

Athens is so famous as a city of the past that it is often forgotten she is a great modern city. As the capital of a Mediterranean State she plays a considerable part in world affairs. Here is a view of modern Athens, with picturesque soldiers guarding the entrance to the Parliament buildings, the Evizene.

E. N. A.

MOUNT OLYMPUS, TEMPLE OF THE GODS

Few centres in Greece are more famous, in history and in legend, than snow-clad Mount Olympus, the home of the Gods of the ancient Greeks, lying in wild scenery on the borders of Thessaly and Macedonia.

R. Byron

A FAMOUS GRECIAN MONASTERY

Of the three prongs of the Chalcidice peninsula which thrust into the Aegean Sea south of Salonika, the most celebrated is Athos. Here is not only the mountain of that name, but also the ancient monastery of Dionysiou seen in the picture. It is built on an inaccessible crag right on the cliff edge.

F. Hoste

ISTANBUL ON THE GOLDEN HORN

This general view of the old capital of Turkey shows how the Mosque of Solyman the Great, standing almost on the waters of the Golden Horn, dominates the city once called Constantinople, now Istanbul.

E. N. A.

THE KREMLIN, A CITY WITHIN A CITY

Dominating the centre of Moscow is the Kremlin, grim and ancient palace-fortress of Imperial Tsars, now the seat of government of the U.S.S.R. This view of it shows the Nicholas Palace on the right and the Grand Palace on the left. Beyond the former is the Cathedral of the Annunciation.

E. N. A.

UNDERGROUND DE LUXE IN RUSSIA'S CAPITAL

Moscow has only recently acquired a system of underground railways and it has been constructed with elaborate care. Here is the elegant but efficient entrance hall of the Ochotny Rjad Station.

R. Byron

WILD SCENERY OF LAKE BAIKAL

Despite the energy with which Communist Russia has tackled the problem of modernising the vast stretches of her territory, the primitive wildness of the country is still scarcely affected. This winter scene at Nizhni Angarsk on Lake Baikal reveals some of the difficulties still facing her.

L. Fockhart

THE CHURCH OF THE RESURRECTION, LENINGRAD

A striking memorial to Panslavism, which surged up in Russia at the end of the 19th century, is this Church of the Resurrection in Moscow, built on the very spot where the Tsar, Alexander II was assassinated by Nihilists in 1882. Built of marble, granite, and coloured brick it is fantastically adorned.

A GLOSSARY AND ENCYCLOPÆDIA OF GEOGRAPHICAL TERMS

Africa: Area about 11½ million square miles. The most compact continent. Greatest extent: Cape Bon (Tunis), 37½° N.; Cape Agulhas (Cape Colony), 35° S.; Cape Guardafui (Somaliland), 51½° E.; Cape Verde (Senegal), 17½° W.

The surface consists chiefly of two plateaux: a low plateau in the north (600–1,500 ft.) and a high plateau filling the east and south (2,000–5,000 ft.). The Atlas Mountains, in the north-west, are the only distinct range. The southern plateau descends steeply to the sea: the rivers which flow over the edge run down the slopes in rapids and cataracts; they are of little use for navigation. In the south the plateau ends in the Drakensberg Mountains. In the Province of the Cape of Good Hope the land descends in three flat terraces—the High Veld, the Great Karroo, and the Little Karroo.

Nearly the whole of Africa drains to the Atlantic. The *Nile* (3,600 miles) begins in Lake Victoria and flows through Lake Albert. It receives the drainage of this region and also that of Abyssinia (by the Blue Nile and the Atbara). In its lower course it is a desert river, receiving no tributaries. Below Khartoum there are six "cataracts" (rapids) across a stretch of 350 miles. The rivers from Abyssinia cause the Nile floods in the autumn: the floods spread silt over the land; upon them depends the prosperity of Egypt. Lower Egypt is irrigated by a network of canals. Three dams have been built to regulate the flow of the Nile—below Cairo, at Aswan, and at Sennar on the Blue Nile. The Nile delta covers an area of about 8,000 square miles.

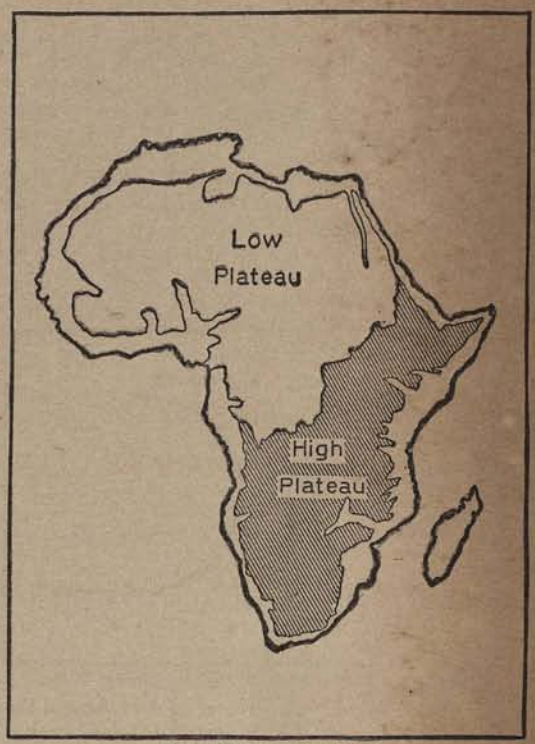
The *Niger* (2,600 miles) flows into a swampy delta between the Bight of Benin and the Bight of Biafra.

The *Congo* (3,000 miles) is the greatest of the African rivers; it is navigable for 1,000 miles—to the Stanley Falls. The *Orange River* is not navigable; in its lower course it loses more water than it receives.

The *Zambesi* (2,000 miles) is the largest of the African rivers which flow into the Indian Ocean; at the Victoria Falls, about the middle of the river-course, the river pours into a narrow defile. The *Limpopo* is the only other large river which flows east; it is not navigable.

There are two large areas of inland drainage: the Lake Chad region and the Lake Ngami region.

Countries of Africa: British—Anglo-Egyptian Sudan (cap., Khartoum), British Somaliland (cap., Berbera), Uganda (cap., Entebbe), Kenya (cap., Nairobi), Tanganyika Mandate (cap., Dar-es-Salaam), Zanzibar, Northern Rhodesia (Cr. Col., cap., Livingstone), Southern Rhodesia (Cr. Col., cap., Salisbury), Union of South Africa (Dominion, caps., Cape Town (Parliament), Pretoria (Executive)), Nigeria (cap., Lagos), Gold Coast (cap., Accra), Sierra Leone (cap., Freetown), Gambia (cap., Bathurst), British Togo, British Cameroons (Mandate, cap., Victoria), Basutoland (cap., Maseru), Bechuanaland (Serowe), Swaziland (cap., Mbabane),



THE AFRICAN PLATEAUX.

French—Algeria (cap., Algiers), French Morocco (cap., Rabat), Tunisia (cap., Tunis), Dahomey (cap., Porto Novo), French Guinea (cap., Conakry), Ivory Coast (cap., Bingerville), Senegal (cap., St. Louis), Niger (cap., Niamey), French Togo (cap., Lome), Mauritania, Upper Volta (cap., Onagadongon), French Sudan (cap., Bamako), French Equatorial Africa (cap., Brazzaville), French Cameroons (cap., Yaoundé), Madagascar (cap., Antananarivo).

Italian—Tripoli (cap., Tripoli), Eritrea (cap., Asmara), Italian Somaliland (cap., Mogadiscio), Cyrenaica (cap., Benghazi).

Spanish—Spanish Morocco, Spanish Guinea (cap., Santa Isabel), Rio de Oro (cap., Cisneros).

Portuguese—Portuguese Guinea (cap., Bolama), Angola (Portuguese West Africa, cap., S. Paulo do Loanda), Mozambique (Portuguese East Africa, cap., Lourenço Marques).

Belgian—Congo (cap., Leopoldville).

Abyssinia (Kingdom, cap., Addis Ababa).

Egypt (Kingdom, cap., Cairo).

Liberia (Negro republic, cap., Monrovia).

(See also: *Congo, Continent, Karroos, Niger, Nile, Orange River, Pygmies, Rand, Rift Valley, Sudan, Sudd, Tell, Zambesi.*)

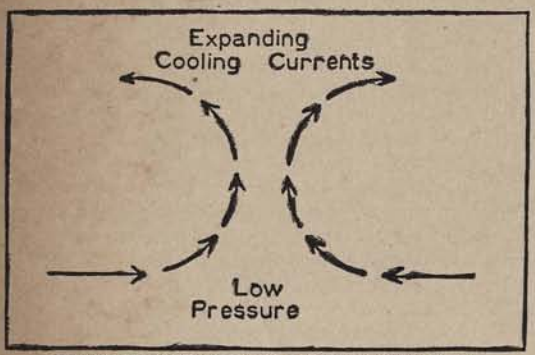
air-pressure: The pressure of the air at the earth's surface is about 15 pounds per square inch, equiva-

lent to about 30 inches on the mercury barometer. The pressure decreases at the rate of 1 inch of mercury (= about ½ lb. per sq. in.) for each 1,000 feet of ascent; this is only approximately correct up to a height of a few thousand feet; the rate of decrease itself slows down with increasing height. The air pressure at various heights is shown in the following table:

Sea-level . . .	30 in.
1 mile . . .	25 in.
6 miles . . .	7¾ in.

Air-pressure (the reading of an aneroid barometer) can be used as a means of measuring heights. The aneroid is read at a certain height; the reading is compared with a sea-level reading taken at the same time. The difference in the two readings indicates the height.

Air-pressure varies continuously. Warm air is lighter than cold air; damp air is lighter than dry air. When the air is cold and dry air-pressure approaches a maximum; when the air is warm and damp air-pressure approaches a minimum. These differences are shown by the barometer.



INWARD CURRENTS TOWARDS A LOW-PRESSURE AREA.

Winds are caused by differences of air-pressure: they blow from regions of high pressure towards regions of low pressure. Hence winds blow inward towards hot regions (low pressure) and outward from cold regions (high pressure).

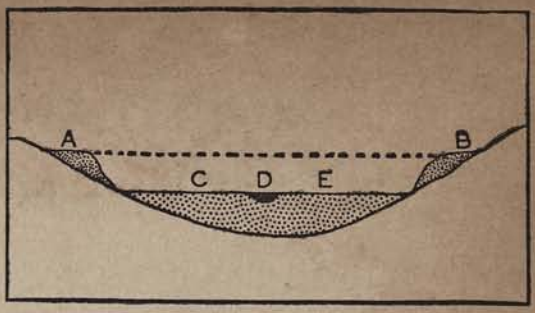
The low air-pressure is one of the great difficulties in climbing very high mountains; the small supply of oxygen leads to a difficulty in breathing and an additional strain on the heart. Oxygen has been carried to overcome this difficulty.

Aeroplanes can only climb to a certain height, in each case depending on the construction of the aeroplane and its engine. The "roof" is fixed by the decreasing pressure of the air; a stage is reached when the aeroplane, running at full speed, is only just supported.

(See also: *Atmosphere, Barometer.*)

All-red route: So-called because it passes over British territory—the route from England to Australia by way of Canada. The first stage of the route is from Liverpool or Glasgow to Montreal (in summer) or Halifax (in winter); thence by the Canadian Pacific Railway across Canada, through Winnipeg to Vancouver; then by steamer, calling at Honolulu (United States territory) and Suva in the Fiji Islands to Auckland in New Zealand, and finally to Sydney in New South Wales.

alluvium: Material brought down by rivers and deposited in their beds. Sand and mud are washed into the river by rain and carried away. In comparatively still water the silt is deposited, the heavier materials first and the lighter materials in stiller water. These materials are often deposited in the river valley, forming *river plains.* In times of flood material may be deposited at higher levels, forming *flood plains* along the outer edges of the valley. (The reason why matter is deposited along the edges is this: the current is weakest near the edges and therefore the water cannot carry such heavy material as in the middle.) Plains of alluvium are also formed (as deltas) at the mouths of some rivers.



AB—FLOOD PLAINS. CE—RIVER PLAIN. D—RIVER.

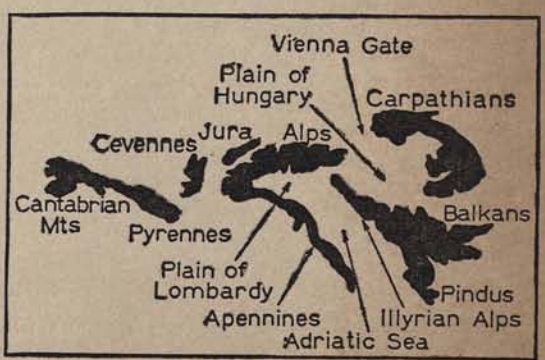
Alluvium makes fine and fertile soil; the richest agricultural regions are on alluvial plains in the middle or lower courses of rivers. The fineness of alluvium increases with distance from the mountain source; only the finest material is carried for a great distance. The alluvium in the Ganges basin, for example, is quite free from stones.

Alluvial cones are formed where a river flows out of a mountainous district into a plain; they are sometimes of great depth.

(See also: *Australia, Plains.*)

alpines: The typical plants of high mountain slopes; so-called because they grow to profusion on the upper slopes of the Alps. They are creeping or low-growing plants with long roots which go down deep in quest of water. When the snows melt they quickly develop and produce sheets of flowers. Similar plants grow in the tundras, which in early summer are covered with sheets of colour.

Alps: The centre of the greatest mountain system of Europe—ranges of fold mountains extending to the Pyrenees, the Apennines, the Balkan Mountains, and the Carpathians. The Alps end on the west at the Rhône valley, and on the east they fade into the Hungarian Plain; they end in the north at Lake Constance, the Bavarian Plateau, and low country from Salzburg to Vienna; in the south in the Plain of Lombardy and the Sava valley.



THE ALPS AND THEIR EXTENSIONS.

TUNNELS THROUGH THE ALPS.

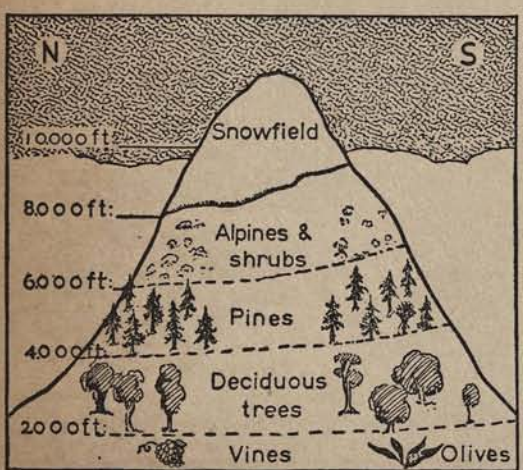
The highest peaks are: Mont Blanc (15,781 ft.), on the borders of France and Italy, just outside Switzerland; Monte Rosa (15,200 ft.), Matterhorn (14,780 ft.), Finsteraarhorn (14,026 ft.), Jungfrau (13,670 ft.), Mont St. Gotthard (12,000 ft.).

Three great rivers rise in Mont St. Gotthard—the Rhine, which flows north to the North Sea; the Rhône, which flows to the Mediterranean; and the Ticino, which flows to the Po and so to the Adriatic.

The drainage of the steep southern slope of the Alps flows to the Po and Adige; this region contains many lakes (Maggiore, Como, Garda). In the east the Inn and Sava carry the drainage to the Danube. The northern drainage flows chiefly to the Rhine and Danube; the northern slope is more gradual than that to the south.

There are numerous lakes in the Alps. Amongst these are: Lake Constance (area, 200 sq. miles, the largest of the Alpine lakes, on the northern edge of the Alps; the Rhine flows through it); Neuchâtel and Lucerne, which also drain to the Rhine; Geneva, which filters the river Rhône.

The Alps are extraordinary for the large number of passes across them. Many of the passes have had roads through for long periods. The railways which cross the Alps usually tunnel under the highest parts of the passes. These tunnels are: the Mont Cenis tunnel, 8 miles long, on the route from France to Turin; the Simplon tunnel, 12¼ miles long, on routes from France and Germany to Genoa; the St. Gotthard tunnel, 9 miles long, on the route between Germany and Milan. Railways from Germany and Austria cross the Brenner Pass into Italy without tunnelling.



VEGETATION ZONES IN THE ALPS.

The following vegetation zones are found on the Alps:

1. Olives—in sheltered places on the southern side.
2. Vines—in the valleys.
3. Deciduous trees (oak, beech, ash, sycamore)—up to 4,000 feet on the northern side and 5,000 feet on the southern.
4. Pines—up to 6,000 feet on the north and 7,000 feet on the south.
5. Alpines—shrubs and rock plants (alpines); this is the region of pastures (called "alps" in the German Alps).
6. Glacial region—begins at 8,000 feet on the northern side and 9,000 to 9,500 feet on the southern. From this region glaciers descend.

The characteristic animals of the Alps are the chamois and the ibex, two mountain goats, which live in almost inaccessible spots close to the snowline.

(See also: *Avalanche, Glacier.*)

altitude: Heights are measured upward from sea-level. Since the sea-level is continually changing with the tides it is necessary to have a standard sea-level. A line has been fixed as the mean sea-level at Liverpool. This is the zero line from which heights are measured.

Other heights have been carefully measured during survey work, and any of these can be used as a basis for further measurements.

Depths in the sea are measured downward from sea-level. Ocean depths, found by sounding, are measured downward from the actual sea-level. It is not possible to measure these depths with the same accuracy as heights on land; hence the small variations due to the tides are immaterial.

Two important corrections are made for altitude:

1. Air-pressure, as measured by the barometer; when the recording station is above sea-level an inch of mercury is added for each 1,000 feet; this "reduces the reading to sea-level"; the corrected reading gives the pressure as it would be in that region at sea-level.
2. A similar correction is made in thermometer readings taken above sea-level—1° is added for each 100 yards of altitude above sea-level.

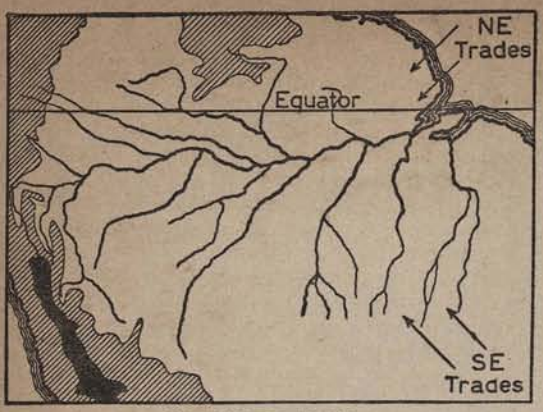
aluminium: See *Metals.*

Amazon: The greatest river in the world, with a length of 4,000 miles and a basin covering 2¾ million square miles (not far short of half of South America). It rises on the plateau of the Andes, breaks through the eastern Cordillera of the Andes, and descends to the plains in great rapids and cataracts, finally passing through a cañon 2,000 feet deep and only 100 feet wide in some places. In many places the Amazon is from 4 to 6 miles wide, in others it rushes through narrows a mile wide and 200 feet deep. In November the heavy rains begin and the river begins to rise; it continues rising until June and then falls; the flood-level is from 10 to 50 feet above the lowest level. In flood the Amazon spreads far and wide—up to 400 miles. The mouth of the great river is about 170 miles wide.

Vast tributary streams flow into the Amazon. The whole basin is covered with an almost impenetrable tropical forest, which extends its mighty arms along the tributaries.

The main stream is navigable to Iquitos, 2,300 miles from the sea, for ocean-going steamers.

The Amazon has no delta, but islands and sand-banks are being built up along the coast of Guiana.



BASIN OF THE AMAZON.

On the north shore at the mouth there is a tidal bore—a wall of water about 10 feet high advances up the river at a speed of 10 to 15 miles an hour.

ambergris : See *Whale Fishing.*

America : *North America* has an area of 9¼ million square miles, *South America* an area of 6¾ million square miles.

Greatest extent : northward, about 71° ; Cape Horn 56° S. ; Cape Branco (Brazil), 35° E. ; Cape Prince of Wales (Bering Strait), 168° W.

North America has a great mountain system in the west, consisting of the Rocky Mountains rising abruptly from the plain to the east and lower ranges to the west ; between these are high plateaux. The Appalachians form a lesser watershed in the east. There is a third watershed which extends east and west ; this consists of the Laurentian Plateau, continued west of Lake Superior in a low elevation, the Height of Land (this is important, because it forms the watershed between the United States and Canada). The Mexican Plateau is a continuation of the Rocky Mountain system southward ; it descends steeply to the sea on both sides. Central America consists of parallel ranges running east and west.

Rivers of North America : The greatest rivers are the St. Lawrence and Mississippi, flowing almost at right angles to each other ; these rivers and their tributaries cover a great part of North America, and led to the rapid penetration of the country. The most important rivers of the eastern slope (in addition to the St. Lawrence) are the Hudson, Susquehannah, and Potomac. The Hudson is navigable by large ships ; it has cut a gap through the Appalachians (the Mohawk Gap) which is the chief route from the east to the plains ; New York stands at the mouth of the Hudson. On the western slope to the Pacific the chief rivers are : the Yukon (frozen most of the year—the Klondike River is a small tributary), the Fraser River (noted for salmon), the Sacramento (used for irrigation in California), the Colorado (famous for its cañons).

On the northern slope the greatest river is the Mackenzie (2,500 miles), useless for navigation, because it flows to the Arctic. Many rivers flow into Hudson Bay : these include the Nelson and the Red River (which drains Lake Winnipeg). The Rio Grande, between the United States and Mexico, flows across an arid region, with cañons in the upper course.

Countries of North America : British—Canada (cap., Ottawa), Newfoundland and Labrador Coast (cap., St. John's), British Honduras (cap., Belise), Jamaica (cap., Kingston).

United States (federal republic, cap., Washington).

Mexico (republic, cap., Mexico).

The following States are republics :

Guatemala (cap., Guatemala), Honduras (cap., Tegucigalpa), Salvador (cap., S. Salvador), Nicaragua (cap., Managua), Costa Rica (cap., San José), Panama (cap., Panama), Cuba (cap., Havana), Haiti (cap., Port-au-Prince), Dominican Republic (cap., Santo Domingo), Porto Rico (U.S.A., cap., San Juan).

South America has a somewhat similar build. The Andes form a continuous mountain mass from north to south with wide plateaux between the bounding ranges. The highlands of Guiana and Brazil are lesser systems both in extent and height to the east. The Amazon and Orinoco basins are a vast plain. The Pampas are another great plain south of the Brazilian highlands and extending to the Andes.

THE CHIEF WATERSHEDS OF NORTH AMERICA.

Rivers of South America : The two greatest river systems are almost at right angles, as in North America. The Amazon (4,000 miles) is the greatest river in the world ; the Plate River estuary receives the Paraguay-Paraná (2,200 miles) and the Uruguay. The Orinoco (1,200 miles) is the chief river of the north. Near its source it divides into two branches ; one of these, the Cassiquiare, flows to the Rio Negro, and so connects the Orinoco and Amazon.

Countries of South America : With the exception of Guiana the countries are republics : British Guiana (cap., Georgetown), French Guiana (cap., Cayenne), Dutch Guiana (cap., Paramaribo), Brazil (cap., Rio de Janeiro), Venezuela (cap., Carácas), Peru (cap., Lima), Ecuador (cap., Quito), Colombia (cap., Bogotá), Bolivia (cap., La Paz), Chile (cap., Santiago), Argentine (cap., Buenos Aires), Uruguay (cap., Montevideo), Paraguay (cap., Asuncion).

THE CHIEF WATERSHEDS OF SOUTH AMERICA.

(See also: *Amazon, Andes, Bad Lands, Cañon, Continent, Everglades, Fall Line, Great Lakes, Klondike, Mammoth Cave, Mississippi, Mohawk Gap, Prairies, Rocky Mountains, St. Lawrence, Selvas, Skyscraper, Tornado.*)

Andes: A mountain system which extends from north to south of South America and forms the backbone of that continent. The total length of the system is about 4,400 miles. The Andes consist for a great part of their length of two high ranges separated by a broad plateau, in many places 100 and more miles wide. The widest parts are in the middle and in the north.

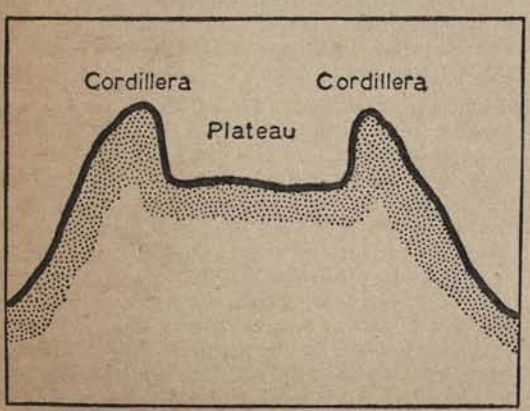
Most of the Andes drains to the Atlantic, but there are areas of inland drainage. The largest of these is that round Lake Titicaca, which lies on the plateau at a height of 12,540 feet.

The Andes are fold mountains which are probably still being forced upward. The whole region is, therefore, an earthquake zone, and there are great numbers of volcanoes.

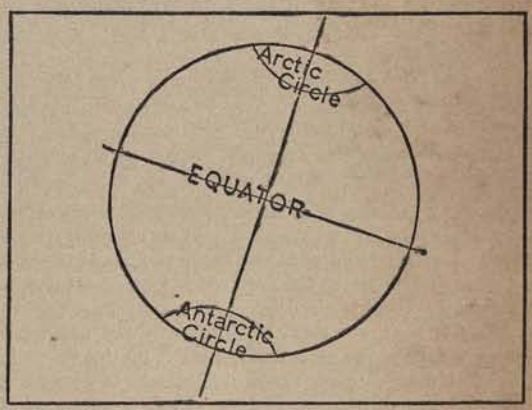
The highest mountains in the Andes are: Sorata (Illampu—25,250 ft., in Bolivia), Illimani (24,633 ft., in Bolivia), Aconcagua (23,025 ft., between Chile and the Argentine). The highest volcanoes are: Sahama (21,480 ft., in Bolivia) and Cotopaxi (19,612 ft., in Ecuador).

The Andes have a great effect on the climate of South America. The trade winds from the east are forced upward by the mountains; there is heavy rainfall in the Amazon valley and desert to the west of the mountains. In the south, the region of westerly winds, there is heavy rainfall on the west and semi-desert and steppe country to the east.

It is an interesting comment on the magnitude of the Andes that when the frontier was fixed between Chile and the Argentine it was arranged that it should follow the line of highest crests forming the watershed between the two countries; when a commission came to examine the region it was found that the "line of crests" sometimes stretched across a width of 40 miles.



SECTION ACROSS THE ANDES.



THE ARCTIC AND ANTARCTIC CIRCLES.

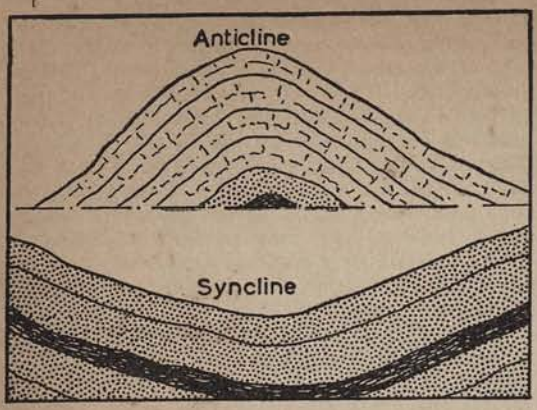
Antarctic circle: A circle on the earth, similar to the Arctic circle, but at 23½° from the South Pole. Conditions are similar: perpetual day during southern midsummer; perpetual night during southern midwinter.

Whilst the Arctic circle passes overland for the most part, the Antarctic circle is almost entirely on the sea. (See also: *Arctic Circle.*)

Antarctic regions: The Antarctic regions are largely unexplored; many points are still in doubt. The land that has been discovered follows the Antarctic circle fairly closely over part of the distance. The greatest extension out of the Antarctic circle is Graham Land, which extends out towards Cape Horn; two seas which recede backwards towards the South Pole have been partly explored—Weddell Sea and Ross Sea.

There is an ice-barrier round the Antarctic which is in many places 200 feet high; this probably consists of ice forced out from the land and half afloat. Beyond this is the icepack, consisting of sea-formed ice mixed with icebergs.

The climate of the Antarctic is extremely ungenial, much more so than that of the Arctic regions. The mammals of the Arctic are not represented in the Antarctic, but there are seals and vast numbers of penguins.



BENDING OF STRATA IN ANTICLINE AND SYNCLINE.

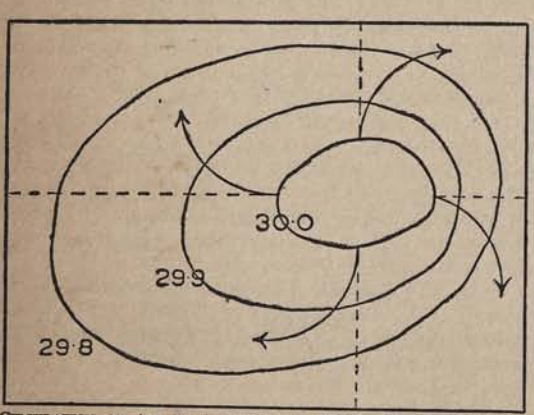
anticline and syncline: An *anticline* is strata bent by pressure so as to form an arch. The top of the arch, being pressed upward, is the loosest and weakest part and is most quickly eroded. A *syncline* is strata folded so as to form a trough. The rocks at the lowest part are under great pressure from all sides; they become compact and hard, and are eroded slowly.

Thus it may happen that what was originally the highest part of a district may be completely eroded, whilst original valleys (synclines) may remain. The top of Snowdon, for example, is part of an original syncline, with the strata curving up on each side.

anticyclone: A region of high air-pressure surrounded by regions of lower pressure. When an anticyclone occurs winds blow outward from the high-pressure region at the centre towards the low-pressure region round it.

There is always a twist in these outward winds for this reason: the speed of rotation of the earth is greatest at the equator—25,000 miles in 24 hours; it fades away to nothing at the poles. Hence a wind blowing towards the North Pole is continually reaching land moving less rapidly eastward; it shoots ahead of this land and so gets a twist towards the east. Similarly, a wind blowing south would get a twist towards the west. Hence, in the northern hemisphere the outward winds in an anticyclone form a whirl in the direction of the hands of a clock (a clockwise whirl).

For similar reasons the winds in an anticyclone in the southern hemisphere have an anticlockwise whirl.



CIRCULATION OF AIR IN ANTICYCLONE (NORTHERN HEMISPHERE). MEASUREMENTS IN INCHES OF MERCURY.

(It may be noted that in all movements towards or away from the equator there is a twist to the right in the northern hemisphere and towards the left in the southern hemisphere. This applies to winds, ocean currents, and to some extent to rivers.)

At the centre of an anticyclone the air is heavier than the surrounding air. Hence there are downward and outward currents of air. The descending air is compressed and warmed, so that rain is not deposited; fine weather (absence of clouds and rain) is associated with anticyclones.

Anticyclones are often of great extent. Wide, shallow anticyclones are most stable, and may bring fine weather for a considerable period. Cyclones disperse slowly by the outflow of the denser air.

antipodes: The antipodes of a place is the point at the opposite side of the earth (i.e. at the opposite end of the diameter which goes through the place).

To find the antipodes of a place: latitude—as far south (or north) as the place itself is north (or south); longitude—as far east (or west) of the 180° meridian as the place itself is west (or east) of the 0° meridian. This is readily seen by reference to the globe. E.g. the antipodes of a place 52° N. 4½° W. is 52° S. 175½° E. The antipodes of London (51½° N. lat., long. 0°) is 51½° S. lat., long. 180°. The nearest land to this point is a small island, hence called Antipodes Island.

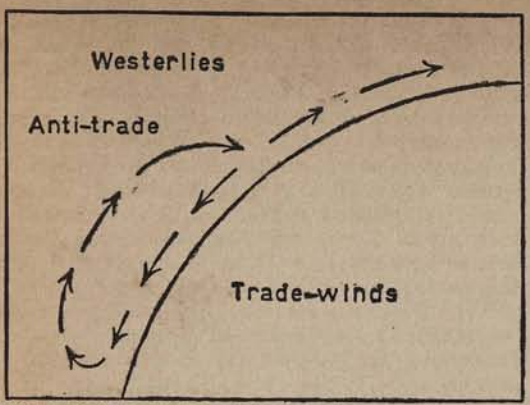
The existence of land and water hemispheres, the former containing nearly all the land in the world, explains why nearly all places on land have water antipodes. The only large exception is the southern part of South America and the corresponding part of Eastern Asia.

The antipodes of any region, being at the opposite side of the world, differs from it by 12 hours in time. (The difference would be 12 hours later if the measurement is made towards the east and 12 hours earlier if made towards the west. The discrepancy would be rectified, because in one case or other the date line would be crossed. If the date line is crossed in the eastward measurement the date jumps back—say, from the fourth to the third—and so the 12 hours on is adjusted to the 12 hours back when the measurement is made westward. A similar adjustment—the date jumps on, say, from the third to the fourth—is made if the date line is crossed in the westward measurement.)

The antipodes of a region also has the opposite season—winter for summer, spring for autumn, etc. This is simply due to the fact that one region is in the northern hemisphere and the other in the southern hemisphere. The change of season does not apply to the equatorial region, which has perennial summer. The antipodes of any place on the equator is also on the equator, and so has exactly the same season.

anti-trades: The trade winds blow towards the equator from north-east and south-east, regularly throughout the year. The hot light air along the equator is pushed out and flows over the trades to north and south. The presence of these winds (anti-trades) in the upper air is shown by the clouds, which may be seen moving in the direction opposite to the surface winds (trades).

The anti-trades descend from the upper air in regions about 40° from the equator, and then appear as south-west winds in the northern hemisphere and north-west winds in the southern hemisphere. The regions of the Atlantic where the anti-trades descend are called the Horse Latitudes. These regions are



CIRCULATION OF AIR PRODUCING THE TRADE WINDS AND ANTI-TRADES.

north of the tropic of Cancer and not far from the tropic of Capricorn. (The difference is due to the fact that the region of equatorial calms is north of the equator.)

The name "anti-trades" is also used for the prevailing westerly winds of the temperate regions; these winds begin where the upper anti-trades descend.

(See also: *Trade Winds.*)

aqueduct: See *Water-supply.*

archipelago: A group of islands. The name was originally given to the Grecian archipelago, in the Aegean Sea. It has been extended to similar groups of islands in other regions. The largest archipelagos are: the East Indies, the West Indies, the frozen archipelagos of Northern Canada and Siberia, the British Isles, the Japanese islands, the Philippine Islands, the Faroes (Denmark), the Aleutian Islands. There are numerous archipelagos in the Pacific.

Many archipelagos are the highest parts of land which has subsided; they are often found on subsiding coasts—Lofoten Is. on the fiord coast of Norway, the islands on the fiord coasts of British Columbia and Chile. The British Isles are on the Continental shelf; the Frisian Islands are fragments left when the sea broke through and formed the Zuyder Zee. There is a wide continental shelf also about the East Indies and Philippines. Many small archipelagos occur which are made up of coral islands. The Maldive and Laccadive Islands, in the Arabian Sea, are examples of coral archipelagos.

Arctic circle: A circle on the earth at a distance of $23\frac{1}{2}°$ from the North Pole. When the sun is overhead on the tropic of Cancer (northern midsummer) all places within the Arctic circle have perpetual daylight. Places on the circle have several days at midsummer without night (the sun just touches the northern horizon). The time of complete daylight increases up to six months at the North Pole.

The phenomenon of the sun visible in the north at midnight is called the "midnight sun."

At midwinter places on the Arctic circle have several days with the sun just appearing on the southern horizon. The time of perpetual night increases up to six months at the North Pole.

(See also: *Antarctic Circle, Midnight Sun.*)

Arctic Ocean: The part of the sea north of the Arctic circle; it is, in fact, a gulf of the Atlantic and the largest gulf in the world; the area is about $3\frac{1}{2}$ million square miles; over 2 million square miles of the ocean is covered continuously with floating ice.

The Arctic is almost entirely surrounded by land—Europe, Asia, America, and the great island of Greenland. The widest opening, the mouth of the gulf, is the sea between Greenland and Norway. Baffin Bay is a narrower opening between Greenland and Northern Canada. The only other opening is the narrow Bering Strait.

There is an unusually wide continental shelf round the margin of the Arctic, with a much deeper depression across the middle. There are many islands either on the shelf or connected with it. These include Spitsbergen, Franz Josef Land, Novaya Zemlya, New Siberia, Wrangel Island, and the Arctic Archipelago of America.

The ice in the Arctic is either floe-ice, formed by the freezing of the sea, or icebergs broken off from glaciers, chiefly those in Greenland. The region of icepack extends much farther south in the region of Bering Strait than towards the sea north of Europe.

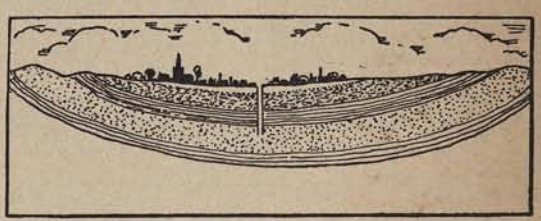
The Arctic receives water from the northern rivers of Eurasia and Canada, from snow and rain, and from inflowing currents. The large amount of fresh water received makes the surface water less salt and therefore less dense than the water below.

On the outskirts of the Arctic, where the sea is fairly open, there is a great development of plant life (plankton) in the sea, with a consequent great development of fishes. The most important fishing-grounds of the world occur where the Arctic meets warmer water.

There is also a great development of mammal life on the outskirts of the Arctic, especially seals and whales. Vast numbers of birds live on insects and the fishes and plankton of the sea.

arrowroot: A fine starch obtained from the rhizomes (root-stocks) of a group of plants (Maranta) which grow chiefly in the West Indies; the cultivation has spread to other tropical countries. St. Vincent arrowroot is greatly esteemed.

Inferior starches obtained from plants other than the Maranta are sometimes sold as arrowroot.


SAUCER-SHAPED LAYERS OF CLAY IN AN ARTESIAN WELL AREA.

artesian well: A well made by boring down to saturated layers of rock. The water rises through the bore-hole. These wells are only possible in saucer-shaped depressions. A saucer-shaped layer of an impervious rock (usually clay) has over it a layer of sand or chalk, over this another layer of clay, and so on. The saucer may be filled above with rocks, so that there is no sign at the surface of the saucer shape.

The artesian well is made by boring through the upper layer of clay and tapping the water-soaked layer of sand or chalk; the water usually gushes out, sometimes to a height above the ground level.

The original artesian wells were made in Artois in France (hence the name). The method has been extensively copied in other places where the conditions are suitable. There are numerous artesian wells in the Paris and London districts; pure water for the London breweries is drawn from artesian wells.

Some of the smaller oases in the Sahara are supplied with water entirely by means of artesian wells; these are usually sunk to a depth of about 200 feet.

There are large areas in Australia which are irrigated by means of artesian wells.

asbestos: A fibrous mineral which can be teased out and woven into cloth. Asbestos is a bad conductor of heat; for this reason it is sometimes used to cover hot-water pipes and so to check the loss of heat. It is also used in sheets as a fireproof covering, e.g. for cinema projection boxes. Asbestos clothing is worn by stokers of very hot furnaces.

Eighty-five per cent. of the world's supply of asbestos is mined in the eastern part of Quebec. South Africa now produces a considerable quantity.

Asia: The largest of the continents. Area—over 17 million square miles, nearly one-third of the land surface of the globe. Greatest extent—Taimyr Peninsula, 73° N.; Malay Peninsula, 1° N.; Cape Baba (Asia Minor), 26° E.; East Cape (Bering Strait), 169° W.

The north coast lies almost entirely within the Arctic circle; it is low except for the mountainous Taimyr Peninsula. The east coast has a fringe of islands enclosing shallow seas; beyond is a steep drop to the ocean floor. The south coast has the great peninsulas of Indo-China, India, and Arabia.

Asia is separated from Europe by the Ural Mountains, and from Africa by the deep depression of the Red Sea.

The northern plain of Siberia stretches right across the continent, being widest in the west. South of this plain is the greatest mountain mass in the world. The centre of this system is the Pamir Plateau, "the Roof of the World." From this plateau great ranges radiate: the Tien Shan Mountains to the north-east extending to the Altai and Yablonoi Mountains; south of these run the Kwen Lun Mountains; south again run the Karakoram Mountains, and towards the south-east the Himalayas; to the south run the Sulaman Mountains; to the south-east run the Hindu Kush, extending to the Elburz Mountains.

Between the great mountain ranges are vast plateaux. The Taklamakan Desert lies between the Tien Shan and the Kwen Lun; it is drained by the Tarim River, which ends in the salt lake, Lob Nor.

THE GREAT PLATEAUX OF ASIA.

The plateau of Tibet, between the Kwen Lun and the Himalayas, is from 12,000 to 15,000 feet in height. The plateau of the Deccan is separated from the inland plateaux by the lowlands of the Indus and Ganges basins. The plateau of Iran lies between the Sulaman Mountains on the east, the Hindu Kush and Elburz Mountains on the north, and the sea on the south. Westward the plateau narrows to the plateau of Armenia and extends to the plateau of Asia Minor. The plateau of Arabia is separated from that of Iran by the wide basin of the Tigris and Euphrates.

Rivers: The rivers of the northern slope flow into the Arctic Ocean; north and south they are of little use for navigation. The great tributaries, however, flow east or west; it was along these tributaries that Siberia was penetrated. The rivers are frozen for a great part of the year; in spring the southern parts are thawed whilst the mouths are still frozen; this leads to extensive floods along the Arctic coastlands. The chief rivers are the Ob, Yenisei, and Lena.

The great rivers of the eastern slope are: The Amur, which flows into the Sea of Okhotsk. The Hwang-ho (Yellow River, 2,500 miles), rises in Tibet and makes two great bends before entering the Gulf of Pechili. The lower course is across a plain, where it is held in by embankments. There have been so many disastrous floods that the Hwang-ho is called "the Sorrow of China." About the middle of last century the Hwang-ho changed its course—it originally flowed into the Yellow Sea. The name is derived from the yellow appearance of the water, due to silt brought down from the loess region.

The other great river of China is the Yangtse-kiang (3,000 miles); this river also rises in Tibet; it flows through a populous district with many large towns. The Si-kiang, in the south of China, flows into the sea near Hong-kong. The chief rivers of Indo-China are the Salwen and Mekong; these rivers flow parallel with the Yangtse-kiang in their upper courses.

The rivers of the southern slope include the two great Indian rivers, the Ganges (1,500 miles) and the Indus (1,700 miles); these two rivers and their chief tributaries rise in the Himalayas; they have formed vast plains, each ending in an extensive delta. The Indus and its tributary, the Sutlej, rise on the northern slope of the Himalayas; the Brahmaputra (1,680 miles; in its upper course the river is known as the San-po) also rises on the northern slope and joins the Ganges delta. The Irrawaddy is the chief river of Burma. The Tigris and Euphrates are to Iraq what the Nile is to Egypt; they flow across a wide plain with extensive lands available for irrigation.

Countries: British—India (cap., Delhi), Ceylon (cap., Colombo), Palestine (Mandate, cap., Jerusalem), Trans-Jordan (cap., Amman), Federated Malay States (cap., Kuala Lumpur), Unfederated States, Straits Settlements (cap., Singapore), North Borneo (cap., Sandakan), Brunei (cap., Brunei), Sarawak (cap., Kuching), Cyprus (cap., Nicosia), Hong-kong (cap., Victoria).

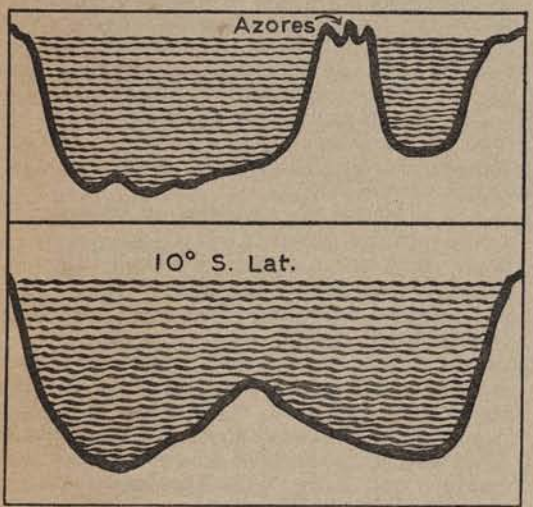
Arabia (Hejaz, cap., Mecca); Sandieh (Nejd and Hejaz; Sandieh is the new official name; cap., Riyadh), Iraq (cap., Baghdad), Turkey (cap., Angora), Syria (French Mandate, caps., Beirut and Damascus), Persia (cap., Tehran), Afghanistan (cap., Kabul), Nepal (cap., Katmandu), Bhutan (cap., Punakhá), Siam (cap., Bangkok), French Indo-China (cap., Hanoi), China (cap., Nanking), Manchukuo or

Manchuria (cap., Hsinking), Japan (cap., Tokio), Siberia (cap., Irkutsk), Trans-Caucasia (cap., Tiflis), Philippine Islands (U.S.A., cap., Manila), Dutch East Indies (cap., Batavia).

(See also: *Bedouins, Continent, Deccan, Eurasia, Ganges, Himalayas, Indus, Loess, Monsoon, Pamirs, Sundarbans, Terai, Yangtse-kiang, Yellow River.*)

asphalt: A mixture of coal-tar and sand used for surfacing roads. Asphalt also occurs naturally in the asphalt lake of Trinidad and in similar lakes in Mesopotamia. The ancient Romans drew pitch from the latter source.

Outcrops of natural asphalt have been discovered in Alberta, along the Athabaska River.



SECTIONS ACROSS THE ATLANTIC. THE VERTICAL SCALE IS GREATLY EXAGGERATED COMPARED WITH THE HORIZONTAL SCALE.

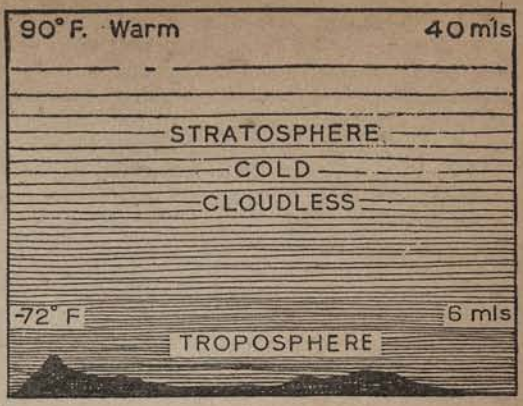
Atlantic Ocean: The length of the Atlantic from north to south (between the Arctic and Antarctic circles) is about 9,000 miles. The shortest distance across it is 800 miles, between Greenland and Norway. From Florida to Morocco is 3,600 miles. There is a narrow part between Brazil and the coast of Africa, 1,500 miles; this part is now used as an air route.

The general depth of the Atlantic is about 15,000 feet. There is a submerged ridge down the middle of the ocean which roughly follows the curves of the coastline. This ridge rises to within 6,000 to 10,000 feet of the surface; the Azores are on the broad northern end of the ridge. The ridge joins on to the Telegraph Plateau which stretches between Ireland and Newfoundland; it is on this submarine plateau that the cables between Europe and America are laid. There is a still shallower part of the Atlantic between Greenland and Scotland; Iceland stands on this ridge.

(See also: *Gulf Stream, Ocean Currents.*)

atmosphere: The envelope of gas which surrounds the earth. Dry air consists of nitrogen 78 per cent., oxygen 21 per cent., a small but important amount of carbon dioxide (3 parts in 10,000), and a number of inert gases, of which argon and helium are the best known.

Oxygen is the gas which supports life and which enables things to burn. Nitrogen dilutes the oxygen. Combined nitrogen is necessary to plant and animal life; within recent years methods have been found for obtaining nitrogen from the air in the form



THE ATMOSPHERIC ZONES.

of nitrates, which are used as fertilisers for the soil. Previous to the discovery of these methods the world had been dependent on natural deposits, chiefly those in Chile. Carbon dioxide is important because it supplies plants with the carbon (pure charcoal) which makes up a great part of their bulk. The supply of carbon dioxide is renewed by burning and by the breathing of plants and animals.

Extent of the atmosphere: The height of the atmosphere has been measured by finding the height at which meteors burst into flame (by brushing rapidly against air particles); the greatest height measured is over 200 miles. The air at such heights is extremely thin; half the total amount of air is below a height of about 3½ miles.

The lower layer of the atmosphere (the *troposphere*) extends to a height of 6 miles; in this region there is a steady fall of temperature with increase of height; at low levels the fall is about 1° F. for each 100 yards of ascent. At the top of the troposphere the temperature has fallen to about 70° F. below zero.

Above the troposphere is another region called the *stratosphere*, which extends to a height of about 40 miles. This is an almost cloudless region with a very low temperature.

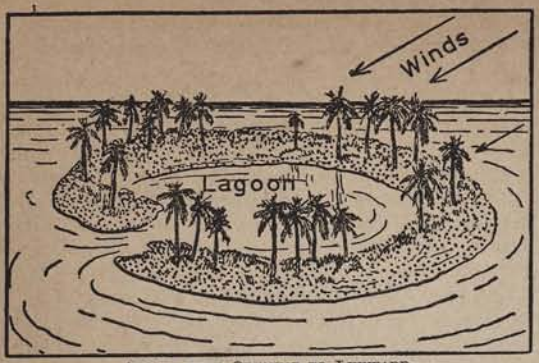
Above the stratosphere again is a third region of warm air (about 90° F.), but very little is known about this.

How the air is heated: The air takes very little heat from the sun's rays as they pass through. The heat rays are absorbed by the earth and the warm earth heats the air immediately above it. The heat spreads through the air chiefly by convection currents (warm air forced up by heavier cold air about it). This method of heating explains why the upper air is so much colder than air near the earth.

(See also: *Air-pressure, Barometer.*)

atoll: A ring-shaped coral reef enclosing a lagoon, with openings to the sea. The outward rim is living coral and constantly extending outward. The still water of the lagoon is surrounded by dead coral, which slowly dissolves, so that the lagoon increases in size. The opening to the lagoon is found at the side away from the prevailing winds; here the water is comparatively still, and coral does not grow so well.

Atolls are usually fertilised by the excrement of birds and possibly by sea animals washed up. Coconuts drift to them over the sea, so that it is usual to find them clothed with coco-nut palms. The larger atolls are inhabited; the inhabitants live on fish and coco-nuts.



ATOLL, WITH OPENING TO LEEWARD.

Great numbers of atolls occur in the tropical parts of the oceans: in the centre of the Pacific, in the Indian Ocean, and to a lesser extent in the west of the Atlantic. The Laccadive Islands in the Indian Ocean are a remarkable group of atolls. The coral which covered the islands was cut away at a remote period so as to expose the sand which occurs below. This sand has been converted into fertile soil.

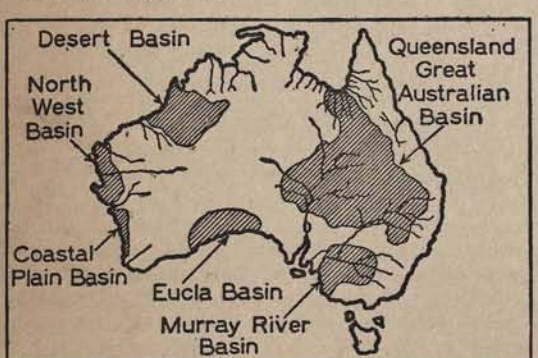
(See also: *Coco-nut, Coral Reef.*)

Atoll Valley: A part of the Western Pacific, where there is the greatest development of atolls (ring-shaped coral islands). This region extends from 5° north of the equator to 25° south of it, and from 130° east to 145° west. In this region there are many thousands of atolls.

Australia: Area over 3 million square miles. The coastline is about 8,850 miles, or 333 square miles to each mile of coast; this is the smallest proportion of coast in any continent. Australia is wholly within the southern hemisphere; greatest extent—Cape York (11° S.), Wilson Promontory (39° S.), Cape Byron (N.S.W., 153½° E.), Steep Point (Western Australia, 113° E.).

Australia consists largely of plateaux with a low fringe of coastal plain and a depressed region to the east of the centre. The highest mountains are along the Pacific Coast; there are lesser mountains close to the west coast.

The eastern side of Australia has a wide stretch draining towards the sea, and there are narrower stretches on the north and west. The greater part of the interior has inland drainage; the largest of these areas is that draining into Lake Eyre. The Australian rivers are extraordinary, in that many of them only fill their beds in times of flood. At other times they are dry. There is an almost complete absence of springs, which would equalise the flow of rivers during dry periods.



ARTESIAN BASINS IN AUSTRALIA.

The great plain of Australia consists of alluvium spread out by the rivers in times of flood. Below much of the alluvium are old beds of the rivers which have been filled up. The river water sinks through the porous alluvium and is lost to the river. In many regions the water which thus sinks into the ground is tapped by means of artesian wells, and used in irrigation.

The lakes of South Australia are on flat lowland; they are salt or brackish; they vary greatly in size between periods of drought and periods of heavy rain.

Australia is considered an old continent. It has been shut off from the rest of the world for a very long period. The animals are chiefly marsupials (pouched animals), a form which almost died out in other continents after the appearance of mammals.

Nearly half of Australia is within the tropics. The northern coast and the eastern coast have tropical vegetation changing inland to savannas and grasslands. The arid interior is partly hot desert, but much of it may be made productive by irrigation. There are sub-tropical regions in the south-east and south-west.

The black-fellows, the aborigines of Australia, are a very primitive people at a low stage of development. They have probably been isolated from the rest of the world since a very early period.

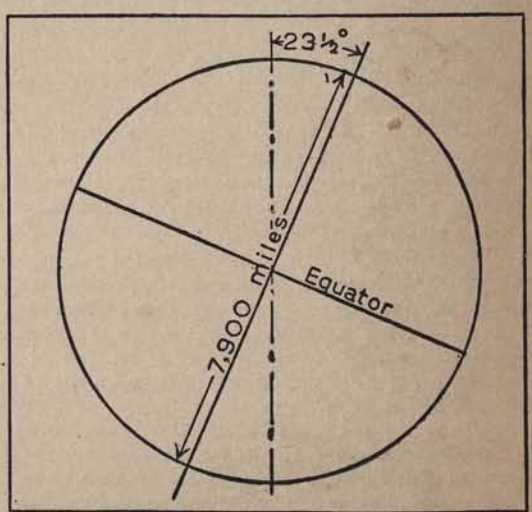
(See also: *Antipodes, Continent, Marsupials, Murray River.*)

avalanche: A destructive slide of snow and rocks common in high mountainous countries. Quite a small thing may start an avalanche high up on the slopes. In rolling down, a stone or lump of snow would accumulate more and more snow (like a giant snowball) until finally hundreds or thousands of tons of snow and rock plunge down with destructive effect. Avalanches are common in spring when the snows begin to melt and the snow is damp and clinging.

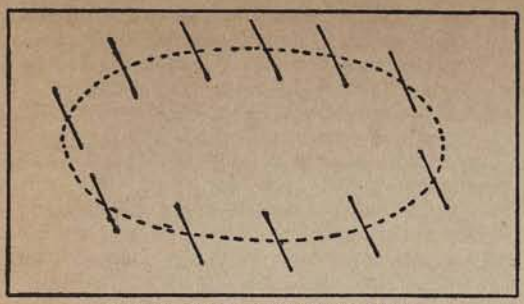
Where there is danger from avalanches the Alpine villages have screens of pine-trees to protect them.

axis of the earth: The line about which the earth spins. The ends of the line are called the North Pole and the South Pole. The length of the axis is a little under 8,000 miles (actually 7,900 miles).

The axis is inclined to the plane in which the earth



TILT OF THE EARTH'S AXIS.



CONSTANT SLOPE OF THE EARTH'S AXIS.

revolves round the sun. It is tilted away from the upright to this plane at an angle of 23½°.

The equator is the circumference of the earth halfway between the poles. The Arctic and Antarctic circles are 23½° from the poles. The tropics are circles 23½° from the equator.

The spin of the earth keeps the axis always pointing in the same direction. Its direction at any part of the earth's orbit is parallel to its direction at other parts of the orbit.

(See also: *Ecliptic.*)

bacon and ham: Most of the external trade in bacon and ham consists of exports from other countries to Great Britain. The greatest quantities are received from Denmark and the United States, with Canada and the Irish Free State next. The chief American production is in the Mississippi valley, with Chicago as the centre. Limerick and Cork are important bacon-curing centres in the Irish Free State. Much bacon is produced in England, especially in Wiltshire. York hams are famous.

Bad Lands: Regions in South Dakota, North Dakota, Nebraska, Montana, Arizona, and other western states of America. These lands consist of level clays, shales, and other rocks cut up into steep, winding gullies by streams. The bad lands fringe the valleys of larger streams.

The bad lands occur in arid regions over which rapid streams flow, which cut down quickly through rather friable rocks.

Vegetation is almost non-existent, because soil is swept away almost as quickly as it is formed. There is very little animal life, because of the absence of plants.

The name bad lands was originally applied to regions in South Dakota. It is now used for similar regions in other parts of the Rockies, South America, and Asia.

bakelite: A hard solid made from phenol (carbolic acid) and similar compounds obtained when coal is distilled at a low temperature (in making "coalite" and similar fuels, together with gas production).

Various kinds of bakelite are used for insulators, fountain-pens, and other small articles.

bamboo: A characteristic genus of tropical plants which are cultivated especially in India, the East Indies, and China. The most common bamboo grows like a tree to a height of 60 or 80 feet.

Bamboos are put to a vast number of uses in tropical countries. The joints are bored through and the stems used as pipes for carrying water. The stems are used for making all kinds of furniture and agricultural implements, for building houses, and for the masts of ships. Joints are cut off and used as buckets. Young shoots are used as vegetables.

Great quantities of bamboos are exported for making furniture and for umbrella and walking-sticks.

barometer: A tube more than 31 inches long, filled with mercury and up-ended in a basin of mercury. Air pressing on the exposed surface of mercury supports the column in the tube; the level in the tube rises or falls with increase or decrease of air pressure. Hence the barometer measures air-pressure. At meteorological stations constant records of air-pressure are kept. These are entered on weather maps, and help in the framing of weather forecasts; winds, for example, blow from regions of high pressure to regions of low pressure.

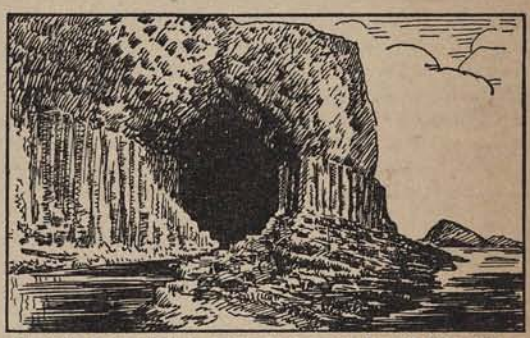
Weather depends so greatly on air-pressure that the barometer is commonly used as a means of predicting what weather is to follow. The marks on barometers show:

31 in. . . .	Very dry.
30⅔ in. . .	Settled.
30⅓ in. . . .	Fine.
30 in. . . .	Variable.
29⅔ in. . . .	Rain or wind.
29⅓ in. . . .	Much rain.
29 in. . . .	Storm.

These are not to be taken as invariable, but as indications. Slow changes in the barometer foretell settled weather, fine if upward, wet if downward. Quick changes foretell unsettled weather.

Dry air is heavier than moist air and cold air than warm air. Hence the highest barometer is observed with dry, cold air, and the lowest barometer with damp, warm air.

barrier reef: See *Coral Reef.*



FINGAL'S CAVE, STAFFA, SHOWING REGULAR BASALT COLUMNS.

basalt: A volcanic rock which often occurs in sheets of great thickness. It has the peculiarity of splitting into vertical columns of great regularity and often six-sided. The splitting is probably due to strains set up when the rock is cooling and contracting. The contracting rock has to give somewhere; it gives along the easiest lines. Cracks running downward through the mass of rock split it into columns.

Extraordinary examples of columnar basalt are seen in the Giant's Causeway, near Portrush, on the north coast of Ireland, and in Fingal's Cave, in the Isle of Staffa, Western Scotland.

Bedouins: Nomadic Arabs who live under tents in the semi-desert country between the Arabian coast and the central mountains. They are shepherds and herdsmen who live continuously in the open, moving from place to place in search of pasture for their flocks and herds.

The Bedouins are an independent and quarrelsome

people; the quarrels usually arise out of struggles for wells and pasture-lands.
(See also: *Nomads.*)

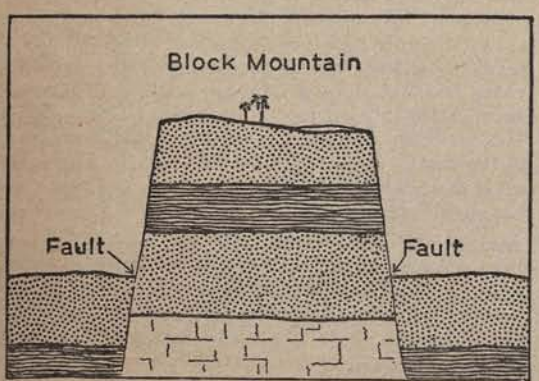
beer: See *Brewing.*

bight: A very slightly indented opening of the sea. It is known to sailors as a long stretch of coast which curves inland. The largest bight is the Great Australian Bight, which is about 600 miles across. Other bights are the Bight of Benin and the Bight of Biafra, on the West African coast.

Black Country: The metal-working country about Birmingham. The name was given because of the pall of smoke which hangs over manufacturing towns and because of the heaps of cinder and slag which give the region a barren and desolate appearance.
There is a small ironfield near Birmingham, where iron has been smelted for at least 300 years. Great quantities of iron ore are now imported from Spain, Algeria, and Sweden. The South Staffordshire coalfield lies between Birmingham and Wolverhampton.
Many of the Black Country towns specialise in one form of metal industry, often one requiring great skill: Wolverhampton—locks; Walsall—harness; Dudley—telegraph insulators; West Bromwich—brass wares; Redditch—needles and fish-hooks; Coventry—cycles, motor-cars, sewing-machines.
Birmingham is the market town for the Black Country. It is a great railway centre, and lies at the middle of "The Cross," a group of canals which join it to the Mersey, the Humber, the Thames, and the Severn. Birmingham has a great variety of metal manufactures, both large and small; it produces everything in metal from "a pin to a steam-engine."

Black Earth: A region in Russia, covering 150 million acres, which stretches from the Carpathians to the Urals; the most fertile and valuable land in Russia. The whole region is covered with a thick deposit of black earth; this is loess (friable loam), mixed with about 10 per cent. of humus, decayed vegetable matter which gives the soil its black appearance. The black earth is cultivated without manure.
The Black Earth region extends north as far as the upper reaches of the Oka. Southward the beds thin out towards the Black Sea and finally disappear.
(For the origin of black earth see *Loess.*)

block mountains: Mountains or plateaux formed in the following way—a mass of elevated land under strain cracks. It may happen that the outer parts sink, leaving an elevated central part, a crust block or block mountain. An original plateau of this kind may be eroded by rivers into a mass of block mountains, and finally into conical peaks.
Flat-topped mountains are also formed where very hard strata lie over softer strata. Where the upper hard stratum happens to be cut through erosion proceeds rapidly in the softer strata below. The parts which remain form flat-topped mountains capped with a layer of the hard rock. Many of the Pennines have flat tops formed of the exceedingly hard millstone grit. This hard rock protects the heights over which it still remains and preserves them as separate flat-topped peaks.
A typical example of block mountains is seen in the Black Forest, to the east of the Rhine. Here a mass of rock, about 200 miles long, has sunk between the Black Forest and the Vosges, forming the rift valley of the Rhine and leaving masses of block mountains.



FORMATION OF BLOCK MOUNTAINS; BEFORE EROSION.

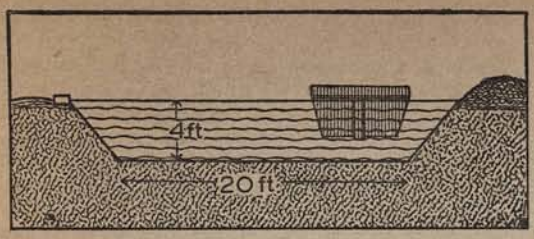
brandy: See *Distilling.*

brewing: Beer is usually brewed from barley. The barley grains are allowed to sprout in moderate heat, and the sprouts are then destroyed by greater heat; this is the process known as malting. The malt is further fermented to wort; the fermentation is checked and then hops are added. The quality of beer depends largely on the water used in making it. The quality of the beers made at Burton-on-Trent is ascribed to the water which is obtained from deep wells and not from the river; the water contains lime, common salt, and sulphates of potash, lime, and magnesia. London beer is made from water obtained from deep artesian wells.

bush: Dense vegetation consisting chiefly of bushes and small trees which is a common feature of the drier parts of tropical and sub-tropical lands. As it originally occurs the bush often extends continuously for hundreds of miles; as the height is more than that of a man, bush country is difficult to travel in. In Australia much of the bush has been cleared to make room for crops.

cactus: The cacti are typical plants of the arid regions of America. They are of extraordinary and varied shapes. They have succulent stems which hold much moisture, and they have tough skins with few pores. Hence they can survive long periods of drought.
Some kinds of cacti have been introduced into the Mediterranean countries where they flourish. The prickly pear is one of the commonest; it produces edible fruit.
The cochineal insect, which is used to make a red dye used in cooking, is reared on a variety of the prickly pear. The chief supplies of cochineal come from New Granada and the Canaries.

canals: Canals are usually intended either for barges or ships. Canals for barges only are of small size. The width at the bottom is usually a little more than twice the width of a barge; the sides slope outward from the bottom at an angle of not more than 40° (2 in 3). The depth is at least 1½ times the depth of a loaded barge. A typical English canal is 20 feet wide at the bottom, opening out to 32 feet at the surface, and 4 feet deep. Many modern canals on the Continent have been made of much greater dimensions in order to admit the smaller of the craft which ply on the great rivers. In Germany canals have been cut over 70 feet wide.
The banks of a canal are usually lined with rubble to check erosion due to the wash from barges. The speed of barges is slow, again to check erosion; a



SECTION ACROSS A BARGE CANAL; TOWPATH ON THE LEFT, RUBBLE BANK ON THE RIGHT.

horse-drawn barge travels at about 3 miles an hour. On porous ground canals are lined with clay or concrete.

Canals are cut as much as possible on level ground in straight stretches. A continuous supply of water is necessary; each time a barge goes through a lock water sinks from the higher level to the lower, and this water must be replaced. Sometimes canals (lateral canals) follow the courses of rivers where it is necessary to avoid rapids or falls; the advantage is that water can be drawn from the river to supply the canal.

Safety gates are placed at intervals, especially on long stretches without locks and where the canal is above the level of the surrounding country. In case of injury to the canal banks the gates are closed to prevent the whole of the canal water flooding the surrounding country.

England: An important group of English canals is "The Cross"—from the Mersey to London and from the Humber to the mouth of the Severn. The Aire and Calder Navigation runs from Goole through the West Riding; this canal is used chiefly for the transport of coal. The Leeds and Liverpool canal passes through the Aire Gap.

France: The Languedoc canal, between the Mediterranean and the Bay of Biscay, was finished in 1681; it has 119 locks and reaches a height of 620 feet. France has over 3,000 miles of canals; some of the new canals are over 8 feet deep; in the north-east the system links up with the Belgian canals.

Holland: The canals are usually above the general ground level; water is pumped up into them; they serve as a means of drainage as well as for transport. Recent improvements have made some of the canals wide and deep enough to take large Rhine barges, up to 2,000 tons.

Central Europe: An important canal connects the Danube with the Main and thence with the Rhine; when improvements are completed this canal will take barges up to 1,500 tons.

The rivers of Russia form a sprawling network across the whole country. They have been connected by canals so that there are through waterways between the Black Sea, the Baltic, and the White Sea.

America: Difficult parts in the navigation of the St. Lawrence are avoided by means of canals. Lake Michigan is linked to the Mississippi by a canal, and thus to the Gulf of Mexico. A canal from Buffalo runs to the Mohawk River, and thus joins up with the Hudson River and New York.

Other canals: Along the east and west coasts of India there are canals parallel with the coasts. The Grand Canal of China was formerly a most important waterway, but most of it has been allowed to silt up.

Canals are also cut for irrigation purposes. The water is usually carried to the irrigated district by a wide canal. Numerous small branches carry the water to different parts and these again branch out.

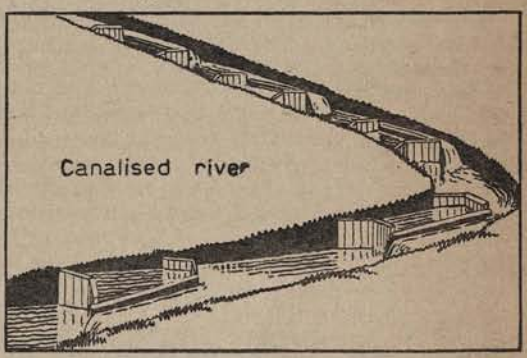
Locks.—Locks connect lower and higher levels in canals. They consist of sections of the canal long enough to take the barges or ships, with double gates at each end opening towards the upper level.

When a barge is going up, the following processes may be necessary: (1) sliding doors on the lower gates are raised to let out the water; (2) the lower gates are opened; (3) the barge enters and the lower gates are shut; (4) sliding doors on the upper gates are raised to admit water; (5) the upper gates are opened and the barge is drawn out.

(See also *Ship Canals.*)

canalisation: A river is canalised by constructing weirs across it at intervals so as to divide it into stretches of comparatively deep water; locks are constructed at each weir to enable barges (and in some cases small ships) to pass up and down the river. This method of rendering a river navigable has proved more successful than deepening it by dredging.

The Thames has been canalised upward from Teddington, the highest part that the tide reaches; below Teddington there is a weir at Isleworth, which



CANALISED RIVER; DISTANCES BETWEEN THE LOCKS REDUCED IN DIAGRAM.

is raised to admit the tidal water and lowered at low tide.

The Seine has been canalised as far up as Montereau (60 miles above Paris). The depth of the canalised river is at least 10½ feet up to Paris and 6½ feet above Paris. The Main has been canalised from its junction with the Rhine to Offenbach, above Frankfurt; the depth is 8¼ feet.

The difficulty of canalisation increases as the head of the river is approached on account of the increasing steepness of the river bed. The weirs in the lower part can be placed much farther apart than in the upper to obtain the same depth of water.

Cancer, Tropic of: See *Tropics.*

cañon: A deep narrow valley with almost or quite upright sides. These valleys occur in the west of North America, where rivers flow across almost rainless regions. A river cuts its bed vertically downward. Rain would erode the edges and change the valley to V-shape. As there is little or no rain the edges are not eroded and the sides of the valley remain upright, thus forming a cañon.

The greatest of the cañons are those of the Colorado River. This river and many of its tributaries flow through enormous cañons. The greatest of these cañons is the Grand Cañon. The sides of the cañon rise almost straight up from the banks of the river to a height of 4,000 feet and in some places to 7,000

A CAÑON.

feet; this cañon is 200 miles long. In some places the bottom of the cañon is always in darkness, and stars can be seen overhead in the middle of the day. In any other region the other cañons would be considered enormous, but they are dwarfed by the Grand Cañon.

At the lower end the walls which form the valley of the Colorado River are being eroded, the edges are being worn away, first to flat-topped hills and then to conical peaks.

capitals : The capital city (seat of the Government) is usually the chief town in a country. Two notable exceptions are : 1. United States of America—capital Washington ; built on a tract of land given up by Maryland in 1790 ; in 1839 Washington was described as " a large straggling village reared in a drained swamp " ; the district in which it stands (Columbia) is governed directly by Congress. 2. Australia—the Federal capital is Canberra, built specially as the capital.

Capital cities usually become centres of art and culture, and usually have numerous manufactures ; capitals are often publishing and printing centres. The excessive growth of capital cities is probably due to the following reasons : the capital is originally fixed at the most important town in the country—this gives it an initial advantage. Court and parliament attract the more luxurious forms of trade ; the capital becomes a shopping centre and attracts foreign visitors. The increasing population provides a good market and many manufactures develop. Business firms all over the country find it profitable to have an office in the capital ; great numbers make this the chief office. Each office established makes it more important for other firms to be at the capital, and so the capital grows as a centre of commerce.

The table at the foot of the preceding column shows the percentage of the whole population that inhabit some of the larger capitals.

(For complete lists of capitals—see under the Continents.)

Country.	Population in millions.	Capital.	Population in millions.	Per cent. of capital to the whole country.
Great Britain & Northern Ireland	44½	London .	8	18
France . .	42	Paris . .	2·9	7
Germany .	66	Berlin . .	4½	6¾
Italy . .	43	Rome . .	1·2	2¾
Spain . .	22	Madrid .	·8	3·6
Austria[1] . .	6·6	Vienna. .	1·9	30
India . .	353	Delhi . .	·5	·14(⅓)
Japan . .	92	Tokio . .	5·3	5·7
Egypt . .	14	Cairo . .	1	7
Brazil . .	40	Rio de Janeiro	1·5	3¾
Argentine .	11·8	Buenos Aires	2·2	19
U.S.A. . .	137	Washington .	·5	·37(½)

[1] The great size of Vienna compared with the whole of Austria is one of the troubles of that country. Vienna developed to its present size as the chief town of the old Austro-Hungarian empire.

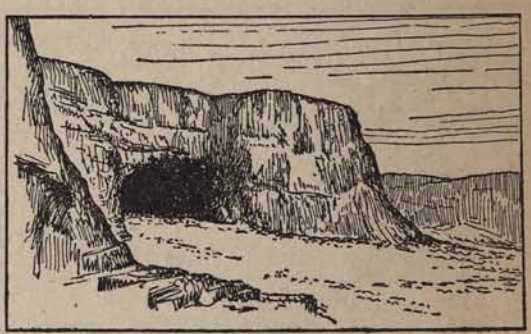
Capricorn, Tropic of : See *Tropics*.

cataract towns : See *Town Sites*.

cattle : Cattle for meat and hides are reared chiefly in dry regions in the temperate zone. Cattle ranches begin where the climate is too dry for wheat. The great cattle regions are : the western prairies of Canada and the United States, the pampas of the Argentine, South Africa, parts of Australia, the steppes of Russia and western Asia.

Of recent years two great changes have been taking place in the practice of cattle rearing :

1. Lands are now being used for wheat and other crops which were formerly used for ranches. The herds of cattle have been moved to less fertile lands. In Canada wheat growing has spread into what were the great ranching provinces and the ranches have been moved to the north. The pampas of the Argentine were given up almost entirely to ranches. The eastern part is now agricultural ; the herds of cattle are now on drier pampas to the west.
2. Cattle rearing has been moving into the tropics, where it can be profitably carried on. This is especially the case in Queensland, where cattle rearing is increasing in the tropical region, in the Llanos of the Orinoco, and in South Africa.



SEA CAVE FORMED BY BATTERING OF WAVES.

caves : A cave is usually one of two kinds. 1. Small caves occur in sea cliffs, where the cliffs are battered by waves and holes gradually worn in them. 2. The largest caves occur in limestone. Limestone is soluble in water containing carbon dioxide. Rain in falling dissolves carbon dioxide from the air and so can dissolve limestone. Where cracks occur the water runs through and slowly dissolves the limestone and forms a cave. Several caves are often found one under another. Whilst the upper cave is being dissolved out the water is slowly dissolving its way through other cracks to a lower level. Some limestone caves are of vast extent, the largest being

LIMESTONE CAVE FORMED BY SOLUTION; STALACTITES HANGING FROM THE ROOF; STALAGMITES ON FLOOR.

the Mammoth Cave of Kentucky. Waterfalls often occur in such caves where a stream falls from a dry upper cave to a lower cave.

(See also: *Mammoth Cave, Stalactites, Stalagmites.*)

cement: One of the most important building materials; used with sand to make mortar for uniting bricks. Concrete is a mixture of cement, sand, and broken stones; vast quantities are used in foundations, the floors and walls of great buildings, for making piers and breakwaters, to form the basis of roads, for pile-driving, etc.

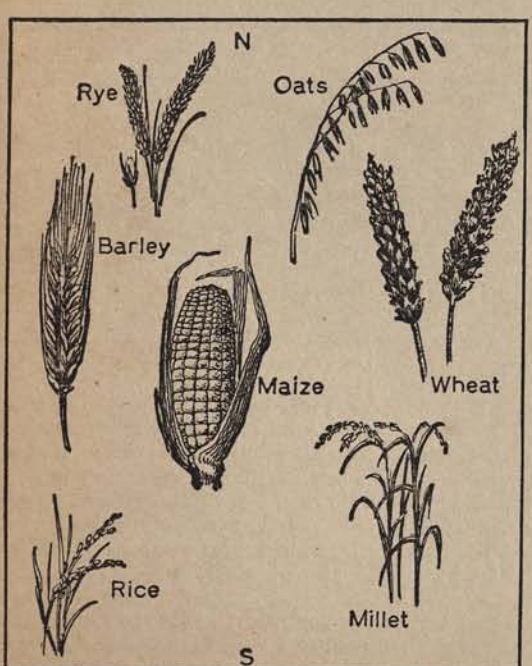
Cement is made by heating together finely ground clay and chalk or limestone. Portland cement, made in this way, is so called because it has the appearance of Portland stone. It sets extremely hard; it has the great advantage also of setting under water.

Cement is usually manufactured in districts where clay is found close to chalk or limestone. There are many cement works in Kent, where clay and chalk are found together. A little gypsum in these rocks prevents the cement setting too quickly.

centigrade: See *Thermometer.*

cereals: The principal cereals are:

Rye: This grows farther north than any other cereal. It is usually grown where the climate is too



CEREALS, SHOWING THEIR OCCURRENCE FROM THE NORTH TO THE TROPICS.

ungenial for other cereals. Rye is fermented and distilled for whisky.

Oats: Requires a rather warmer climate than rye, but not so warm as wheat. Oats are ground to make oatmeal, used for porridge and oat cakes. Oats are also used as food for horses.

Wheat: The greatest cereal crop. Grows best in regions of mild, wet winters and dry, hot summers—that is, in the sub-tropical regions and temperate regions with a climate approximating to these. In England wheat grows best in the rich claylands of the east and south-east. There are belts of wheat-lands in the temperate zones. These include the prairies of Canada and U.S.A., the Black Earth region of Russia, and the Argentine pampas. In England and sub-tropical regions wheat is usually sown in autumn; in Canada it is usually sown in spring.

Barley: Often grown as a rotation crop interchanging with wheat; it requires similar soil and climate, but is usually sown in spring. It is a valuable food, but is now usually grown to be malted for brewing and distilling.

Maize: Grows best nearer the equator than wheat; great quantities are grown in the United States, where it is largely used as a luxury food. Ground maize (Indian meal) is used to make a kind of porridge.

Millet: A cereal grown in tropical countries. In parts of Europe it is grown as a forage crop.

Rice: Needs a hot, damp climate. Grown in flooded fields and also on hill-sides (hill rice). Rice is grown largely in India (especially the Ganges valley), China, West Africa, and tropical countries generally.

(See also: *Brewing, Distilling.*)

chalk: A sedimentary rock composed of the shells and skeleton remains of minute sea animals (*foraminiferae*). The shells fall to the sea floor and slowly build up layers of soft rock; the pressure of rock above compresses that below. The chalk hills were originally formed on a sea floor and then raised above sea-level.

Chalk has the same composition as limestone (calcium carbonate or carbonate of lime), but it has not been so tightly compressed. It occurs as a white rock which is permeable by water. Chalk hills are therefore dry—the rain soaks through. When chalk rests on clay, lines of springs occur where the chalk ends; the supply of water has often resulted in a line of villages being built along the meeting-place of chalk and clay. This phenomenon is seen in the Weald where the chalk downs meet the Wealden clays.

Chalk, being soft, forms the low, rounded hills called downs. The chalk is friable and readily crumbles at the surface to form a soil which produces good crops of fine grasses well suited to sheep.

In large masses chalk weathers to oblong blocks, so that chalk cliffs are usually upright, as in the case of "the white cliffs of Dover." The eastern hills of England are chalk; they include the North and South Downs and ranges stretching from Dorset to Flamborough Head (Dorset Heights, Chilterns, East Anglian Heights, Norfolk Edge, Lincoln Wolds, and Yorkshire Wolds).

Chalk headlands occur where the ranges of chalk hills reach the sea: Beachy Head, North Foreland, South Foreland, Flamborough Head.

cheeses: See *Dairy Produce.*

chemical industries: The raw materials for the chemical industries are many and varied. Probably the

only ones which affect the geographical distribution of the industries in this country are coal and coal-tar. The salt deposits of Cheshire supply raw materials for the chemical industries of Widnes and St. Helens; the nearness of these towns to the cotton and woollen districts which need much soap, bleaching powder, and dyestuffs also accounts for their development. Newcastle also has chemical industries partly dependent on local supplies; the factories at Billingham were placed over a bed of gypsum (this was a fortunate accident); there are beds of salt near the mouth of the Tees.

Other important raw materials are: sulphur, used largely in the manufacture of sulphuric acid (most of the sulphur now comes from America); iron pyrites, also used for making sulphuric acid; limestone or chalk, as a source of carbon dioxide in making carbonates; common salt, used in making hydrochloric acid, chlorine, caustic soda, etc.; potassium and magnesium chlorides, from Stassfurt in Germany (the chief source of potassium salts); oils (see *Vegetable Oils*), used largely in soap making; apatite and bones, used in making phosphorus and calcium superphosphate; Chile nitrates.

Amongst the most important chemical products are: soaps, bleaching powder, liquid chlorine (in cylinders; used for bleaching), compressed oxygen and hydrogen, ammonia, fertilisers, dyes, perfumes, drugs, explosives.

Germany has highly developed chemical industries, the greatest being at Baden (Württemberg), and the surrounding region.

china clay: See *Clay*.

chinook: See *Föhn*.

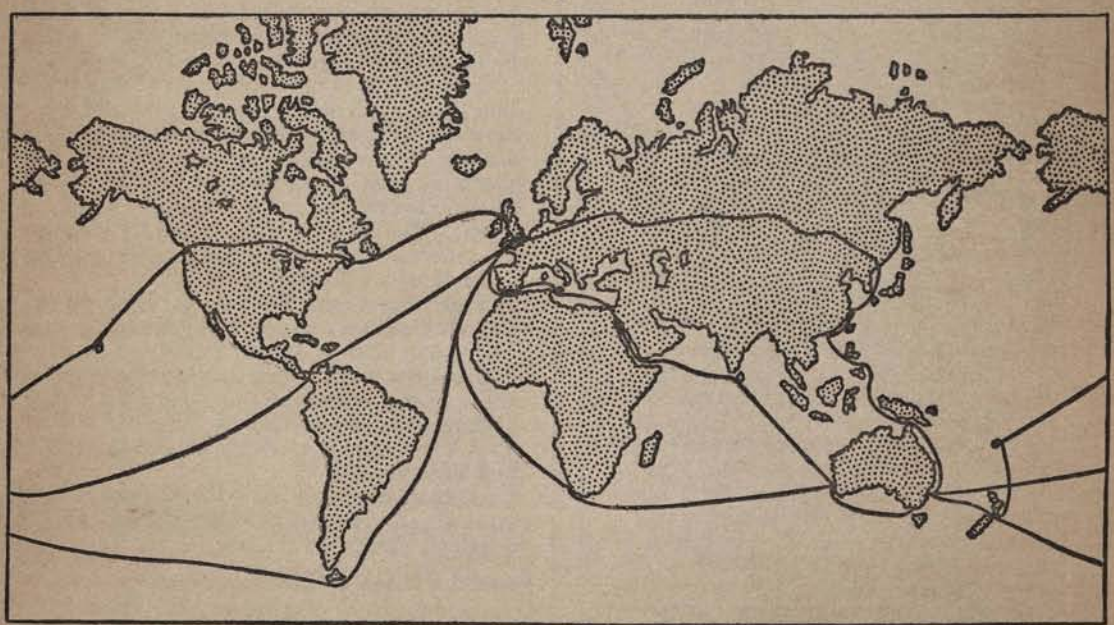
chromium: See *Metals*.

circumnavigation: Sailing round the earth. A journey confined to one side of the equator should not be considered as circumnavigation; otherwise any small circle might be so considered. If, however, the equator has been crossed, and there is no turning back from west to east or east to west, at least a great circle must have been accomplished when the voyager has returned to the point from which he started.

Ferdinand Magellan (1480–1521), the famous Portuguese navigator, was the first to sail round the world. In the service of the King of Spain he offered to attempt to reach the East Indies by way of a passage which he hoped to find to the south of South America. In 1519 he left Seville with five ships. He sailed round Cape Horn and spent thirty-eight days in passing through the Straits of Magellan. He then sailed westward, and after a terrible voyage of ninety-eight days, in which the crews were almost starved, he reached the Ladrones. Magellan himself was killed in a fight with the natives of the Philippines. The voyage was completed round the Cape of Good Hope. Only one of the ships, the *Vittoria*, completed the voyage, and only thirty-one men returned with her. Magellan is considered the first circumnavigator, because he had reached from the east the latitude of the Moluccas, where he had already been from the west.

Sir Francis Drake was the first English circumnavigator. He sailed from Plymouth in December 1577, passed through the Straits of Magellan, sailed north to latitude 48° N., and then sailed for the Moluccas, which he reached. He arrived back in England after a voyage of two years and ten months. On his return Queen Elizabeth knighted him on board the ship, the *Golden Hind*, in which he had made the voyage. The great difficulties of circumnavigation in early days were the ravages of scurvy and the danger of starvation on the long voyage, lasting two or three months, across the Pacific, often with hardly a sight of land.

Nowadays circumnavigation is an every-day event. Ships sail regularly for Australia and New Zealand by way of Cape Horn or the Panama Canal; the return journey can be made by way of the Suez Canal or round the Cape of Good Hope. Alternative routes are across Canada to Vancouver and then by steamer to New Zealand; by the Trans-Siberian Railway and European railways to Moscow, Berlin, etc.



ROUTES ROUND THE EARTH.

When Jules Verne wrote *Round the World in Eighty Days*, this would have been a great (but possible) achievement. Now the complete journey can be performed in less than a month.
(See also: *Introduction.*)

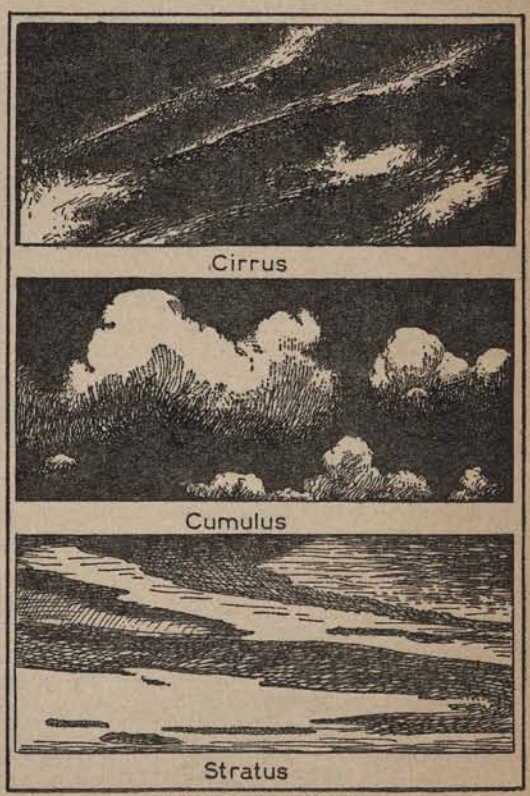
clay: A soft, plastic, non-porous rock of common occurrence in the earth's crust. Very pure, white clay is called kaolin or china clay. Usually clay is tinted with iron or other mineral, and is reddish or bluish in appearance.
Clay is impervious to water. Springs occur where porous rocks lie over clay or other impervious rock. The water sinks through until it reaches the clay; it flows over the clay and reaches the surface above the clay as springs. Artesian wells are usually sunk successfully where there is a saucer-shaped bed of clay over saturated layers of porous rocks.
Kaolin, or china clay, is baked to make china. Ordinary clay is baked to form bricks and tiles. Finely powdered clay and chalk are baked together to form cement.
Clay originates from granite and other igneous rocks containing felspar. Exposed granite slowly rots; the felspar unites with water and forms clay; the clay and sand are washed away and deposited in still water. The heavier sand is deposited first and the clay farther out.
Under pressure clay hardens to form layers of shale. Under very great pressure and heat it changes to slate.

climate: The general state of the weather in any region, small daily differences being merged in a general average. The chief varieties of climate are:
1. Even high temperature on and about the equator, the region of perpetual summer. Heavy rain at all seasons.
2. Regions of extreme heat and drought along the tropics to the west sides of continents.
3. More even heat and ample rain to the east of the tropical deserts and regions of equatorial rain.
4. Mediterranean climate of winter rain and summer drought to the west sides of continents in the sub-tropical regions.
5. Heat and deficient rainfall east of the sub-tropical regions.
6. Temperate climate farther from the poles than the subtropical regions—changing to an extreme continental climate farther inland.
7. Arctic climate—mild damp summers and extremely cold winters. In the extreme north—six months day and six months night.
8. Climate of the monsoon lands—hot season with winds from the land, followed by wet season with winds from the sea and heavy rainfall, followed by the cool (and dry) season.

The chief circumstances that affect climate are:
1. Distance from the equator; the farther from the equator generally the cooler.
2. Distance from the sea; the farther from the sea the drier and the more extreme the climate.
3. Slope; slopes towards the sun are warmer than slopes away from the sun.
4. Altitude; the higher the region the cooler it is, and the more rain it usually receives.
5. Direction of the mountain ranges; east and west ranges may cut off north or south winds and so render a district colder or hotter than it might otherwise be. Other ranges may cut off winds from the sea, and so render regions to the lee more dry. This is true of the Himalayas; the southern slopes have the highest rainfall in the world, whereas the plateau of Tibet has little rain.
6. Direction of the prevailing winds. Winds from the sea bring rain; winds from the land are dry. Winds blowing from colder to warmer regions are warmed and therefore dry; winds from warmer to colder regions are cooled and deposit rain. Thus, for example, the trade winds drop little moisture until cooled by mountain ranges; the south-west winds bring much moisture to western Europe.

(See also: *Continental Climate, Rainfall, Winds.*)

clouds: Clouds have a considerable effect on temperature. They help to equalise day and night temperatures—during the day they intercept heat from the sun; during the night they check radiation of heat from the earth. (Clear nights are coldest.) The absence of clouds in hot desert regions is one of the causes of the great difference between day and night temperatures in these parts.
Clouds consist of masses of water particles each formed about a speck of dust or an ion (one of the excessively minute particles ejected from atoms by electrical and other forms of radiation). Cloud or mist does not form in air free from dust and ions. Where the particles are comparatively few the drops which form are few and big (this is the case in a Scotch mist); where the particles are numerous the drops are numerous and small (as in a London fog).
When moist air is cooled below saturation point (the dew point) water condenses in small drops to form a cloud. As the cloud falls it may reach warmer and drier air; the part below may evaporate whilst more cloud forms above; thus there is no change appar-



COMMON FORMS OF CLOUDS.

ently in the position of the cloud (this is seen in the cloud over the spout of a boiling kettle).

When a cloud is cooled, probably by rising and expanding, the drops become bigger, and may fall to the earth as rain.

The most common kinds of clouds are:

Stratus clouds—horizontal layers of cloud which often appear low down on the horizon in the evening and the morning in fine weather.

Cumulus clouds—heaped-up masses of cloud, often globular in shape. These clouds are often seen during the day in summer; they frequently disappear in the evening. When cumulus clouds become very massive a rain-storm often follows.

Cirrus clouds—feathery clouds seen high up in the sky; they only exist at high altitudes. Cirrus clouds are often a sign of wind.

Nimbus clouds—rain-clouds with no particular form. They cover the sky with a uniform grey.

coal: Coal is used—for domestic fires, for gas making, as coke for smelting iron, as fuel for steam engines. The by-products of coal used in gas making are coke, ammonia, and coal-tar. The coal-tar is redistilled into a series of light and heavy oils, with a residuum of pitch, used for paving roads; amongst the commercial products obtained from coal-tar are—carbolic acid, a vast range of coal-tar dyes (from aniline and alizarine), toluene (used in making T.N.T.—tri-nitro-toluene).

Coal varies in composition according to the age of the deposits:

—	Carbon.	Hydrogen.	Oxygen.
	Per cent.	*Per cent.*	*Per cent.*
Peat (imperfectly formed coal)	60	6	34
Lignite (brown coal) . .	67	5½	27½
Coal	88½	5½	6
Anthracite	94	3½	2½

The coalfields in England and Wales are:

1. Northumberland and Durham.
2. Cumberland.
3. Lancashire and East Cheshire.
4. Shropshire (Coalbrookdale).
5. West Riding of Yorkshire, Derbyshire, and Nottinghamshire.
6. North Staffordshire, South Staffordshire.
7. Bristol and Somerset.
8. Forest of Dean.
9. South Wales.
10. Flintshire, Denbighshire.

The Scottish coalfields are in the Lowlands—Clyde basin, Midlothian, Haddington, Fife, Ayr.

The chief coalfields on the Continent are:

1. Central France.
2. North-east France and Belgium.
3. Ruhr Basin.
4. Saxony.
5. Upper and Lower Silesia.
6. Bohemia.
7. Donetz valley, Russia.

The coalfields of North America are:

1. The Appalachian coalfield, the greatest in the world, extends for 900 miles.
2. Illinois and Indiana.
3. Iowa, Missouri, and Kansas.
4. Coalfields in the Rockies and coast ranges.
5. North of Nova Scotia, Cape Breton Island.

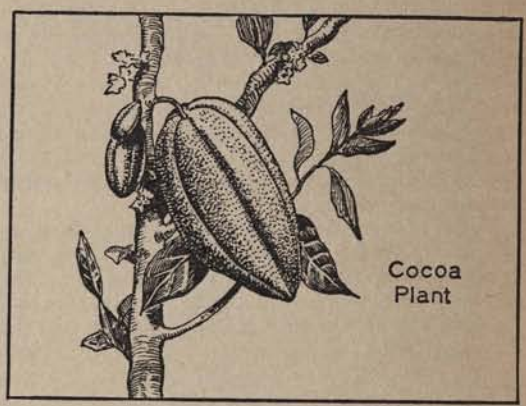
Other coalfields are:

1. Africa—Natal (Newcastle and Dundee); near Johannesburg.
2. Asia—India, especially in the north-east; China—great coalfields, but only worked near the Gulf of Chihli.
3. Australia—Newcastle (New South Wales); Bunbury (Western Australia).

cobalt: See *Metals*.

cocaine: See *Drugs*.

cochineal: See *Cactus*.



cocoa: A brown powder produced from the seeds of the cocoa tree which grows in hot countries. The seeds are very finely ground and some of the oil expressed from the powder; a very small amount of alkali is added. The cocoa powder is not soluble, but the alkali and cocoa fat make an emulsion in which the fine particles are suspended. Chocolate differs from cocoa in having cocoa-butter added to it instead of having some of it removed.

The cocoa tree is a native of Mexico and South America. It has been introduced into West Africa. The Gold Coast produces more than a third of the world's supply. The cocoa plantations here are owned and worked by the native inhabitants.

Other sources of cocoa are:

West Africa—Nigeria, San Thomé, Cameroons, Ivory Coast.

South America—Brazil, Trinidad, San Domingo, Ecuador, Venezuela.

The growth of the industry on the Gold Coast has been extraordinary. In 1896 the production was 34 tons; in 1936 it had risen to 260,000 tons, more than twice the production in Brazil, which is next on the list.

coco-nut: The coco-nut palm is one of the most useful trees of the tropics. Its peculiar habit of growing well close to the sea and often overhanging the sea is one reason for its widespread distribution. The fruits drop into the sea and may remain there for long periods without injury. They may be carried by currents and cast up on far-distant shores. The most remote islands of the tropical seas are clad with coco-nut palms; the original seeds probably reached them in the way described.

Almost every part of the coco-nut palm is made use of. The outside casing consists of a valuable fibre called *coir* or coco-nut fibre. This fibre is used for making ropes, for door-mats, for matting to spread on floors in place of carpets, and for making coarse brushes.

Copra is the flesh of the coco-nut. It is eaten as food, and oil is extracted from it. The nuts are split with an axe, and the copra is readily removed when it shrinks. The copra is then dried and oil extracted by pressure. The remaining solid is used as cattle food. The oil is used in soap-making (especially for marine soap, since it makes a lather with brine); for making margarine, and sometimes as a substitute for cocoa-butter in chocolate. The chief sources from which copra and coco-nut oil are obtained are: Dutch East Indies, Philippines, Ceylon, and Southern India. In Ceylon it is estimated that there are 20 million coco-nut palms.

The juice of the coco-nut supplies sugar, and it is fermented to make a drink called arrack.

The timber of the coco-nut palm is used for building in tropical countries and for making furniture.

coffee: The seeds of the coffee plant, an evergreen plant which grows to a height of 20 feet. It grows best on mountain slopes in tropical lands. The seeds are roasted and ground.

The use of coffee spread originally from Arabia, which supplied the whole world with coffee, the best remaining in Arabia. Brazil now produces two-thirds of the world's supply. Other sources of coffee are Colombia, Venezuela, Central America, West Indies, India, British East Africa, and the East Indies.

coir: See *Coco-nut.*

cold storage: Foods from distant lands are now brought across the sea in holds, where the temperature is carefully regulated. In every case the temperature is low, but it varies with different foods. Thus, butter and mutton are frozen, whereas eggs and apples are chilled but not frozen. The general method is to cool the food very slowly to the required temperature, keep it at that temperature, and on arrival to raise it slowly to the atmospheric temperature.

Cold-storage holds usually depend on compressed air. The air is compressed and heated during compression; it passes through tubes, where it is cooled by means of cold water; it is then allowed to escape through narrow nozzles. In escaping the compressed cool air expands and is still further cooled to a low temperature. The extent of this cooling determines the temperature of the hold. Fruits need careful ventilation as well as cooling; for this reason they are packed in open-work cases which permit the air to circulate through them.

Mutton and butter are brought frozen from New Zealand and Australia. Chilled beef is brought from the Argentine. Eggs and apples from Australia and New Zealand are cooled very slowly and brought to this country in cold storage. Chilled eggs are also brought from South Africa.

"Cold Wall," the: See *Gulf Stream.*

commercial towns: See *Town Sites.*

communications: The various means of communication are:

By water:

1. By ship. The fastest steamers, especially those carrying passengers, run in regular lines, and so are called liners. The largest liners are those used on the North Atlantic route between New York and the chief ports of England, France, and Germany.

In addition to the regular lines there are numerous "tramps." Tramp steamers have no regular routes; they sail from port to port, picking up cargoes where they can, and making their voyages suit the cargoes.

Coastal trade is carried on by smaller steamers which keep close to the shore and carry goods between one port and another of the same or neighbouring countries.

2. By canal and river. On the great navigable rivers, such as the Rhine, Danube, small steamers ply. Many rivers have been deepened by canalisation: the river is divided into stretches of deep water held up by weirs, with locks to permit barges and steamers to pass up and down.

Barge canals are cut to increase the extent of navigable waterway, or to avoid rapids and falls on navigable rivers. Ship canals have been cut to shorten routes, to avoid rapids (as on the St. Lawrence, the greatest navigable waterway in the world), or to turn an inland town into a seaport.

Water transport is comparatively cheap. Canal transport is slow; hence the materials carried are usually cheap, bulky articles which are not perishable (coal, gravel, paper, etc.).

By land: Railways are the quickest means of land transport. They are expensive compared with canal transport. Motor transport, using the roads, has the advantage of carrying goods directly from door to door.

In some parts of the world old means of transport are still used, sometimes side by side with modern means. In desert regions camel caravans are still used; caterpillar motors have been introduced for transport in the Sahara. In mountainous countries pack mules are used (e.g. in Spain and in the Andes); llamas are still used in the Andes. In India and Ceylon bullocks are used.

By air:

The newest means of transport, by air, is extremely quick but expensive. This means of transport is therefore confined to cases where speed is essential: passenger traffic, articles of small bulk and comparatively great value, letters which it is important to have delivered quickly even at added expense.

In Europe the airways usually provide alternative routes to the railways and steamers, more direct and speedier. In less developed countries they often link up places not connected by rail (as in Australia, Africa, and Southern Asia).

(See also: *Introduction.*)

By message:

Postal communication has been developed to include every accessible spot. Mails are delivered by the quickest route available, irrespective of differences of cost, e.g. overland routes are used to reduce long sea

voyages, the quickest liners are used as mail ships. Air mails, however, are charged extra.

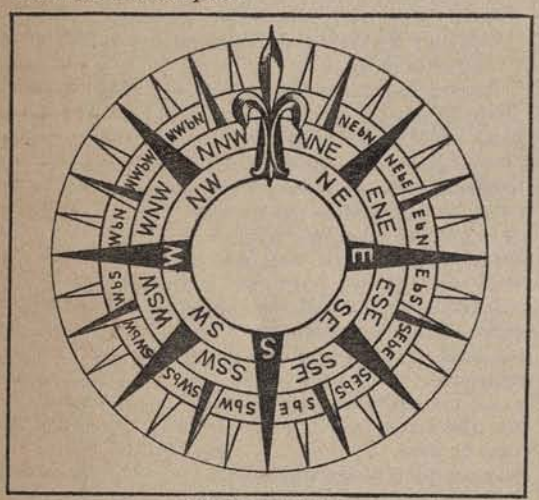
The other means of communication by message are: telegraph and cable, telephone, wireless. These are comparatively expensive, especially for long distances. They are used when speed is more important than cheapness (news, business deals, urgent private messages).

(See also: *Canals, Canalisation, Railway Routes, Ship Canals.*)

compass: Points to the magnetic poles and hence used to find direction at sea.

Two lines at right angles give north, south, east, and west. Half-way between these are: N.E., S.E., S.W., and N.W. Half-way between these again are: N.N.E. (north-north-east), E.N.E., E.S.E., S.S.E., S.S.W., W.S.W., W.N.W., and N.N.W. Half-way between these are: N. by E., N.E. by N., N.E. by E., and so on.

In using the compass to find direction allowance must be made for deviation from the geographical north. Tables have been made which show the deviation for each degree of latitude and longitude. These tables are used to find the correct direction by means of the compass.



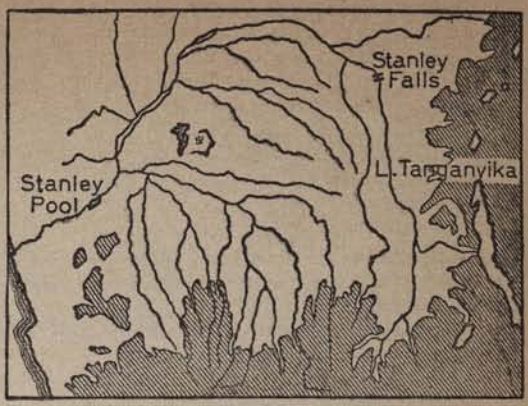
THE COMPASS CARD.

concrete: See *Cement.*

confluence towns: See *Town Sites.*

Congo: The greatest of the African rivers, though not the longest: length, 3,000 miles; area of basin, nearly 1½ million square miles; second only to the Amazon in volume. The Congo is a plateau river, flowing round the plateau and finally cutting through; like other plateau rivers, it is only navigable in sections:

1. *The Upper Congo* (Lualaba): Rises in the south-east of the Belgian Congo, and flows north to the equator. The river is sometimes a mile wide; it is navigable except for two rapids. The chief tributary here is the Lukuga, which brings the overflow of Lake Tanganyika. The upper Congo ends at Stanley Falls, just north of the equator; this series of falls and rapids has a total fall of 200 feet.
2. *The Middle Congo:* The river turns west and flows across a great alluvial plain clad with forest. The river widens out into lake-like depressions, and is often studded with islands. In some places it expands to a width of 20 miles. In this section



THE CONGO.

the Congo receives the drainage of the great equatorial forest. It is navigable throughout the greater part of the course.

3. *The Lower Congo:* This section of the river begins below Stanley Pool. There are two stretches of rapids and falls with a navigable stretch between. Altogether the river falls over 800 feet in a distance of about 210 miles, including a stretch of 70 miles which is navigable. Below the rapids the river widens into an estuary which is navigable by ocean-going vessels for 85 miles.

continent: One of the great land masses. Six are usually recognised—Europe, Asia, Africa, North and South America, and Australia. Europe and Asia are parts of one land mass, often called Eurasia.

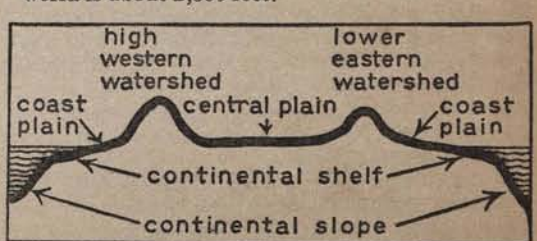
The areas and populations of the continents are:

—	Area in millions of square miles.	Population in millions.
Europe	3¼	475
Asia	17	over 1,000
Africa	11½	143
N. America	9¼	146
S. America	6¼	64
Australia (including Oceania—the Pacific islands)	3½	8½
Polar Regions	5 (?)	—

The highest of the continents is Asia and easily the lowest is Europe. The following table gives the average heights of the continents in feet:

Asia	3,120
N. America	2,300
Africa	2,130
S. America	1,970
Australia	1,310
Europe	980
Old World	2,360
New World	2,230

The average height of the whole land surface of the world is about 2,300 feet.



SECTION ACROSS THE TYPICAL CONTINENT.

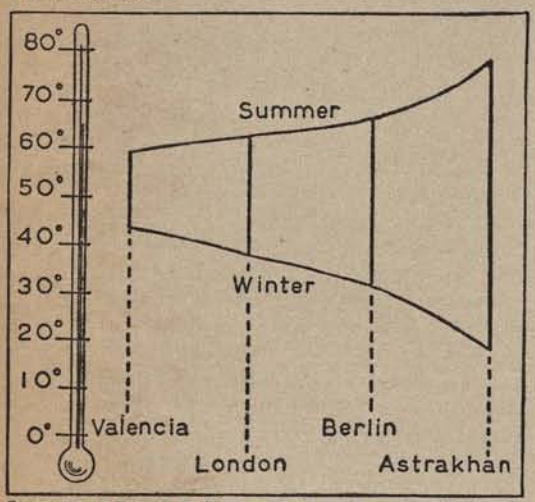
The typical continent is a triangular mass of land with a broad base to the north and its apex towards the south. The continent stands on a platform which rises steeply from the ocean floor to a depth of about 600 feet below sea-level, and then much more gradually to about the same height above sea-level. The gradual slope is the continental shelf; it is continued above the sea-level in lowlands which form fringes to the continents.

(See also under the names of the continents.)

continental climate: The kind of climate associated with the interiors of continents, an extreme climate of hot summers and cold winters. The extremes are due to absence of the modifying influence of the sea, which maintains a more equal temperature all the year round than does the land.

The range of temperature (between July and January) increases with distance from the ocean. Valencia in the west of Ireland has a typical oceanic climate with very mild winters and cool summers. London has the nearest approach to a continental climate in the British Isles (being farthest removed from the influence of the Atlantic); in summer the highest isotherm, 64° F., is a small ring round London; in winter it is close to the lowest isotherm, 38° F.

Across the continent of Europe the range of temperature between summer and winter increases with distance from the sea. North of the Caspian Sea, for example, the average summer temperature is about 80° F., whereas in winter it falls to 8° F. (24° below freezing-point). Thus in summer Astrakhan has a climate as warm as that at the equator, whereas in winter it is colder than much of the region within the Arctic circle.



INCREASE OF RANGE OF TEMPERATURE FROM THE COAST INLAND.

When examining isotherms, it may be noted that winter isotherms curve towards the equator in crossing continents: a parallel of latitude cuts across them, showing decreasing temperature towards the middle of the continent. Summer isotherms, on the other hand, curve away from the equator in crossing continents, thus showing increase of temperature inland from the sea.

Daily variations: When the air is dry there is a daily variation of temperature similar to the seasonal changes in an extreme climate. The presence of clouds or mist promotes an even temperature with a small variation between day and night. Even a slight ground mist in summer will check the radiation of heat and so keep the night warm. When the air is clear, on the other hand, heat is radiated rapidly, and the night is cold even after a hot day. This phenomenon is commonly observed in England where misty nights are warm and clear nights cold. In desert regions the absence of moisture causes a considerable difference between day and night temperatures. During the day the temperature may rise to far above 100° F., and during the night it may sink as low as freezing-point. Thus the absence of moisture causes miniature daily extreme climates.

Effect on winds: Extreme climates have a great effect on prevailing winds. In summer the interiors of great land masses are highly heated, the air becomes hot and light, and there is an inrush of heavier air from regions of higher air-pressure over the cooler sea. Winds, even the regular trade winds, are diverted towards highly heated regions. In winter the conditions are reversed—winds blow outward from the cold hearts of continents.

(See also: *Climate*, *Monsoon*.)

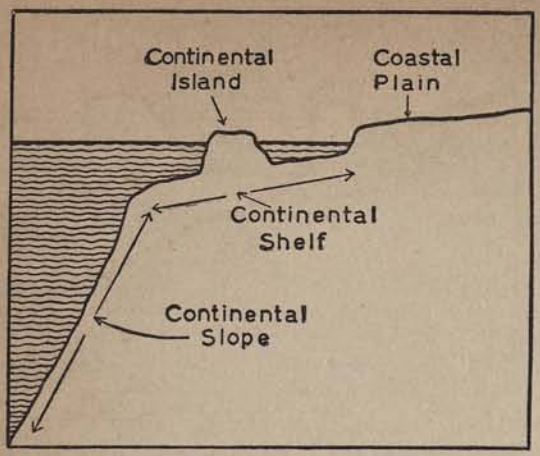
continental drift: A theory that the continents are not fixed but are slowly drifting, generally in a westward direction; the continents consist of less dense rocks which slide over denser rocks forming the beds of the oceans.

According to this theory, America has drifted away from the eastern side of the Atlantic. The chief evidence in favour of the theory is that South America fits into Africa, and that there is a correspondence between the rocks, fossils, and some existing animal and vegetable forms of the two continents. There is also a resemblance between Greenland and Norway. It is further claimed for the theory that it explains the existence of the isolated but distinctly continental island of Madagascar, and the existence of coalfields within the Arctic circle.

According to recent measurements made by Dr. Knud Rasmussen, Greenland is drifting rapidly. By a careful comparison with the meridian of Greenwich, he found that it has drifted 600 feet westward in ten years. Denmark appears to be moving west at the rate of 3 feet in 100 years. This accords with the theory of drift, since Denmark is attached to the great, stable mass of Eurasia. It may be further noted that there is a comparatively deep depression between Iceland and Scotland, as though part of the continental base had drifted westward.

continental shelf: The continents are fringed with stretches of shallow water beyond which there is a much steeper drop to the floor of the ocean. The shallow shelf is called the continental shelf; it varies in width considerably. The continental shelf is considered to end at a depth of 100 fathoms (600 ft.); below that depth there is usually a much steeper drop. Off the west coast of Ireland the floor of the sea drops at the rate of 6 feet per mile for over 200 miles; the rate then increases to 450 feet per mile for 20 miles; after this there is little change.

The continental shelf is wide round the British Isles; these islands stand on the shelf which unites them to Europe. It is wide round most of the coastline of Asia and underlies the westernmost East Indies, which it unites to Malaya and Indo-China. It is narrow round most of Africa, but wide round Australia; in the south of Australia it includes Tasmania, and in the north New Guinea. In both North and South America it is widest on the east coast.



SECTION ACROSS THE EDGE OF A CONTINENT.

The continental shelf is covered with detritus brought down by rivers or broken off by waves; hence it is usually being raised towards sea-level and extended seaward.

The greatest fishing-grounds in the world are in places where the continental shelf is wide; fish are not caught in deep water.

(See also: *Islands.*)

contours: Lines of equal height on land. Thus the 100-foot contour marks all land at a height of 100 feet above sea-level; all land within the contour is over 100 feet in height.

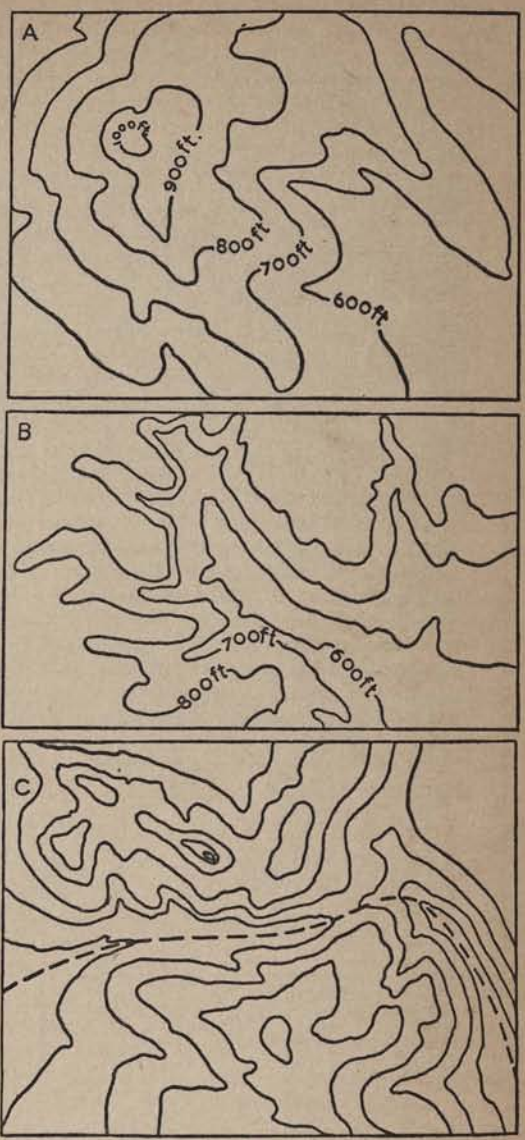
1. The contours A indicate a hill which is over 1,000 feet in height. The slope is greatest on the left, where the contours are close together; there is a quick rise from each contour to the next above. The slope is least on the right, where the contours are wide apart, and there is a slow rise from one to another.
2. The contours B indicate a river valley. The V of each contour points up the valley where the sides of the valley come closer together. Down the valley the contours open out, showing that the slope becomes more gentle.
3. The contours C indicate two peaks with a pass between them. The peak above is higher and steeper than that below. The valley on the left is wider and shallower than that on the right. The steepness of the valley on the right is indicated by the closeness of the contours at the head of the valley; the narrowness of this valley is indicated by the nearness of the contours along the sides of the valley.

Contours are often further indicated by colours. All land within, say, the 500-foot contour is tinted light brown, land within the 1,000-foot contour is tinted darker brown, and so on. Where one contour comes exactly over another there is evidently a cliff; this is indicated by shading.

To understand contours it is necessary to realise that they represent the land as if it were made of slices of even thickness (say 200 ft.) placed one over another. We assume that there is an even slope from one contour to the next. This is a reasonable assumption: if there were any feature, such as a cliff, which the contours do not show, this would be indicated on the map in some other way.

In using a contour map to find a route the important points to remember are: 1. Where contours are close together the slope is steep. 2. Where the contours are wide apart the slope is gentle.

(See also: *Hachures.*)



EXAMPLES OF CONTOURS.

convection currents: The forcing up of warm air by heavier cold air is a familiar phenomenon. It is made use of in chimneys: air in the chimney is heated by the fire; it expands, and is therefore lighter. The warm, light air is pushed up by heavier cold air, and carries with it smoke from the fire. The current of air made in this way is called a convection (carrying) current, because it carries heat. Convection currents occur in water for a similar reason. In hot-water heating apparatus light hot water is forced along pipes by heavier cold water falling on the other side back to the boiler; the hot-water outlet starts at the top of the boiler; the cold-water return pipe comes in below.

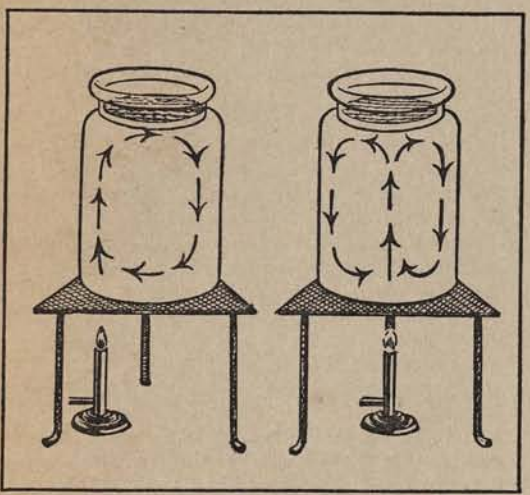
Large-scale convection currents are responsible for some geographical phenomena:

1. Winds are convection currents in the air. Large land masses and the air above them become

highly heated in summer; neighbouring seas are less highly heated. Hence the air over the sea is heavier than that over the land, and there is a wind from the sea towards the land.

2. Ocean currents are, at least in part, convection currents. The sea within the tropics is highly heated at the surface. Hence there is a surface outflow of warm water to north and south, and an inward current of cold water below the surface. The direction of the prevailing winds also affects ocean currents, and possibly also the rotation of the earth.
3. *Convectional rains:* Rainfall on extensive plains is often due to convection currents. The plain is heated by the sun, the air above it is warmed, and so there arises a region covered with warm air. Colder, heavier air round about pushes up the warm air. The rising warm air expands and cools, and so rain is deposited. Damp air blowing over comparatively warm regions is a common cause of rainfall on plains. The heavy rainfall along the equator is due to a similar cause.

(See also: *Ocean Currents.*)



EXPERIMENT TO ILLUSTRATE CONVECTION CURRENTS IN WATER. BEFORE HEATING THE WATER OVER A LOW FLAME, STIR IN SAWDUST AND LET IT SETTLE. THE SAWDUST SHOWS THE DIRECTION OF THE CURRENTS (INDICATED BY ARROWS).

copper: See *Metals.*

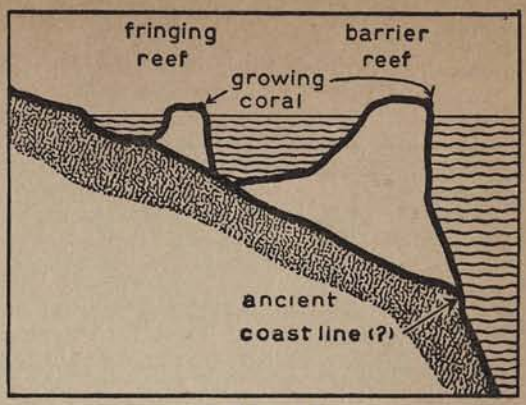
copra: See *Coco-nut.*

coral reef: A ridge of coral rock found off the shore of an island or continent. Those close to the shore are called *fringing reefs*; farther out they are called *barrier reefs.*

The coral polyp increases by branching. At the base of a mass of coral there is dead coral formed of the skeletons of previous generations. From this mass other corals branch out; those at the ends are the living corals. Corals flourish in the following conditions: tropical seas, shallow water, pure and aerated water; they die out when any of these conditions are lacking. Living corals are found on the seaward sides of reefs where the water is purer and in movement; landward the corals die out. Thus it occurs that every coral reef is continually growing seaward.

Where a river enters the sea there is a break in the coral reef; corals do not flourish in the fresh and impure river water.

The Great Barrier Reef, off the east coast of Australia,



GROWTH OF CORAL REEFS.

is the greatest of all the coral reefs. The greatest coral formations occur in the tropical waters of the Pacific, lesser ones in the Indian Ocean, and still lesser ones in the Atlantic.

Reef-building corals are confined to seas where the mean winter temperature does not fall below about 66° F. This region is confined within distances of 1,800 miles of the equator, but excludes regions (notably the western sides of Africa and America) where there are cold currents.

(See also: *Atoll, Atoll Valley, Great Barrier Reef.*)

cordilleras: Ranges of mountains which fringe the Andean plateaux on both sides and in some cases cross them. The name has been extended to similar fringing ranges in other parts.

co-tidal lines: Lines joining places which the tidal wave reaches at the same time. These lines are most interesting on the shelving shores of continents, especially near ports where the time of tide makes a considerable difference.

(See also: *Tides, Tidal Wave.*)

cotton: A textile made from the fluffy fibrous boll of the cotton plant which grows in damp tropical countries. The greater part of the world's supply of raw cotton comes from the southern United States; the finest quality, with long, fine fibres, is Sea Island cotton, which grows in islands off the American coast and in the West Indies. A great quantity of cotton is grown in India, especially in the Deccan. The cultivation has recently been extended to other tropical countries, including Egypt, the Anglo-Egyptian Sudan, Queensland, and Brazil.

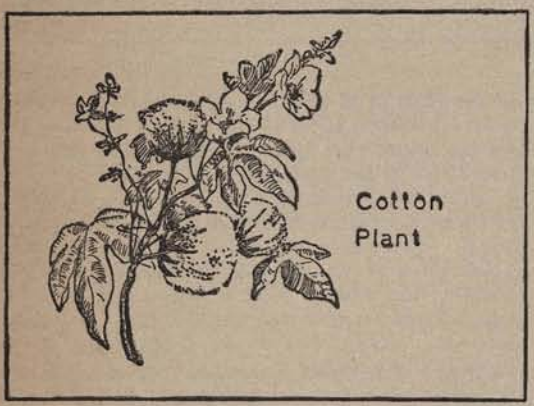
The manufacture of cotton in this country is almost entirely confined to Lancashire and the neighbouring part of Yorkshire. This region is specially suited to the manufacture of cotton because of the damp climate (when the air is dry the fibres fly out). Different branches of the industry are carried on in different parts of the county specially suited to them. Spinning is carried on in the south—coarser cotton in the Oldham district and finer cotton in and around Bolton. Weaving is carried on in the northern half of the county, including Wigan and Blackburn. St. Helens has chemical industries dependent on the salt mines of Cheshire; it manufactures bleaching powder. Accrington does cotton printing. Manchester is the market town for the cotton industry; in addition, it carries on most of the processes connected with cotton-making—spinning, weaving, dye-making, the making of textile machinery.

The cotton industry in France s centred in the north-east at Lille, Rouen, and Roubaix. In the neighbouring region of Belgium cotton is made at Ghent, Courtrai, and Tournai.

In Germany the industry is carried on in Saxony —Chemnitz (spinning and textile machinery), Zwickau, Plauen, and Bautzen. Leipzig is the market.

In the United States cotton is manufactured in Massachusetts (Lowell, Fall River, New Bedford, and Boston). Recently cotton factories have been opened in the south-east, close to the cotton fields.

Cotton is also manufactured in many parts of India, particularly in Bombay.



countries and capitals: See under the names of the continents.

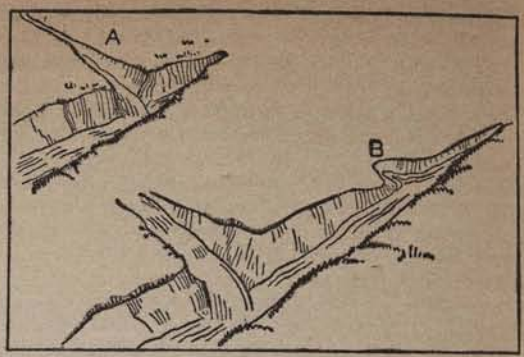
crust of the earth: The outer layers of the earth, the part of which we have definite knowledge. This knowledge is obtained: by examining strata which have been tilted up, thus exposing what is below; by the sinking of mines and bore holes; by examining materials ejected from below by volcanoes.

The crust is composed of: 1. Rocks which were once molten (igneous rocks). These include granite, basalt, new and old lavas, and numerous other rocks. 2. Rocks formed under water (sedimentary rocks). These rocks are composed of fine materials spread out in layers on the sea floor. They include sandstone, chalk and limestone, clay and shale. 3. Changed or metamorphic rocks—sedimentary rocks changed by heat and pressure. Limestone thus becomes marble; shale becomes slate; granite becomes an intensely hard rock called gneiss. 4. Rocks of organic origin. These include limestone (shells and skeleton remains), coral (skeleton remains of the coral polyp; the material is the same as limestone), coal (old forests changed under pressure), oil (often found in shale).

The word "rock" is used for materials forming the earth's crust, even when they are soft like clay.

currents: See *Convection Currents, Ocean Currents.*

cutting back: Rivers continually extend their beds backward towards the mountains or hills. Soil and fragments of rock are washed by rain into the river and carried away. Thus the head of the valley is lowered and extended backward. The process proceeds most quickly on steep slopes and where rainfall is heavy (in these conditions erosion is greatest). Finally, a river may cut back right through the range of hills in which it rises. As a rule rivers cut back from the steeper slope towards the gentler slope (cutting back from the gentler slope is a much slower process).



How a River cuts back through its Watershed. A—Early Stage. B—Later Stage.

The steep southern slope of the Himalayas is a region of heavy rainfall—the conditions for rapid cutting back. The Himalayan rivers are cutting back their beds at a rapid rate; the actual watershed is now behind the line of highest peaks. The Indus, Sutlej, and Brahmaputra have cut back through the Himalayas to the plateau of Tibet, and other rivers of the steep Himalayan slope are cutting backward towards the same region.

The plateaux of the Andes are drained in many places by rivers which have cut back through the mountains forming the eastern fringes of the plateaux.

(See also: *River Capture*, a phenomenon depending on the cutting back of river valleys.)

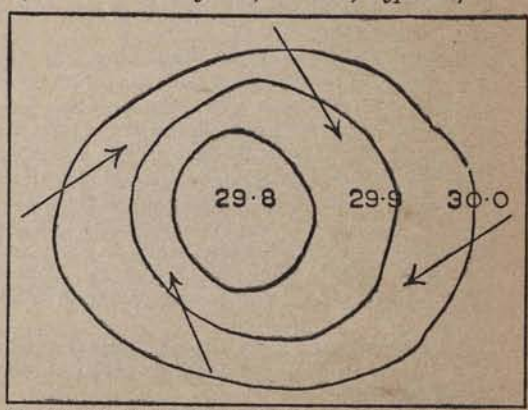
cyclone: A region of low pressure surrounded by high pressure. There are inward winds towards the low-pressure centre. As in the case of anticyclones winds blowing north are deflected to the east and those blowing south to the west, so that there is always an anticlockwise whirl in the northern hemisphere (and a clockwise whirl in the southern hemisphere).

The light air at the centre is driven upward by surrounding heavier air. The upward currents expand and cool, clouds are formed and rain may fall. Cloudy, wet weather is associated with cyclones.

Cyclones are often referred to as "depressions" because of the low pressure, and depressed barometer, at the centre.

A cyclone may persist for some time, advancing across a country, or it may fill up by the inflow of denser air.

(See also: *Anticyclone, Tornado, Typhoon.*)



Circulation of Air in a Cyclone (Southern Hemisphere). Measurements in Inches of Mercury.

dairy produce: Dairy farms are usually situated in regions where there is a sufficiency of rain. These regions provide good pasturage. In England, for example, the great dairy-farming regions are found on the western and damper side. This part of the country includes the Cheshire Plain, famous for cheese.

The heavy rainfall of Ireland has made that country famous for dairy produce, and other parts of Europe with damp climates are similarly noted—Brittany and Normandy, Sweden, Holland, Denmark, Norway, Switzerland. Many of these countries produce famous cheeses, and Switzerland also produces large quantities of condensed milk.

Amongst famous cheeses are: Stilton (Leicester), Cheshire, Cheddar, Gloucester, Wiltshire, Edam and Gouda (Dutch cheeses), Gruyère and Roquefort (French cheeses; Roquefort is made from ewe's milk and ripened in caves), Emmenthaler (the great Swiss cheese, as wide as a cart wheel), Limburger (German), Gorgonzola and Parmesan (Italian).

Large quantities of cheese are imported from eastern Canada; the eastern United States also produce much cheese. New Zealand and the damper parts of eastern Australia export butter and cheese.

Danish and Irish butter are largely imported into Great Britain.

THE DANUBE BASIN.

Danube: Next to the Rhine the greatest river in Europe; it has a length of about 2,000 miles, and drains an area of 300,000 square miles. It rises in the Black Forest, quite close to the Rhine, and flows north-east and then south-east through Württemberg and Bavaria. It flows eastward across northern Austria and through Vienna. It then flows across the Plain of Hungary. In this part of its course the Danube is subject to floods, which spread far and wide, so that there is a strip of country where it is impossible to live; this district has numerous willows and little else. Soon after entering Hungary the Danube passes through the twin town, Budapest. In the south the Danube flows across Yugoslavia, passes Belgrade, and again approaches the mountains. It cuts through the mountains by the famous Iron Gate. This was formerly a bar to navigation, but the way has been cleared by blasting rocks in the bed of the river and confining it between embankments. The Danube forms the greater part of the boundary between Rumania and Bulgaria; the lower part of the course, however, is in Rumania; the coast plain of the Dobruja is Rumanian. The Danube enters the Black Sea across an extensive delta which is rapidly spreading seaward. During the past 2,000 years the delta appears to have increased seaward by 9 or 10 miles.

The Danube receives numerous important tributaries from the Alps and the Carpathians, so that there is always deep water for navigation. The river is controlled by an international commission, which has carried out many improvements to make the river more navigable and keep it under control. Amongst improvements embankments have been built to confine the river to straight channels and the Iron Gate has been cleared.

The upper course of the Danube is frozen in winter and the lower course is usually frozen. Terrible floods have occurred when the upper waters have thawed before the lower waters. In such cases the upper waters can find no outlet and spread in great waves over the land. Ice-breakers are now employed to keep the river open as long as possible in the winter and to clear it in spring before the upper waters come down.

The Danube is a great international highway, and the chief route for the trade of countries through which it flows. It is connected by canal with the Main and thus with the Rhine.

(See also: *Iron Gate.*)

Date Line: The International Date Line, fixed by international agreement, follows the 180° meridian, except where it diverges to avoid land. The day starts on this line and sweeps westward with the sun.

Exactly at midnight (on the Date Line) it may be Tuesday over the whole globe. Just west of the Date Line it is Tuesday midnight, 15° farther west it is 11 p.m. on Tuesday, 15° still farther west it is 10 p.m. on Tuesday, and so on; at Greenwich it is 12 noon on Tuesday, just to the east of the line Tuesday is just beginning.

A moment later Wednesday has started to the west of the line. An hour later Wednesday has begun 15° farther west, and so on. It may be seen that places just to the east of the 180° meridian are always a day behind places just to the west. In crossing the Date Line from west to east it is therefore necessary to count back a day; in crossing from east to west it is necessary to count forward a day.

Where does the extra day come from? In travelling eastward the days are less than 24 hours. Thus, if a traveller went 15° east in a day he would reach a place where noon was an hour earlier; from noon at the starting-place to noon 15° east of it is only 23 hours. In circling the globe the differences would add up to a complete day. For example, 24 days of 23 hours each would be the same as 23 days of the normal length. In travelling westward the time from noon to noon is more than 24 hours.

(See also: *Introduction, Standard Time.*)

day and night: See *Rotation of the Earth.*

Deccan: The plateau of peninsular India; it is flanked by the Eastern and Western Ghats, and on the north by the Vindhya and Satpura Ranges. It is from 1,000 feet to 3,000 feet high. Many rivers of the Deccan dry up in the hot season; in the rainy season they fill up quickly and there are often great floods. The rivers leave the plateau through the Eastern Ghats, and descend rapidly to the coast plain.

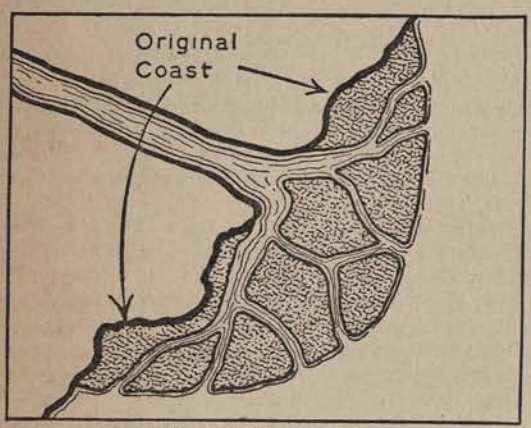
deciduous forests: Deciduous trees are those whose leaves fall in autumn before the period of winter rest. These trees are suited to temperate regions where lack of leaves is an advantage in winter. The deciduous forests of western Europe have been cleared to make room for the growth of cereals and

for pasturage; only patches of the original forests remain.

Two great regions of deciduous forest still remain. One of these is in the eastern part of the United States and extends some distance into Canada. In the north it merges into the pine forests and in the south-east it gives way to the cypress swamps of Florida. Westward the deciduous forest ends where the prairies begin. In the prairie region there is insufficient rain to enable such a forest to flourish.

The other great deciduous forest occupies an almost exactly similar position in eastern Asia. It extends from the mouth of the Amur, south to the Gulf of Pechili.

The deciduous fruits—apples, pears, plums, cherries, peaches, apricots—are an important product of the deciduous forest regions, especially in Europe and America.



THE FORMATION OF A DELTA.

delta: Stretches of flat land found at the mouths of some rivers. Sand and mud are brought down by the river and deposited in the sea about its mouth. Flat land is thus formed which spreads out like a fan. The mouth of the river is often blocked with silt; it may form two channels, one on each side of the obstruction. This process may continue until there is a wide stretch of flat land with a network of rivers flowing over it.

Deltas are often triangular in shape (hence the name, which comes from Δ, the Greek capital letter delta).

Deltas are usually found at the mouths of rivers which flow into lakes, or into seas with small tides (Mediterranean, Black Sea, Caspian, Gulf of Mexico). Where the tides are strong there are no deltas except where an excessive amount of silt is brought down, as in the case of some of the Indian rivers.

Amongst the greatest deltas are:

The Nile: The name "delta" was first given to this delta. It starts below Cairo, 90 miles from the sea, and is 180 miles wide. *The Po:* This has extended so far that the old seaport of Adria is now 14 miles inland. Silt from the Po and Adige formed the mud flats on which Venice was built. *The Danube:* The delta is extending at the rate of 250 feet yearly. *The Rhine:* Holland is largely a delta plain formed by the Rhine. *The Ganges*, the largest delta, covers 60,000 square miles; the seaward edge is a swampy region called the Sundarbans. *The Mississippi:* Length 220 miles, extending about 200 feet per year; vast quantities of soft mud are brought down. *The Hwang-ho:* This river and the Yangtse-kiang have formed the great delta plain of China. The Hwang-ho delta extends 100 feet per annum.

(See also: *Sundarbans*, and references under the names of the rivers.)

depressed seas: Two cases occur where large inland seas are below the general level of the sea. In these seas the amount of water which flows in is less than that lost by evaporation. The seas are salt—the rivers continually bring in salts in solution; only pure water is lost by evaporation. These seas are slowly drying up.

Dead Sea: Thirty miles long and from 5 to 9 miles wide. The surface is nearly 1,300 feet below sea-level; the water is extremely salt, and about one and a quarter times as heavy as fresh water, so that a swimmer cannot sink in it; at the south-west end is a range of hills consisting of rock salt, 7 miles long and 300 feet high.

Caspian Sea: The largest of the inland seas, 740 miles long and over 200 miles wide, area 180,000 square miles. The surface is 84 feet below sea-level. The water is less salt than that of the Black Sea; this has been accounted for by the existence of extensive shallow basins along the shore; water evaporates rapidly in these, and salt is deposited, thus removing it from the sea-water. It is possible that the Caspian may not sink much lower, since evaporation may balance the water received (evaporation decreases as the level sinks and the surface decreases). There is an old shore line at the level of the Black Sea, which shows that the two seas were probably once united, through the Sea of Azov.

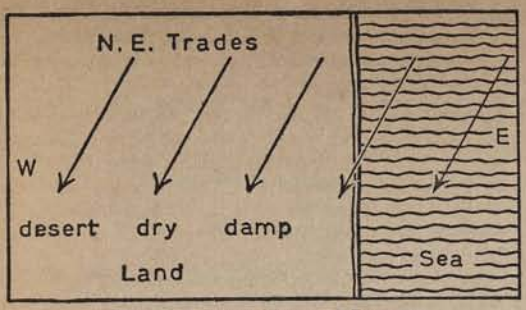
depression: See *Cyclone*.

deserts: Deserts are of two kinds—ice deserts and hot tropical deserts.

In ice deserts the growth of vegetation is prevented by extreme cold and coverings of ice and snow over the rocks. It is extraordinary that some form of vegetation is usually found wherever soil is exposed, even when the climate is extremely cold. Mosses and lichens are the first vegetation to appear, and, in slightly less frigid regions, dwarf trees and bushes and low-growing, quick-flowering alpines. The ice deserts are found in the Arctic and Antarctic regions, and also on the tops of mountains which rise above the snowline.

The hot deserts occur along the tropics to the west of continents. The reasons why deserts occur in these positions are: 1. The sun is overhead at the tropics for a longer period than anywhere else. The daily changes in the height of the sun are greatest at the equinoxes and least at the solstices (summer and winter); at the solstices the sun is overhead at one or other of the tropics. 2. The tropics are in the region of the trade winds; on the west sides of continents the trade winds are from the land and therefore dry; in addition, they are blowing from cooler to warmer regions, and for this region also they are dry.

The chief tropical deserts are: in *Africa*: Sahara in the north (this desert stretches right across the continent; the position of Arabia to the east accounts for this; other continents in the tropical region have sea to the east); South-west Africa on the tropic of Capricorn. In *Asia*: the Arabian desert; Great Salt Desert of Persia; Kara Kum Desert and Kizil Kum Desert, east of the Caspian; Thar Desert of India; Desert of Gobi. In *Australia*: central Australia—desert and semi-desert. In *North America*: north of the Mexican Plateau and regions in the



EFFECT OF TRADE WINDS ON RAINFALL.

Rockies (including the Mohave Desert and Great Salt Lake Desert). In *South America*: western Peru, Atacama Desert in northern Chile.

It is a mistake to suppose that deserts are mere sandy wastes. There are great stretches of sand in the Sahara, but there are also fertile spots, oases, some of them large enough to have towns and villages, groves of date palms, and fields of millet and maize. The desert vegetation, away from the oases, consists of plants with great powers of drought resistance and defence against animals. Some of these plants are stunted, bitter, and prickly, with small leaves. Cacti and other succulent plants are common in the North American deserts; these plants store up water in their stems to carry them through periods of excessive drought.

In many desert places there is water only a short distance below the ground; an oasis may be created by digging wells. This has been done in parts of the Sahara. Large districts in Australia have been irrigated by sinking artesian wells.

Oasis vegetation is usually luxuriant. The distinctive feature of the Saharan oases is the date palm, which flourishes in the absence of rain.

(See also: *Cactus*, *Continental Climate*, *Oasis*.)

dew: Moisture formed on plants, etc., on cold nights. Dews are heaviest on clear autumn nights, when the air is damp and radiation of heat is considerable. The temperature of the air falls until the "dew-point" is reached, that is, the temperature at which the air is saturated. Any fall below this causes dew to settle from the air on cold surfaces.

Dew forms an important source of water supply in some semi-desert countries, e.g. in northern Africa along the coast. There is rapid radiation of heat in the clear night air, and heavy dews form, sufficient to supply the place of rain.

When the temperature is below freezing-point dew forms as hoar frost (white frost).

diamonds: Crystals of carbon; the hardest substance known. When used as jewellery they are "cut" by means of diamond dust. On account of its hardness diamond is used for cutting glass, and on the ends of drills used for cutting into hard rocks. Diamonds have been made artificially by dissolving carbon in molten iron. The mass is suddenly cooled; the outside solidifies and then the inside, under pressure. The iron is dissolved away and small diamonds found; these diamonds, however, are black, and not lustrous like natural diamonds.

Diamonds are found, either in the throats of ancient volcanoes, or in sand to which they have been carried. South Africa is a great source of diamonds. The greatest mines are at Kimberley; there are lesser mines near Bloemfontein and north of Pretoria. Recently there have been considerable finds of diamonds in river gravel in South-west Africa. The greatest quantity of diamonds now comes from the Congo; other important sources are the Gold Coast and Angola.

The chief centre for cutting and polishing diamonds is Amsterdam. Hatton Garden is the London centre for diamond merchants.

(See also: *Graphite*.)

discoveries, geographical: See *Introduction*.

dissected plateau: An original plateau cut up by rivers. The rivers on all plateaux are eroding their beds. The effect is to cut the plateau into flat-topped masses. Further erosion, especially by rain, rounds off the flat tops and turns the flat-topped masses into normal mountains.

Traces of the original plateau may be seen in the tops of the mountains which remain very much at the same level throughout.

Many mountain groups are dissected plateaux. In England and Wales this is the case with the Cumbrians, the Pennines, and the Welsh Mountains.

Along the Colorado River erosion has been delayed by the almost entire absence of rain. The various stages may here be seen: 1. Stretches of almost level plateau. 2. Deep beds eroded by the rivers. 3. Table-topped hills where the valleys reach the plain. 4. Rounded hills where erosion has proceeded farther.

(See also: *Block Mountains*, *Plateau*, *Drainage*.)

distilling: The manufacture of spirits from liquids containing alcohol. The general method is to boil the liquid and to condense the first vapours that come over in a still (a coiled tube surrounded by cold water). The first vapours contain a large percentage of alcohol which has a lower boiling-point than water. The flavour of the spirit is given by volatile oils and other flavouring matter in the original liquid.

Brandy is made by distilling wine. Fine brandy is made at Cognac in France (hence brandy is called cognac), in the Champagne, and other wine districts.

Rum is distilled from fermented sugar-cane and from molasses. The chief source of rum is the West Indies and especially Jamaica.

Gin is spirit redistilled from wine, beer, or whisky, with juniper berries. The chief source of gin is Holland; Dutch gin is called Hollands and Schiedam. Gin is also manufactured in various parts of England, especially in Plymouth.

Whisky is distilled from grain, generally from fermented barley, though rye, wheat, and sometimes potatoes are used. Whisky is distilled chiefly in Scotland and Ireland. Campbeltown, on the peninsula of Kintyre, is almost entirely dependent on distilleries.

Vodka is a Russian spirit distilled from rye.

distributaries: Branches of a river which breaks up into two or more channels. This feature is most often seen in the deltas which some rivers form at their mouths; the bed of the river becomes choked with sediment, the river finds a way round each side of the obstruction, and so forms two channels; the process may be repeated until there is a network of distributaries.

Distributaries are sometimes found where a river breaks up in a flat desert region. Many of the parched rivers of Australia and the Sahara end in this way.

Doldrums: See *Equatorial Calms*.

dominions : Completely self-governing nations within the British Empire ; each governed by a parliament and an executive responsible to it, with a Governor-General appointed by the King on the advice of the Dominion Government.

The dominions are : Dominion of Canada (cap., Ottawa), Newfoundland and Labrador Coast (cap., St. John's), Commonwealth of Australia (cap., Canberra), Dominion of New Zealand (cap., Wellington), Union of South Africa (caps., Cape Town—parliament ; Pretoria—executive) ; Irish Free State (cap., Dublin).

drainage : Most of the land of the earth drains to the sea. The drainage area of a river is outlined by comparatively high land which forms the water-partings between the river and other rivers.

Rivers usually carry off 50 or more per cent. of the rain that falls on their basins. The continuity of flow is preserved by the rain that soaks through porous layers and reappears in springs.

Where rivers flow over porous soil they sometimes lose rather than gain water over parts of their courses. The Australian rivers lose water in this way, so that over a great part of their courses they do not drain their basins. The Darling River carries off only about 10 per cent. of the water that falls on its basin. The South African rivers are similar ; some run only after rain ; the Orange River dwindles in the lower part of its course. In these cases a great part of the drainage is underground.

Areas of inland drainage occur in arid regions where the amount of evaporation balances the rainfall. (If the rainfall were greater the area of water would increase until the balance was adjusted again or until the water poured over the edges of the basin and began to cut new channels.) In some inland areas the rivers simply disappear by evaporating or by sinking into the ground. In other cases the rivers flow into a central lake, which expands in wet seasons and contracts in dry seasons. These terminal lakes are salt ; salt is brought in in solution by the rivers and only pure water is lost by evaporation.

The greatest areas of inland drainage are in Asia. These include the basin of the Caspian Sea, which is partly in Europe and includes the basin of the Volga ; the Aral Sea basin ; the Lake Balkash basin ; the Tarim basin, and parts of the great plateaux.

Africa has two large areas of inland drainage—the Lake Chad basin, on the southern side of the Sahara, and the Lake Ngami basin, in the tropical semi-desert of the south. Parts of the Sahara, especially those in the higher regions, have wadis—dry water-courses—which run only after rain and quickly dry up.

Australia has large areas of inland drainage covering the middle of the country and extending south to the Great Australian Bight. The greatest of these systems is that which flows into Lake Eyre.

There are two extensive areas of inland drainage in North America ; these are in the Rocky Mountains. The larger of the two is the Great Basin, which includes the Great Salt Lake system. The lesser area is in Central Mexico.

In South America there are areas of inland drainage on the Andean plateaux. The largest is the basin of Lake Titicaca. This is a fresh-water lake ; it discharges into another shallow lake, and this preserves the freshness of the water. Lake Titicaca has an area of nearly 5,000 square miles and a surface level 12,500 feet above sea-level.

drugs : Many drugs are synthetic products, being manufactured from coal-tar derivatives and similar substances. The following are obtained from natural sources :

Opium.—From the juice of the opium poppy, grown chiefly in the lower Ganges valley, southern China, and Persia. *Laudanum* is a tincture of opium, that is, a solution in alcohol.

Quinine.—From cinchona ("Peruvian") bark ; the cinchona tree grows in the Amazon forests ; it is also cultivated in India.

Cocaine.—From the coca, another tree of the Amazon forests. The natives chew coca leaves as a stimulant.

Strychnine.—A poison used in minute quantities as a nerve stimulant. It is obtained from nux vomica, the seeds of a tree which grows in the East Indies.

Eucalyptus Oil.—From the eucalyptus (gum) trees of Australia.

dry valleys : Valleys which have no streams running in them and, therefore, little to account for their erosion. (See also : *Valley.*)

dyes : Dyestuffs are either natural or artificial.

1. Amongst natural dyes are : *Indigo*—from the indigo plant, which grows in India, China, Central America, Hungary, and France. *Madder*—from the madder plant, which grows chiefly in France. *Cochineal*—from the cochineal insect (see *Cactus*) ; used in cooking.

Gamboge.—Obtained from a gum which exudes from the bark of a tree which grows in South-east Asia.

Logwood.—Obtained from the heartwood of a tree which grows in Central America and the West Indies.

Saffron.—From the saffron crocus. Obtained from southern Europe, Kashmir, and Persia.

2. Most modern dyes are prepared from coal-tar and shale oil ; there are vast numbers of these dyes, including almost every colour and shade. The dyes are produced chemically ; the object of the chemist is to produce dyes which are fast to light and washing. Most dyes are only suitable for a particular material—silk, wool, cotton, or linen.

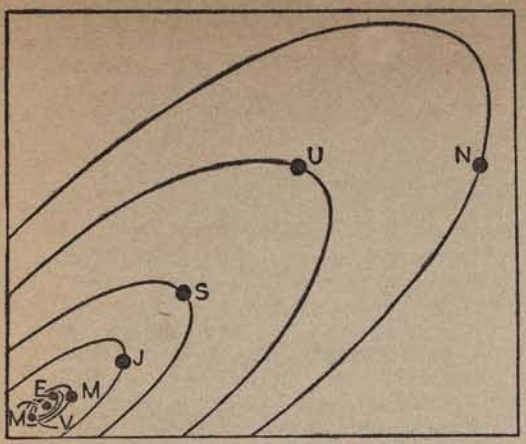
Different groups of dyes are produced from anthracene, a product of the distillation of coal-tar, and from aniline which is made from benzene, another coal-tar product.

Before the War the dye industry was almost entirely concentrated in Germany (135,000 tons out of a world total of 162,000 tons). Since the War a great dye industry has been built up in England. The United States now comes second to Germany, with England and France third.

dykes : Walls built along low-lying coasts to keep out the sea. They are usually of great thickness, with a gentle gradient on each side and a roadway along the top ; the sea face is covered with large stones and rubble. There is more than 2,000 miles of dykes along the coast of Holland ; many of these dykes are 20 or 30 feet high.

It is necessary to drain the land behind the dykes artificially. This is done by means of pumps worked by windmills. The water is pumped into canals above the level of the land and runs away to the sea.

earth as a planet : The earth is a planet similar to the other planets. It revolves round the sun in an ellipse which is almost a circle ; the sun is at one of the foci of the ellipse. The greatest distance of the earth from the sun is about 93 million miles and the least distance 90 million miles.



RELATIVE DISTANCES OF THE PLANETS FROM THE SUN.

The time of revolution is nearly 365¼ days. The quarters are included as an extra day in February of leap years. This makes the average year a little too long; three leap years are therefore omitted in each four hundred years—the exact hundreds except when the number of hundreds divides by four.

The orbit of the earth is a plane (if traced out, the surface would be flat). The orbits of the other planets are also planes inclined at slight angles to that of the earth. The orbit of the moon round the earth is similarly inclined at a small angle to that of the earth. A single flat surface would almost include the whole of the solar system.

The earth rotates once per day; the ends of the axis about which it rotates are the North and South Poles.

In shape the earth is an oblate spheroid (orange-shaped; a sphere pressed in at the poles). This shape is that taken by a plastic body which spins; this is one of the reasons for thinking that the earth was once liquid. The earth is, however, very nearly a sphere. The diameter is 7,926 miles at the equator; the diameter joining the poles is 7,900 miles. The difference is, therefore, only about one part in 300. The equator is a little under 25,000 miles long.

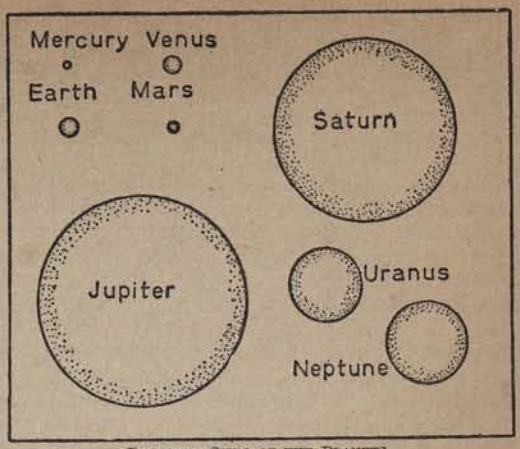
The earth is one of the lesser planets. Taking the earth's diameter as unit those of the planets are:

Mercury	·4	Venus	·95
Earth	1	Mars	·55
Jupiter	10½	Saturn	9
Uranus	4	Neptune	4½

The diameter of Pluto, the recently discovered planet beyond Neptune, is unknown.

eclipse: *Moon:* An eclipse of the moon takes place when the moon passes into the earth's shadow cast by the sun. There are two parts to the shadow—an inner cone completely cut off from the sun (this part is the umbra); the penumbra is an outer part cut off from part of the sun. During a total eclipse the whole of the moon passes into the umbra. During a partial eclipse only part of the moon is covered by the umbra.

An eclipse of the moon can only take place when the moon is at the opposite side of the sky from the sun (with the earth exactly between them), that is, at full moon. There is not always an eclipse at full moon, because the moon usually passes above or below the earth's shadow.



RELATIVE SIZES OF THE PLANETS.

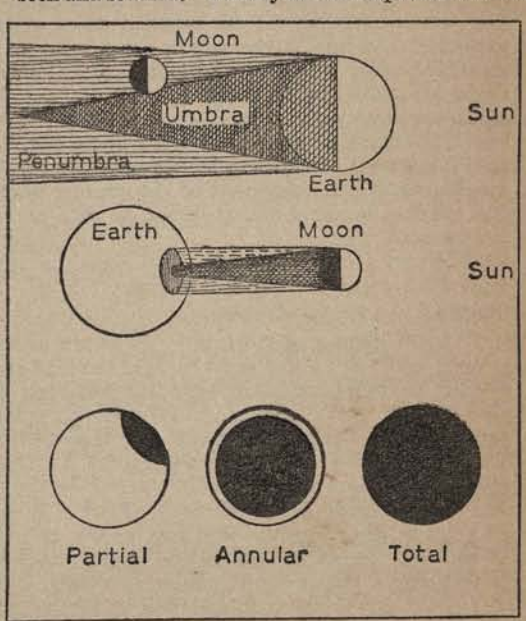
The shadow of the earth on the moon is always round. This is one of the reasons for thinking that the earth is round.

Sun: An eclipse of the sun takes place when the moon passes between the earth and the sun. There is a total eclipse when the moon comes exactly between so as to cover the sun completely. During a partial eclipse only part of the sun is covered.

A total eclipse of the sun can only be seen on the part of the earth where the moon's shadow falls. This is only a small area, because the earth is very near the apex of the shadow cone. Sometimes the apex of the shadow cone falls outside the earth. The moon does not, in these conditions, appear to cover the sun completely; there is a rim of light about it. An eclipse of this kind is called an annular eclipse.

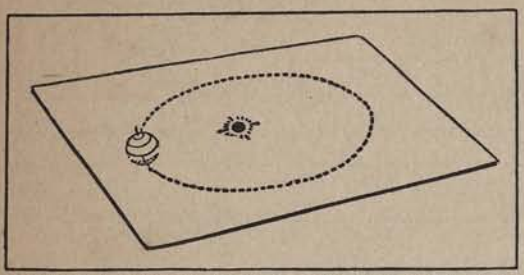
An eclipse of the sun can only take place when the moon is between the sun and the earth, that is, at new moon. Usually the moon passes a little above or below the sun and there is no eclipse.

Total eclipses are of special interest, because the outer, flaming atmosphere of the sun can then be seen and studied. Usually the atmosphere is hidden



TOP—ECLIPSE OF MOON. MIDDLE—ECLIPSE OF SUN. BELOW—THREE KINDS OF ECLIPSE OF THE SUN.

by the glare of the full sun. During a total eclipse stars which appear close to the sun can be seen and photographed. Great interest has been taken in this matter recently because of the theory that light is affected by gravity. Rays of light passing the sun are attracted towards it; this gives the stars a slightly different position from that which they have when seen away from the sun.



THE EARTH'S AXIS INCLINED TO THE ECLIPTIC (PLANE OF THE EARTH'S ORBIT).

ecliptic: The plane of the earth's orbit (the ellipse in which the earth travels round the sun). Imagine that the orbit were drawn on a flat sheet of paper: the surface of the paper would be the ecliptic.

Imagine a similar plane on which the equator of the earth is drawn (the plane of the earth's equator). There is an angle of 23½° between the two planes. The axis of the earth has, of course, an equal tilt away from the perpendicular to the ecliptic: this is what is meant by the statement that the earth's axis is tilted.

(See also: *Axis of the Earth.*)

electric grid: A system for co-ordinating and connecting the electrical power stations of Great Britain. The scheme is under the control of the Central Electricity Board; the members of the Board are appointed by the Ministry of Transport. The country is divided into nine main areas connected by cables carried on towers (pylons)—these cables form the "grid," so that if there is a breakdown in any district current can be supplied from other districts. The chief advantages of the scheme are: standardisation, which enables electrical materials to be produced cheaply in quantities; large-scale and consequently cheap production of electricity—small, uneconomic power-houses are being eliminated; loss from breakdowns is minimised; current can be supplied to every part of the country when the scheme is complete, to farms as well as to towns.

Similar grid schemes are being developed in the United States, Canada, and Germany.

electricity: See *Power—Sources of.*

elevation and sinking of the land: There are many reasons for thinking that some parts of the land are sinking whilst others are rising. The process is so slow that it is seldom possible to make an exact measurement of the rate of elevation or depression.

The following are some of the reasons for thinking that land is rising:

1. Raised beaches occur in many places. These beaches have exactly the appearance of sea beaches, except that they may be several hundred feet above sea-level. There are sea cliffs with typical sea caves and stretches of shells and rounded pebbles in front of them. There can be no reasonable doubt that these caves were formed at sea-level and afterwards raised with the surrounding land.
2. Stratified rocks are found high up on the highest mountains. The only way suggested for the formation of these rocks is that they were laid down under water; the tops of these mountains must once have been below the sea. Many of the highest stratified rocks contain fossils of marine animals; this also points to the fact that they were once below the sea.
3. Many stratified rocks show a distinct upward tilt, sometimes amounting to a right angle; others show upward and downward folds. As the sea spreads materials in level stretches these strata must once have been level.

Evidences of subsidence are equally convincing:

1. Submerged forests are found in some places with stumps rooted in the ground below the present level of the sea. In some cases these submerged forests are visible at low tide. It is clear that the land must have sunk since the forests were growing.
2. Coal is the fossil remains of ancient forests which once flourished on the surface of the ground. Coal is now found at considerable depths, covered with layers of stratified rocks laid down by the sea above them.
3. Fiord coasts show evidences of subsidence. The theory that they are drowned glacial valleys explains the various phenomena noted in them—the upright sides going deep down, especially at the heads of the fiords.
4. At Scania, in Sweden, some of the streets run down below sea-level. Since they must have been built above sea-level this is evidently a case of recent subsidence.

Lateral pressure (from the sides) is one cause of the elevation of land areas. In such cases the rising land usually forms an anticline (folded upward in the form of an arch).

equator: The circumference of the earth half-way between the North Pole and South Pole. The length of the equator is about 25,000 miles (actually 24,926 miles).

At the equator the lengths of day and night are equal throughout the year; the sun rises at 6 a.m. and sets at 6 p.m.

The midday sun is overhead in spring and autumn. It is never more than 23½° from the zenith (when it is overhead at one of the tropics). Hence there is very little variation in temperature throughout the year. There is one season only, summer, with an even high temperature of about 80° F.

The sun rises in the east, climbs vertically up the sky to the zenith, and descends vertically to the west. When it reaches the horizon it is quickly hidden, so that there is a very short twilight; day and night come "at one stride."

equatorial calms: The region, just north of the equator, towards which the trade winds blow. This region moves north or south with the sun: in the northern summer it is 10° or 12° north of the equator and in the southern summer it is close to the equator.

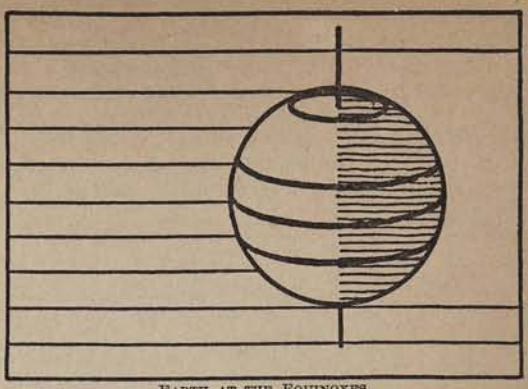
The warm light air of this region is pushed upward by heavier cooler air from north and south. The ascending currents expand and cool.

Over the Atlantic the region of equatorial calms is called the Doldrums. The air over the sea is saturated; in the ascending currents the moisture con-

denses. Hence the Doldrums is a region of leaden skies and heavy rain.
The sailors of the old sailing-ships dreaded the Doldrums, partly because of their depressing effect and partly because of the absence of strong winds.
(See also: *Horse Latitudes.*)

equatorial rains and forests: The region of equatorial calms is a region of heavy rainfall (because of upward currents of moist air). The conditions in this region —heavy rainfall and a high temperature which varies little throughout the year—are exactly those suited to luxuriant growth. (They are the conditions that the hot-house keeper tries to reproduce.)
There is a belt of equatorial forest stretching round the world, and including the basin of the Amazon, the Congo and West African coast, the East Indies, the north coast of Australia, and the west coasts of India and Burma. The belt is only broken where dry regions occur: (1) west of the Andes the winds are off-shore and therefore dry; (2) in East Africa the winds blow from the hot dry region of Arabia and less from the Indian Ocean. The equatorial forests reappear south of Zanzibar, where the influence of Arabia ceases to be felt.
The equatorial forests are extremely dense. Great trees crowd each other; there is also a dense undergrowth of dwarf palms and other plants. Orchids and other parasites grow on the branches of the trees. Through the dense tangle climbing plants reach up towards the light; these plants appear like ropes hanging from the trees: they are called lianes or forest ropes.
Since there is perpetual summer the trees do not lose their leaves. They blossom and produce fruit at any part of the year.
The trees grow so densely that the ground below is always in semi-darkness, and it is possible to travel for days without seeing the sun.
The animal life of the equatorial forests is that associated with trees. This is the chief region in which monkeys and apes are found. The apes include the gorilla and chimpanzee of West Africa and the orang-utan of the East Indies. There are vast numbers of birds, often brightly coloured. Insect life includes the largest and most brightly coloured butterflies and innumerable stinging insects.
There are great numbers of snakes, including the huge anaconda of South America; many of the snakes are tree-climbers. The jaguar of South America is also a tree-climber; it lies out on a branch overhanging a stream and catches fishes with its paws. The rivers contain great numbers of fishes and turtles.
(See also: *Amazon, Congo, Selvas.*)

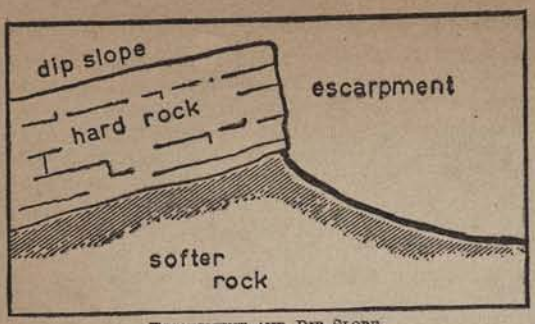
equinox: One of the two periods of the year when days and nights are equal throughout the world. The spring equinox is about March 22, and the autumnal equinox about September 22.
At these periods the axis of the earth is tilted across the direction of the sun's rays, so that each part rotates half in day and half in night. (In the sketch the axis is tilted towards the observer and across the rays of the sun.)
At the equinoxes the sun rises almost exactly due east at 6 a.m. and sets almost due west at 6 p.m. throughout the world (as occurs throughout the year at the equator).
(See also: *Solstice.*)



EARTH AT THE EQUINOXES.

erosion: All land is continually being eroded, worn down, by various agents. The chief of these are: rain, rivers, sea, frost, wind.
Rain carries down mud and sand to the rivers. The rivers carry the silt farther down and deposit it in their beds or at their mouths. The water sorts out the mud and sand in the following way: in the still water of the sea the heavier sand drops first; the lighter clay is carried farther out to sea before it settles, and so the two materials are separated.
The sea erodes the land when waves batter the shore; incoming waves pick up pebbles and rocks and drive them against the cliffs; this increases the erosive power of the waves. Sea caves are often formed at the bases of cliffs; when a cliff is sufficiently undermined rocks fall from it to the beach; these rocks are broken up and smoothed by rolling on the beach. Tidal and other currents assist erosion by carrying materials farther out to sea.
Frost breaks up rocks in this way: water gets into cracks in a rock; the water freezes at the outside and afterwards within the crack. In freezing the water expands and forces the sides of the crack apart. When this process has been repeated often enough part of the rock is broken off. (Gardeners often leave lumps of clay exposed, to be shattered by frost.)
The wind erodes rocks by driving sand against them. The continual rubbing of the sand finally wears the rock away.
The effect of erosion is to reduce the height of land, and to bring it nearer to sea-level; all rivers spread quantities of mud and sand over the bed of the sea near their mouths. If erosion were unchecked the whole of the land surface would be finally reduced to sea-level. There are, however, the counteracting effects of the eruption of materials by volcanoes and the slow upheaval of the land in certain regions (the latter is the greatest of the counteracting effects).

escarpment: A steep inland cliff. Escarpments occur where layers of hard rock slope upwards to the surface over softer rocks. The hard rock above prevents the softer rock from being rapidly eroded into rounded hills. As the softer rock is eroded the hard layer above is undermined and falls in masses. This preserves the upright character of the escarpment.
Thus the special features of an escarpment are accounted for: almost upright, hard rocks above; more gently sloping softer rocks below; lumps of the harder rock lying on the slope below. It may be seen from this account that an escarpment slowly retreats



ESCARPMENT AND DIP SLOPE.

as the upper layer is undermined and falls in lumps.

The layer of hard rock dips down behind the escarpment at a gentle slope, known as the dip slope. It is down this slope that an escarpment retreats.

The Weald of Kent is surrounded on three sides by escarpments facing inwards. The escarpments are formed in harder chalk above and softer clay below. The inner extent of the Weald slowly increases as the escarpments retreat.

In addition to the Weald there are two great lines of escarpments running across England: (1) the western edge of the line of chalk hills from Dorset to Norfolk, Lincolnshire, and Flamborough Head; (2) the western edge of a line of oolite (limestone) hills, roughly parallel with the chalk hills and west of them. This line of hills includes the Cotswolds, Northampton Heights, and the North Yorkshire Moors. Both these lines of escarpments are slowly retreating eastward, thus exposing the layers of rock beneath them. Smaller escarpments are common in many districts—wherever a layer of harder rock lies over layers of softer rock.

Eskimos: See *Igloo, Kayak, Nomads.*

esparto grass: A grass resembling feather-grass which grows in northern Africa (especially Algeria) and Spain. It flourishes in dry, sandy soils near the sea; it grows to a height of 3 or 4 feet with narrow leaves 3 feet long. Young esparto grass is used as food for cattle; after a few years it becomes tough, and after a further period the leaves are gathered. The leaves contain a fibre which is used for making ropes, baskets, and mats. Great quantities of esparto are exported for paper-making.

Esparto is also called Spanish grass.

estuary: The wide mouth of a river. Estuaries are usually found on sinking coasts where the sea has flooded the lower valley of the river; this accounts for the width and depth of the estuary.

Estuaries are valuable sites for ports; there is usually deep water because of the sinking of the land; they are usually tidal, the funnel shape increases the height of the tide, and so the river is affected far inland. An estuary has therefore the advantage of having sites for ports some distance inland.

Eurasia: Europe and Asia considered as a single continent. Europe is a westward extension of the great land mass of Asia; it is considered as a continent because of the importance of the European peoples, and because they have developed a civilisation distinct from that of the Asiatic peoples. Geographically, however, Europe is an extension of Asia—a peninsula to the west; the Ural Mountains are a comparatively low barrier. Europe has, on the other hand, its own distinct mountain core—the Alps and their extensions.

(See also: *Asia, Europe.*)

Europe: Area—3¾ million square miles. Coastline—nearly 20,000 miles or 1 mile to each 180 square miles of area. Greatest extent—Cape Nordkyn, 71° N.; Cape Tarifa, 36° N.; Urals, 66½° E.; Cape St. Vincent, 9½° W.

The most indented of the continents, with numerous peninsulas—Scandinavia, Jutland, Brittany, Iberian, Italy, Greece, and the Crimea are the largest. Numerous large islands—Iceland, British Isles, Corsica, Sardinia, Sicily, Crete, and Cyprus are the largest. Inland seas—White Sea, Baltic, and North Sea in the North; Mediterranean, Adriatic, Aegean, Black Sea, and Caspian in the south.

Chief watershed—Alps and extensions (Carpathians, Illyrian Alps, Pindus Mountains, Apennines, Vosges, Jura, Pyrenees). Valdai Hills (930 ft.) are a low watershed in Russia. The Scandinavian mountains form the watershed between Norway and Sweden. The Urals form the watershed to the East.

The great European plain stretches from the Urals across Russia, the Baltic countries, Germany, Holland, Belgium, and northern France. The Plain of Hungary is enclosed by the Alps and the Carpathians, and the Plain of Lombardy by the Alps and the Apennines.

The chief rivers of the northern slope are: Loire, Seine, Meuse, Rhine, Weser, Elbe; (flowing into the Baltic) Oder, Vistula, Dvina, Neva; (flowing into the White Sea) Onega, Dvina.

Rivers on the southern slope: Ebro, Rhône, Po, Adige, Danube (2,000 miles), Dniester, Dnieper, Don, Volga (2,400 miles).

Spanish rivers flowing west: Minho, Tagus, Guadiana, Guadalquivir.

The two greatest navigable rivers are the Rhine and Danube; these rivers are connected, by way of the Main, by means of a canal, thus providing a through waterway from the North Sea to the Black Sea.

Countries and Governments:

Kingdoms: Albania (cap., Tirana), Belgium (cap., Brussels), Bulgaria (cap., Sofia), Denmark (cap., Copenhagen), Great Britain and Northern Ireland (cap., London), Iceland (cap., Reyk-javik), Italy (cap., Rome), Holland (cap., The Hague), Norway

CHIEF WATERSHEDS OF EUROPE.

(cap., Oslo), Rumania (cap., Bucharest), Sweden (cap., Stockholm), Yugoslavia (cap., Belgrade).

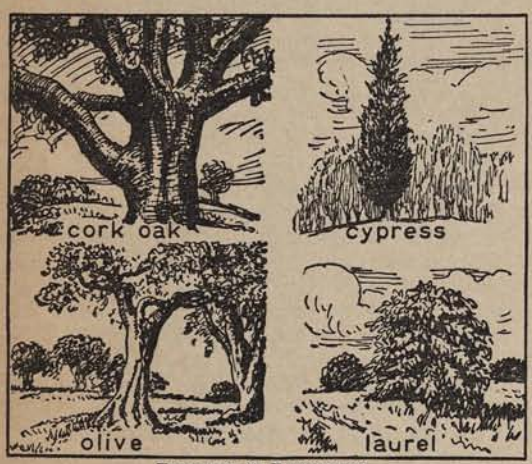
Republics: Andorra, Austria (cap., Vienna), Czechoslovakia (cap., Prague), Estonia (cap., Revel), Finland (cap., Helsingfors), France (cap., Paris), Germany (cap., Berlin), Greece (cap., Athens), Latvia (cap., Riga), Lithuania (cap., Kovno), Poland (cap., Warsaw), Portugal (cap., Lisbon), Russia (cap., Moscow), San Marino, Spain (cap., Madrid), Switzerland (cap., Berne), Turkey (cap., Angora, in Asia Minor).

Other States: Hungary (Governor with sovereign rights, elected by the National Assembly; cap., Budapest), Irish Free State (British Dominion; cap., Dublin).

(See also: *Alps, Black Country, Black Earth, Continent, Danube, Iberian Peninsula, Meseta, Minor States of Europe, Rhine, Volga.*)

Everglades: A region in Florida in the sub-tropical belt. The trade winds bring heavy rain to this district, especially in the summer. The region is covered with dense vegetation similar to that of the tropical forests. Lakes and ponds are clogged with masses of vegetation. The vegetation is so dense that drainage is checked and the whole region is swampy. The cypress is a distinctive tree of this region.

Recently much of the Everglades has been drained by the cutting of new channels to drain off the surplus water.



EXAMPLES OF EVERGREENS.

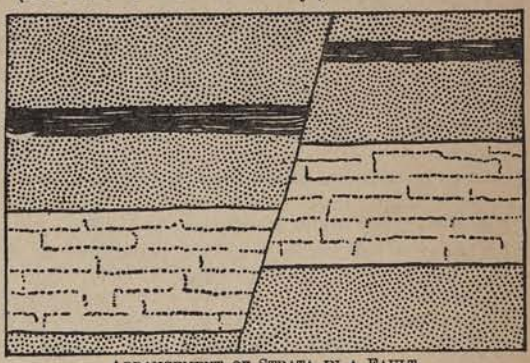
evergreens: Typical plants of the sub-tropical regions. They are specially suited to the climate of these regions—winter rains and summer droughts. The trees and shrubs retain their leaves in winter during the damp, mild winters when there is considerable growth. The leaves are glossy, so that they retain moisture during the summer droughts. In many cases, also, the leaves are small; this again reduces the amount of moisture given out by the trees.

Typical trees are: the cork oak, from the bark of which cork is obtained; the evergreen oak; the olive—the oily fruits are called olives, from them olive-oil is expressed; the cypress, the cedar, and pine trees. There are great numbers of evergreen shrubs like the laurel and myrtle. Rhododendrons and azaleas are evergreen shrubs which thrive in peaty soil and often flourish on the sides of mountains. On high mountains in hot lands the region of shrubs usually contains many rhododendrons.

Fahrenheit: See *Thermometer.*

Fall Line: A remarkable line of waterfalls along the eastern edge of the Appalachian Mountains in the United States. The Appalachians end in a plateau; the rivers to the east descend from this plateau in waterfalls. The map shows a string of towns along the Fall Line, one at each fall. These towns use the force of the falling water to supply power for lighting, heating, and driving machines.

(See also: *Power—Sources of.*)



ARRANGEMENT OF STRATA IN A FAULT.

fault: A crack across rock strata where the strata on one side of the crack have been pushed up or have sunk so as to be out of line with those on the other side. The slipping of strata in the formation of faults is one cause of earthquakes.

Faults may show on the surface as steep cliffs on one side of the fault with the same rocks at a lower level on the other side. A knowledge of faults is essential to miners. A bed of coal or a mineral vein may be followed to a fault; beyond the fault it is necessary to seek for the continuation at a higher or lower level in its place in the series of strata.

Large parallel faults sometimes occur. When the land between sinks a rift valley is formed. When the land on both sides sinks the mass between remains as a block mountain.

(See also: *Block Mountains, Rift Valley.*)

Fens: A low-lying region round the Wash, and especially to the south of it; there are no clearly defined limits, but the region includes the lower basins of the Witham, Welland, Nen, and Great Ouse. Formerly the Fens consisted chiefly of extensive marshes and stretches of water; the Isle of Ely was then really an island; it was in this district that Hereward the Wake defied and resisted William the Conqueror.

The Fens have now been drained by the straightening of rivers, embanking of rivers, and the cutting of new channels. By these means the marshes have been changed to rich agricultural land. The clay soils of this region make excellent wheatlands. Small fruits (raspberries, gooseberries, etc.) grow well, and have led to the establishment of a jam-making industry.

The Wash is a shallow opening which is being silted up by the sea. Boston and King's Lynn have lost their importance as ports because of the silting. Along the shores of the Wash some of the sandbanks have been reclaimed and are now used as agricultural land.

ferry towns: See *Town Sites.*

fiord: A narrow winding inlet of the sea, with precipitous sides; the water deepens towards the head of

RAMIFICATIONS OF THE TRONDHJEM FIORD.

the fiord. The name originated in Norway, where there are numerous fiords along the coast; it has been extended to similar openings on the west coast of Scotland, the coast of British Columbia, the coast of Chile, and the west coast of South Island (New Zealand). Except in the case of New Zealand, the fiord coasts are fringed with islands.

Fiords are drowned glacial valleys. A valley filled by a glacier is eroded in U-form. The ice protects the edges and prevents their being worn away to a flat V-shape. When a coast containing U-shaped glacial valleys sinks a series of fiords is formed. The U-shape accounts for the vertical sides; the windings and ramifications are the valleys of the old glaciers and their tributary glaciers. It is to be noted that there are still glaciers at the heads of many of the Norwegian fiords. The water at the mouth of a fiord is usually shallow because of moraine deposits made by the glacier which originally filled the valley.

(See also: *Estuary, Ria, Glacier, Moraine.*)

fisheries: The great fisheries of the world are in comparatively shallow seas where there is food for the fishes. The greatest of all are in regions where cold polar currents meet warmer water. There is an abundance of plant life in open polar waters, and this supplies the fishes with food. The great fishing-grounds are: the Newfoundland Banks, where the cold Labrador current meets the Gulf Stream; Iceland, where the cold Greenland current meets the Atlantic drift; Lofoten and Finmarken, in Norway, where cold polar waters meet the Atlantic drift.

The North Sea is the most fished of all the seas. It is rich in plant life, and there is abundant food for a great variety of fishes. Flat fishes live near the bottom in shallow places; they are caught by means of trawls on the Dogger Bank in winter and in the shallow waters along the coast of the Continent in summer. Herring fishing off the British coasts begins in the north of Scotland in June, and becomes later and later southwards; it ends at Yarmouth in November.

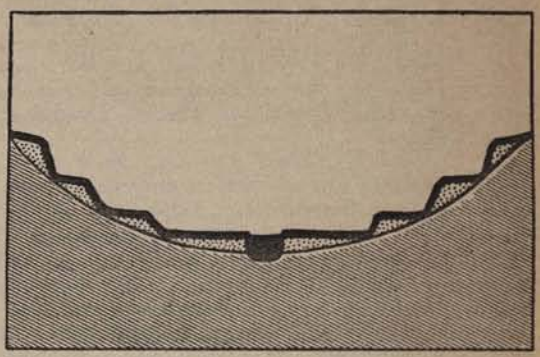
Salmon fishing is carried on on a large scale in the rivers of the Pacific coast of North America. Vast shoals of salmon come up the rivers from the sea; they are trapped and canned; the canneries are close to the rivers, so that the fish are quite fresh when canned. In British Columbia the chief centres are on the Skeena and Fraser Rivers, Queen Charlotte Island, and Vancouver Island.

Sardine fishing is important in the Mediterranean and the Bay of Biscay. Sardines are young pilchards preserved in olive-oil; they are imported chiefly from France and Portugal. Young brisling (caught off the coast of Norway) are preserved in the same way, and so also are young sprats.

(See also: *Whale Fishing.*)

Five Towns, the: See *Potteries.*

flax: See *Linen.*



FLOOD PLAINS AT VARIOUS LEVELS.

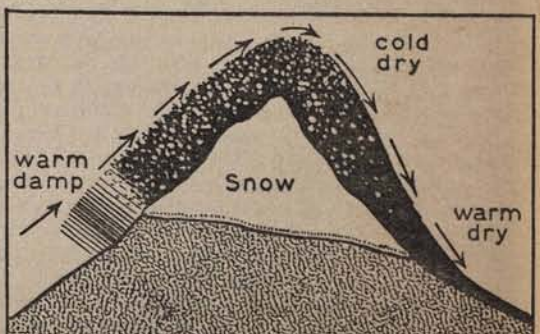
flood plain: A plain formed in a river valley above the lowest levels of the valley. In periods of flood rivers often rise to a fairly constant level; sand and mud are deposited by the slow-moving waters at the edges of the flood. A continuation of this process leads to the building up of flood plains along the edges of the valley. River terraces are sometimes found at different levels on the slopes of a valley.

föhn: A warm, dry wind which blows into the Swiss valleys from the south-west in spring and clears them of snow.

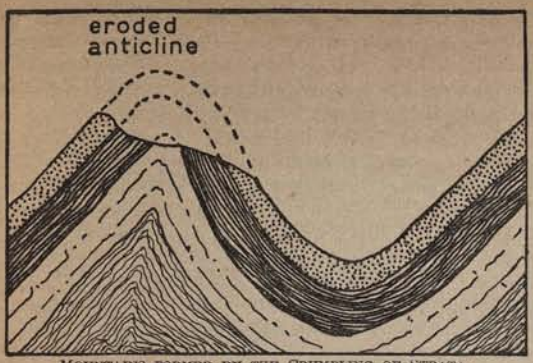
The föhn is originally a warm, damp wind. In crossing the mountains most of the moisture is changed to snow. A great deal of heat is given up in the double change from vapour to water and from water to ice; hence the wind is warmer than if it had been dry. In blowing down into the valleys the wind is compressed and heated. It therefore reaches the lower slopes as a warm, dry wind.

Similar winds occur in other regions where a wind, originally warm and damp, blows across mountains and descends on the other side; these winds are often referred to as "föhn winds."

The chinook is a föhn wind which blows across the Rocky Mountains in winter and clears the prairies of snow. Föhn winds also occur in Greenland. Warm, damp winds from the Pacific blow across the Greenland plateau and appear on the coast as dry, warmish winds.



HOW THE FÖHN BECOMES A WARM DRY WIND.



MOUNTAINS FORMED BY THE CRUMPLING OF STRATA.

fold mountains : Mountains formed by the crumpling or folding of rocks which were originally level. The extent of the folding is shown by the present arrangement of strata, which must have been horizontal when laid down under water.

Some of the greatest mountain masses and chains have been produced by folding. Amongst these are the Rocky Mountains and coast ranges of North America; the Andes; the chief mountains of Europe—Alps, Pyrenees, Carpathians, Caucasus; the Himalayas, Pamirs, and ranges of Central Asia.

The main streams amongst fold mountains flow through the valleys between the folds, that is, parallel to the folds. They are often joined by tributary streams flowing across the folds.

foothills : See *Hills*.

forests : See *Deciduous Forests, Equatorial Rains and Forests, Pine Forests*.

" Four Seas " : The seas surrounding Great Britain—North Sea, English Channel, Irish Sea, Atlantic Ocean.

frigid zones : The regions within the Arctic and Antarctic circles, that is, within 23½° of the poles. These regions have long cold winters. The Arctic zone has cool summers with long days, ranging up to six months at the North Pole. In spite of the long days the Antarctic summer is inclement.

Vegetation within the frigid zones is dwarfed. Along the fringes of the Arctic there are dwarf trees and low-growing plants. Farther north the vegetation fades out to little more than mosses and lichens. Wherever there is soil, however, there appear to be plants of some kind.

fringing reef : See *Coral Reef*.

fruits : Fruits are classified geographically as temperate, sub-tropical, and tropical.

The *temperate fruits* (apple, pear, plum, and soft fruits like the raspberry and strawberry) flourish in the latitude of England; their cultivation extends towards the sub-tropical regions. Apricots, peaches, and nectarines require a warmer climate than that of England to grow readily. Amongst the great fruit-growing regions are: In England—Kent, Hereford and the surrounding counties, Devonshire and Somerset (cider apples). Perthshire has a large fruit area (especially strawberries). Nova Scotia, the peninsula between Lakes Erie and Ontario, British Columbia; California.

New Zealand; the south-east of Australia; the south-west of South Africa.

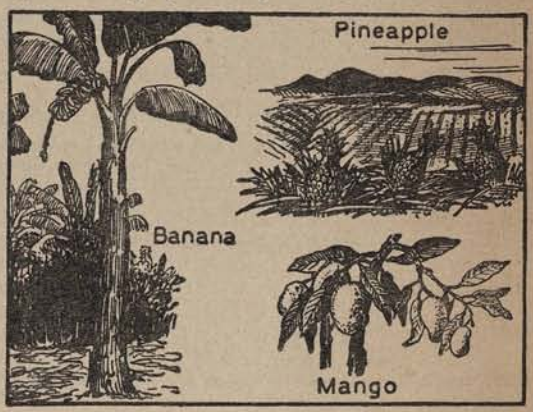
Sub-tropical fruits include oranges and lemons (oranges can stand a little frost, but lemons cannot), the vine (grapes, raisins, sultanas, currants, wine), olives. The cultivation of these fruits is carried on most successfully in the sub-tropical countries (the Mediterranean region, California, south-east and south-west of Australia, Central Chile, south-west of South Africa). The cultivation of oranges has recently been extended into tropical countries, especially Rhodesia and West Africa.

Tropical fruits include the pineapple, banana, grape-fruit, guava (used for making jelly), mango.

Bananas grow easily in hot, damp countries. Suckers are planted, produce a single bunch of fruit in about 18 months, and die; the bunches weigh from 50 lb. to 80 lb. Owing to the tropical climate of perennial summer bananas ripen at all times of the year. The chief supplies of bananas to this country come from Central America and Colombia, the Canaries and Madeira, and the British West Indies. Bananas are also grown in other parts of the tropics where there is a damp climate.

Grape-fruit is imported chiefly from the West Indies, Florida, Central America, and from South Africa.

Pineapples originated in tropical America, where they are still largely grown; they are now cultivated in many tropical regions; the Hawaiian Islands produce large quantities.



TROPICAL FRUITS.

furs : The chief sources from which furs are obtained are: northern Canada, Alaska, the pine forests of northern Russia, and Siberia; this is the great pine-forest region, the home of the chief fur-bearing animals.

Fur seals are hunted in two regions: islands off the coast of Alaska, and the South Shetland and Antarctic regions.

Great numbers of coney (rabbit) skins are imported from Australia.

Ganges : The great river of northern India; length, 1,500 miles; area of the basin, over 400,000 square miles. The Ganges originates in a snowfield over 10,000 feet up on the Himalayas. In the upper course it is a river of shallows and rapids during the dry season; when the snows melt and during the rains the river is swollen. A series of roughly parallel streams bring down to the Ganges the southern drainage of the eastern Himalayas. About 220 miles (in a straight line) from the mouth the great delta begins. In the delta the Ganges is joined by the Brahmaputra, which brings in the drainage from the northern slopes of the Himalayas and also the heavy rainfall of the eastern Himalayas. The head of the delta is a rich and fertile region, but towards the sea it changes to the swampy Sundarbans.

The slope of the lower Ganges is very slight; below Allahabad it is only a few inches to the mile. For this reason, and also because the rivers bring down great quantities of silt, the Ganges frequently changes its bed, especially towards the delta. Many cities, originally built on the river, are now stranded and sometimes deserted ruins.

The Ganges is regarded as a sacred river by the Hindus. There are numerous places of pilgrimage on it, including the source, the points of junction with the various tributaries, and especially the tongue of land between the Ganges and the Jumna, where the two rivers join. Benares is regarded as a holy city.

(See also: *Himalayas, Sundarbans.*)

gap towns: See *Town Sites, Weald.*

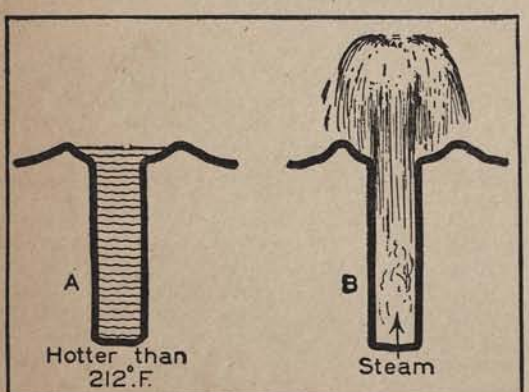
geographical lengths: It is always to be understood that the distances given for such measurements as the lengths of rivers and coast-lines are far from being close approximations. It would be impossible to make an accurate allowance for all the windings of a river, and in any case, rivers are constantly changing their courses. In time of flood, also, the minor windings are wiped out.

Measurements of latitude and longitude can be made with great accuracy, especially on land. Longitude, for example, can be measured very accurately by comparing exact local time with Greenwich time as given by wireless.

geyser: A form of decaying volcanic activity in which masses of water are thrown out of a tube in the earth, often to great heights. A tubular hole goes deep into the ground; water accumulates in this, and is then suddenly flung out. The temperature of the bottom of the tube appears to be higher than boiling-point. The water is heated, but does not boil because of the pressure of water above. The temperature increases until it is sufficiently high for the water to boil under pressure. When this point is reached a mass of the water suddenly evaporates and the steam presses on the water above and throws it out.

Geysers occur in regions which are recognised as regions of decaying volcanic activity. Amongst these regions the most notable are Iceland, the Yellowstone National Park (in the Rocky Mountains), and in North Island, New Zealand. "Geyser" is the name of the first geyser observed; it is in Iceland. The name was extended to include similar phenomena in other parts of the world.

gin: See *Distilling.*



SECTION THROUGH A GEYSER.

glacial deposits: Glaciers continually bring down with them stones and fragments that have fallen from the rocks at the sides of the valley. This debris is left as a terminal moraine at the spot where the glacier ends. If the glacier were to retreat during a period of warm years terminal moraines would be formed in other places along its line of retreat.

In the parts of northern Europe covered by glaciers during the Ice Age moraine deposits are common. They often occur as hillocks of debris resting on ordinary level layers below. Rich cornlands in the east of England consist of boulder-clay; this is clay deposited by glaciers; it contains numerous boulders brought down at the same time (hence the name "boulder-clay").

(See also: *Moraines.*)

GLACIER WITH TERMINAL MORAINE, ENDING IN RIVER.

glacier: A river of ice, moving forward usually at the rate of a few inches a day. Glaciers originate in ice deserts, either in polar regions or on the tops of high mountains. Snow falls on high mountains and accumulates without melting. Under the pressure of snow above the snow below turns to ice. The ice increases in amount until the pressure is so great that the part beneath is pushed outward and downward as a vast tongue of ice, or glacier. The glacier descends a valley carved out by itself, much as a river does, but much more slowly.

Tributary glaciers flow into the main glacier just as tributary streams join a river. The glacier flows downward with extreme slowness until it reaches warmer regions below. There the glacier melts and runs downward as a river.

Glaciers occur wherever mountains rise above the snowline. The glaciers of the polar regions descend to sea-level; great masses break away and float off as icebergs.

A glacier fills its valley and checks erosion at the edges; hence glacial valleys are U-shaped, and not V-shaped like river valleys.

Glaciers carry down masses of rock which scratch the rocks forming the sides and bottom of the valley. Parallel scratches are a distinctive feature of glacial valleys; they are an important sign, by which old glacial valleys are recognised.

(See also: *Fiords, Icebergs, Moraines.*)

glass: Made by fusing together sand, soda, potash, and other materials. Formerly all glass was blown; some of the fused material was taken up at the end

of a pipe and blown to the required shape; flat sheets were made by cutting blown cylinders and spreading them out. Cheap glass is now cast or blown in moulds; plate glass is rolled out—this made it possible to manufacture the enormous sheets now used for shop fronts. Glass is manufactured at Smethwick, Stourbridge, Warrington, and St. Helens.

Bohemia (Czechoslovakia) has long been famous for glass.

Many glasses are now made with special properties for special purposes. Triplex consists of two sheets of glass firmly united by a sheet of cellulose between them; it is used for the wind-screens of motors, because when it is fractured the splinters adhere to the cellulose. Vitaglass (made at Smethwick) and a number of other glasses contain much quartz and little iron oxide; they are transparent to ultra-violet rays which are stopped by other glasses, especially those containing lead and iron. Monax and Pyrex are heat-resistant glasses; they contain much quartz and expand little on heating, so that there is little danger of cracking. Optical glass (for telescopes, microscopes, etc.) is a small but extremely important branch of glassmaking; optical glass is made in Great Britain, Germany, France, and the United States.

The greatest glass-producing countries are (in order of importance): Germany (greatest works at Jena), United States, Czechoslovakia, Great Britain, Russia, France.

gneiss: See *Granite.*

gold: See *Metals, Klondike, Rand.*

granite: One of the most important of the igneous rocks. It is a plutonic rock, that is, a rock formed by the very slow cooling of molten rock; the cooling takes place deep down, and the granite is afterwards exposed by the erosion of rocks above. Granite consists of a mixture of small crystals of three of the commonest minerals: quartz (the material of sand), felspar (there are two forms—pink and grey), and mica (the mineral which splits into thin sheets).

Granite is found amongst old hard rocks where erosion has been going on for a long time. It is quarried for use as a building stone; it takes a high polish, and is used as an ornamental stone for the fronts of buildings. Granite from Shap Fell in Westmorland has very large crystals of pink felspar which give the polished stone a very ornamental appearance. Aberdeen is often called the Granite City, because granite from quarries near the town has been used in building the houses.

The surface of exposed granite slowly weathers—the felspar unites with water to form clay, so that it becomes a soft mass full of fragments of quartz and mica. The three substances are sorted out by water: sand and mica are deposited first and clay farther out. Decayed granite is probably the source of the great masses of sandstone and clay.

When exposed on the coast granite forms rugged masses without bedding, as on the coast of Cornwall; it erodes into rounded oblong blocks.

Gneiss is formed from granite by extreme pressure. It is one of the hardest rocks, with the original crystals pressed out into veins. This rock forms bold headlands on the north coast of Scotland.

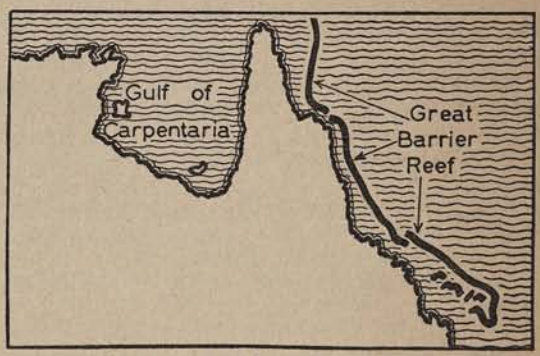
(See also: *Clay.*)

graphite: A soft mineral consisting of a form of carbon. On account of its softness and dark greyness it is used for making lead pencils. It is also used as a lubricant for machinery. It is a good conductor of electricity, and is used in small grains in microphones.

Graphite is found in veins in granite and other igneous rocks. The largest deposits are found in the east of Canada and in New York, in the Austrian Alps, in Irkutsk (Siberia), and in Sonora (Mexico).

Graphite is now manufactured (using water-power) by passing very powerful electric currents through coke or anthracite. Lamp carbons and electrodes are made in this way. Graphite made in this way is also used for lead pencils.

(See also: *Diamonds.*)



POSITION OF THE GREAT BARRIER REEF.

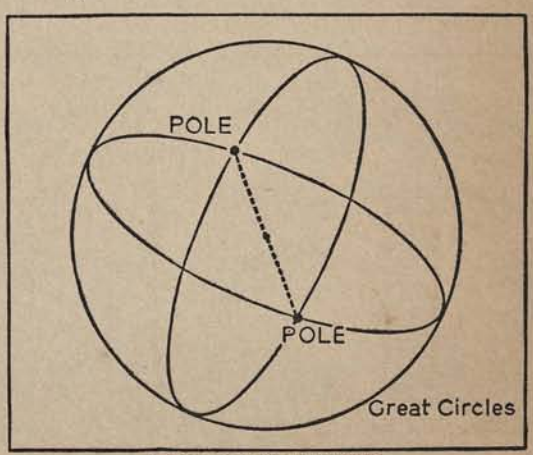
Great Barrier Reef: A great coral reef off the coast of Queensland. The reef is of great extent; the length is 1,200 miles and the area is 30,000 square miles. At the northern end the reef is within 20 miles of the coast; at the southern end it is a hundred miles out from the coast. The channel between the reef and the mainland is used by steamers, and there are navigable passages through the reef. It has been suggested that the reef marks an old coastline of Australia, now submerged.

The Great Barrier Reef is visited for the purpose of collecting "sea cucumbers." These are large, slug-like creatures used in making soup.

(See also: *Coral Reef.*)

great circle: Circle on a sphere passing through two opposite points (poles); this is the largest circle that can be drawn on a sphere.

Meridians are great circles on the earth passing through the North Pole and South Pole.



EXAMPLES OF GREAT CIRCLES.

The shortest distance between two points on the earth is always part of a great circle; this distance is found by stretching a thread between the two points on the globe. Ships usually sail on parts of great circles ("great circle" sailing).

Parallels of latitude are small circles, with the exception of the equator. The distance along a line of latitude is, therefore, greater than the great circle distance between two points on the line of latitude.

Great Lakes: The five great lakes in the course of the St. Lawrence; four of them form a boundary between Canada and U.S.A. (Superior, Huron, Erie, Ontario; Lake Michigan is wholly within the United States). In order of size the lakes are:

Superior	31,810 sq. miles
Huron	23,010 ,,
Michigan	22,400 ,,
Erie	9,940 ,,
Ontario	7,540 ,,

The Niagara Falls are between Erie and Ontario; the Welland Canal was cut to avoid them. Traffic on the Great Lakes is steadily increasing; ships up to 10,000 tons are employed; the traffic through the Sault Ste. Marie Canal (between Superior and Huron) is greater than that through the Suez Canal. A great part of the goods carried consists of iron ore and grain.

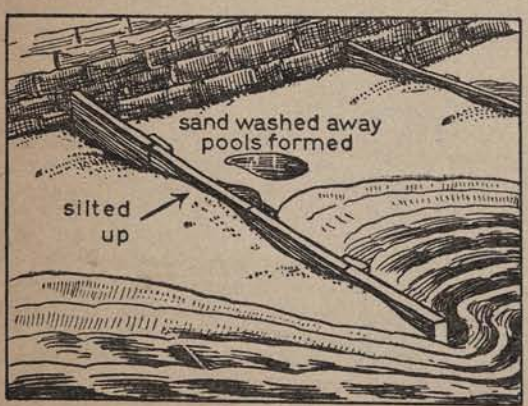
(See also: *St. Lawrence.*)

Greenwich Mean Time: The length of the natural day (from solar noon to solar noon) varies throughout the year; the reason is that the speed of the earth in revolving round the sun varies—it is greatest when the earth is nearest the sun (northern winter) and least when it is farthest from the sun (northern summer). In order to avoid the inconvenience of a day of varying length an average is taken for the year, and Greenwich Mean Time is based on this. The variations between solar noon and noon by Greenwich Mean Time are comparatively small, and not commonly observed; they vary from nothing up to about 16 minutes.

The differences are important in nautical observations; hence they are tabulated in almanacs. (See also: *Revolution of the Earth; Standard Time.*)

gregale: See *Winds.*

groynes: Short walls built out into the sea to check erosion by the tides, and especially to prevent beach material being carried away. The tide piles up sand and pebbles against one side of the groynes and carries them away from the other side. Hence it is usual to find small pools at one side of a groyne.



GROYNES USED TO PRESERVE BEACH FROM TIDAL EROSION.

guano: A fertiliser composed of the droppings of sea-birds. It is found as a deposit on islands off the west coast of South America, especially in Peru. The coast here is dry, so that the guano is not washed away. Deposits are also found on the Ichaboe Islands, which are in a dry region off the coast of South-West Africa.

Gulf Stream: A warm current which issues from the Gulf of Mexico through the Florida Channel. It flows northward parallel to the American coast, and separated from it by a strip of cold water, the "cold wall." Near Newfoundland the Gulf Stream meets the cold Labrador Current. It ceases to be a definite current, and becomes the Gulf Stream Drift, an eastward drift in the direction of the westerly winds. Part of the drift turns south, towards the tropics. The northern part passes west of the British Isles, and then breaks into three branches separated by currents moving south. One branch passes between Iceland and Norway, a second past the west coast of Iceland, and the third along the west coast of Greenland.

The speed of the current is at first from 2 to 4 miles an hour; the speed sinks until in the drift it is a few miles a day at most. The temperature of the Gulf Stream is about 80° in the Florida Channel; by the time it reaches the region of Nova Scotia the temperature has fallen by about 5° in summer and 15° in winter. The cold Labrador Current still further reduces the temperature, and the Gulf Stream Drift is only a few degrees warmer than surrounding water.

In the early stages the Gulf Stream can be recognised by the blueness of the water and the strong northward current.

As the Gulf Stream emerges from the Florida Channel it is about 25 miles wide. It afterwards spreads out; off Cape Hatteras the total width is about 160 miles. This width includes two bands of cold water; the inner band of the Gulf Stream is the warmest and most rapidly flowing.

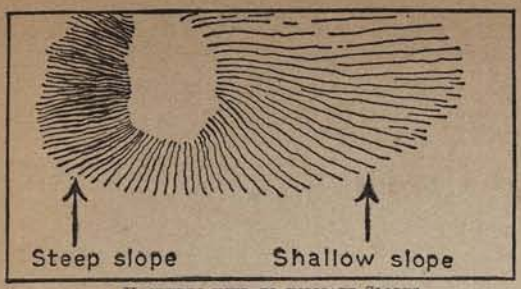
The drift of warm water towards the north-west has a considerable effect on the climate of Europe; it keeps the seas open during the winter.

(See also: *Ocean Currents.*)

gum arabic: A sort of gum used as an adhesive, in ink, in some water-colours, in finishing silks and other textiles, and for various other purposes. It is exuded from the branches of gum trees which grow in the Sudan, in a belt known as the gum belt between Abyssinia and Lake Chad. In Kordofan the gum tree is cultivated, but in other parts it grows wild. Collectors of gum journey into the desert; the distance they can penetrate depends on the growth of the wild melon, which provides food for man and fodder as well.

The principal market for gum is at El Obeid, the capital of Kordofan.

gypsum: The mineral from which plaster of Paris is made; the gypsum is heated for some time to drive off some of the water of crystallisation; the plaster sets by recombining with water. Beds of gypsum occur near Paris (at Montmartre); it is from this circumstance that plaster of Paris gets its name. Gypsum is worked in Staffordshire, Derbyshire, and Northampton, and at Salzburg (Austria). It is widely spread over North America, and worked in

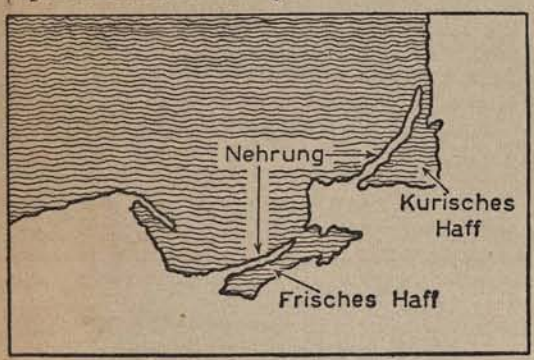


HACHURES USED TO INDICATE SLOPES.

Canada and a large number of the states of the United States.

hachures : Lines drawn on maps to indicate slopes by shading. On steep slopes the lines are drawn close together and on shallow slopes wide apart. The lines are often called streamlines, because each follows the direction that would be taken by a stream.
(See also : *Contours.*)

haff : A lagoon on the south coast of the Baltic, usually kept open by a river flowing through it. The long spit of sand which separates the haff from the open sea is called a *nehrung.*



HAFFS ON THE SOUTHERN BALTIC COAST.

hanging valley : A side valley at a higher level which joins a main valley at a lower level ; there is often a waterfall pouring over from the higher hanging valley into the lower main valley.
Hanging valleys occur where valleys were formerly filled by glaciers. The glacier in the main valley prevented erosion in the side valleys. Erosion is now proceeding ; the waterfall will gradually recede and form a normal valley.

harmattan : See *Winds.*

helium : See *Natural Gas.*

hemisphere : The earth is often divided into two hemispheres (half spheres). The Eastern Hemisphere includes the Old World and the Western Hemisphere the New World (the Americas). The land hemisphere, with its centre at London, includes most of the land of the world ; the corresponding water hemisphere includes very little land. Northern and Southern hemispheres, divided by the equator, are sometimes referred to.

hemp : A fibre used for ropes and coarse textiles. The plant grows in a mild, damp climate, usually to a height of 6 or 8 feet. It is pulled and treated like flax. Hemp is used for making ropes, cord, sailcloth, sacking, and other coarse textiles. Plumbers use it for packing joints.
The chief sources of hemp are Russia (by far the greatest amount), Italy, Hungary, and India.

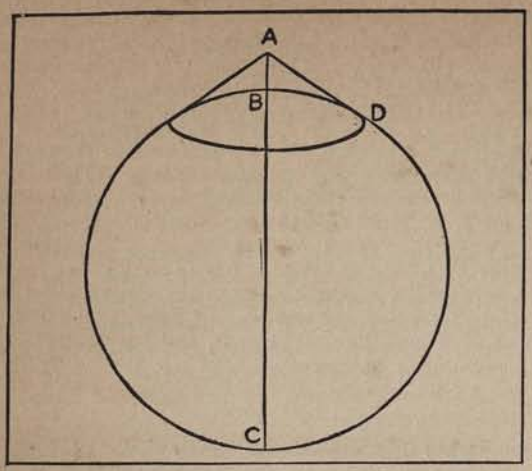
Manila hemp is a fibre obtained from a plant which is not related to the true hemp. The plant is a native of the Philippines, and has been introduced into other tropical countries (East and West Indies, India, etc.), but the bulk of the supply comes from the Philippines. These islands have a warm, damp climate which suits the plant. Manila hemp makes the finest and strongest ropes. Manila paper is made from worn manila ropes.
(See also : *Sisal Hemp.*)

hills : Masses of high land not high enough to be called mountains. Most ranges of hills consist of newer rocks not yet elevated to a great height. The newer rocks are comparatively soft and easily rounded by rain and other erosive agencies ; hence ranges of hills usually have smooth curves and rounded tops.
Foothills are lower ranges found along the bases of high mountain ranges.

Himalayas : The greatest of mountain chains ; it forms the southern edge of the Tibetan plateau, and stretches for about 1,500 miles. The limits usually assigned to the chain are the bends of the Indus and Brahmaputra.
The highest peaks occur on a line well back in the mountain chain ; this is a line of snowclad peaks. Farther south are the sub-Himalayas, and beyond these lines of foothills. The highest peaks rise from land which is itself at a great elevation, so that the whole vast height is never seen. On Mount Everest, for example, the greatest slope exposed to view is 12,000 feet high, considerably less than half the whole height.
The highest peaks are: Everest (over 29,000 ft. ; the highest of all mountains), Godwin-Austen (over 28,000 ft.), Kanchinjunga (28,000 ft.), Makalu (27, 800 ft.).
The rivers of the Himalayas are fed by glaciers and snow, so that they are always full ; nearly all the valleys which run up high into the Himalayas have glaciers. Almost the whole drainage from both slopes of the Himalayas goes to the Indus and Ganges, which have formed great alluvial plains and deltas. The tributary streams have powerful currents. They are cutting back rapidly into the mountain range. The tributaries of the Ganges have pressed that river close up against the Deccan.

HIMALAYAS AND THE GANGES.

horizon : At sea the circle where land and sea seem to meet ; on land the horizon is usually broken by the uneven land surface, the more even the surface the more regular the circle. The circular appearance of the horizon is due to the spherical shape of the earth. The distance of the horizon as seen from any height is readily calculated. AB is the height of the observer and AD the distance of the horizon. By



geometry $AD^2 = AB.AC$ (BC is the diameter of the earth and AC is taken as equal to BC, since AB is comparatively very small).

$\therefore AD = \sqrt{AB.\ BC}$.

Hence the length AD in miles as seen from a height of h feet ($AB = h$)

$$= \sqrt{\frac{h \times 8{,}000}{5{,}280}} \text{ miles.}$$

The distance of the horizon as seen from various heights is given in the following table:

10 ft.	20 ft.	30 ft.	40 ft.	50 ft.
3·9 ml.	5·5 ml.	6·7 ml.	7·8 ml.	8·7 ml.

Horse Latitudes: Regions of calms about 40° N. and just south of the tropic of Capricorn, where the anti-trades descend and become south-west and north-west surface winds (more nearly west in the southern hemisphere). The descending currents are compressed and warmed; hence there is little condensation of moisture. The Horse Latitudes are regions of calms, fine weather, and cloudless skies.

On land the Horse Latitudes are the sub-tropical regions of winter rain and summer drought on the west of continents and summer rain on the east.

(See also: *Anti-trades*.)

horses: Horses have been taken into almost every part of the world where man goes. The best of the British breeds are: the thoroughbred, descended from the native English horse crossed in past times with Arab horses; the Cleveland bay, bred in the north-east of England, adapted for ploughing and heavy work; hackneys, for riding and driving, bred in eastern England as far north as Yorkshire; the shire horse, a large draught horse, bred in Lincolnshire, Cambridgeshire, and the neighbouring "shire" counties; the Clydesdale, another large draught horse from the Clyde valley; the Suffolk punch. Many breeds of ponies are famous—New Forest, Exmoor and Dartmoor, Shetland, Connemara.

Both England and Ireland are famous for horse breeding; horses are purchased by other countries to improve their own stocks.

Horse rearing is an important industry in Hungary and in the south-east of Russia. Great numbers of horses are kept in all the Steppe regions; they are a necessity in dealing with the large numbers of sheep and cattle kept in these regions. The horsemanship of the cowboys of North America, the gauchos of the pampas, the Cossacks of south-east Russia, the Hungarians, and the Arabs is famous.

hot springs: See *Springs*.

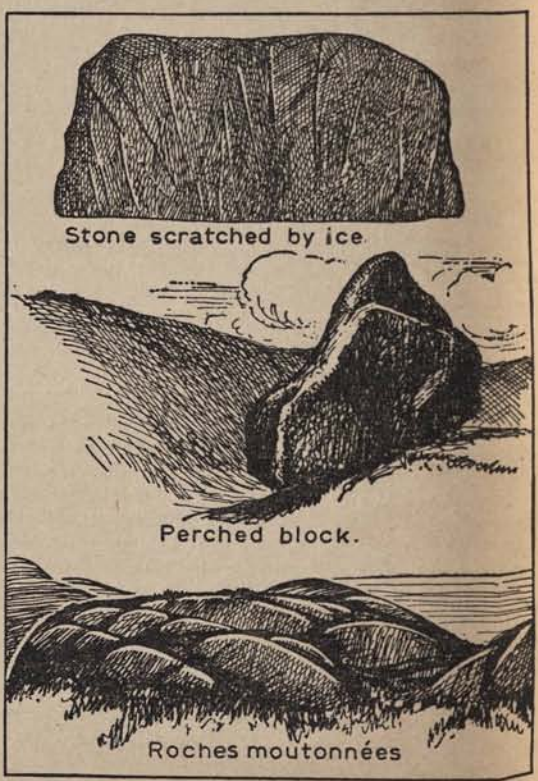
Hwang-ho: See *Yellow River*.

Iberian Peninsula: The most westerly peninsula of Europe, which contains the two republics of Spain and Portugal. The peninsula is almost completely shut off from the rest of Europe by the Pyrenees. The most important railways pass round the ends of the Pyrenees, thus connecting France and Spain. Recently, however, a railway has been carried across the Pyrenees, with tunnels at the highest part.

The peninsula consists of a tableland, the Meseta, with mountain ranges along its northern and southern edges. The rivers flow chiefly from east to west, and have cut deep gorges in the plateau. The regularity of the east and west ranges has made north and south communications difficult.

Ice Age: A recent geological period when a great part of the land of the northern hemisphere was covered with ice. In the British Isles Arctic conditions spread as far south as London, covered Wales, and extended to South-west Ireland. On the Continent the glacial conditions extended roughly to 50° latitude; the Alps and the Pyrenees were great snow-fields, with glaciers like those of Greenland to-day. In America the glacial region extended roughly to the boundary between Canada and the United States.

The results of the Ice Age are widespread over northern Europe, Asia, and Canada. The glaciers of the Alps, Scandinavia, and the Pyrenees are remnants of huge glaciers of the Ice Age. The fiords of Nor-



Some Effects of Glacial Action.
Roches Moutonnées are Rocks smoothed and rounded by Ice.

way are glacial valleys carved by glaciers, of which only the stumps now remain. In some places rocks are smoothed, rounded, and scratched with parallel scratches; perched blocks are found in many places—these are boulders, sometimes of great size, and perched precariously. The great sheets of ice in many cases changed the geography of countries. On the great plain of northern Europe there are widespread deposits of glacial drift—largely sandy, but containing boulder-clay, i.e. clays containing lumps of rock; these rocks are usually scratched in the same way as glaciated rocks. Glacial deposits are found in many parts of the British Isles. The boulder-clay makes rich farming land, but sandy drift is infertile.

The Ice Age changed many surface features. Lakes were created, sometimes by the blocking of river valleys with moraine deposits; in other cases hollows were scraped out—small lakes and tarns in natural basins of this kind are found in Norway and in Sutherland. The whole of Finland is covered with glacial deposits, and amongst these deposits are innumerable lakes. Similar lake regions extend over a great part of Sweden and eastern Germany. In addition to the lakes, there are numerous marshes where drainage has not yet been re-established.

Across most of Canada there are signs of glaciation, including the fiord coast of British Columbia and a great number of lakes. (The Great Lakes, however, were probably caused by an upward tilt of the land in the east, thus forming vast hollows. The St. Lawrence is cutting through the rims of these hollows.)

The depth of the ice sheets has been estimated by noting the heights at which the characteristic glacial deposits occur, and also the glacial markings (parallel scratches). The ice sheet must have been hundreds of feet thick, and in some cases thousands of feet thick, perhaps like the vast sheets of ice which cover the plateau of Greenland to-day.

icebergs: Masses of ice which break off from glaciers where they reach the sea, and float away. This phenomenon occurs in Arctic and Antarctic regions. Roughly nine-tenths of a glacier is below the surface of the sea and one-tenth above. The glaciers float southward from the Arctic until they reach warmer seas; there they melt.

ICEBERG, SHOWING THE PROPORTION UNDER WATER.

The Labrador Current brings down icebergs from Baffin Bay; these bergs melt in the warm waters of the Gulf Stream. Stones and other detritus are deposited on the sea floor when the bergs melt. This material has built up the Newfoundland Banks, famous for cod fishing.

igloo: The hut of an Eskimo family. These are sometimes dome-shaped huts of snow, but more often they are built of slabs of stone and earth. The entrance is narrow and low down. The igloo is usually warmed by means of an oil-lamp; it becomes so warm that clothing is almost or entirely discarded. Snow huts are used occasionally, but only in winter; in spring they begin to melt, and are exceedingly uncomfortable.

(See also: *Kayak, Nomads.*)

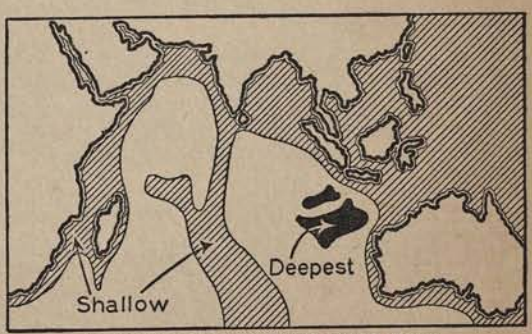
WINTER HOME OF AN ESKIMO FAMILY.

igneous rocks: Rocks formed by the hardening of material which was once molten. Molten material which cools quickly at the surface sets as glassy rocks or as rocks with minute crystals. Other molten material sets slowly at a great depth; this material sets in large crystals, and forms *plutonic rocks*. The greater the depth and the slower the cooling, the larger are the crystals. Granite is an example of a plutonic rock which has set with extreme slowness and afterwards been exposed by the erosion of rocks above it. It occurs in mountainous masses in many parts of Scotland and Wales and the West of England.

(See also: *Basalt, Granite.*)

Indian Ocean: Widest between the southern ends of Africa and Asia (6,000 miles), and tapers northward. Area to 40° S.—about 17 million square miles, or including the sea to the Antarctic circle, about 26 million square miles.

There is a central ridge, comparatively shallow, which extends southward from India and joins up with the submarine plateau of the Antarctic; on this central ridge are the Maldives, Chagos Islands, New Amsterdam, and the Kerguelen Islands. The Seychelles are on a westward branch. The deepest



DEEPS AND SHALLOWS OF THE INDIAN OCEAN.

parts of the Indian Ocean are in the angle between Australia and the Sunda Islands.

There are three large continental islands—Madagascar, Ceylon, and Sokotra. Many of the islands are coral (Laccadives and Maldives, Chagos, Cocos, Seychelles). Mauritius is the most important volcanic island; the Crozet Islands are also volcanic.

With the exception of the rivers from the north (Euphrates and Tigris, Indus, Ganges, Brahmaputra, Irrawaddy, and the Deccan rivers) the Indian Ocean receives little drainage.

Indus : One of the great rivers of India ; length, 1,700 miles ; area of basin, 370,000 square miles. It rises in glaciers on the north side of the Himalayas in a group of mountains close to the sources of the Brahmaputra, the Sutlej, and the Gogra. For 530 miles the Indus flows to the north-west. It is then joined by the Shyok, which drains the southern slopes of the Karakorams. Later it is joined by the Gilgit ; it turns to the south-west, and cuts through the main line of the Himalayas to the plains. The Indus and its tributaries (Jhelum, Chenab, Ravi, and Sutlej) drain the Punjab (the Country of the Five Rivers).

THE INDUS AND ITS TRIBUTARIES.

In the lower course through Sind the water of the Indus is used for irrigation. Many irrigation schemes are in operation and others are in course of completion. The greatest of these schemes includes a barrage in the gorge at Sukkur and weirs on the Sutlej. This scheme irrigates 5 million acres.

In its lower course the Indus is apt to change its bed. It brings down an enormous amount of solid matter which silts up the bed and raises it above the surrounding country. It formerly sent a branch to the Rann of Cutch. The last great change took place about 200 years ago, when the river broke through limestone ridges at Sukkur and shifted its course farther to the west.

inlets of the sea : Wide, shallow openings are called *bights*, e.g. the Bight of Benin and the Great Australian Bight. *Gulfs* are large, deep openings, e.g. the Gulf of Carpentaria and the Californian Gulf. *Bays* are wide openings, not so deep as a gulf, e.g. Bay of Biscay.

" Bay " and " gulf " are not sharply distinguished.

A *cove* is a small bay.

Long, narrow openings are often called *fiords* and *rias*. A fiord is a drowned glacial valley and a ria a drowned V-shaped valley. An *estuary* is the wide mouth of a river ; these occur where the land is sinking and where the mouth of the river is drowned

Firth and *loch* are used for openings in Scotland, loch also in Ireland.

A *strait* is a narrow passage between two pieces of land ; a *channel* is a wider passage. A *sound* is a strait.

(See also : *Bight, Estuary, Fiord, Ria.*)

International Date Line : See *Date Line.*

iridium : See *Metals.*

iron : The ores used in making iron are :

1. Magnetite (an iron oxide), so-called because of its magnetic properties. It is found in large masses in Scandinavia and Siberia. Swedish ore is largely exported to England and Germany, but some is now smelted with charcoal in Sweden.
2. Hæmatite (another oxide of iron).
3. Limonite (a hydrate of iron).
4. Clay-ironstone, clay and iron carbonate.

Iron is smelted by heating the ore mixed with coke and limestone in a blast furnace. The oxygen of the ore unites with the carbon of the coke and iron is released. The limestone forms a flux with the various impurities. Slag floats on the liquid iron and is run off. The molten iron is run off into moulds (pig-iron). Smelting is usually carried out on the ironfield, because it is cheaper to move the coke to the iron than the iron to the coke. In making steel more coal is required, and it is cheaper to move the iron to the coal ; hence the processes of manufacture are usually carried out on the coalfield.

In steel-making, impurities are burnt out of the molten iron by means of a forced draught. Carbon and other materials are added to improve the quality of the iron and increase its hardness. Manganese, chrome, nickel, and tungsten are added to form alloys each used for particular purposes. Manganese steel resists heavy blows, it is used for railway wheels and large machines. Stainless knives are made from chrome steel, which is hard and elastic. Nickel steel is used for the propeller shafts of ships. Tungsten steel keeps its edge even when very hot ; it is for this reason used for metal-cutting tools.

The slag from blast furnaces is used for many purposes ; basic slag (containing phosphorus) is used as a slow-acting fertiliser ; slag wool is used for packing (as a bad conductor of heat) ; slag is used as road metal and as a dressing for tarred roads (for this purpose it is ground to a powder).

Iron ore is found in Great Britain in a broad strip extending from the Cleveland district of Yorkshire south-west to Dorset. On the Continent the chief deposits of iron ore are on the frontier of France and Germany, and extend into Belgium. Spain and Sweden have iron ores, but no coal to smelt them ; these ores are exported to England and Germany. In America the greatest deposits are round Lake Superior ; the ores are hæmatite. The ores occur in strips or ranges. The greatest of these is the Mesabi range in Minnesota. The Lake Superior ores are transferred by water transport to the coalfields.

(See also : *Black Country, Metals.*)

Iron Gate : The narrow, rocky passage through which the Danube flows between the Balkan Mountains and the Carpathians.

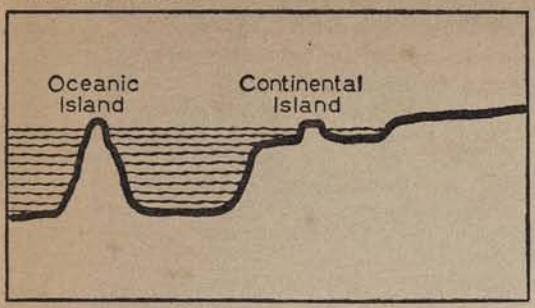
(See also : *Danube.*)

irrigation canals : See *Canals.*

islands : Islands are classed as continental and oceanic islands.

Continental islands are those which occur on the continental shelf or which show by their structure

that they are connected with a continent. The British Isles, for example, are on the continental shelf of Europe, and the rocks of Kent are continued across the Channel.



Oceanic islands are those isolated from continents; they spring directly from the sea floor, and usually have immense depths of sea about them; sometimes they are on the higher parts of submarine ridges or plateaux; this is the case with the Azores, which stand on the central ridge of the Atlantic. Oceanic islands are usually either volcanic or coral.

The largest islands of the world (in addition to the island continent of Australia) are:

New Guinea (330,000 sq. miles), Borneo (284,000 sq. miles), Madagascar (228,000 sq. miles), Sumatra (162,000 sq. miles), Great Britain (88,700 sq. miles), Honshu (Japan, 87,500 sq. miles), Celébes (72,000 sq. miles), South Island (N.Z., 58,500 sq. miles), Java (48,000 sq. miles), North Island (N.Z., 44,500 sq. miles), Cuba (44,000 sq. miles), Newfoundland (42,750 sq. miles), Luzon (Pacific, 41,000 sq. miles), Iceland (40,500 sq. miles).

The Arctic islands—Greenland, Baffin Land, etc.—are large but of comparatively little importance.

Note the close correspondence between three groups of islands often compared:

		sq. miles.		sq. miles.
British Isles .	Gt. Britain .	88,700	Ireland .	32,600
New Zealand	South I. .	58,500	North I. .	44,500
Japan .	Honshu .	87,500	Hokkaido .	36,500

(See also: *Atoll, Continental Shelf.*)

isobar: A line joining places with equal air pressure.

In the weather maps printed daily in the newspapers the daily isobars are given. These maps show where pressure is greatest and where least, and hence the directions of winds.

Other maps show the monthly isobars—lines joining places with equal mean pressures for the month. These maps are useful because they show the persistence of low or high pressures, and therefore the tendency of winds to blow in certain directions.

The isobars on maps are sea-level isobars. When barometer readings are taken at stations above sea-level an allowance is made at the rate of 1 inch of mercury for each 1,000 feet above sea-level; this amount is added to the actual reading.

In the northern winter there are high-pressure systems over the great land masses—Central Asia and the centre of North America towards the west; there is a rather less pronounced high-pressure system between Spain and Florida. There is a persistent low-pressure system over Iceland; winds flow into this region.

In the northern summer there are high-pressure systems over the northern oceans—the eastern Pacific, north of the equator; the central Atlantic, north of the equator.

The southern hemisphere isobars are much more regular. In the southern summer there is an almost continuous high-pressure belt just south of the tropic of Capricorn, higher on the sea and lower on the land.

In the southern winter the highest parts of the high-pressure belt shift towards the land.

isohyets: Lines of equal rainfall. Variations of rainfall are usually indicated by shading; the lines bounding the various degrees of shading are the isohyets.

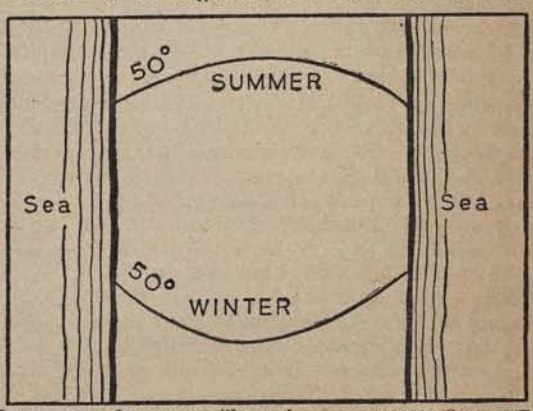
In general the isohyets run roughly parallel with the coast, indicating a steady decrease in rainfall towards the interior. The chief variation is where mountains occur—the isohyets run roughly parallel with the main axes of mountain ranges; they indicate higher rainfall to windward and lower to leeward of the ranges.

Isohyets may be annual, seasonal, or monthly. The seasonal isohyets are valuable, because they indicate at which periods the rainfall is greatest and at which least.

isotherms: Lines of equal average heat, i.e. lines connecting stations having the same mean temperature for, say, a month. As a rule two temperatures are recorded daily—the maximum and minimum. The average of these two is "reduced to sea-level"; an allowance is made of 1° F. for every 100 yards of elevation above sea-level; this allowance is added to the actual reading.

The most interesting isotherms are those indicating summer and winter temperatures; these are the means for January and July, the coldest and hottest months. The isotherms are much more irregular in the northern hemisphere than in the southern, because of the large land masses in the former. In summer there are regions of high temperature over the land masses; these occur on or about the tropics. The hottest regions during the northern summer (the 90° isotherm) are in the west of North America, over the Sahara, and over Arabia, Persia, Baluchistan, and northern India. The coldest regions during the northern winter are over the great land masses—the centre of North America (north-west of Hudson Bay), and the centre of northern Asia. One small region of Asia has an average January temperature of −60°, the coldest region in the world.

During the southern summer the hottest regions (85° isotherm) are over the east of South America, just south of the equator, over the centre of Africa, north and south of the equator, and over the north of Australia. During the southern winter the isotherms



DIRECTIONS OF SUMMER AND WINTER ISOTHERMS ACROSS A CONTINENT.

in the southern hemisphere are almost parallel, the temperature decreasing steadily towards the South Pole.

isthmus : A narrow neck of land between two larger masses of land. The most important isthmuses are those of Panama, joining North and South America, and the Isthmus of Suez, joining Africa and Asia. In each case a ship canal has been cut across the isthmus. Canals have also been cut across the isthmuses of Corinth and of Jutland.

An isthmus is sometimes defined as the narrowest neck of land between a peninsula and the mainland. There is, however, no part of the peninsula of Cornwall and Devon which can be usefully called an isthmus. The name "isthmus" is best reserved for those places where there are narrow necks of land.

(See also : *Ship Canals.*)

ivory : Ivory is produced chiefly in Africa, India, and South-East Asia. The best ivory comes from bull elephants. Very little is exported from India. The western half of Africa produces hard ivory and the eastern half soft ivory, which is more valuable. Ivory is exported from both East Africa (Zanzibar, Mozambique, Angola) and West Africa (Cameroons, Loango, Congo, Gold Coast, Sierra Leone). Much of the ivory exported is from the skeletons of long-dead elephants.

The teeth of the hippopotamus and the tusks of the walrus are also counted as ivory.

In northern Russia and Siberia ivory is dug up from the remains of elephants and mammoths.

jute : The fibre of a plant which grows in parts of the tropics where there is heavy rain, especially in the region round the Ganges delta—Bengal, Assam, and Dacca.

Jute is an annual plant which requires a great deal of labour to produce it ; the stems are retted in the same way as those of flax. Jute fibre is of great length (about 8 ft.), but it is not so tough as hemp.

Jute is used for making rope and twine and for strong sacks. It is woven with other textiles in making carpets and tapestries.

Jute was originally manufactured into bags, paper, ropes, and cloth in India. A great industry was established in Dundee, and jute is now spun and woven in most countries.

Kaietur Falls : See *Waterfalls.*

kaolin : See *Clay.*

kapok : A vegetable down which grows on a tree variously known as the kapok tree, the ceiban, and the cotton tree. The down is used for stuffing cushions because of its lightness and elasticity ; it is also used in life-belts. The tree is a native of South America, but it is now cultivated in Tanganyika, the East Indies, and the Philippines.

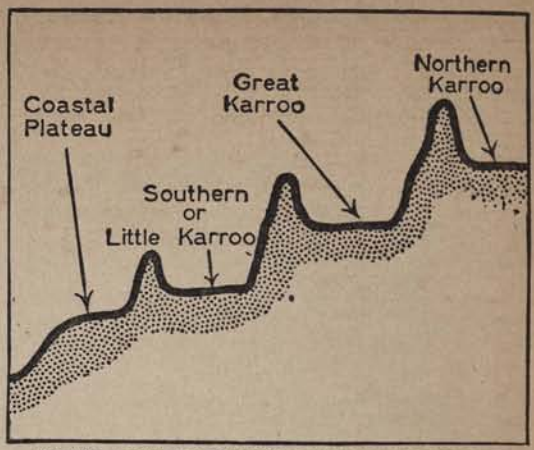
Karroos : South Africa rises from the sea in a series of terraces, all but the outer one being fringed with mountains. These terraces are, in order:

1. The coastal plateau.
2. The southern or Little Karroo.
3. The central or Great Karroo.
4. The northern Karroo.

The *coastal plateau* has a warm, moist climate. It varies in width from a few miles up to 50 miles.

The *southern Karroo* has a much drier climate. Most of it is bare, or covered with the sparse scrub of the veld. The soil is fertile, and good crops are obtained where it is irrigated.

The *Great Karroo* lies between the Zwartebergen



SECTION ACROSS THE KARROOS ; VERTICAL SCALE GREATLY EXAGGERATED.

(peaks from 5,000 to 7,000 ft. high) and the Nieuwveld and Sneenuwberg ranges (highest peak, Kompas Berg, 7,800 ft.). The Karroo bush affords pasture for large flocks of sheep and goats. During the dry season the vegetation dries up and the land depends on irrigation. Immediately after the rains the Karroo quickly blossoms. There are many bulbous plants, both flowering bulbs and grasses, which develop quickly.

The *northern Karroo* has a climate similar to that of the Great Karroo, except that it is more extreme. Much of the scanty rain runs off the sun-baked land into gullies which carry it to the sea. The chief industry is cattle and sheep rearing.

The Karroo bush grows wherever there is not enough water for grass. It includes many stunted shrubs, of which the mimosa is the best known.

kayak : The canoe of the Eskimos ; made by stretching skins on a framework of bones. A kayak holds one man only ; he drives the kayak along by means of a paddle, and is very skilful in manipulating it. Kayaks are used in fishing and in hunting seals and other aquatic mammals.

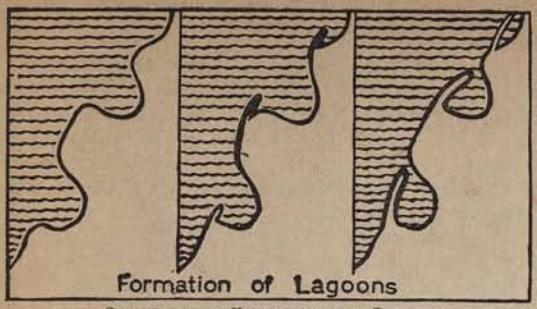
khamsin : See *Winds.*

Kiel Canal : See *Ship Canals.*

Klondike : A district in North-west Canada famous for the wild gold-rush in 1896. Gold-bearing gravel was found along the Klondike River and its tributaries. Most of the ground was frozen, and it had first to be thawed by making fires or by using steam. Dawson City, the centre of the region, quickly became a town of 10,000 inhabitants, but most of these left after the richest part of the goldfield had been worked out.

Krakatoa : See *Volcano.*

lagoon : A narrow, oval opening fringing the coast and separated from the outer sea by a spit of land with a narrow opening between sea and land. About a third of the coastline of the world is fringed with lagoons. Amongst long stretches of lagoons are : those along the eastern coast of the United States, those along the western (Malabar) coast of India. The silt brought down by rivers often helps to form lagoons. The silt of the Mississippi, brought down in enormous quantities, has formed a remarkable string of lagoons along the coasts of the Gulf of Mexico ; the silt of the Po and Adige has formed lagoons at the head of the Adriatic Sea, the most famous being the



STAGES IN THE FORMATION OF A LAGOON.

Lagoon of Venice; the delta of the Nile is fringed with lagoons.

Lagoons originate on irregular coastlines where there are tidal currents along the line of the coast. The current carries mud and sand in suspension; these materials are dropped in the still water at the mouths of bays, and gradually build up a spit of land. The lagoon may be completely enclosed, unless a river flows into it; the river preserves an opening. Sometimes a lagoon is completely enclosed; the water evaporates, and the lagoon becomes a salt marsh. In the final stage the water may evaporate altogether, leaving a level bed of salt.

(See also: *Haff.*)

Lake District: A region in Cumberland and Westmorland where there are numerous lakes. The Cumbrian Mountains of this district are a dissected plateau with ridges radiating from the centre of the district. The lakes lie in valleys between the radiating ridges. The largest of the lakes is Windermere, 10 miles long and rather less than a mile in width. Ullswater is next in size—9 miles long and about ¾ mile wide. Derwentwater and Bassenthwaite were probably once a single lake; they are now separated by a level stretch of land. Buttermere and Crummock Water also are separated by level land. Other lakes are: Wastwater, Thirlmere, Buttermere, Grasmere, Hawes Water; Thirlmere supplies Manchester with water. The Falls of Lodore are at the head of Derwentwater.

The only towns in the Lake District are Keswick on Derwentwater and Ambleside on Windermere. Both towns are centres for tourists.

lakes: Lakes generally occur in one of two situations: (1) in river valleys with dams across them very often consisting of moraine deposits; (2) filling hollows in plains.

Lakes are comparatively short-lived phenomena:

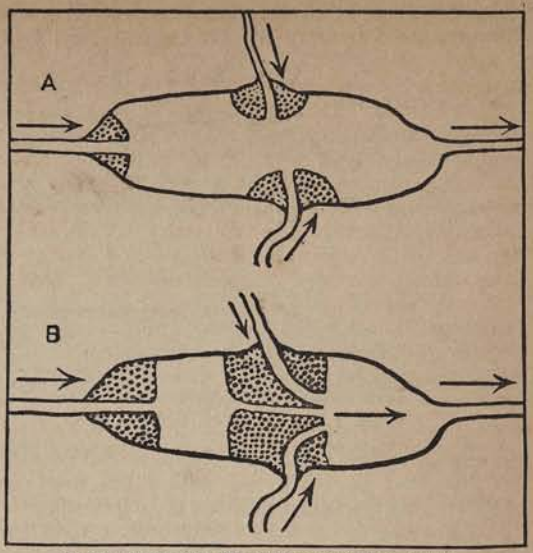
1. They may be filled up with silt brought down by rivers; small deltas are frequently found where rivers flow in. Sometimes a lake is cut in two by silt brought in by a river. Or a lake may be completely filled with silt and become a very flat plain.
2. The dam may be worn down; in this case the lake will drain away.

Lakes act as filters to rivers. A river may flow in very muddy; in the still water of the lake the mud sinks to the bottom; the river flows out quite clear. The Rhône is filtered in this way by Lake Geneva. It originates in a glacier and flows down laden with fine mud. This mud is deposited in Lake Geneva and the Rhône flows out quite clear.

Lakes also regulate the flow of rivers and prevent floods. The flood water spreads out over the lake instead of being concentrated in a narrow river-bed; hence the rise is comparatively very small. The vast extent of the Great Lakes prevents floods in the basin of the St. Lawrence. The Mississippi, on the other hand, is subject to floods; the drainage of the greater part of the United States runs down to the Mississippi, and in times of heavy rain the river is subject to disastrous floods.

As a rule mountain lakes are deep and lakes on plains shallow.

(See also: *Great Lakes, Ice Age, Yangtse-kiang.*)



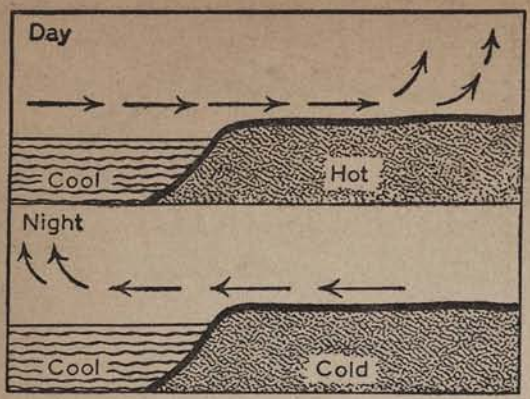
HOW A LAKE MAY BE DIVIDED INTO TWO LAKES.

land and sea: The total area of the world has been estimated at about 197 million square miles. Of this about three-tenths is land and seven-tenths is water. The greatest height of the land and the greatest depth of the sea are about equal (5½ miles land, 6 miles sea). The average height and depth differ greatly, because the floors of the great oceans are sunk at great depths, whereas large stretches of the land surface are only just above sea-level. The average height of the land has been estimated at 2,300 feet, whereas the average depths of the oceans is about 12,000 feet. If the whole of the land above sea-level were shaved off and spread over the Atlantic floor there would still be more than a mile depth of water above it.

It is a remarkable fact that nearly all the land of the earth is in one hemisphere, the other hemisphere being almost entirely sea. Thus it is that almost all the land has water antipodes; even the antipodes of Australia fit neatly into the Atlantic. The only important exception is the southern part of South America.

The fact that the northern hemisphere contains far more land than the southern hemisphere accounts for many differences between the climates of the two. The climate of the southern hemisphere is more even, there are fewer great variations than in the northern. The great variations of land and water in the northern hemisphere, with great mountain masses, have caused the diversion of winds, the existence of great areas with excessively low winter temperatures, great variations in rainfall, etc. Isotherms in the southern hemisphere are much more nearly parallel than in the northern, and the westerly winds are more regular and more truly westerly.

(See also: *Isobar, Isotherms.*)



CAUSE OF LAND AND SEA BREEZES.

land and sea breezes : A familiar phenomenon near the sea—breezes from the sea during the day and breezes from the land at night. During the day the land becomes much more highly heated than the sea. The air over the land is hotter and lighter than that over the sea. Hence the air-pressure is lower over the land than over the sea, and there is a wind from the sea towards the land.

At night the land quickly loses its heat, much more quickly than the sea. The air over the sea is, therefore, warmer and lighter than that over the land. The air-pressure is greater over the land, and there is a breeze from the land towards the sea.

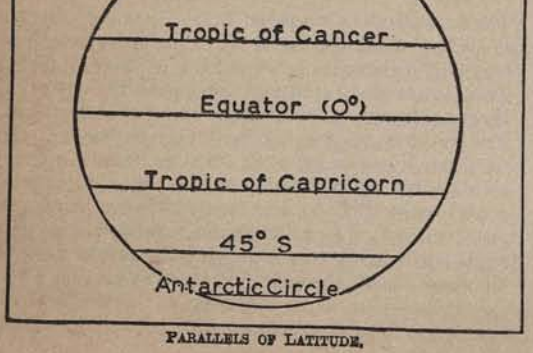
Monsoons are land and sea breezes on a very large scale. The whole land mass of a continent becomes highly heated in summer, and there are winds (monsoons) from the sea towards the low-pressure area on land. In winter the conditions are reversed, and monsoons blow from land to sea.

(See also : *Monsoon.*)

Landes : See *Sand Dunes.*

latitude : Distance north or south of the equator. Measurements are made in degrees, each degree representing one-ninetieth of the distance from equator to pole or $\frac{1}{360}$ of the whole circumference. The length of a degree of latitude is thus 24,926 ÷ 360 miles = 69·2 miles. The sixtieth part of a degree is called a minute ; hence a minute of latitude = about $1\frac{1}{6}$ miles.

The lines of latitude are drawn parallel to the equator; hence the length of a degree of latitude is the same everywhere. The lines of latitude are often called "parallels of latitude."



PARALLELS OF LATITUDE.

Measurements of latitude begin at the equator, which is 0°, and extend to the poles, 90° N. and 90° S. Thus a place with latitude 45° N. is somewhere on the circle which lies half-way between the equator and the North Pole.

Latitude is a natural measurement, and the measurement can be made anywhere by means of suitable observations. For example, the angular height of the Pole Star gives the latitude of any place in the northern hemisphere. Latitude can be measured at sea by observation of other stars whose positions are described in the *Nautical Almanac.* On March 22 and September 22 the height of the sun subtracted from 90° gives the latitude.

The equator is a natural starting-point. Places with equal latitude, north and south, show many similarities of climate and productions.

laudanum : See *Drugs.*

lava : See *Volcano.*

lead : See *Metals.*

leather : Leather is made by curing the hides of animals (cattle, sheep, goats, horses, etc.), formerly by means of oak bark, but now with other tanning extracts also. On account of its toughness and durability leather is used for boots and shoes, for saddlery, for upholstery, for binding books, as bands for driving machinery. No satisfactory substitute has yet been found for leather ("there is nothing like leather"), and the various trades which use leather depend on the natural supply. The best hides for tanning come from countries where the animals live wild or half-wild, generally in the Steppe regions, or in hilly country.

The chief sources of supply for hides are : the Argentine, Australia, and New Zealand, North America, East Indies, South Africa.

limestone : A much harder form of chalk (carbonate of lime) ; formed from the shells and skeleton remains of minute sea animals and hardened by great pressure. It splits into layers and weathers into oblong blocks.

Limestone is soluble in water containing carbon dioxide. Rain contains some carbon dioxide dissolved from the air ; hence the exposed surface of limestone is usually pitted with small holes. The water may sink through cracks and slowly dissolve passages and caves. The greatest caves are found in limestone ; underground rivers are common in limestone districts.

Numerous caves and underground streams occur in the Pennines and in the Cheddar district.

(See also : *Caves, Chalk, Oolite.*)

linen : A textile made from the fibres of the flax plant. The flax is cut, retted in pits of water, and the outer skin rubbed off, leaving the linen fibres.

Flax grows in damp, temperate climates—Northern Ireland, Belgium, and Russia. Before the war the greatest supplies came from Russia, but this supply has now almost ceased.

Linen is woven in many different forms : sailcloth, tarpaulins, and other heavy fabrics (made in Dundee and the surrounding region) ; damasks used for table linen, drills, diapers, and dimity for household use ; plain linens for shirts, collars, and sheets ; and lawns and cambric (Belfast and Northern Ireland) ; medium linens include crash and lawn and huckaback, used

for towels, which are made in most of the linen manufacturing districts.

Linen is made in the great manufacturing region of Belgium and North-east France (Ghent, Courtrai, Cambrai, Lille; cambric derives its name from Cambrai).

In Germany linen is manufactured at Bielefeld, Görlitz, Magdeburg, and Zittau.

liquorice: Black hardened juice obtained from the roots of the liquorice plant which belongs to the pea family. The roots themselves are also sold without the juice being extracted.

Stick liquorice is made chiefly along the coasts of the Mediterranean; the best comes from Calabria. There are liquorice factories in Mesopotamia. Liquorice is also grown round Pontefract, in Yorkshire, for the manufacture of pomfret cakes.

Llanos: Spanish word for plains. The name is applied in particular to the tropical grasslands (savannas) of Venezuela in South America.

loess: A friable sort of loam (clay, sand, and lime) of a brownish yellow colour; it is found chiefly in northern China, where it covers an area of about a quarter of a million square miles. The whole of this vast district is covered with loess, in some parts to a depth of 1,000 feet. The rivers cut down vertically through the loess; it forms vertical cliffs along the edges of the valleys. Most of the inhabitants live in caves cut out in the cliffs, the loess being porous and dry. It is also very fertile, and yields large crops without the application of manure.

Large quantities of loess have been carried down and spread over the Yellow Sea; this silt has made the sea shallow, and given its waters a yellowish appearance.

Two great difficulties of life in the loess region are: (1) The difficulty of transport, because the country is intersected with vertical valleys; (2) the loess is so porous that rain sinks through at once; no water lies on it. Irrigation is impossible, so that the crops depend entirely on the rainfall of the season. Years of great prosperity (rainy years) alternate with dry years of great scarcity.

Loess is found in other regions. The Black Earth of Russia consists of loess containing a large amount of humus (decayed vegetable matter).

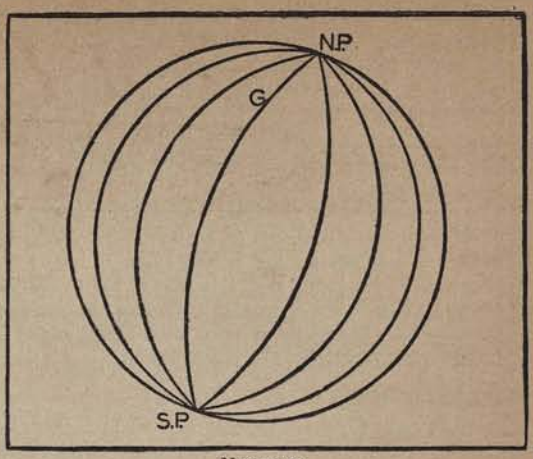
The formation of loess presents a difficulty—it is not stratified, except where it has been redeposited, as in the Yellow Sea. The following explanation has been suggested: sand and dust are blown in from deserts so as to cover a fertile region; the plants decay and fertilise the sand, so that new plants can grow above. This process continues until a considerable thickness of the deposit has been formed. The growing roots prevent any stratification.

(See also: *Black Earth*.)

longitude: Distance east or west of the meridian through Greenwich (i.e. the great circle passing through Greenwich and the North and South Poles). Measurements are made in degrees, eastward or westward. Each line of longitude is half of a great circle passing through the poles. 180° is either east or west; it is the other half of the Greenwich meridian.

Since the meridians of longitude are not parallel, the length of a degree of longitude varies. The variation is from 69·2 miles at the equator to nothing at the poles, where the meridians meet.

The length of a degree of longitude at any place may be found by multiplying 69·2 miles by the cosine of the latitude. The following table gives the length of a degree of longitude for each ten degrees of latitude:



MERIDIANS.

Latitude.	Equator = 0°	10°	20°	30°	40°	50°	60°	70°	80°	Poles 90°
Length of a degree of longitude in miles	69·2	68·1	65·0	60·0	53·1	44·6	34·7	23·7	12·5	0

There is no natural line, like the equator, from which to start measuring longitude. Any meridian would do. The meridian of Greenwich was chosen because the original observations were made at Greenwich, and because the other half of the Greenwich meridian passes through the centre of the Pacific and thus makes a convenient date line.

In order to find longitude at sea sailors carry accurate chronometers set to Greenwich time. The local noon is found by noting when the sun is highest in the sky. The longitude is found by comparing this time with Greenwich time. Thus if the local noon is found to be 10.30 a.m. by Greenwich time the local noon is 1½ hours slow on Greenwich. Hence the position is 15 × 1½° west of Greenwich, i.e. 22½° W. Longitude can also be found by observing the positions of stars given in the *Nautical Almanac*.

On land very accurate measurements of longitude can be made by finding local noon, and comparing this with noon at Greenwich as radiated by wireless. Wireless is also a great help to sailors; it gives Greenwich time with great accuracy.

maelstrom: A strong tidal current between two of the Lofoten Islands (Norway). It is sometimes very dangerous to shipping. The name is also used for strong whirlpools elsewhere.

magnetic poles: The earth acts as a magnet with the poles not far from the geographical poles. This is the reason why a compass sets north and south. A compass needle does not show the true north and south, since it points to the magnetic north. The difference between the line of the compass needle and the true north and south line is called the magnetic deviation. Tables have been prepared which give the deviation for various latitudes and longitudes so that allowance can be made for it and so that the compass can be used to find the true north.

A dip needle is a compass needle mounted so that it swings in a vertical plane. At one of the magnetic

poles it would stand on end, since the pole is immediately below. At other places there would be a greater or less dip downward from the horizontal—this angle of dip is called the magnetic dip. In general the angle of dip decreases from 90° at the magnetic poles to 0° near the equator. The actual line along which the dip is zero is called the magnetic equator.

The magnetic poles are found by noting where the dip needle stands vertically. The North Magnetic Pole was reached by Sir James Ross in 1831; its position (in Boothia Land, Canada) is 70° 5′ N., 96° 45′ W. The South Magnetic Pole was observed by Mawson and David (who were with Shackleton) in 1908. Its position is 72° 25′ S., 154° E.

maize : See *Cereals.*

Mammoth Cave : A vast limestone cave in Kentucky, U.S.A. The main cave is 300 feet wide at its widest part, and from 35 to 125 feet high; where this cave is highest there is an area of two acres, known as Chief City, which is covered by a lofty vault. From the main cave winding passages lead out to other caves and galleries; the total length of the passages is about 150 miles. Amongst the many interesting features of the caves are: a waterfall 250 feet high surrounded by draperies of stalactite; caves lined with crystals of every colour and shape; River Hall, where the waters collect and form several large lakes; Echo River, which flows through a passage famous for the long reverberations which follow any sound. Amongst animals found in the Mammoth Cave are blind wingless grasshoppers, blind colourless cravfish, and blind fish.

(See also: *Caves.*)

manganese : See *Metals.*

manila hemp : See *Hemp.*

map projection : See *Introduction.*

marble : See *Metamorphic Rocks.*

marsupials : The distinctive animals of Australia; they carry their young in pouches. With the exception of opossums living marsupials are unknown in other continents.

There are more than a hundred species. These include: the kangaroo, which lives on grassy plains; smaller kangaroos, called wallabys; the wombat, a burrowing animal like a small pig; the bandicoot, a sort of marsupial rat; the platypus or duck-bill, a marsupial mole with the bill of a duck; the native cat; the marsupial wolf of Tasmania (Tasmanian devil).

mercury : See *Metals.*

meridian : See *Great Circle, Longitude, Date Line.*

Meseta : The plateau of Central Spain, crossed by ranges of mountains (sierras—saw-toothed mountains). The climate is extreme—cold in winter, and hot and dry in summer. Parts of the plateau are barren. There are large numbers of sheep which are moved into the mountainous parts in the summer when the level lands are arid and scorched. In the southern part of the plateau the olive grows and the sub-tropical vegetation begins.

(See also: *Iberian Peninsula.*)

metals : The chief metals produced on a commercial scale are:

Aluminium is made by passing powerful electric currents through a solution of bauxite in fused cryolite (both bauxite and cryolite are compounds of aluminium). The production is only commercially possible where there is abundant and cheap electric power, that is, where there is ample water-power. The production of aluminium is carried on in a great many countries, the chief producing countries being Germany, U.S.A., Russia, France, Canada, Switzerland. On account of its lightness aluminium is much used for aircraft and motors. As the compounds are non-poisonous it is used for cooking utensils.

Chromium.—A white metal used largely as an alloy with steel; it gives great hardness, elasticity, and tenacity. It is used also as a plating, because it corrodes very slowly.

The ore, chrome iron ore, is composed of oxides of iron and chrome. About half the total world production comes from Southern Rhodesia (Selukwe). There are also deposits near Lydenburg, in the Transvaal; these deposits contain a low percentage of chromium.

Cobalt.—A white metal used chiefly in the production of pigments. The chief sources of supply are the Cobalt district (Ontario), Belgian Congo, Queensland.

Copper : Native copper is found on the shores of Lake Superior, sometimes in masses weighing hundreds of tons. The commonest ore of copper is copper pyrites, a compound of copper, iron, and sulphur. Crude copper is obtained from the ore by smelting. The crude copper is refined by heating it with charcoal and stirring with poles of young wood; copper is now largely refined by electrolysis. Copper contracts slightly when it solidifies, so that it cannot be cast. Brass, bronze, speculum metal, and gun-metal are alloys of copper which can be cast. The greatest production of copper is in the following countries: United States, Chile, Africa (South Africa and the Belgian Congo), Canada, Japan, Mexico, Spain (Rio Tinto), Peru.

Gold.—Gold is usually found as grains in sand (alluvial gold) or as veins in quartz; in the latter case the quartz is crushed before the gold can be extracted. In gold washing the sand or crushed ore is shaken up with water; the gold sinks to the bottom and is thus concentrated; it is then extracted by means of amalgamated copper plates—the mercury leaves the copper to form an amalgam with gold; the amalgam is then distilled, thus separating gold and mercury. Gold is also extracted by roasting the crushed ore and treating it with a solution of chlorine or bromine.

Gold is a soft metal; it is hardened for jewellery and coins by alloying it with silver or copper.

The total world production is about £125 million per year, reckoning at the gold standard rate of £4¼ per ounce. More than a third of the total comes from the Transvaal and over 50 per cent. from the British Empire (Canada 10 per cent. of the total, Australia 4 per cent., Southern Rhodesia 2–4 per cent.).

Other sources of gold are: Russia 17 per cent., the United States 11 per cent., Japan 3 per cent. In the United States the chief production is in Colorado. (See also: *Klondike, Rand.*)

Iridium.—Iridium is a white metal of the platinum group and often found associated with it; it is often used as an alloy with platinum. It is also used for the hard points of the gold nibs of fountain-pens.

Lead : The chief lead ores are galena and white-lead

ore (cerussite). Lead ore is widely distributed. In this country it is found in Derbyshire, Cumberland, and Flintshire. Other sources are: United States, Australia, Mexico, Canada, Germany.

Manganese.—A refractory metal used as an alloy with steel. The chief supplies of the ore come from Russia (the largest deposits are in the Republic of Georgia), India (Central Provinces), the Gold Coast, and South Africa.

Mercury (quicksilver) is usually found as cinnabar (sulphide of mercury); the metal is obtained by roasting the ore and cooling the gases which come off (mercury vapour and sulphur dioxide); the mercury condenses on the sides of a chamber to which it is admitted, the sulphur dioxide escapes. Cinnabar is found at Almaden (Spain), Idria (Austria), in Mexico, and California. Mercury is used chiefly for barometers and thermometers, for extracting gold, and for electrical work.

Nickel.—A white metal used for coins either alone or alloyed with copper or zinc; *German silver* is an alloy of nickel and copper. Nickel is also used as an alloy with iron. Silver-plated goods are often made of nickel alloys. Over eight-tenths of the world's output of nickel comes from Sudbury (Ontario); most of the remainder comes from New Caledonia.

Platinum.—Platinum is used for jewellery and for scientific apparatus. It is found with iron, copper, osmium, gold, and other metals; suitable acids are used to dissolve away the metals associated with the platinum and the platinum remains.

Platinum is found in the Ural Mountains; before the War 95 per cent. of the total world-supply came from this source. Platinum is now obtained from Canada, Russia, Colombia (S. America) and South Africa.

Radium.—The well-known radio-active metal which is obtained in minute quantities chiefly from the mineral pitchblende. By a long and tedious process a few grammes of barium are separated out from each ton of picthblende; with the barium the radium also is extracted. At present the chief world-supplies of pitchblende come from the Katanga district, in the Belgian Congo, Canada and Czechoslovakia.

Silver.—Silver is usually found with lead, copper, zinc, gold, or other metals; in a great many cases the amount of silver is so small that it is a by-product. Silver is used for coins and jewellery, and a considerable amount is used yearly for photographic and other chemical purposes. The chief sources of supply are: Mexico (about 37 per cent.), United States (Utah, Montana, Idaho, Colorado, 24 per cent.), Canada (Cobalt district, 9 per cent.), South America (Peru and Bolivia).

Tin: The chief ore is tinstone (tin oxide); the ore is smelted with anthracite and lime and refined by poling it with poles of green wood. Tinstone is found in Cornwall, but the chief supplies now come from: British Malaya, the Dutch East Indies, and Bolivia. Tinplate is iron sheets coated with tin; great quantities are produced in South Wales and the eastern United States.

Tungsten.—A refractory metal used as an alloy with iron, as filaments in electric lamps, and for numerous electrical purposes. The best-known ore is wolfram (iron manganese tungstates). The ores are found (usually in rocks of the granite group) in all the continents. The output from various sources changed rapidly as surface deposits were exhausted and deep mining became necessary. Burma and the Malay States were formerly the chief sources of supply; then China supplied two-thirds of the world production; the United States now produces large quantities.

Vanadium.—A very small quantity of this metal makes a great difference to the physical properties of iron with which it is alloyed; it combines with gases dissolved in the iron, and so hardens it and prevents rusting. Minas Ragra in Peru produces nearly nine-tenths of the world supply.

Zinc: The chief ores are blende (sulphide of zinc) and calamine (carbonate of zinc). The ores are roasted in air and then heated with powdered coal; zinc vapour comes off and is condensed. Impure zinc made in this way is called spelter. Zinc is used chiefly to coat iron (galvanised iron). Small quantities of zinc ore are found in England. Large quantities are found in the United States, Germany, Austria, Belgium, and Spain. The greatest production of zinc is in the United States, Belgium, Canada, Germany, and Poland.

(See also: *Iron.*)

metamorphic rocks: Rocks which have been changed by heat and pressure. Amongst the commonest of the metamorphic rocks are:

1. *Marble:* This is limestone changed to a hard crystalline rock, in which the original fossils may still be seen. Many marbles are coloured by mineral salts. Marble takes a high polish; it is used for statuary, as an ornamental building stone, and for table tops, etc.

Marble is widely distributed. The most famous quarries are those of Carrara, in Italy; these quarries supply most of the marble used by sculptors; the marble is snow-white in colour. There is not much marble fit for statuary in the British Isles, but tinted and black marbles occur. Some of the sources are: Derbyshire and Yorkshire, North Wales, Isle of Man, Kilkenny, and Galway (black marble).

2. *Slate:* Shale altered by great pressure; slate splits into thin layers, often at right angles to the original bedding. Slate is used for roofing because of the property of splitting into thin layers, and also because of its lightness and durability.

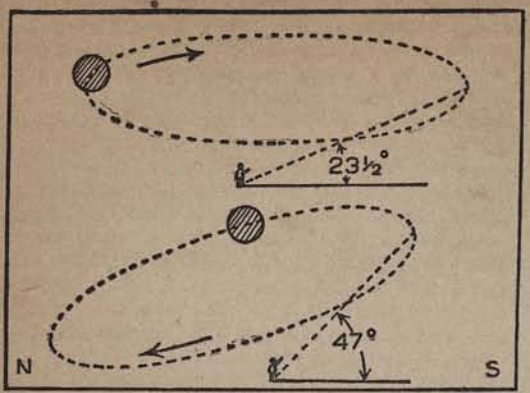
The supplies of slate come chiefly from North Wales (Llanberis, Penrhyn, Festiniog). Other sources are the Lake District (green slates), Cornwall and Devon, western Scotland.

3. *Quartzite:* Sandstone altered by being compressed and partly fused. A very hard rock which does not break into separate grains of sand.

4. *Gneiss:* Granite altered by extreme pressure. The minerals are squeezed out into thin layers. An exceedingly hard rock which forms bold cliffs and headlands.

mica: A mineral which splits into thin elastic sheets. It is much used in electrical work because of its high electrical resistance; the development of wireless has led to a great increase in the demand. The chief sources of supply are India (Deccan), United States (Appalachians), Canada, and Madagascar.

midnight sun: At the northern midsummer all places within the Arctic circle have the sun above the horizon, in the north, at midnight. At the actual pole the sun then describes a complete circle at a height of 23½° above the horizon. On the Arctic circle the sun rises to 47° in the south at noon and touches the northern horizon at midnight.



DAILY COURSE OF THE SUN AT MIDSUMMER: (1) AT THE NORTH POLE, (2) ON THE ARCTIC CIRCLE.

The number of days on which the midnight sun may be visible at various latitudes is shown in the following table:

	Days
Arctic circle (66½° N.)	several
70° N.	70
North Pole	189

A similar phenomenon occurs within the Antarctic circle, where the midnight sun is visible, on the southern horizon, during the southern summer.

(See also: *Antarctic Circle, Arctic Circle.*)

millet: See *Cereals.*

mineral springs: See *Spa, Springs.*

Minor States of Europe:

Andorra: Republic in the Pyrenees; area, 175 square miles; pop., 6,000.

Danzig: Free City on the Baltic; area of district, 726 square miles; pop., 400,000.

Liechtenstein: Principality on the Upper Rhine; area, 60 square miles; pop., 12,000

Luxemburg: Grand duchy between France, Belgium, and Germany; area, 1,000 square miles; pop., 300,000.

Monaco: Principality on the Riviera, with the Monte Carlo gaming house; area, 4 square miles; pop., 23,000.

Papal State: The Vatican; ruled by the Pope.

San Marino: Republic in the hills near Rimini (Italy); area, 38 square miles; pop., 13,000.

Mississippi: This great river drains almost the whole of the United States between the Rocky Mountains and the Alleghanies, an area of 1¼ million square miles. The main stream, the Missouri-Mississippi, has a length of 4,200 miles, so that it is the longest river in the world. Below the junction with the Ohio the Mississippi flows across an alluvial plain of great fertility which extends for about 20 miles on each side of the river. This plain produces wheat in the upper parts, cotton towards the middle, and rice, sugar, and oranges towards the mouth.

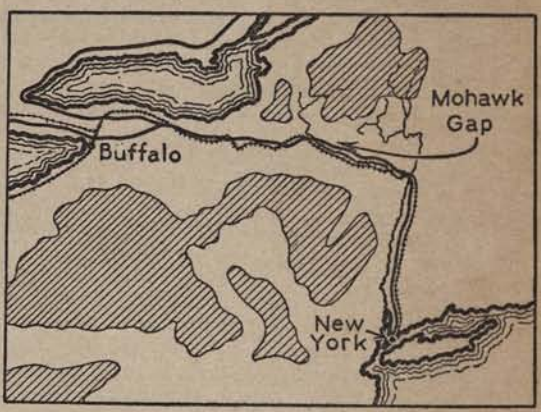
The fall of the river across the plain is very slight, with the result that the river winds across it in enormous loops. When the river cuts through the neck of a loop the part cut off is rapidly silted up at the ends and remains as a semicircular channel (an ox-bow). There are chains of large ox-bows along the course of the river.

The plain of the lower Mississippi is greatly subject to floods, especially in spring. Attempts have been made to check these by building embankments, but they are still a great danger along the whole lower course of the river, especially to the great city of New Orleans at the head of the delta.

The Mississippi brings down a great quantity of sediment, which has built up the delta and formed lagoons along the shore of the Gulf of Mexico.

THE MISSISSIPPI-MISSOURI BASIN.

mistral: See *Winds.*



THE MOHAWK GAP.

Mohawk Gap: A gap through the Appalachian Mountains cut by the Mohawk River, a tributary of the Hudson. This gap forms the best route through the Appalachians. Railways run north from New York, turn west along the Mohawk River, and on to Buffalo and the west.

It was this gap that gave New York its great importance as the chief American port, coupled with the wide, deep estuary of the Hudson.

monsoon: A wind which blows regularly at one season of the year. Monsoons are land and sea breezes on a large scale. During the summer a large land mass becomes highly heated, much more highly heated than neighbouring seas. The air over the land is hot and light; that over the sea is cooler and heavier. Hence there is a steady wind from the high-pressure area over the sea towards the low-pressure area over the land. In winter the conditions are reversed. Air over the land is cold and heavy; that over the sea is warmer and lighter. Hence there is a steady wind from the land towards the sea.

In India the hot season begins in February. By the end of May the interior has become highly heated, and winds blow in from the sea; these are the south-

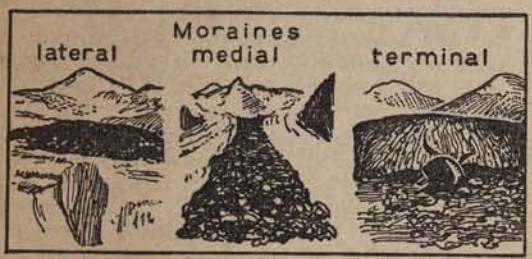
west monsoons, which bring rain from the sea. For two months there are heavy rains. By October the interior has cooled, and the wind changes from south-west to north-east.

In the south-east of Asia generally the winds are monsoonal. The monsoons of Australia are less regular, because Australia is a lesser land mass than Asia. Those of the East Indies are unusually monsoonal in character.

In West Africa the south-east trades are diverted towards the land by the highly heated interior region. The trades become a south-west monsoon, which brings heavy rainfall to the coast of West Africa. This rainfall accounts for the tropical forest in this region.

Other parts of the world have less pronounced monsoons. Thus, western Europe has westerly winds more regularly in summer than at other seasons, and easterly and north-easterly winds in spring and autumn.

(See also: *Land and Sea Breezes.*)



moraines: Materials from the sides of glacier valleys are continually being broken off by the effects of rain and frost. They fall on the glacier and form lines of detritus along the sides of the glacier. These lines of detritus are called *lateral* or side *moraines.*

When two glaciers meet the inner moraines join and form a *medial* moraine which runs down the middle of the glacier. There may be a number of medial moraines each showing that a glacier has come in from one side or the other.

Finally the glacier flows down to a place below the snowline, where it melts. All the material brought down in both lateral and medial moraines is deposited where the glacier melts. The mass of detritus thus formed is called a *terminal* moraine. There is a terminal moraine at the end of every glacier which melts before reaching the sea. Glaciers which reach the sea break off as icebergs; the moraine matter is dropped in the sea when the glaciers melt.

(See also: *Glacial Deposits, Ice Age.*)

mountain pass: A comparatively low route across a mountain range. Passes usually occur where a river valley on one side has cut back so as to meet a valley on the other side. The route is up the valley on one side, across the pass, and down the valley on the other side.

Roads and railways make use of passes. As a rule the road runs through the pass. It is often found convenient to carry the railway, by means of a tunnel, under the pass. This is especially the case where the route is across a very high range. The tunnel avoids the steepest part at the head of the valleys and also the danger that the pass may be blocked with snow in winter.

(See also: *Alps.*)

mountains: Masses of high land. The name is usually applied where the land forms peaks rising to a height of at least several thousand feet, especially where the peaks are rugged. In ranges of very high mountains lower ranges along the base are often called foothills, even though in other regions they would be considered as mountains.

The mountain cores of the continents run north and south, except in the case of Eurasia, where the mountain core runs east and west.

Mountains of recent formation usually consist largely of soft rocks. In older mountains the softer parts have been eroded and the hardest parts remain. Thus, amongst the English mountains, the newer hills in the east consist largely of chalk and clay which form rounded downs. In Wales the mountains are much older. They consist of older and harder rocks which form rugged mountains.

Mountains are classified as fold mountains (ranges formed by the folding of strata), block mountains (formed by the breaking away of masses, leaving a central mountain block), mountains of denudation (formed by the erosion of surrounding rocks, leaving a mountain peak), mountains of accumulation (volcanoes, formed of matter erupted from the earth).

Mountain peaks are: ridges (with a long edge), conical peaks, table-topped mountains, mountains with rounded summits.

(See also: *Block Mountains, Fold Mountains, Hills, Watershed*; also mountain chains and masses—*Alps, Andes, Himalayas, Pamirs, Rocky Mountains.*)

mud volcanoes: Small volcanic cones which eject mud, mixtures of water and volcanic dust. These cones are usually small, not more than 20 feet high; they are found in Iceland, Sicily, and other volcanic districts.

The name is also applied to eruptions of mud due to the escape of gases from petroleum and having nothing to do with volcanic activity. Mud volcanoes of this kind are found in the Crimea, in the oil-bearing region of the Caspian, and in Burma.

(See also: *Geyser, Solfatara.*)

Murray River: The largest river of Australia; length, 1,200 miles (or with the Darling, 2,310 miles). It rises in the Great Dividing Range and flows into Lake Alexandrina in South Australia, whence it enters the sea by a narrow opening. The Murray and its tributaries drain the greater part of New South Wales and parts of Queensland and Victoria. Like other Australian rivers which flow towards the interior, it loses much water in its lower course; there is, however, a flow throughout the year. There are extensive irrigated regions in the lower course of the Murray and along its tributary, the Murrumbidgee. Much of this region is used for fruit farms.

natural gas: Natural gas occurs below ground in a porous rock called "gas sand"; it is often found in cavities associated with oil and water. Probably the gas was formed by the natural distillation of coal or of animal remains in bygone ages. Natural gas is widely spread over the United States and Central Canada. It is estimated that there are 16 million domestic users of natural gas in the United States. By-products of natural gas are petrol, chloroform, formaldehyde, helium, lamp-black (used for printers' ink). Helium is one of the gases of the air; it may be important for airships because it is very light and does not burn.

(See also: *Petroleum.*)

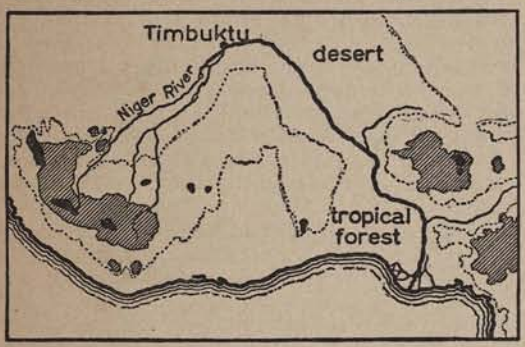
Niagara : See *St. Lawrence, Waterfalls.*

nickel : See *Metals.*

Niger : The chief river of West Africa ; length, 2,600 miles ; area of basin, nearly 600,000 square miles. The Niger rises within 150 miles of the coast and flows inland. The mountainous part of the course ends at Kulikora ; below this town there is a navigable stretch of 1,000 miles.

A great part of the middle Niger contains a series of lakes and divided channels ; these cease at Timbuktu. In its most northerly part the Niger is a desert river ; in some places it is lined with sand dunes on both sides. About 400 miles below Timbuktu navigation is interrupted by reefs and rapids which stretch for hundreds of miles.

The lower part of the Niger is through tropical forest. The delta is about 120 miles wide and stretches 150 miles inland. It is a flat region of mangrove swamps with a network of streams crossing it. A great part of the lower course is flooded every year by the Niger and its chief tributary, the Benue.



THE NIGER BASIN.

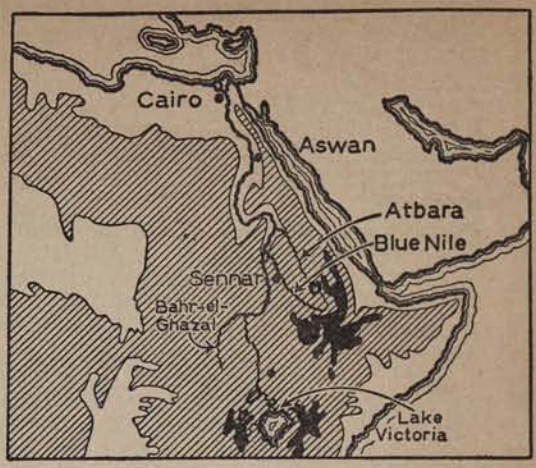
Nile : One of the longest and most famous rivers of the world. Its length is about 3,600 miles, and for a great part of its course it is a true desert river receiving no tributaries ; only the immense volume of water it receives from equatorial regions enables it to reach the sea.

The Nile rises in Lake Victoria, one of the greatest lakes in the world, and crossed by the equator. The river flows over two falls (Ripon and Murchison) to Lake Albert, which is in the Rift Valley. In the southern part of the Sudan the Nile flows across the *sudd* region. The rivers across this region are choked with masses of decaying vegetation called sudd ; the sudd is so densely consolidated that in some places small fishing villages are built on it. The sudd is cut so as to keep open a channel for navigation.

The Bahr-el-Ghazal brings in the drainage of much of the sudd region. At Khartoum the Blue Nile flows in from Lake Tsana in Abyssinia and lower down the Atbara from Abyssinia joins the Nile.

From Khartoum downward the Nile is a desert river. The valley is never more than 30 miles wide, and it is hemmed in on both sides by the desert. Between Khartoum and Aswan are the famous Nile cataracts, six series of rapids which obstruct the river. At Cairo the great and fertile delta begins.

Egypt has been called " the gift of the Nile." The prosperity of Egypt depends on the floods brought down from Abyssinia by the Blue Nile and the Atbara. The Nile rises to a maximum height in September and October ; the rise is usually about



THE NILE BASIN.

24 feet ; if it is less there is distress throughout Egypt ; if the rise is higher than usual damage may be done to canals and embankments.

There are three great dams across the Nile. The lowest is the barrage below Cairo, which regulates the flow in the delta. The dam at Aswan holds back the water and lets it flow more evenly throughout the season. A dam higher up, at Senaar, impounds water to irrigate the cotton lands of the Sudan.

Formerly Egypt was irrigated by the flood waters spreading over the land, watering the land and spreading layers of silt which fertilised it. The lower basin of the Nile is now irrigated by means of a system of canals which carry water and enable crops to be grown at all seasons.

nitrates : Used in the production of explosives and also as fertilisers. Great quantities of nitrates are now produced from the nitrogen of the air.

Large deposits of nitrate of soda occur near the rainless coast of Chile and Peru. These deposits have remained because of the rainlessness ; even a slight rainfall would dissolve away the nitrate.

A band of nitrate deposits, about 3 miles wide, extends through Chile for a distance of 250 miles. The nitrate region produces nothing but the mineral. Food, water, clothing, and other things needed by the population of the mining region have all to be imported.

The nitrate is exported chiefly from Iquique.

(See also : *Atmosphere.*)

nomads : Peoples not settled in one spot, but moving from place to place. This way of life is usually dictated by shortage of water and consequent shortage of food. As a rule the nomadic peoples are confined to areas where the rainfall is insufficient for agriculture, but enough to produce grass. Hence the nomads are pastoral peoples. When water and grass are exhausted in one place they move on to another with their flocks and herds. Quarrels often arise over the possession of wells and the surrounding pastures ; so that nomads have earned a reputation for being quarrelsome.

Nomadic peoples are found in the steppe regions, where water is scanty, that is, towards the middle of continents and especially to the east of the sub-tropical regions. Nomads also exist in semi-desert and even desert conditions.

The dwellings of nomads are suited to their condition. Very often they are tents which can readily be taken

TENT OF A NOMAD ARAB.

down and moved to another region. Sometimes they are huts made of the branches of trees.

Personal possessions are almost nil. They consist of cooking utensils and similar necessaries, and do not include the superfluities of more settled peoples. Most of the nomadic peoples have never been conquered. In case of attack they simply move off to another spot.

In addition to the true nomads of steppe and semi-desert lands, there are peoples who are half nomads. The Eskimos are amongst these semi-nomads. They move from place to place in order to make as much as they can of the scanty supplies of food obtained from the sea.

(See also: *Bedouins.*)

northers: See *Winds.*

oasis: A fertile part of a desert. The hot deserts are barren merely from lack of moisture; any parts where rain falls or where fresh water is otherwise supplied, produce luxuriant vegetation. In the Sahara, for example, there are areas between the mountains where water collects. There are other areas where water can be reached by digging wells. In such regions oases occur; the land is highly cultivated and produces dense groves of date palms, tropical fruits, and millet.

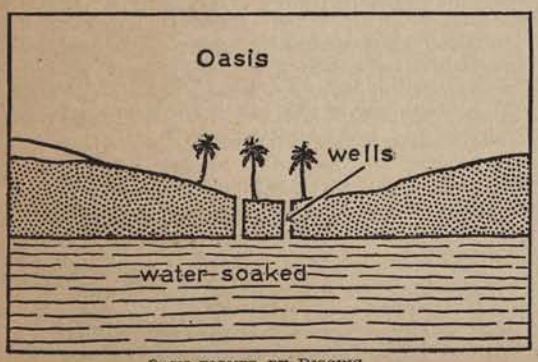
Some of the oases of the Sahara are quite small, mere stopping-places where caravans can obtain water and some food. Other oases are of great extent, with towns and villages, large groves of date palms, and fields of millet and maize. The great oasis of Air or Azben is situated on highlands in the centre of the Sahara.

(See also: *Deserts.*)

oats: See *Cereals.*

ocean currents: Streams of water in the sea. They may be due to several causes:

1. Convection currents: The surface water of the equatorial seas becomes highly heated, whereas polar water is colder and heavier. There is an interchange of water between the two, warm water pouring north and south (with a trend towards the east) and cold water pouring in below.
2. In polar regions surface water is often cold, but comparatively light owing to the melting of ice, which reduces salinity. Hence surface currents may be cold.
3. Currents usually flow in the direction of the prevailing winds. The equatorial currents flow in the direction of the trade winds; the Atlantic drift is in the direction of the prevailing westerlies. Some of the currents in the Indian Ocean change their directions with the seasonal changes in the winds; in the Southern Ocean there is an easterly current round the earth in the direction of the west winds, which are here strong and regular.



OASIS FORMED BY DIGGING.

In the *Atlantic* there are two warm equatorial currents—north and south of the equator. The northern moves westward to the Caribbean Sea and the Gulf of Mexico. It issues from the Gulf of Mexico as the Gulf Stream; this flows north along the coast of the United States; part turns south and rejoins the north equatorial current; part joins the north-east Atlantic drift towards Norway and Iceland. The south equatorial current divides in two where it meets the great angle of South America; part reinforces the current into the Caribbean Sea; the remainder forms the Brazilian Current along the east coast of South America. Cold Arctic currents flow south: (1) along the coast of Labrador to Newfoundland, where it meets the Gulf Stream; (2) the Greenland Current along the east coast of Greenland. The cold Antarctic Current moves eastward across the south Atlantic, turns north, and flows along the west coast of Africa (the Benguella Current), and finally merges in the south equatorial current.

The *Pacific* circulation is similar. A north equatorial current flows west, and is turned north along the east coast of Asia (Japan Current); it swirls round and joins a small cold current through the Bering Strait; part flows along the coast of California and America, and part back to the equatorial current. The south equatorial current forms a similar whirl in the south Pacific. Where it turns south along Australia it is called the New South Wales Current; the cold current running north along the west coast of South America is called the Peruvian Current. Between the two westward equatorial currents there is an eastward counter-current.

In the *Indian Ocean* the south equatorial current flows westward. Near Madagascar it divides, forming northward and southward whirls.

In the *Southern Ocean* there is an eastward current which circles the earth and sends branches along the western coasts of the continents.

(See also: *Gulf Stream.*)

Oceania: A name for the islands of the Pacific; sometimes Australia and the surrounding islands are included.

oceanic climate: See *Continental Climate.*

oil: See *Petroleum, Power—Sources of, Vegetable Oils.*

olive: See *Alps, Evergreens, Vegetable Oils.*

oolite: A form of limestone which is made up of small grains looking rather like the hard roe of fishes (whence the name—"oon" = an egg). The grains are sand grains coated with limestone.

There is a line of oolite hills stretching across England from the west of Dorset, through the Cotswolds, to the North Yorkshire Moors. These hills have escarpments facing west.

THE ORANGE RIVER.

opium : See *Drugs*.

Orange River : The chief river of South Africa ; length, 1,100 miles. The Orange River drains the greater part of South Africa ; its chief tributary, the Vaal, forms the boundary between the Transvaal and the Orange Free State. Below the junction with the Vaal the Orange River loses more water than it gains from tributaries. The river is therefore of no use for navigation ; the mouth is closed by a bar for nine months of the year. The middle course of the river is being increasingly used for irrigation.

overland route : The route from England to the East which includes an overland portion—Dover to Calais, then Paris, Lyons, and Marseilles ; this route saves the long voyage by way of Gibraltar, and reduces the journey to the East by nearly a week ; it is the mail route. Alternative routes are overland to Genoa, Naples, or Brindisi.

ox-bow : See *River Loops, Mississippi*.

Pacific Ocean : The Pacific Ocean lies between America in the east and Asia and Australia in the west. In the north it is almost completely landlocked, the Bering Strait being only 36 miles wide. The southern limits have no natural boundary: the Pacific is sometimes assumed to end at 40° S. and sometimes taken to include the Southern Ocean as far south as the Antarctic circle.

The area as far south as 40° S. is about 50 million square miles ; to 66½° S. the area is over 60 million square miles.

The Pacific is notable for the large number of inland seas, bounded by island strings along the west. These seas are, from north to south, the Bering Sea, Sea of Okhotsk, Sea of Japan, Yellow Sea, East China Sea, South China Sea, and the seas of the East Indies—Sulu Sea, Celébes Sea, Java Sea, Banda Sea, Arafura Sea. The American coast is regular except for the fiords of British Columbia and southern Chile ; the coast of Australia also is regular.

DEEPS AND SHALLOWS OF THE PACIFIC ; THE PART WITH MANY ISLANDS IS CROSS-HATCHED.

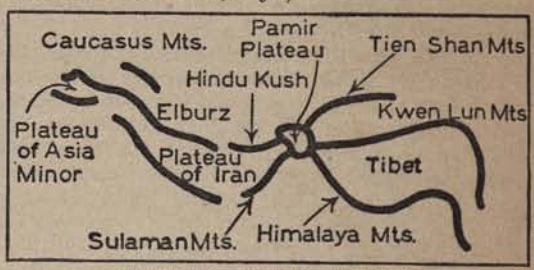
The eastern Pacific is uniformly deep up to a short distance from America, except for a ridge which runs from Panama south-westwards. This part of the Pacific has few islands ; the most important group is the Galapagos Islands.

The western Pacific has a wide shelf extending from the Malay Peninsula south-eastward round Australia, with a branch which extends past New Zealand. It is on this shelf that the East Indies, Australia, and New Zealand stand. The deepest large areas are east of New Zealand and east of Japan. Over a great part of the western Pacific there are volcanic ridges and peaks, many rising above the surface and others coming close to the surface and crowned with coral.

(See also : *Ocean Currents*.)

palms : Typical trees of the tropics. They usually grow upward without branching, and the stems do not increase in girth with age. The leaves usually grow in large tufts at the top. Amongst the most valuable palms are : coco-nut, date, sago, oil palm (West Africa ; the tree from the fruit of which palm oil is obtained).

(See also : *Coco-nut, Sago*.)



THE PAMIRS AND THEIR EXTENSIONS.

Pamirs : The Pamir Plateau, "the roof of the world," stands to the north of Kashmir ; from it radiate the great mountain systems of Asia—the Tien Shan, the Kwen Lun, the Karakorams, the Himalayas, and the Hindu Kush. The plateau consists of glacial valleys separated from each other by ridges, and leading up to the central axis of the Sarikol range, which contains Muztah Ata, 25,000 feet high and the highest mountain north of the Himalayas. The whole region of the Pamirs is desolate ; the valleys are covered with grass and strewn with boulders. The mountains between them are snow-capped ; the Muztagh range contains the greatest system of glaciers in the world.

pampas : Plains extending over an area of about a quarter of a million miles in the Argentine ; they extend from the Andes to the Atlantic coast, and are almost level.

In the east the pampas are almost entirely treeless. Large stretches of the country are covered with pampas grass, a very tall grass with feathery spikes (familiar in English gardens). This region is well watered. Cattle and horses were introduced by Europeans, and later sheep-rearing was successfully attempted. Enormous herds of cattle were kept on the open pampas, tended by cowboys (called *gauchos*), who were famous for their horsemanship. Recently cereals and other crops have been raised in the east ; cattle-rearing has been driven farther west.

West of the fertile eastern pampas is a more arid

region which extends to the Andes. Here there are sandy deserts and salt lakes and streams. Large areas are covered with stunted trees and bushes, the typical vegetation of semi-desert regions.

The southern pampas are subject to cold south-west winds with rain and thunder, which arise suddenly and die down quickly. These winds are called pamperos.

The name " pampas " is applied to similar regions in other parts of South America, the largest being in Bolivia and Peru.

Great quantities of chilled meat are exported from the pampas, especially to this country. The Bovril herds are on the pampas.

Panama Canal : See *Ship Canals.*

parallels of latitude : See *Great Circle, Latitude.*

parched rivers : Rivers which rise in mountains where the rainfall is considerable sometimes flow across arid regions, where they lose much water by evaporation ; they may also lose water by flowing over porous soil. In some cases the river fades away altogether—a parched river. In rainy seasons such a river flows farther than usual along its bed ; in dry seasons a great extent of the bed is left dry, or possibly with a few marshy spots. In these dry river-beds it is often possible to reach water by digging.

The Nile, the Murray, and the Orange River are examples of rivers which reach the sea although losing water over a great part of their courses. Rivers which end without reaching the sea are to be found in the desert regions of Australia, Central Asia, the Rocky Mountains, and similar regions.

The wadis of the Sahara are dry river-beds which only run during the infrequent rains.

pearl fishing : Pearls are produced when oysters are attacked by boring insects, or when some irritating substance enters them ; the irritant is covered with layer after layer of the pearl substance.

Pearl oysters are obtained by diving. The diver goes down at the end of a rope with a bag for the oysters and a heavy stone to carry him down quickly. A minute later he is hauled up—first the stone, then the bag of oysters, then the diver himself.

Pearl fishing is carried on in tropical seas : in the Gulf of Manaar, Ceylon ; the Persian Gulf ; the Sulu Islands, and other parts of the East Indies ; the north-west coast of Australia ; many islands in the Pacific ; the Gulf of California, and parts of the West Indies.

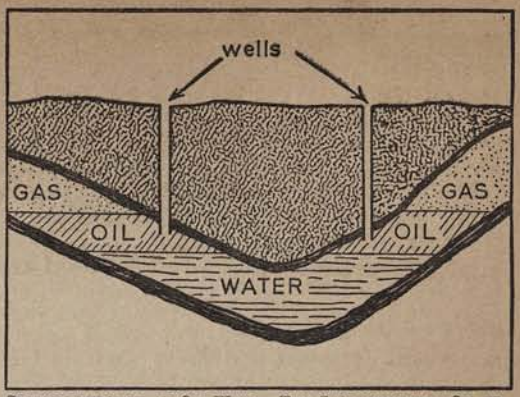
peneplain : See *Plains.*

peninsula : A piece of land almost surrounded by water. Peninsulas are very unevenly distributed ; Europe is a continent of peninsulas, whereas Africa has no large peninsulas. Most of the great peninsulas point in a southerly direction. The only important exceptions are Jutland, the peninsula of Cotentin in the north of France, Yucatan in Central America, York Peninsula in Queensland, and some of the Arctic peninsulas. Africa and the Americas may be regarded as peninsular continents.

(See also : *Isthmus, Ship Canals.*)

perched blocks : See *Ice Age.*

petroleum : The oil which is found in the earth's crust probably originated from buried animal and vegetable matter in clays and shales. The oil accumulated in folds of rock, which formed reservoirs for it.



SECTION THROUGH AN OIL WELL. THE GAS DRIVES THE OIL UP.

In some cases a well is sunk and the oil gushes out in the same way as water from an artesian well. In other cases the oil has to be pumped out. In oil-fields which have been worked for some time it is necessary to pump out the oil.

Oilfields are spread over a great part of the earth's crust. The most productive fields are : the eastern and middle states of the United States, Mexico, Venezuela, the Caucasus and region round the Caspian, Rumania, Persia, the Dutch East Indies. The United States produce nearly three-quarters of the total world output.

Shale oil : Many shales contain oil which has not accumulated in reservoirs. Oil is obtained from such shales by slow distillation. The distillation of oil shale has been carried on in Midlothian, Scotland, since 1862. The extraction of oil from shale will probably increase as the amount of liquid petroleum decreases.

(See also : *Power—Sources of.*)

phosphates : Phosphates are used as fertilisers, for medicinal purposes (as hypophosphites), and for the manufacture of phosphorus. The chief mineral source is apatite (calcium phosphate). Nearly two-thirds of world-resources in phosphates are in the United States.

pine forests : A great belt of pine forests encircles the earth, south of the tundras and north of the deciduous forests and prairie regions—from Scandinavia, across Russia, Siberia, and Canada. The pine is capable of resisting both drought and cold ; the narrow leaves (needles) help to conserve moisture. Hence it flourishes in regions where other trees would die out. Pines are the last great trees before the tundras and before the snowfields at the tops of high mountains.

The pine-forest belt is the home of the fur-bearing animals (wolf, bear, fox, marten, lynx, wolverine, etc.).

The pine is valuable for many purposes ; the straight trunks make it suitable for scaffolding, ships' masts, etc. ; in northern countries the trunks and timber are used in building ; turpentine, resin, and Stockholm tar are other products of pine forests ; branches and small trees are used for making paper-pulp and also as wood for matches.

plains : Stretches of level or almost level land. Plains are classified as plains of denudation and plains of deposition.

Every river basin is being slowly worn down over the whole of its extent. The process may continue until the general level is low and the land almost flat—a

peneplain (almost a plain). Still further (and extremely slow) denudation would reduce the peneplain to a true plain of denudation.

Many large plains are produced by deposition. Matter is carried down and deposited at the bottom of a river valley, forming a level valley plain. Level plains of this kind are often found in river valleys, with a steep slope on each side. Lower down the river, where the valley widens and flattens out, the plain may be of considerable extent. As the material is alluvial such plains are fertile. The Vale of York is a wide and fertile alluvial plain of this kind.

Note that both denudation and deposition are assisting to produce a level plain. The highest parts are being worn down and the lowest parts are being filled with alluvium.

Extensive delta plains have been formed round the mouths of rivers which bring down much silt. Holland is largely a delta plain formed by the Rhine and other rivers; there is a large delta plain about the lower course of the Hwang-ho in China.

Coastal plains are being formed in many places of matter brought down by rivers or eroded in other places by the sea. The Po and Adige are gradually silting up the head of the Adriatic; large mud flats are being formed round the Gulf of Mexico by the Mississippi—in the earler stages lagoons are formed. In this country sandbanks and shoals are being formed of matter carried by currents and deposited in still water; parts of the Wash are being filled up and the land is extending at Dungeness.

The processes of plain formation also proceed below sea-level. The highest parts are worn away by currents; the matter eroded, and the silt of rivers is deposited in hollows between the higher parts. In this way an extensive stretch of very level sea-floor may be produced. A slight elevation would bring this submarine plain above sea-level as a large and level plain.

Extremely level plains of small extent are being formed by the filling up of lakes with silt brought down by rivers. Level stretches of land are often found at the heads of lakes, where rivers flow in.

The greatest plains are:

Europe: the great Northern Plain, stretching across Russia, the Baltic countries, northern Germany, Denmark, Holland, Belgium, northern France, the east of England; the Plain of Hungary—plain of the Danube and Theiss.

Asia: Plains of Siberia, from the central mountains to the Arctic; Plain of Turkistan, east of the Caspian; the delta plain of China; the valley plains of the Indus and Ganges; Mesopotamia.

Australia: The Lake Eyre basin, stretching into New South Wales and Victoria.

North America: Hudson Bay region; Prairies; Atlantic Plain (eastern U.S.A.); Gulf Plain (southern U.S.A.).

South America: Llanos of the north; selvas of the Amazon; pampas.

planet: See *Earth as a Planet.*

plateau drainage: Plateaux are usually surrounded by rims of hills or mountains, so that the form of drainage associated with ranges of mountains is impossible. The following are some interesting points connected with plateau drainage:

1. Marshes are common on the flat lands of low plateaux. High plateaux are usually too dry for this.

PLATEAU DRAINAGE. A—INLAND DRAINAGE. B—OUTWARD DRAINAGE.

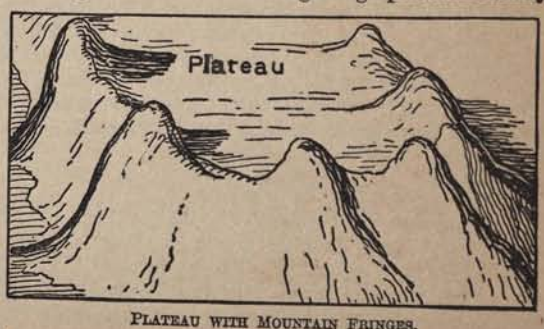
2. Plateau rivers often flow round a great part of the plateau before reaching a breach in the mountainous rim. Notable cases are the Congo and the Niger.
3. Cases of inland drainage are often found on high plateaux. Examples of this are: The Tarim in Central Asia, which ends in Lob Nor; the Lake Aral and Lake Balkash systems, also in Central Asia; Lake Ngami in southern Africa; Lake Chad in Central Africa; Great Salt Lake in the Rockies; Lake Titicaca in the Andes.
4. Many plateaux are drained by rivers which have cut back and captured plateau streams. This probably accounts for the drainage of Tibet, the Deccan, many parts of the Andes plateaux, and parts of the African plateaux.
5. The descent to the sea from high plateaux is often very steep; rivers descend by rapids and cataracts, and are of little use for navigation.

plateaux or tablelands: Elevated masses of land, preserving some approach to general flatness. Plateaux are usually fringed with mountains; this suggests upward pressure over the whole area and greater uplift along lines of weakness where the plateau has broken away from neighbouring plains.

In early stages a plateau may have inland drainage. As erosion proceeds rivers on steep outer slopes with heavy rainfall may cut back through the fringing ranges and begin the outward drainage of the plateau.

As erosion proceeds farther the plateau may be cut up or dissected into separate peaks and ridges with river valleys between.

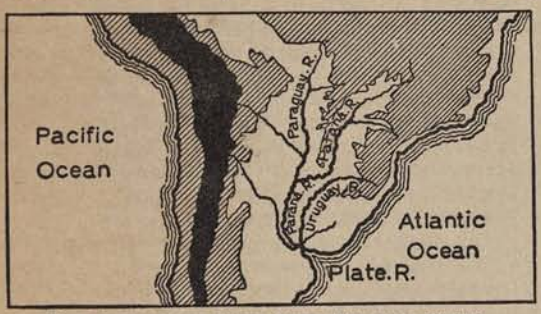
Owing to the mountain fringes high plateaux usually



PLATEAU WITH MOUNTAIN FRINGES.

have deficient rainfall (the winds lose most of their moisture in crossing the mountains); thus, the excessive rainfall of the southern slopes of the Himalayas is succeeded by low rainfall on the Tibetan Plateau. For this reason vegetation is scanty on high plateaux. On low plateaux there may be ample rainfall; the lack of drainage may lead to the formation of swamps.
(See also: *Deccan, Plateau Drainage.*)

Plate River: A funnel-shaped estuary, 170 miles long, on the east coast of South America. It is 25 miles wide at the head and widens to nearly 140 miles at the mouth. The estuary is shallow, and there are many sandbanks. Two great rivers flow into the Plate River—the Uruguay (1,000 miles long) and the Paraná (2,200 miles long).
The *Uruguay* rises in the Brazilian Serra do Mar, close to the coast, and flows inland. The lower river is navigable, but the upper part is much obstructed by rapids.
The *Paraná* drains a large area of southern Brazil, and receives many tributaries from the coast ranges. The upper course has many rapids and cataracts; in one place it has cut a deep gorge, 2 miles long, through which it rushes in many rapids and falls. Near the junction with the Paraguay there is a large triangular piece of land which is low and often flooded. Below the junction the Paraná is from 1 to



THE BASIN OF THE PLATE RIVER (RIO DE LA PLATA).

3 miles wide at low water; during floods it forms a great lake up to 30 miles in width. There is a delta where the Paraná runs into the Plate River.
The Plate River itself has the ports of Montevideo and Buenos Aires.

platinum: See *Metals.*

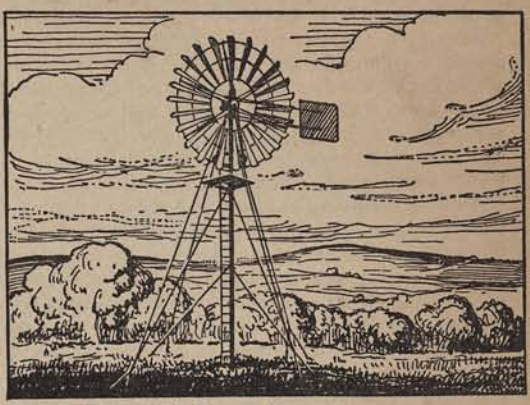
plutonic rocks: See *Igneous Rocks.*

polar circles: See *Antarctic Circle, Arctic Circle.*

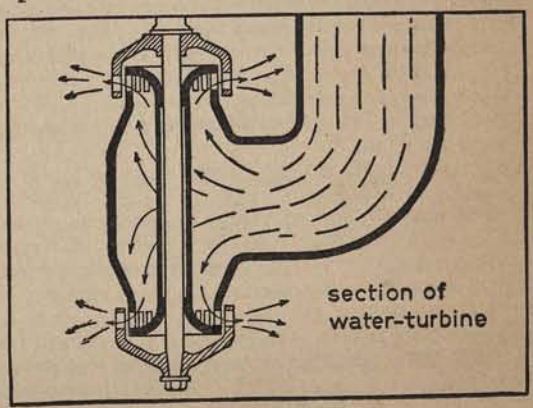
Polish Corridor: A neck of land, about 20 miles wide, between Pomerania and the Free City of Danzig. This land was given to Poland under the Treaty of Versailles in order that Poland might have an opening to the sea. The Poles are developing Gdynia, on the Gulf of Danzig, into a port. The Polish Corridor cuts off East Prussia from direct land communication with the rest of Germany.
(See also *Introduction.*)

Potteries: A region in North Staffordshire which has long been noted for the production of pottery. The industry at first depended on local clay, but fine china clay (kaolin) is now brought from Devon and Cornwall. The finest porcelain made is known as Wedgwood ware, after Josiah Wedgwood, who established the industry at the end of the eighteenth century.
The industry is centred chiefly in "the Five Towns" (Hanley, Burslem, Longton, Fenton, Turnstall), now combined with Stoke in the borough of Stoke-on-Trent.
(See also: *Clay.*)

power, sources of: Sources of power are important geographically because they very often determine the positions of towns and large centres of population. The prime sources are:


A MODERN WINDMILL.

1. *Manual labour:* Only used now for small operations, especially in civilised countries. Minor work on farms and in gardening is still done by manual labour. Where large supplies of cheap native labour are available costs of production are kept down, and it is profitable to employ this labour, e.g. in cotton picking, tea picking, the work in gold and diamond mines. Even on farms much of the work is now done by machinery; the use of electrical farming machines is increasing.
2. *Wind power:* Used to drive windmills. The old windmills had four sails set at right angles. Modern windmills have a large number of blades set at an angle. The wheel is turned and works an axle. The windmill works a dynamo which supplies power. Windmills are of most service in flat countries where the winds are regular. They are still used in Holland as a cheap means of raising water from low-lying ground to the canals which carry it off to the sea.
3. *Water-power:* The force of running water has long been used to drive heavy machinery, e.g. in flour-mills. Two forms of water-wheel are used: (1) Overshot wheel, with buckets arranged round the rim; water pours on the buckets at the front of the wheel and causes it to rotate; (2) Undershot wheel, with paddles round the rim; water rushes through



below, pushes on the paddles, and drives the wheel round.

Water-turbines are the modern form of water-wheel. Blades are set at an angle round a horizontal wheel; the wheel is arranged to rotate in a wide tube. Water falls on the wheel from above and causes it to rotate rapidly. The rotating axle is used to drive dynamos which supply power.

Wherever there are waterfalls some of the water can be diverted into tubes, so that it falls on turbine wheels from a height. This form of power has been greatly developed in countries with many waterfalls. It has led to the shifting of industries to the neighbourhood of waterfalls because of the cheapness of water-power. Examples of this development are: Turbines have been installed on both sides of the Niagara Falls; along the Fall Line in the eastern United States a line of towns has grown up close to the falls; chemical industries are growing up in Norway; these use power supplied by the numerous waterfalls; France, Italy, Switzerland, Sweden, and Spain also use much water-power. The available water-power in Great Britain is small, and this country comes low on the list of those which use water-power.

The cheapness of water-power has made possible the commercial production of many substances—aluminium, carborundum, chromium, are examples. It is being increasingly used for the production of these substances, and other substances whose production requires powerful electric currents. Electricity supplied by water-power is being used largely on farms, especially in the United States and Sweden. Many railway systems have been electrified by means of water-power; some of the French railways, for example, draw power from the Pyrenees, and the Swiss railways use power from the numerous Alpine falls.

South America has great resources of water-power; only about 1 per cent. of this is now being used.

Suggestions have been made for harnessing the tides, especially in estuaries where there is a considerable range between high tide and low tide. The method proposed is to build a dam across the estuary to impound the tidal water at high tide. When the tide falls the impounded water would be used to turn turbines. A difficulty in the way is the short fraction of the day when the tide is sufficiently low for the impounded water to be used. A scheme was worked out for the Severn estuary, but no work has been done on it.

4. *Coal:* Power obtained by burning coal is used: (*a*) In steam-engines where a piston rod is driven to and fro by admitting steam first at one side and then at the other. (*b*) In steam turbines. The turbine consists of an enclosed wheel with rings of blades set at an angle round it. Jets of steam are directed on the blades and cause them to rotate.

Steam-engines (including steam turbines) may turn machines directly, or they may be used to run dynamos which supply power in the form of electric currents.

Until the recent development of water-power coal held easily the first place as a source of power. Though it is still first, it is a wasting source of power and comparatively expensive.

5. *Oil:* The most recently developed prime source of power. Oil is used as an explosive mixture with air in internal-combustion engines, the small and powerful engines that have made motor-cars and aeroplanes possible. Oil is also used as a fuel for steam-engines; the oil is allowed to drip on coke; it burns and supplies heat for boilers; it is used in this way for marine engines.

6. *Interior heat of the earth:* in volcanic regions the great heat of the earth at small depths is a possible source of power—steam may be generated and used to drive motors. This form of power has been used in Italy in a small way.

7. *Electricity:* This is not a prime source of power; it is a convenient way of conveying power from one place to another. Some prime source is used to drive a dynamo; the currents from this are used to drive distant machinery.

prairies: Vast plains in the middle west of Canada and the United States; beginning west of the Great Lakes and stretching to the Rocky Mountains. These great plains are extremely level; they are almost treeless. Formerly the prairies were covered with grass, over which roamed enormous herds of bison, preyed on by Red Indians. The bison have almost entirely disappeared; the Red Indians are confined to special "reservations."

The eastern prairies are now the greatest stretch of wheatlands in the world. They are divided up into large farms which are worked with the aid of large agricultural machines. The various farming processes—ploughing, harrowing, reaping, etc.—are all done by machinery.

The United States and Canada are the two greatest wheat-producing countries in the world; Canada produces less but exports more wheat than the United States. During the autumn every available route is taxed to carry the enormous stocks of grain. In Canada the Hudson Bay route is being developed as a means of dealing with the increasing production of grain.

West of the wheat region of the prairies is a drier region (farther inland from the Atlantic), extending to the Rockies. This is the great ranching region, formerly given up almost entirely to cattle and horses. Wheat-growing has extended into the best of the lands, and cattle ranches are being pushed into the more northerly regions.

The climate of the prairies is dry, but most of the rain falls in summer—the growing season. Being far from the sea the climate is extreme—there are cold, dry winters, and hot, comparatively damp, summers.

(See also: *Pampas, Steppes.*)

pumice: See *Volcanoes.*

Pygmies: There are two groups of pygmy peoples, both living in tropical forests:

1. The Pygmies of the forests of Central Africa. They are a branch of the negro race, but much shorter than the true negroes, and lighter in colour; they live in the perpetual twilight of the tropical forest, and rarely come into the open.
2. The pygmy races of Asia are called Negritos. These peoples are found in the Andaman Islands, the Malay Peninsula, and in parts of the East Indies. They rarely exceed five feet in height; they are weakly peoples with very dark skins. The Andamanese are very primitive people; they have no knowledge of means of getting fire, but they preserve the embers of the fires and use fire for cooking and for making pottery.

quinine: See *Drugs.*

radium: See *Metals.*

raffia : A fibre obtained from the leaves of the raffia palm, which grows in Africa and Madagascar. A similar product from Japan is also called raffia.

railway routes : Mountains are the chief difficulty which engineers have to overcome in laying railway tracks. 1. Where possible railways are laid so as to run round the ends of mountain chains. Thus, the chief railways between France and Spain run round the ends of the Pyrenees ; railways between England and Scotland run round the ends of the Cheviots. 2. Advantage is taken of river gaps which sometimes cut right through mountain chains. The Aire Gap and the Tyne Gap are used as railway routes across the Pennines ; Wensleydale provides a less important route with a rather steep climb at the western end. The railways of the Weald use the river gaps. The Belfort Gap, between the Vosges and the Alps, is used as a railway route. The Mohawk Gap is the chief route between New York and the middle and west of the United States. 3. Where neither of these methods is available mountain passes are used. The railway is carried up a river valley on one side, often in curves so as to reduce the slope, crosses the pass, and descends a river valley on the other side. It is a usual practice to tunnel under the pass, partly because of the steep slope, and partly because the pass may be blocked with snow in winter.

Railways of Great Britain.—The chief lines radiate from London : 1. On the eastern side the L.N.E.R. runs over a level plain extending the whole way to Edinburgh. 2. One main line of the L.M.S. runs over the Midland Plain, crosses the Pennines by the Aire Gap, and runs to Carlisle down the Vale of Eden ; another main line proceeds to Crewe and then across Lancashire and Westmorland to Carlisle, using the valleys to cross the mountains. From Carlisle lines run along the valleys to Edinburgh (the Waverley route) and Glasgow, and along the coast plain to Stranraer. 3. There are two main routes across Wales—the L.M.S. along the north-coast plain to Holyhead and the Great Western route along the south-coast plain to Fishguard. These routes connect with Ireland. 4. Great Western lines run westward from London to Bristol, to Ilfracombe, and to Penzance. 5. The Southern Railway has a series of routes radiating from London to the chief towns on the South Coast—Margate, Folkestone, Brighton, Southampton, Plymouth. 6. In northern Scotland the chief railway route is along the east-coast plain to Dundee, Aberdeen, and Wick.

Railways in Ireland.—The chief railways of the Irish Free State radiate from Dublin—northward to Drogheda and Northern Ireland, westward to Mullingar and thence to Sligo and Galway, south-west to Limerick and Cork, and south to Wexford. In Northern Ireland the chief railway route runs from Belfast through Coleraine, Londonderry, Strabane, Omagh, and Portadown, thus forming a rough circle.

Railways on the Continent.—1. Paris to Bordeaux, round the western end of the Pyrenees, to Madrid ; round the eastern end of the Pyrenees and along the east coast of Spain. 2. (Dover by steamer to Calais), thence to Paris, Dijon, Lyons, and Marseilles ; or through the Mt. Cenis tunnel to Turin and the Italian railways (Genoa, Rome, Naples to the west of the Apennines ; Ancona, Brindisi, and Otranto to the east). 3. Ostend to Brussels, the Rhine valley to Basel, through the St. Gotthard tunnel to Milan. 4. From Berlin along the Oder valley to Vienna, along the Danube to Belgrade, across the Balkans to Constantinople, thus linking up with the railways of Asia Minor. 5. Antwerp to Berlin and Moscow, then eastward to connect with the Trans-Siberian Railway. 6. From Moscow northward to Archangel and southward to Odessa. 7. Moscow to Orenburg to connect with the Trans-Caspian Railway.

Railways in Asia.—1. Trans-Siberian—Omsk, Tomsk, round the southern end of Lake Baikal to Vladivostok ; southward through Manchuria to Moukden to connect with the Chinese railways (two important lines run almost north and south across the Chinese Plain. 2. Trans-Caspian—roughly a half circle curving east along the north of Lake Aral to Krasnovodsk on the Caspian. 3. From Egypt, through Palestine, to connect with the routes to Smyrna, Angora and Constantinople, the Euphrates valley ; down the Euphrates to Basra (there is a gap between the railway down the Euphrates and the railway from Aleppo). 4. Indian railways : several routes radiate from Bombay—to Delhi, Allahabad, Calcutta, across the Deccan to Madras, along the west coast. Other important lines are from Calcutta along the Ganges to Lahore and the North-West ; from Karachi, along the Indus.

Railways of Africa.—Most of the African railways run inland from the coast to connect the ports with the interior. 1. The Nile railway follows the river except to cut across the bend which begins at Wadi Halfa ; the line extends to El Obeid. 2. A line runs east and west through the Tell region of the north-west, with branches towards the interior. 3. Lines run inland from Dakar, Lagos, Port Harcourt, and some other coast towns in the west ; from Benguella, Walvis Bay, and Lüderitz ; from Mombasa and Dar-es-Salaam in the east. 4. The greatest South African line runs from Cape Town, through Kimberley to Rhodesia, and then connects with a line across the Belgian Congo. Another line runs almost parallel through Bloemfontein, Johannesburg, and Pretoria ; lines to Durban, to Lourenço Marques, and to Beira connect with this.

Railways of North America.—The greatest lines are those which run east and west across the continent. 1. The Canadian Pacific Railway runs from Halifax and Montreal almost due west through Winnipeg and the Rockies to Vancouver. The Canadian National Railway runs from Halifax through Quebec and Winnipeg, and then takes more northerly routes to Port Rupert and to Vancouver. 2. The chief trans-continental railways of the United States run westward from New York to Chicago and thence by several routes to the Pacific coast ; the most southerly route runs from New Orleans to Los Angeles. The chief north and south lines are—along the Atlantic coast plain from New York to Key West and to New Orleans ; along the Mississippi valley from Chicago to New Orleans ; along the Pacific coast. 3. The chief Mexican line climbs from Vera Cruz to the plateau (Mexico), and thence north to connect with the United States railways.

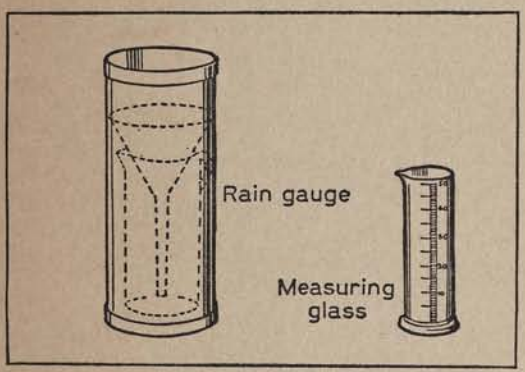
Railways of South America.—The railways run along the coast or inland ; in the Argentine, however, the system is much more developed. 1. Several lines run inland and along the coast from Rio de Janeiro ; the longest is that to Corumba on the Paraguay ; southward the lines run to Montevideo and connect with the Argentine railways. 2. From Buenos Aires

lines run along the rivers which flow into the Plate River. One of these climbs to the Andean plateau and reaches La Paz; another crosses the Andes to Valparaiso. 3. A line runs north and south through the greater part of Chile.

Railways of Australia.—1. There is a railway route which keeps fairly close to the coast from Queensland to Geraldton in Western Australia; this route passes through the state capitals—Brisbane, Sydney, Melbourne, Adelaide, and Perth. 2. Most of the other railways run directly inland from coastal towns—Townsville, Rockhampton, Brisbane, Sydney, Geraldton. 3. A route connecting Adelaide with Port Darwin is in process of completion.

Railways of New Zealand.—1. In North Island the chief route runs north and south from Auckland to Wellington. 2. In South Island the chief route follows the coast plain from Invercargill to Christchurch, crosses the Southern Alps by Arthur's Pass, and runs north to Nelson.

rainbow: Rainbows are seen in the morning and evening when the sun shines on a shower of rain. Sunlight is reflected from the inner surface of the raindrops and is twice refracted (on entering and on leaving); thus the white light of the sun is broken up into its constituent colours—red, orange, yellow, green, blue, indigo, violet. The following points may be noted about rainbows: (1) the arch is highest when the sun is lowest; (2) the observer's shadow points to the middle of the bow; (3) no two observers see exactly the same bow—each is at the head of cones of coloured rays forming the bow he sees; (4) if the observer changes his position he sees a rainbow in a different place; he could never reach the spot "where the rainbow ends."

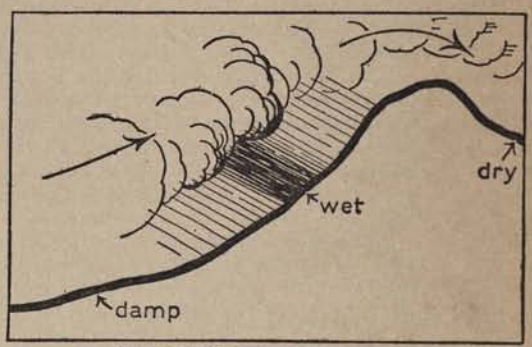


rainfall: Rainfall is measured in inches by means of rain gauges. A rain gauge is a wide funnel placed in a narrow measuring jar. It is placed in an enclosure, where it is exposed fully to any rain that falls, and does not receive drippings from trees, etc.

The measuring jar is made narrow to ensure accuracy in measuring. If the area of the jar is one-tenth that of the funnel, then 1 inch of rain on the funnel fills 10 inches in the jar, and each inch in the jar would represent one-tenth of an inch of rain.

The amount of rainfall depends on many things:

1. The prevailing winds—winds from the sea bring rain; winds from the land are dry.
2. Winds from warmer to colder regions usually deposit rain as they are cooled. Winds from colder to warmer regions are usually dry.
3. The height of the land—winds are turned upwards by mountains, expand and cool, and so deposit rain. In descending they are compressed, warmed, and are less apt to deposit rain. Thus the seaward sides of mountains are usually damper than the landward sides and plains. The heaviest rainfall in the world is over 500 inches per annum at Cherrapunji in Assam.
4. Distance from the sea—generally the farther from the sea the less the rainfall, because each precipitation leaves the wind drier.
5. Air-pressure: in a region of low pressure air is driven upward, expands and cools, and deposits moisture. In a region of high pressure the heavy air falls, is compressed and warmed, and does not deposit moisture.



Effect of Mountains on Rainfall.

The general distribution of rain throughout the world is as follows:

1. Along the equator there is a belt of calms and heavy rain at all seasons. This is due to the inflowing trade winds and consequent rising currents of air.
2. Between the equator and the tropics are regions with summer rain and little winter rain. These regions have their chief rainfall when the equatorial calms are nearest to them, i.e. in summer. In the winter season they are in the dry trade-wind zones.
3. Along the tropics are regions with little rain at any season. These are the tropical hot deserts on the west sides of continents. The trade winds reach them as dry land winds. The east sides of continents (except Africa, which connects with Asia on the east) receive the trade winds from the sea, and have ample rain.
4. The sub-tropical regions have winter rain when the westerlies blow over them, and summer drought when the trade winds blow over them.
5. Regions to the east of the sub-tropical regions have most rain in summer, when the trade winds blow over them from the sea.
6. Temperate regions have ample rain towards the coasts. The rainfall becomes more and more deficient inland; here it falls chiefly in summer, when winds blow from the sea towards the heated land surface of the interior.
7. The monsoon lands have heavy rainfall following the hot summer season. At this time monsoons blow in from the sea towards the heated interior.

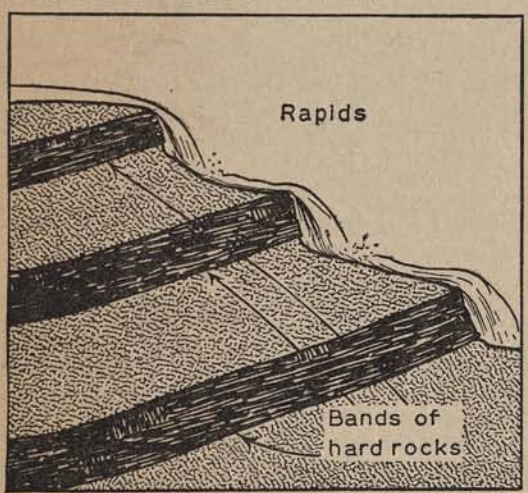
rain shadow: When a region is "shaded" from rain by high mountains it is said to be in a rain shadow. Rain shadows occur to the lee of high mountains. In such cases the prevailing winds blow across the mountains, deposit most of their moisture on the windward side, and arrive on the leeward side dry. Typical regions of this kind are seen on the west

RAINY REGIONS AND RAIN SHADOWS IN SOUTH AMERICA.

coasts of South America. The almost invariable winds are the south-east trades; these reach the west coast dry, and the parts within their influence are desert.

Rand: A familiar name for Witwaters Rand, a ridge 50 miles long, which lies south of Johannesburg, "the gold-reef city." On this ridge are the greatest gold-mines in the world. The gold is found in quartz, and expensive machinery is needed to crush the quartz before the gold can be extracted. The mines lie south of the city; here are the compounds where the native labourers live. There are numerous mounds of white dust which has come from the mines. Nothing grows on these mounds, and the dust gives rise to dust storms in the neighbourhood of Johannesburg.

Gold was first discovered in 1886. Since that day the town has grown from a village to a city of 300,000 people, of whom 170,000 are whites.



SECTION ACROSS RAPIDS.

rapids: Parts of rivers where the water rushes rapidly over upturned rocks, often forming series of miniature waterfalls.

Rapids occur where beds of hard rock cross the bed of a river. Softer rocks between the hard strata are worn away, leaving the hard bands as the sills of small falls forming the rapids.

Rapids form a serious obstruction to navigation. In some cases canals have been constructed to avoid falls; the descent is then made by means of locks. In other cases rocks have been blasted away to clear the river of obstructions.

Many rapids occur in the beds of plateau rivers where they descend from the plateau to the plain below or to the sea.

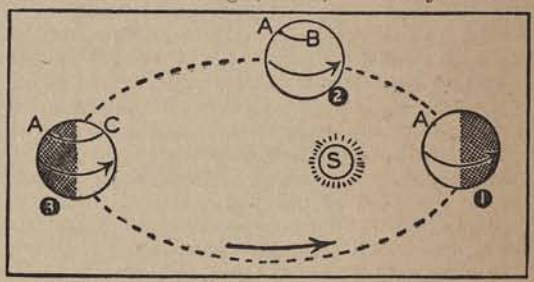
resins: Exude from trees in the same way as gums. They are used to make varnishes with linseed oil and turpentine or with spirit.

Common resin is a by-product in the distillation of turpentine obtained by tapping pine-trees.

Copal is obtained from various trees which grow in East Africa, West Africa, the Dutch East Indies, the South Sea Islands, and the north of South America.

Kauri gum is exuded from the kauri tree of Australia. It is also dug out of the ground, often at a distance from existing trees.

Dammar gum is similar to copal but softer. It comes from the Senegal, India, and Malay Straits.



DIRECTION OF REVOLUTION OF THE EARTH.

revolution of the earth: The earth revolves about the sun once in about 365¼ days. The orbit is an ellipse which is almost a circle; the greatest distance of the earth from the sun is about 93 million miles and the least distance about 90 million miles.

The real movement of the earth round the sun is in the same direction as the real movement of rotation. The real movement of revolution is seen as an apparent movement of the sun in the same direction. As the year progresses different groups of stars are seen to the left of the sun after sunset; the groups recur yearly. This observation led up to the modern idea of the revolution of the earth about the sun. The idea was accepted by many of the Greek philosophers, but had been discarded for many centuries when Copernicus revived it soon after 1500. Copernicus framed the modern idea of the solar system: the sun as the centre with the planets (including the earth) revolving about it. In 1609 Kepler laid down the law that the planets revolve about the sun in ellipses.

The revolution of the earth round the sun (together with its rotation on its axis) gives a complete explanation of the recurrence of the seasons.

The idea of leap years was devised to take account of the fractional part of a day in the year, and so to prevent a gradual change of the first day of the year backward towards autumn and then summer. The fraction is a little less than a quarter. Hence—an additional day is included in each fourth year, the years that divide exactly by 4; this was a little too much, so three leap years are omitted in each hundred years—the exact hundreds, except when the number of hundreds divides by 4 exactly.

The diagram shows why the revolution of the earth affects the length of the solar day: (1) in position 1 the point A is having noon; (2) in position 2 the point has done a complete number of turns, but it

is not in the noon position until it has done the further turn AB; (3) similarly in position 3 it must do the further turn AC. In the course of a year these additional amounts add up to a day.
(See also: *Axis of the Earth, Greenwich Mean Time, Seasons, Zodiac.*)

Rhine: The greatest river of Central Europe; it is now governed by an international commission. It rises in a glacier on Mont St. Gotthard, and in its course through Switzerland it receives the drainage of the north side of the Bernese Oberland, including numerous glacier-fed rivers. The Rhine reaches Lake Constance as a muddy glacier stream; it emerges clear, filtered by the lake.

At Basel the river turns north. Between this town and Mainz it flows through a great rift valley with rich alluvial soil. The valley floor provides good pasturage; the lower slopes are planted with vineyards and orchards; the higher slopes of the Black Forest and the Vosges are covered with pine forests. Mannheim is a port in the rift valley to which ocean-going steamers come.

At Mainz the Main flows in. This river has been canalised, and a canal joins it to the Danube, so that there is through water communication between the North Sea and the Black Sea.

The Taunus Mountains turn the Rhine west until it breaks through at the Rhine Gorge. Below the gorge the Rhine flows across the great plain. This part of the course is the greatest manufacturing region of Germany. The Ruhr valley contains the greatest of the German coalfields. There is a group of manufacturing towns noted for iron, steel, and textiles.

In Holland the Rhine forms a great delta. Here the banks are so low that it has been necessary to build embankments to hold in the river. The name "Rhine" is retained by one of the smaller branches. The widest branch is the Waal, which is joined by the Maas and flows through Dordrecht. Another branch, the Yssel, flows to the Zuyder Zee. The Lek, which flows through Rotterdam, is the principal waterway.

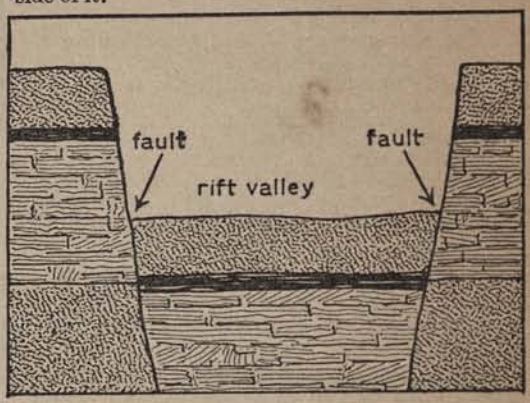
The Rhine is about 800 miles long, and drains an area of 75,000 square miles. The number of tributary streams that reach it, directly or indirectly, has been computed at 12,000.

RIAS IN SOUTH-WEST IRELAND.

ria: A long, narrow opening of the sea on a sinking coast. Rias occur in groups where parallel ridges run down to the sea, as in the south-west of Ireland. Rias are distinguished from fiords by the fact that they shelve landward (whereas fiords are deepest at the landward end) and that they are V-shaped (whereas fiords are U-shaped). The differences are explained by origin: fiords are drowned glacial valleys, whereas rias are drowned valleys which are not glacial; ice protects glacial valleys from erosion along the rims; there is no such protection in non-glacial valleys, and these are worn down to V-shapes. (See also: *Estuary, Fiord.*)

rice: See *Cereals.*

rift valley: A valley formed in the following way: a plateau is cracked in two places, parallel cracks running across it. The centre part sinks, leaving almost upright mountain walls on each side. The walls are afterwards eroded and lose some of their upright character. The distinctive features of a rift valley are: a lowland tract (the floor of the valley) with parallel ranges of hills rising steeply along each side of it.



FORMATION OF A RIFT VALLEY.

Well-known rift valleys are: the Lowlands of Scotland (a rift valley between the Grampians and the southern uplands); the Rhine Gorge, between Basel and Mainz (a strip of land 10 to 20 miles wide and 200 miles long has sunk between the Vosges and the Black Forest. The valley floor is very flat and subject to floods; it is covered with alluvium, and provides good pasture); the Great Rift Valley of East Africa. The last-named is the greatest rift valley in the world. It begins at Lake Nyasa and branches in two. The western branch includes Lakes Tanganyika, Edward, and Albert. The larger, eastern branch passes to the east of Lake Victoria, includes Lake Rudolf, and then crosses Abyssinia, and includes the Red Sea and the valley of the river Jordan.

river bar: A sandbank which forms across the mouths of many rivers and makes navigation difficult in them. Sand is brought down by the river and deposited where it meets the still waters of the sea. Thus a bank of sand is built up across the river mouth. Where the current of the river is very strong the sand may be swept out to sea and no bar formed; this is especially the case in rivers where the tides enter strongly, as in the Severn.

Seaports are often built inside river mouths, where they are sheltered from the direct effects of storms. The formation of a bar is a constant menace to such ports. It is usual to keep channels sufficiently deep by dredging. At Liverpool dredgers are constantly at work keeping the Mersey sufficiently deep for great liners. Nearly all great ports find it necessary to employ dredgers. In some cases another method has been adopted: the river is straightened and narrowed by means of embankments; this helps to increase the current and so enables the river to scour its bed more deeply.

river basin: The whole area of land drained by a river; all the rain which falls in this area (excepting any

that evaporates or remains in the ground) finds its way eventually to the river. A river basin is outlined by comparatively high land which separates it from other river basins.

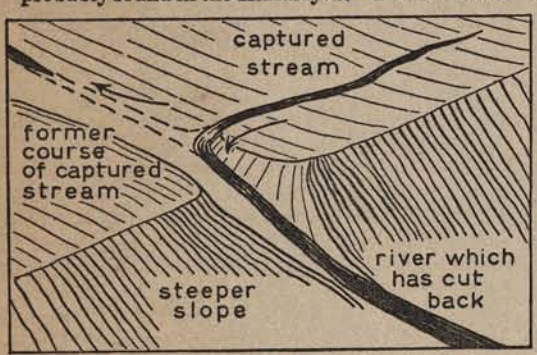
The surface of a river basin slopes down everywhere towards the river (except in rare cases where holes occur). The whole surface is being continually eroded, especially by rain, and thus lowered. The material eroded is carried down and deposited in the river valley and finally in the sea beyond the river mouth. Thus the general height of a river basin is being reduced continually.

A river basin usually consists of:

1. A mountainous part, where the slope is steep, and the river comparatively straight and rapid. Waterfalls and mountain lakes may occur in this part of the basin.
2. A level part where the river winds slowly over a plain. There is usually an alluvial plain deposited by the river and covered with fertile soil.
3. Where tidal currents are small there may be a delta at the mouth of the river. Here the slope is usually very slight, and there may be almost no perceptible height between the river basin and neighbouring basins.

(See also: *Watershed.*)

river capture: The beds of rivers are continually extending backward towards the hills or mountains; this is due to soil and rock from the higher slopes at the head of the valley being washed into the river and carried away. In this way the watershed may be lowered until streams from the other side may find an easier route down the channel of the river which has cut back: this process is known as river capture. The most extraordinary cases of river capture are probably found in the Himalayas. Almost the whole



northern drainage is carried south by the Indus and Brahmaputra, which cross the Himalayas through all but incredible gorges. A strong argument in favour of the theory is that the Himalayan rivers on the south side are cutting back their beds rapidly owing to the steep slope and the heavy rainfall.

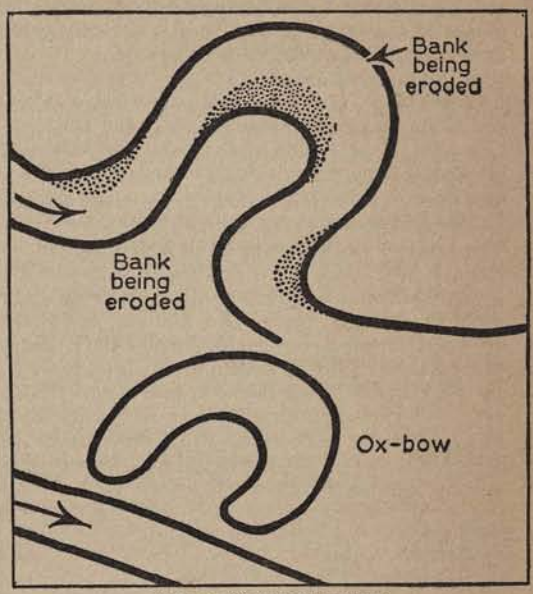
The Thames above Reading flows through a narrow gap; the lower Thames probably cut back at this point and captured streams which formerly flowed to the Bristol Channel.

Cutting back, and therefore river capture, occurs most rapidly on steep slopes. As a rule the steep slopes are being cut through, until eventually rivers on the gentler slope take the easier route by way of the cutting.

(See also: *Plateau Drainage, Cutting Back.*)

river loops: River loops are formed where a river flows across a gently sloping plain, as in the case of the Mississippi, which has enormous loops.

A loop originates with an obstruction on one side of the river. The water is directed against the opposite bank and begins to erode it. Erosion proceeds for the following reason: the current is always strongest at the outside of a bend and slowest at the inside. Hence erosion proceeds rapidly at the outside, whilst pebbles and sand are deposited at the inside of the loop. This process continues until a wide loop is formed. Meanwhile, the river is cutting through the neck of the piece of land which projects into the loop.



HOW AN OX-BOW IS FORMED.

When the river has cut through the neck it takes this new and easier course. Silt is deposited in the still water at the ends of the loop cut off. Finally, the cut-off loop is separated from the river; it is then known as an ox-bow.

Famous loops are those on the Mississippi, the Links of the Forth, the windings of the river Meander in Asia Minor. There is a well-known and beautiful loop on the River Wye in South Wales.

rivers: The typical river rises in springs on the side of a mountain. The upper part of its bed is steep and narrow and comparatively straight. There may be a lake held up by a dam across the valley, and there may be falls and rapids.

In its middle course the river flows through a much wider valley with a flat river plain stretching across it. The river winds (meanders) across the plain in loops. If there are no strong tidal or other currents, there is a delta at the mouth—very flat land formed of silt brought down by the river and deposited in the sea.

As erosion proceeds the height of the valley walls decreases everywhere, and the valley becomes shallower and wider. The dam of the lake is worn through and the lake ceases to exist. The hard rocks which form rapids and waterfalls are finally worn away and the rapids and falls cease to exist. Thus a completely developed river rises not far above sea-level and flows in a winding course across a gently sloping plain.

Riviera: Part of the Mediterranean coast which is sheltered by the Maritime Alps; being sheltered from north winds it has very mild winters and is a

favourite winter resort. The Riviera extends into both France and Italy. Nice is the largest of the winter resorts. Monaco is a small principality with the famous gaming tables of Monte Carlo.

roaring forties : A region between 40° S. and 50° S., so-called because the west winds, the " Brave West Winds," blow very strongly in this region. These winds encircle the globe, and blow with much more regularity than the westerly winds of the northern hemisphere. The reason is that the region of the roaring forties is almost entirely water, whereas the region of the northern westerlies is a highly mixed area of land and water.

(See also : *Horse Latitudes.*)

Rocky Mountains : The great mountain chain which is the backbone of North America and forms the eastern edge of the western highlands. The total length is 2,200 miles from New Mexico to the Yukon. They separate the plains of the east from the plateaux and coastal ranges of the west.

The Rockies are widest in Utah and Colorado (300 miles) ; in Canada the width is generally about 70 miles. In Colorado there are several hundred peaks over 13,000 feet high. The highest peaks are : Mount McKinley, in Alaska (23,100 ft.) ; Mount Massio (14,002 ft.) and Mount Blanca (14,390 ft.) in the United States Rockies, and Mount Rainier (14,530 ft.) in the Cascade Range ; Mount Waddington (13,260 ft.) in the Canadian Coast Range and Mount Robson (12,975 ft.) in the Canadian Rockies are the highest of the Canadian mountains.

Chief Mass of the Rocky Mountains.

rotation of the earth : The earth spins on its axis once in 24 hours ; the axis is the line joining the North and South Poles. The speed of rotation is greatest at the equator (25,000 miles in 24 hours) ; it sinks to zero at the poles.

Day and night are an effect of rotation. The side of the earth towards the sun has daylight ; the side turned away has night.

The direction of rotation is from west to east through the south. This real movement of the earth is seen as an apparent movement of the sun, moon, and stars in the opposite direction. All these appear to revolve about the earth daily.

As the earth rotates each part in turn comes directly under the sun. Hence the time of noon moves continually westward ; places east of Greenwich are, therefore, fast on Greenwich ; places to the west are slow on Greenwich.

The rotation of the earth has the effect (as with other spinning things) of keeping the axis of rotation pointing always in the same direction. It also has the effect of giving movements, north or south, in

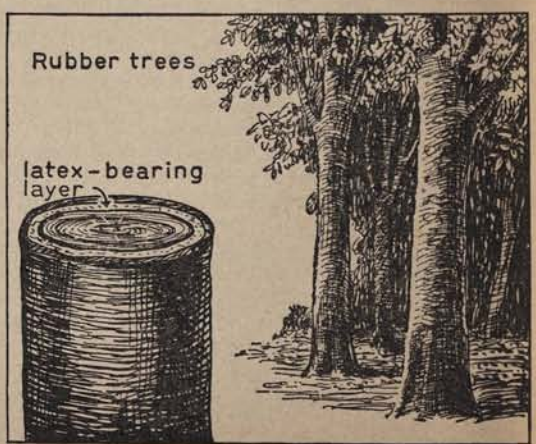
Direction of Rotation of the Earth.

the northern hemisphere a twist towards the right, and similar movements in the southern hemisphere a twist towards the left ; this is seen in winds and in ocean currents.

(See also : *Axis of the Earth.*)

rubber : The plastic and elastic juice of the rubber tree, hardened by exposure. The rubber tree grows exclusively within the tropics. The juice is extracted by making cuts in the bark and fixing clay cups below the cuts. The milky juice is hardened by dipping a rod in it, holding the rod in smoke from a fire, dipping the rod again, and so on. Rubber is further hardened by heating it with sulphur. When the process is continued further the hard dark substance called ebonite or vulcanite results. The rubber can be moulded before it is vulcanised. It is now possible to vulcanise rubber without heat ; this makes it possible to get more delicate colours in vulcanite.

Formerly the sole supply of rubber was from trees which grew wild in tropical forests, especially in the



forests of Brazil. Rubber trees are now cultivated throughout the tropical belt, except where the climate is too dry, and especially in the Malay Peninsula, Dutch East Indies, and Ceylon.

rum : See *Distilling.*

rye : See *Cereals.*

sago : The pith of a kind of palm which grows in the East Indies. The tree flourishes in marshy land. The pith is mixed to a paste with water and pressed through sieves to form grains. Much sago is imported from Borneo.

St. Lawrence : Perhaps the greatest waterway in the world; length, 2,100 miles; area of basin, over 500,000 square miles. The Nipigon is regarded as the chief source, but over 200 rivers flow into Lake Superior. The stages in the river are:

1. *Lake Superior :* The largest fresh-water lake; 390 miles long and 180 miles wide at its widest, average depth 900 feet; coast rockbound, but lower sandy shores on the United States side; silver, copper, and iron ore on the north side, copper and iron on the south; not frozen in winter, but the shore ice stops navigation.
2. *St. Mary's River :* 55 miles long; St. Mary's rapids extend over half a mile and are avoided by canals, one on each side of the river.
3. *Lake Huron :* 270 miles long and 105 miles wide; average depth, nearly 1,000 feet; northern shore hilly, southern shore flat.
4. *Lake Michigan :* 345 miles long and 84 miles wide; average depth, over 1,000 feet; shores flat; joined to the Mississippi by a canal.

THE ST. LAWRENCE BASIN.

5. *St. Clair River :* 33 miles long. *Lake St. Clair :* 25 miles long; *Detroit River :* 18 miles long. A deep passage through the lake is kept clear by dredging.
6. *Lake Erie :* 250 miles long and 60 miles wide; very shallow; mean depth, only 90 feet; usually frozen from the beginning of December to April. The Erie Canal connects Lake Erie with the Hudson River. The shores are low on the north; on the south there is a plateau.
7. *Niagara River :* Flows north to Lake Ontario; length, 27 miles. About 16 miles below Lake Erie rapids begin which extend for a mile, with a total fall of over 50 feet. The rapids end with the Niagara Falls.
   Niagara Falls : The greatest cataract in the world. The total width, including Goat Island, is 4,750 feet. The Horse-shoe Fall, on the Canadian side, is about 2,000 feet wide and 150 feet high; the depth of water on the sill is about 20 feet. The American Fall is separated from the Horse-shoe Fall by Goat Island; it is about 1,000 feet wide and 160 feet high. The sill of the Falls is hard limestone, with softer shales below.
   Niagara Gorge : Below the Falls the river runs through a gorge more than 1,000 feet wide in places and descending abruptly to a depth of 200 or 300 feet. The Gorge is about 7 miles long. Near the middle of it is a whirlpool caused by the river being deflected violently from the Canadian cliffs. Below the Gorge the river widens out and flows into Lake Ontario, 7 miles on.
8. *Lake Ontario :* The smallest of the Great Lakes; 190 miles long and 52 miles wide, average depth, over 400 feet. The Niagara Falls are avoided by the Welland Canal, 27 miles long.
9. *Ontario to Montreal :* Along this part of the river there is a chain of canals which are needed to overcome the rapid fall of the river. Lake St. Louis, near Montreal, receives the Ottawa River, the largest tributary of the St. Lawrence.
   Montreal is the chief Canadian port for ocean-going vessels; it is shut up by ice in the winter. The river below Montreal has been deepened by dredging.
10. *The Estuary :* Below Quebec the river quickly widens and merges into the Gulf of St. Lawrence, about 250 or 300 miles below the city.

salt : Salt is found in the earth as rock salt, which is cut out and sold as it is, or dissolved and purified. It is also made by evaporating salt water—sea-water, brine from springs, or brine pumped up from underground layers of salt. Where the climate is hot and dry enough the brine is run into shallow pits and left to evaporate; as various salts separate out in turn they are dredged out of the remaining liquid. In this country the chief deposits of salt are in Cheshire. These deposits supply table salt and materials for the chemical industries at Widnes. The most famous salt mines are those at Wieliczka, near Cracow.
(See also : *Wieliczka.*)

sand dunes : Low hills of sand which are common along many coasts. They originate when sand on a beach becomes dry and is blown inland. The blown sand is piled up and forms mounds and then hills. The sand of the dunes is constantly blown forward in the direction of the prevailing winds. The dunes move slowly forward, covering fields and destroying them for purposes of cultivation.
In some regions the advance of sand dunes has been successfully checked. In the Landes of South-west France pine-trees have been planted; the roots bind the sand and check the movement of the dunes. In other regions grasses with wide-spreading roots have been used to bind the sand.

sandstorm : Sandstorms are of frequent occurrence in parts of the desert where there is much sand. A sudden wind raises the sand to a considerable height and the sand sweeps forward in a great cloud. As the sand is carried forward it penetrates everywhere. In towns it is usual to close all doors and windows, but this does not entirely exclude the sand. In the open desert it is usual to take refuge to the lee of camels. The camel is specially capable of resisting the effects of sandstorms: its eyes, nostrils, and

ears can be closed tightly until the sandstorm has passed.

The effects of sandstorms are sometimes seen in the piling up of sand dunes in the desert. The flying sand is caught in desert vegetation; this begins the formation of dunes. Further vegetation may grow, and so the dunes may increase in size. Where there are steady winds in one direction the sand dunes advance in the direction of the prevailing wind.

The formation of loess is ascribed to a similar cause. Sand and dust are swept forward in sandstorms over a fertile region. The continual upward growth of vegetation through the drifted sand and dust produces a fertile and friable loam.

Sandstorms carry desert conditions beyond the original desert. Vegetation is covered and destroyed by the sand, so that the desert constantly extends itself. Attempts are now being made to check the southward advance of the Sahara by planting trees to resist the forward movement.

sardine fishing: See *Fisheries*.

Sargasso Sea: A region towards the south-west of the North Atlantic which lies within the swirl of the warm currents; it covers an area about equal to that of Europe. There is little circulation within the Sargasso Sea; much wreckage drifts in and remains there. The name was given by Columbus, because of the vast quantities of sargasso seaweed which grow there. As a rule seaweeds grow attached to rocks; the sargasso weed is exceptional, in that it grows in enormous masses in the open sea.

savannas: Open, park-like grasslands of the tropics. They are found to north and south of the tropical forests, and often to the east of these forests where the climate is drier than in the forest regions.

The savannas of Africa are the regions where there is the greatest development of animal life—the elephant, lion, zebra, gnu, rhinoceros, hippopotamus, etc.

The most important of the tropical productions come from the savannas—tea, coffee, cocoa, sugar-cane and tropical fruits, rubber, etc.

scree: A mass of stones broken from a cliff or the steep side of a hill and accumulated at the foot of the slope. Fragments are often broken off by frost, owing to the expansion of water in cracks when it freezes. Other fragments are broken off by sudden changes of temperature in the morning or the evening. The morning sun may heat the rocks quickly; heated parts expand, and may crack owing to the strain. In the evening sudden cooling and contraction may produce a similar result. Screes are found at the foot of most cliffs and steep hills.

seaports: Seaports develop as outlets and inlets for manufacturing or agricultural regions. As a rule the size and importance of a port depends on the wealth of the region which it serves. In general a port serving an agricultural region will export agricultural produce and import manufactured goods and exotic agricultural produce. A port serving a manufacturing district will export the manufactured goods and import raw materials, agricultural produce, and other manufactures.

The distinctive features of seaports are: docks and wharves with much hydraulic machinery; warehouses and transit sheds for storing goods before loading and after unloading—these include elevators for storing grain; "unskilled" labour for loading and unloading, this labour is essentially casual—moving from ship to ship as required; ready means of transport by road, rail, or barge to the region served by the port.

Seaports are often built inside the mouth of a river, where they are protected from the worst effects of storms; in these cases it is usual to keep the mouth of the river clear by dredging. The high tides in most British waters enable British ports to be placed high up on tidal estuaries. Southampton has the great advantage of "double tides" (the tidal wave reaches the port first through the Solent and then through Spithead), so that ships can be berthed without a long wait for the tide.

The purpose of docks is to provide deep water for ships at all times; the water which fills them is impounded at high tide, and held in by the dock gates. Liverpool has a tidal basin which is readily entered at high tide; the ships can then be manœuvred to the docks without waiting for another tide.

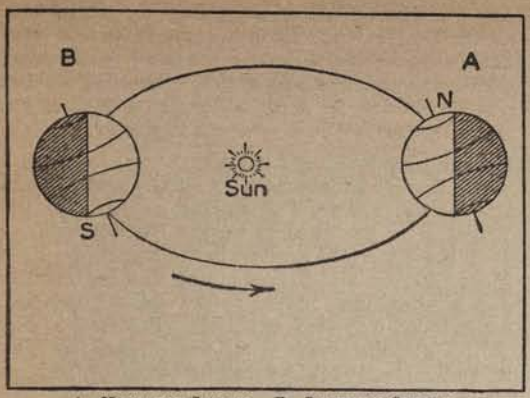
Liverpool is an example of a port which serves a single region—the great textile region of Lancashire and Yorkshire, with which it is connected by a network of railways, canals, and roads. *London* bears a similar relation to England in general. *Southampton* has no great manufacturing hinterland; it is a great passenger port and an outport of London. *Antwerp* is placed conveniently, not only for the great manufacturing region of Belgium, but also for the Rhine valley. *Hamburg* is the most convenient port for a large part of central and eastern Germany. *New York* has grown to an enormous size because it is an outlet for the manufacturing states of the north-east and on the best route (through the Mohawk Gap) to the centre and west; it has the further advantage of needing no docks—wharves are simply built out into the river or sea, and provide water deep enough for the largest ships. The great towns of South America are seaports which serve the great agricultural regions behind them. Many of the coastal towns of Africa and Asia are similar, and so also are the chief towns of Australia; the growth of manufactures usually follows that of agriculture, and so industrial towns usually come later than ports. Many of these ports are vast emporiums—places where merchants interchange goods. Thus, *Singapore* is an emporium for the interchange of goods between East and West; it has developed, within a hundred years, into a great port and emporium because it is situated on the route between the Far East and the countries of the West.

seasons: The changing seasons are due to the tilt of the earth's axis and its constant direction. The spin of the earth keeps the axis always inclined in the same direction, as shown in the diagram. In position A the end marked N is turned towards the sun; in position B the end marked S. A is the position of northern summer; B the position of southern summer.

North and South Poles: Six months night and six months day. The sun shows continuously in summer, slowly climbing for three months to 23½° above the horizon, and then descending for three months.

Polar regions: Short cool summers with the sun almost continuously above the horizon, but at a low elevation. Long cold winters, with long nights and very short days.

Temperate regions: Four well-marked seasons—a long spring, days and nights equal in length, plants begin to grow, hibernating animals waken, migratory



A—Northern Summer. B—Southern Summer.

birds arrive from the south. In summer there are long days and short nights, the sun is high in the sky—the period of greatest heat and growth. A long autumn, days and nights equal in length, the period of harvest, migratory birds fly south. In winter days are short and nights long, the sun is low in the sky—the period of rest, little growth, many animals hibernate.

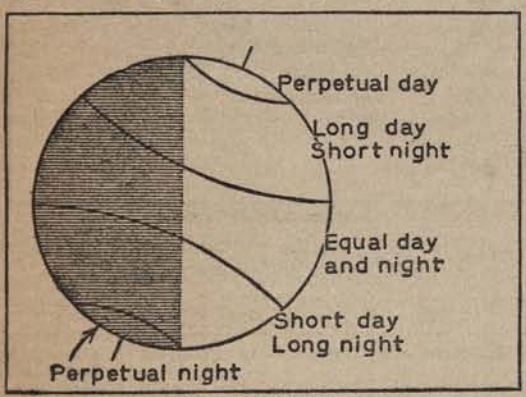
Sub-tropical regions: Similar to the temperate regions, but summers are hot and winters mild.

Tropics: Two seasons—a long, extremely hot summer with the sun overhead; a cooler winter season with the sun sinking to a height of 43° above the horizon.

Equator: A single summer season throughout the year with the sun never lower than 66½°.

The monsoon lands (South-east Asia): There are three seasons—the hot season from February to May, with hot winds from the interior; the wet season from May to October, with damp winds from the sea and very heavy rains in the early part; the cool season from October to February, with cool winds from the interior.

(See also: *Equinox, Solstices.*)



Northern Summer.

seaweeds: Two valuable economic products are obtained from seaweed—iodine and one kind of isinglass. In Brittany large quantities of seaweed are collected in heaps on the shore and burnt; iodine is obtained from the ashes.

Selvas: The vast forests of the Amazon and its tributaries; these tropical forests are of extreme luxuriance; they cover an area of about 2 million square miles.

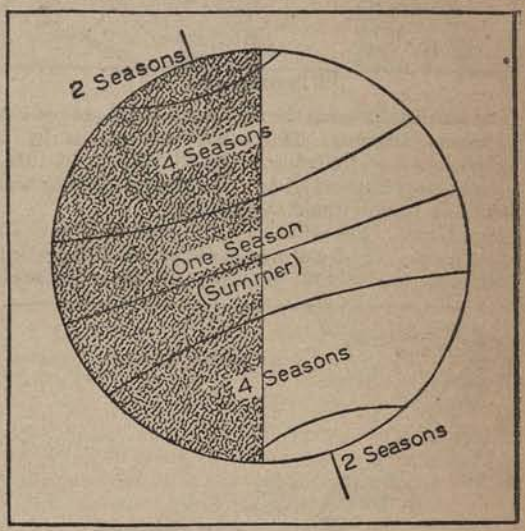
(See also: *Amazon, Equatorial Rains and Forests.*)

"Seven Seas": The Septem Maria, a series of salt-water lagoons which formerly extended along the east coast of Italy from Torcello in the north to Ravenna in the south. These lagoons provided a continuous internal waterway.

A great part of these lagoons has been filled up with silt from the Po and Adige. The Lagoon of Venice is the largest of those remaining.

The name "Seven Seas" is now used to mean: the North Atlantic, the South Atlantic, the North Pacific, the South Pacific, the Indian Ocean, the Arctic Ocean, and the Antarctic Ocean.

shale oil: See *Petroleum.*



Seasons throughout the World.

sheep: Economically sheep are important, because they supply wool, mutton, and the hides for leather. Sheep are sure-footed, so that they can live in hilly or mountainous regions; they can live on short grasses, because of the formation of the mouth. Large flocks of sheep flourish in hilly regions and on dry steppes, where other forms of farming would be impossible. In some regions sheep are bred primarily for the wool and in others primarily for the mutton. The total number of sheep in the world has been estimated at about 600 millions. About a third of these are in Europe, one-fifth each in Asia and Oceania (Australia and New Zealand); South America, North America, and Africa follow in that order.

The countries which export large quantities of raw wool are: Australia, New Zealand, South Africa (Cape Province), the Argentine Republic, and Peru. New Zealand is the greatest exporter of frozen mutton and lamb (Canterbury lamb).

ship-building: See *Shipping.*

ship canals: Ship canals have been cut:

1. To shorten sea voyages by providing a more direct route.
2. To avoid a difficult or dangerous route.
3. To enable an inland town to serve as a port and so to reduce transport charges.

Panama Canal: 50½ miles long, 300 feet wide at the bottom, and 45 feet deep. The canal includes Gatun Lake, an artificial lake which acts as a safety-valve against heavy rainfall. There is a set of double locks near each end of the canal. The Culebra

THE PANAMA CANAL

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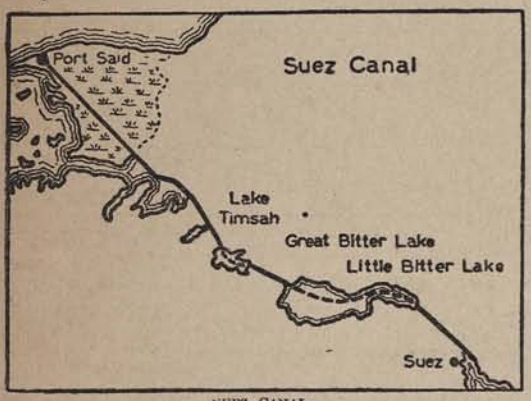

SUEZ CANAL

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The following table shows the tonnage owned by the great shipping countries:

	Millions of tons	
	1914	1936
British Empire	22	20·4
United States	4¼	12·6
Japan	1¼	4·2
Norway	2	4·1
Germany	5	3·7
Italy	1½	3·1
France	2	3
Holland	1½	2·5
Sweden	1	1·5
World Total	45½	65

The "blue ribbon" of the shipping world is the record for the passage between the Channel ports

MANCHESTER SHIP CANAL

and New York. In the last thirty years the record has been held by the following ships:

	Ship	Nat.	Time	Tonnage	Route
1903	*Deutschland*	German	5½d.	16,502	Cherbourg to New York.
1909	*Mauretania*	British	4d. 10h. 41m.	30,696	Queenstown to New York.
1924	*Mauretania*	British	5d. 1h. 49 m.	—	New York to Cherbourg.
1929	*Bremen*	German	4d.18h. 17m.	49,864	Cherbourg to New York.
1930	*Europa*	German	4d.17h. 6m.	49,746	Cherbourg to New York.
1935	*Normandie*	French	4d. 3h. 2m.	82,000	Bishop Rock to Ambrose Light.
1936	*Queen Mary*	British	3d. 23h. 57m.	80,000	Ambrose Light to Bishop Rock.

silk : A fabric made from thread spun round its cocoon by the silkworm. The silkworm feeds on the leaves of the mulberry tree which grows well in sub-tropical climates. Hence raw silk is produced in the sub-tropical regions. The larvæ are killed by heating and the threads of silk are unwound. The best silk is woven from complete strands of silk. Broken strands of silk are spun into threads and these are used for weaving.

Japan produces the largest amount of raw silk. Other important sources of supply are China, Bengal, Piedmont, and the Levant. The area which produces silk is between 25° and 48°. Japan produces five-eighths, China one-fifth, Italy more than a tenth, and the Levant one-fortieth of the total supply available for export.

Lyons is the centre of the silk trade in France ; this trade is considerably greater than that of any other European country. Next to France comes Italy, where the manufacture is centred at Genoa, and Germany, where silk is made chiefly at Krefeld. Macclesfield is the centre of the silk trade in England. The United States produces large quantities of finished silk. China and Japan also manufacture silk.

Artificial silk is a material made from cellulose to imitate silk. The general method of making it is to form a solution of cellulose (the cell-walls of wood, and other fibres) ; the solution is forced through small orifices and hardened into fine threads. These threads are used in spinning and weaving, either alone or in combination with wool, cotton, or linen.

The greatest quantities of artificial silk are produced in : United States, Germany, Great Britain, Italy, and France.

silver : See *Metals.*

sirocco : See *Winds.*

sisal hemp : This plant is not related to the true hemp. It is a native of Mexico, from which country it was introduced into East Africa, where it is now an important crop. It grows well on poor, sandy soils in dry climates. The fibre is got from the leaves ; it is glossy and 3 or 4 feet long ; it is very tough and makes good rope and twine.

Sisal is grown in Kenya, Tanganyika, Nyasaland, and Portuguese East Africa. There are large plantations in the Zambesi valley. (See also : *Hemp.*)

skyscraper : One of the extremely tall buildings of New York and Chicago (so-called by a humorous exaggeration). Skyscrapers were first built in Chicago, where they were an attempt to place a large number of business firms on a small area. A similar problem was solved in a similar way in New York.

The construction of skyscrapers was rendered possible by the modern method of building with a steel framework and reinforced concrete ; these materials have sufficient toughness and elasticity to withstand the enormous strains set up. In Chicago the foundations are made by sinking caissons (*pron.* cassoons). These are enormous steel drums ; they are sunk to the rock beneath and then filled with concrete.

Some of the highest of the skyscrapers are about 1,000 feet high—as high as many mountains actually appear. The upward distances are overcome by means of elaborate series of lifts, each group serving particular sets of floors.

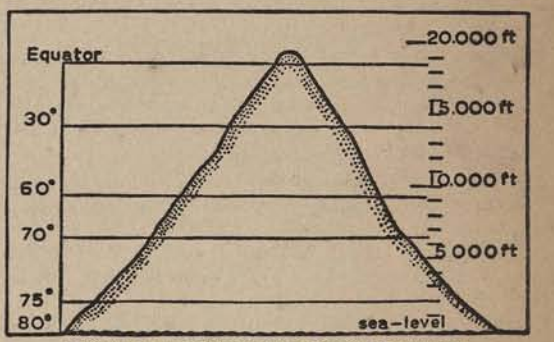
The building of skyscrapers, and the consequent concentration of a vast business population on a small area, has raised almost insoluble transport problems—moving millions of people into and out of the business area, morning and evening. This problem has been solved by constructing railways along Manhattan Island, with branches into the residential districts of Brooklyn and the Bronx. The rivers are passed by means of tunnels and suspension bridges, with footways, roadways, and tracks for railways. Railways run on the surface, underground, and overhead. In spite of these efforts traffic in New York remains a serious problem.

The highest of the skyscrapers are : Empire State Building (New York, 1,248 feet), Crane Building (Chicago, 1,022 feet), Chrysler Building (New York, 1,030 feet), Radio Building (New York, 840 feet), Bank of Manhattan (New York, 838 feet), Woolworth Building (792 feet).

slate : See *Metamorphic Rocks.*

snowline : The line on mountains above which snow remains unmelted throughout the year. The height of the snowline depends on several things :

1. Distance from the equator—the nearer to the hot tropics the higher is the snowline. Within the Arctic circle the snowline falls to sea-level.
2. The snowline on slopes facing south is usually higher than on slopes facing north. Thus, on the southern slopes of the Alps the snowline is at about 10,000 feet. On the northern slopes it descends to 9,500 feet.



HEIGHT OF THE SNOWLINE IN VARIOUS LATITUDES.

3. The snowline is higher where there is small rainfall (snow) than where the rainfall is copious ; this is simply because in the latter case there is more snow to melt. Thus, on the southern slopes of the Himalayas the snowline is at a height of 16,000 feet, whereas on the colder northern slopes the height is 20,000 feet.

Soda Lake : The floor of Lake Magadi, in Kenya, consists entirely of carbonate of soda. The lake is 30 miles long, and the total deposit has been estimated at 200 million tons (the value is about £50 per ton.) As the soda is removed it re-forms as water flows in.

solfatara : A crack or fissure from which various vapours issue ; many of the vapours are sulphurous. By the interaction of various vapours sulphur may be released and deposited round the mouth of the fissure ; this is one of the sources of sulphur.

Solfataras are signs of decaying or minor volcanic activity. Many of them are found in Sicily.

Smoking cracks which occur in Tuscany are called *suffoni.* One of the deposits round these cracks is boracic acid.

Solfatara was originally the name of an old volcanic crater west of Naples which gives out heated vapours continually, especially steam, sulphur dioxide, and sulphuretted hydrogen. The name has been extended to similar vents in other places.

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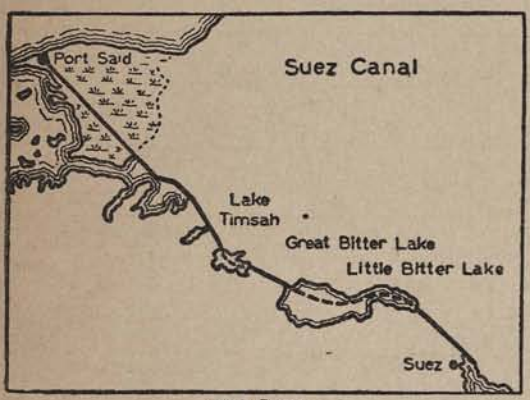

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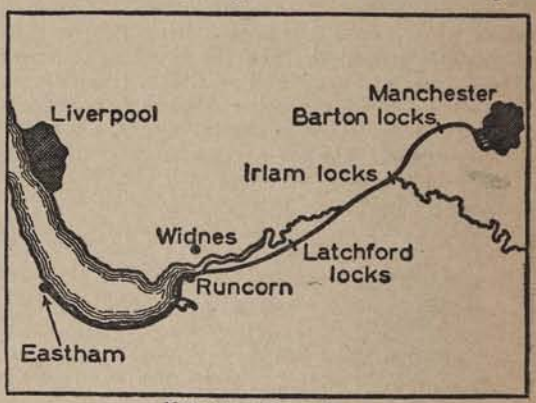
Japan	1¾	4·2
Norway	2	4·1
Germany	5	3·7
Italy	1½	3·1
France	2	3
Holland	1½	2·5
Sweden	1	1·5
World Total	45½	65

The "blue ribbon" of the shipping world is the record for the passage between the Channel ports



MANCHESTER SHIP CANAL

and New York. In the last thirty years the record has been held by the following ships:

	Ship	Nat.	Time	Tonnage	Route
1903	*Deutschland*	German	5½d.	16,502	Cherbourg to New York.
1909	*Mauretania*	British	4d. 10h. 41m.	30,696	Queenstown to New York.
1924	*Mauretania*	British	5d. 1h. 49 m.	—	New York to Cherbourg.
1929	*Bremen*	German	4d.18h. 17m.	49,864	Cherbourg to New York.
1930	*Europa*	German	4d.17h. 6m.	49,746	Cherbourg to New York.
1935	*Normandie*	French	4d. 3h. 2m.	82,000	Bishop Rock to Ambrose Light.
1936	*Queen Mary*	British	3d. 23h. 57m.	80,000	Ambrose Light to Bishop Rock.

silk : A fabric made from thread spun round its cocoon by the silkworm. The silkworm feeds on the leaves of the mulberry tree which grows well in sub-tropical climates. Hence raw silk is produced in the sub-tropical regions. The larvæ are killed by heating and the threads of silk are unwound. The best silk is woven from complete strands of silk. Broken strands of silk are spun into threads and these are used for weaving.

Japan produces the largest amount of raw silk. Other important sources of supply are China, Bengal, Piedmont, and the Levant. The area which produces silk is between 25° and 48°. Japan produces five-eighths, China one-fifth, Italy more than a tenth, and the Levant one-fortieth of the total supply available for export.

Lyons is the centre of the silk trade in France ; this trade is considerably greater than that of any other European country. Next to France comes Italy, where the manufacture is centred at Genoa, and Germany, where silk is made chiefly at Krefeld. Macclesfield is the centre of the silk trade in England. The United States produces large quantities of finished silk. China and Japan also manufacture silk.

Artificial silk is a material made from cellulose to imitate silk. The general method of making it is to form a solution of cellulose (the cell-walls of wood, and other fibres) ; the solution is forced through small orifices and hardened into fine threads. These threads are used in spinning and weaving, either alone or in combination with wool, cotton, or linen.

The greatest quantities of artificial silk are produced in : United States, Germany, Great Britain, Italy, and France.

silver : See *Metals.*

sirocco : See *Winds.*

sisal hemp : This plant is not related to the true hemp. It is a native of Mexico, from which country it was introduced into East Africa, where it is now an important crop. It grows well on poor, sandy soils in dry climates. The fibre is got from the leaves ; it is glossy and 3 or 4 feet long ; it is very tough and makes good rope and twine.

Sisal is grown in Kenya, Tanganyika, Nyasaland, and Portuguese East Africa. There are large plantations in the Zambesi valley. (See also : *Hemp.*)

skyscraper : One of the extremely tall buildings of New York and Chicago (so-called by a humorous exaggeration). Skyscrapers were first built in Chicago, where they were an attempt to place a large number of business firms on a small area. A similar problem was solved in a similar way in New York.

The construction of skyscrapers was rendered possible by the modern method of building with a steel framework and reinforced concrete ; these materials have sufficient toughness and elasticity to withstand the enormous strains set up. In Chicago the foundations are made by sinking caissons (*pron.* cassoons). These are enormous steel drums ; they are sunk to the rock beneath and then filled with concrete.

Some of the highest of the skyscrapers are about 1,000 feet high—as high as many mountains actually appear. The upward distances are overcome by means of elaborate series of lifts, each group serving particular sets of floors.

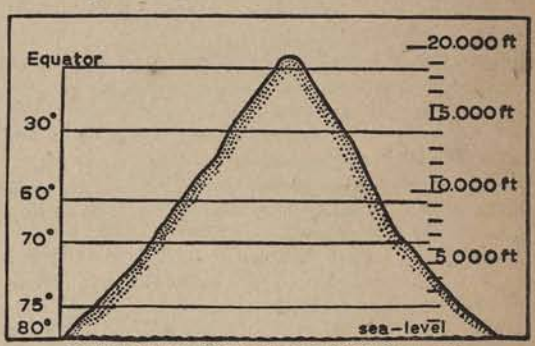
The building of skyscrapers, and the consequent concentration of a vast business population on a small area, has raised almost insoluble transport problems—moving millions of people into and out of the business area, morning and evening. This problem has been solved by constructing railways along Manhattan Island, with branches into the residential districts of Brooklyn and the Bronx. The rivers are passed by means of tunnels and suspension bridges, with footways, roadways, and tracks for railways. Railways run on the surface, underground, and overhead. In spite of these efforts traffic in New York remains a serious problem.

The highest of the skyscrapers are : Empire State Building (New York, 1,248 feet), Crane Building (Chicago, 1,022 feet), Chrysler Building (New York, 1,030 feet), Radio Building (New York, 840 feet), Bank of Manhattan (New York, 838 feet), Woolworth Building (792 feet).

slate : See *Metamorphic Rocks.*

snowline : The line on mountains above which snow remains unmelted throughout the year. The height of the snowline depends on several things :

1. Distance from the equator—the nearer to the hot tropics the higher is the snowline. Within the Arctic circle the snowline falls to sea-level.
2. The snowline on slopes facing south is usually higher than on slopes facing north. Thus, on the southern slopes of the Alps the snowline is at about 10,000 feet. On the northern slopes it descends to 9,500 feet.



HEIGHT OF THE SNOWLINE IN VARIOUS LATITUDES.

3. The snowline is higher where there is small rainfall (snow) than where the rainfall is copious ; this is simply because in the latter case there is more snow to melt. Thus, on the southern slopes of the Himalayas the snowline is at a height of 16,000 feet, whereas on the colder northern slopes the height is 20,000 feet.

Soda Lake : The floor of Lake Magadi, in Kenya, consists entirely of carbonate of soda. The lake is 30 miles long, and the total deposit has been estimated at 200 million tons (the value is about £50 per ton.) As the soda is removed it re-forms as water flows in.

solfatara : A crack or fissure from which various vapours issue ; many of the vapours are sulphurous. By the interaction of various vapours sulphur may be released and deposited round the mouth of the fissure ; this is one of the sources of sulphur.

Solfataras are signs of decaying or minor volcanic activity. Many of them are found in Sicily.

Smoking cracks which occur in Tuscany are called *suffoni.* One of the deposits round these cracks is boracic acid.

Solfatara was originally the name of an old volcanic crater west of Naples which gives out heated vapours continually, especially steam, sulphur dioxide, and sulphuretted hydrogen. The name has been extended to similar vents in other places.

solstices : The periods when the earth's axis is tilted most directly towards the sun, or most directly away from it. About June 21 the North Pole is tilted towards the sun, the northern hemisphere receives the maximum of sunshine and the southern hemisphere the minimum.

1. The North Pole is at the midpoint of its six months of daylight; the sun describes a complete circle at an angle of 23½° above the horizon.
2. On the Arctic circle the midnight sun is seen for a few days.
3. South of the Arctic circle the days are long and nights short. The difference decreases towards the equator, until at the equator day and night are equal.
4. South of the equator the length of the day decreases whilst the night increases.
5. At the Antarctic circle there is almost complete night for a few days, the sun just appearing on the northern horizon at noon.
6. The South Pole is at the midpoint of its six months of night.

About December 22 the earth is at the opposite end of its orbit. The South Pole is then tilted towards the sun and the North Pole away from the sun. Conditions are the reverse of those given for the June solstice. They range from complete day within the Antarctic circle to complete night within the Arctic circle.

Southern Ocean : This name is given to the ocean which completely circles the globe south of the continental peninsulas and north of the Antarctic circle. Parts of it are sometimes included in the Atlantic and Pacific.

Spa : A watering-place in Belgium which has long been famous for mineral springs containing salts of iron (chalybeate springs).

The name "spa" has been extended to other watering-places which have mineral springs. Some of the best-known spas are:

Kissingen (Bavaria)—salt wells used for drinking.
Homburg (New Frankfurt)—iron salts and common salt.
Challes (Savoy) and Harrogate—sulphur springs.
Aix-les-Bains (France) and a group of spas in the Pyrenees—warm sulphur springs.
Vichy (France)—bicarbonate of soda and carbon dioxide.
Carlsbad and Marienbad (Czechoslovakia)—sulphate of soda and bicarbonate of soda.
Wiesbaden—hot alkaline springs.

Some of the mineral waters are bottled and sold for table use: Vichy Water, Apollinaris, Seltzer Water, etc.

spelter : See *Metals (zinc)*.

spices : Spices come from hot tropical countries, and especially from the East and West Indies.

Cloves : The undeveloped flower-buds of the clove tree, an evergreen tree which grows to a height of 30 or 40 feet. The tree grows in many parts of the East Indies and islands of the Indian Ocean; it has also been introduced into the West Indies. The chief supplies come from Zanzibar and the neighbouring island of Pemba.

Cinnamon : The inner bark of the cinnamon tree, an evergreen tree which flourishes round Colombo, in Ceylon.

Pepper : The dried fruit of a climbing shrub which has been introduced into the East and West Indies from Travancore and Malabar (India). Black and white pepper come from the same plant, white being fully ripe. *Cayenne pepper* is not a true pepper, but the dried fruit of one of the capsicums (relatives of the potato and tomato). *Pimento* or Jamaica pepper (also called allspice) is the fruit of an evergreen tree of the myrtle family which flourishes in the West Indies.

Ginger is the underground stem of a reed-like plant which came from tropical Asia. The chief sources are the West Indies (especially Jamaica), East Indies, Cochin-China, West Africa, Egypt. Preserved ginger is made from young rhizomes preserved in syrup; it is imported from the West Indies and China.

Vanilla : The dried pods of a kind of orchid. Originally came from Mexico; now produced also in the East and West Indies and other tropical islands.

Nutmeg : Kernel of the seed of an evergreen tree which grows 50 or 60 feet high. Flourishes in the Banda Islands (East Indies) and has also been introduced into other tropical parts where there is heavy rain. *Mace* is the dried outer covering of nutmegs.

Anise : The seed (really the fruit) of a plant which grows in Egypt and other countries about the Mediterranean; also in South Russia.

Cardamoms : Dried capsules of a plant grown in Malabar (India). It is one of the ingredients of curry powder.

Cumin : Another ingredient of curry powder—the fruit of an annual herb grown in India, Arabia, and Egypt.

springs : Springs occur where layers of porous rock lie over layers of impervious rock, especially where sandstone or chalk lies over clay. Water sinks through the porous rock until it reaches the impervious rock; it flows over the surface of this until it reappears at the ground level as a spring.

In some cases the layer of impervious rock does not reach the surface. In such cases the porous rock goes

How a Spring is Formed.

on absorbing rain until it is saturated. The water may pour up through a crack as a natural well, or it may be tapped by sinking a well.

Springs often occur in a line where a bed of clay reaches the surface of the ground. It is usual to find porous rock above the springs and clay below.

Since chalk is porous it absorbs rain which falls on it; chalk hills are therefore dry, and there is no available water supply for towns or villages. Where chalk meets clay there will usually be found a line of towns and villages at the side towards which the water flows.

Hot springs occur where water sinks to a great depth and then rises to the surface again along a crack.

Such springs occur at Bath and Buxton. In volcanic regions hot springs are very common. In the region round Lake Taupo, North Island, New Zealand, there are many hot springs and natural baths of warm water.

Mineral springs occur where water passes through strata containing mineral salts. Many of these springs have medicinal properties, and are visited by invalids, real and imaginative. Health and pleasure resorts have sprung up round them. Harrogate has springs containing sulphur and salts of iron, Epsom has springs containing magnesia. The waters round Lake Taupo, already mentioned, contain sulphur which is said to be good for rheumatism and skin diseases.

(See also: *Artesian Well, Spa.*)

stalactite: A mass of limestone, tapering downward, hanging from the roof of a limestone cave.

Limestone is almost insoluble in water. It dissolves, however, in water containing carbon dioxide. Rain, in falling through the air, dissolves carbon dioxide from the air. The rain falls on limestone and dissolves a little of it. The rain may sink through cracks and finally come out drop by drop on the inner surface of a cave. As each drop comes out some of the carbon dioxide is given up and a deposit of limestone is formed round the opening of the crack. This is added to continually until a tapering mass of limestone is formed (a stalactite). Stalactites are found hanging from the roofs of limestone caves.

stalagmite: Water containing dissolved limestone drips from the ends of stalactites to the floor beneath. A mass of limestone is slowly built up under each stalactite. These masses—they are much blunter than stalactites—are called stalagmites.

Sometimes stalactites and stalagmites extend until they meet, thus forming limestone pillars.

(See also: *Caves, Limestone.*)

standard time: Time based on Greenwich mean time; adopted throughout most of the world. Countries close to the meridian of Greenwich have Greenwich time; a zone to the east is one hour fast on Greenwich; a zone to the east of this is two hours fast on Greenwich, and so on. The differences are exact hours and in some cases half-hours. A few countries and places stand out from the general convention, e.g. Holland is 19 min. 32 sec. fast on Greenwich, Calcutta is 5 hr. 53 min. 21 sec. fast.

In going eastward clocks are advanced an hour in passing from one time zone to the next. In going west they are put back an hour. (Compare with the date line: in going east over the line you count back a day; this compensates for the advances made in the hours. In going west you count on a day.)

The following table gives the standard time in the principal countries of the world:

Greenwich time: British Isles, France, Belgium, Spain, Portugal, Algeria, Morocco, Gold Coast, Togo.

East of Greenwich:

1 hour fast (on or about 15° E.): Norway, Sweden, Denmark, Germany, Poland, Lithuania, Austria, Hungary, Switzerland, Italy, Czechoslovakia, Yugoslavia, Albania, Tunis, Nigeria, French Equatorial Africa, Cameroons, Congo, Portuguese West Africa, Libya.

2 hours fast (on or about 30° E.): Finland, Estonia, Latvia, European Russia, Rumania, Bulgaria, Greece, Turkey, Syria, Palestine, Egypt, Sudan, Rhodesia, Union of S. Africa, Portuguese East Africa.

2½ hours fast: Uganda.

3 hours fast (on or about 45° E.): Somaliland, Iraq, Tanganyika, Kenya, Zanzibar.

5½ hours fast (on or about 80° E.): India, Ceylon.

6½ hours fast: Burma.

7 hours fast (on or about 105° E.): Indo-China, Siam, Straits Settlements.

8 hours fast (on or about 120° E.): East China, most of East Indies, Western Australia.

9 hours fast (on or about 135° E.): Japan, Korea.

9½ hours fast: South Australia, Northern Territory.

10 hours fast (on or about 150° E.): Tasmania, Victoria, New South Wales, Queensland, New Guinea.

11½ hours fast: New Zealand.

West of Greenwich:

1 hour slow (on or about 15° W.): Iceland, Senegal, French and Portuguese Guinea, Liberia, Sierra Leone.

3 hours slow (on or about 45° W.): Eastern Brazil.

3½ hours slow: Uruguay.

4 hours slow (Atlantic time, on or about 60° W.): Canada east of 68° W., central Brazil, Argentina.

4½ hours slow: Venezuela.

5 hours slow (Eastern time, on or about 75° W.): Canada from 68° W. to 89° W., eastern U.S.A., western Brazil, Chile, Colombia.

6 hours slow (Central time, on or about 90° W.): Central Canada and U.S.A., part of Mexico, Central America.

7 hours slow (Mountain time, on or about 105° W.): Canada from 103° W. to the Rockies, mountain states of U.S.A., Mexico.

8 hours slow (Pacific time, on or about 120° W.): British Columbia, western U.S.A.

10 hours slow (on or about 150° W.): Yukon, Alaska.

(See also: *Introduction, Date Line.*)

steppes: A name originally applied to a region in South-east Russia and South-west Asia; it has now been extended to similar regions—the prairies of the middle United States and the pampas of the Argentine. These are regions inland from the subtropical regions. The climates differ in two important respects—the steppes are much drier and they have a much more extreme climate.

The steppes of Russia and South-west Asia are immense plains which are treeless except for some of the river-beds. In the best watered parts the steppes provide good pasture, but much of the land is desert or semi-desert, and produces little or nothing. The chief wealth of the country is sheep, cattle, and horses. The people are nomadic; they wander from place to place in order to find the best pasture for their flocks and herds.

The United States steppes (prairies) produce cattle and horses; agriculture is extending in the best watered parts. The steppes (pampas) of the Argentine are famous for cattle; agriculture is rapidly extending here also.

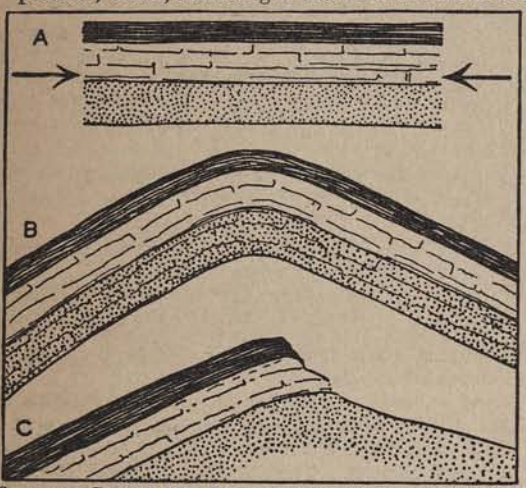
(See also: *Pampas, Prairies.*)

storm beach: A beach formed by the sea flinging up sand and shingle during storms. Such beaches are found along the coast above the level of high tide. A storm beach may be formed in this way across the mouth of a river, so that the river would be completely cut off from its usual means of access to the sea. The river would form a lagoon behind the storm beach, and finally cut a way through it.

Storm beaches are of common occurrence along the shore at a distance above the level of the highest tides.

stratified rocks : Rocks laid down under water. The material may be carried down by rivers and deposited in the sea, or it may consist of the skeleton remains of minute sea animals. In either case the material is spread out in flat layers on the bottom of the sea. When rocks so formed are raised above sea-level they harden in even layers. In some cases the layers are very thin and in others they are of considerable thickness. Stratified rocks can be split into layers, as in the case of flagstones. They often contain fossils. These are the remains of animals which have been carried down and left at the bottom of the water. The greatest layers of stratified rocks are those formed on the floor of the sea ; these show the most level stratification. Level layers of smaller extent are found in stratified rocks formed at the bottom of lakes and in river valleys. Stratified rocks formed in estuaries and deltas show irregular sloping beds.

The most commonly occurring stratified rocks are : sandstone, consisting of sand grains tightly compressed ; chalk, consisting of the minute shells of sea



STRATIFIED ROCKS : (1) AS LAID DOWN ; (2) CRUMPLED INTO AN ANTICLINE ; (3) ERODED SO AS TO EXPOSE THE STRATA.

animals ; limestone, an older and harder form of chalk ; shale, a hardened form of clay. Any material may be deposited in layers to form stratified rocks. For example, the loess of northern China is now being deposited in layers on the bottom of the Yellow Sea and the Gulf of Pechili.

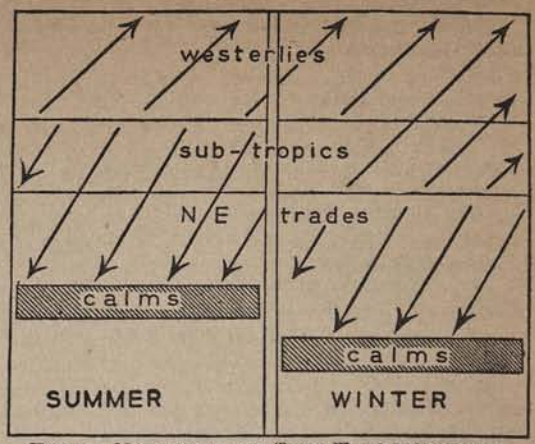
(See also : *Chalk, Crust of the Earth, Limestone.*)

sub-tropics : Regions between 30° and 45° N. and between 25° and 40° S. These are the regions where the trade winds blow in summer and westerly winds in winter.

On the western sides of continents the trade winds blow from the land ; hence they are dry. The trades are blowing from colder regions to warmer ; they are being warmed and there is little condensation. Hence these regions have dry summers. The westerly winds bring rain in winter.

The typical sub-tropical region is the region round the Mediterranean : a climate of hot, dry summers and mild, damp winters is often called a Mediterranean climate. In some other regions, however, the summer is damper than in the Mediterranean.

There are similar regions in California, the central



HOW THE MOVEMENT OF THE TRADE WINDS PRODUCES THE MEDITERRANEAN CLIMATE.

part of Chile (north to south), round Cape Town, in the south-west of Western Australia and in the south of South Australia and the south-west of Victoria.

On account of the hot, dry summers plants must be drought-resisting. The typical plants are evergreens with glossy leaves which give out little moisture in summer and are useful to the plant during the winter rains ; many plants have small leaves and many have long roots ; some also are succulent, these preserve moisture in their fleshy leaves. Amongst plants of the sub-tropics are : orange, lemon, olive, vine, mulberry. The climate is not suited to grass because of summer drought, but it is well suited to wheat. The wheat is planted in autumn, grows well during the mild, wet winter, and ripens rapidly in the hot, dry summer.

The vine has been introduced into other sub-tropical regions and flourishes there. The agave, or prickly pear, is a succulent plant introduced into the Mediterranean region from America.

The Mediterranean region is one of the original homes of civilisation. The reason for this is probably found in the nature of the climate and consequent vegetation. The climate is sufficiently warm to make conditions of life comfortable without destroying energy.

(See also : *Everglades, Evergreens, Fruits—Sub-tropical Fruits.*)

Sudan : A region which stretches across Africa south of Egypt and the Sahara, and extends south to the equator ; it ends at Abyssinia on the east. The name " Sudan " is often restricted to the Anglo-Egyptian Sudan.

The Sudan varies greatly in climate, from the arid desert regions of the north to the well-watered southern region.

The whole of the Sudan is under European influence —the French Sudan in the west, Upper Nigeria (British), the Lake Chad basin (French), and the Anglo-Egyptian Condominium on the Upper Nile.

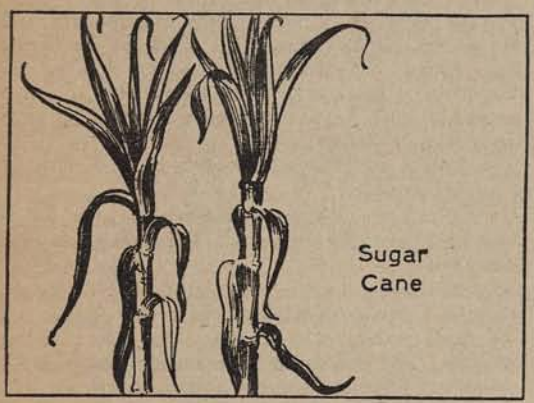
sudd : Thick masses of compressed vegetation, largely grasses, which obstruct the Upper Nile along the Bahr-el-Jebel. The sudd is sometimes 20 feet thick and of such density that small fishing villages are built on it. The masses of peaty vegetation sometimes form obstructions many miles long, and are further compressed by the pressure of water behind. Finally, the river may form a new channel round the obstruction, or it may cause the mass of sudd to burst.

Suez Canal : See *Ship Canals.*

suffoni : See *Solfatara.*

sugar : The principal sources of sugar are sugar-cane, beet-root, and the maple tree.

The *sugar-cane* is a thick grass growing to a height of 12 feet; it grows in tropical countries. The canes are stripped and crushed between rollers. The juice is purified by heating it with lime, sulphur dioxide, or carbon dioxide; the liquid is skimmed and filtered. The clear liquid is condensed in vacuum pans, in which it boils at a lower temperature than the usual boiling-point. When the condensed liquid cools crystals of sugar form in it. The syrup is removed in a centrifugal machine; this rotates rapidly, and the liquid passes out through a strainer which retains the crystals. The chief sources of cane sugar are: West Indies, Central America, Louisiana, east and west coasts of South America, in the tropical zone; Ivory Coast, Angola, Egypt, Natal, Mauritius; most of India, eastern China, Japan, Philippines, Java, Queensland.



Sugar is extracted from *beet-root* by diffusion. Slices of beet are immersed in hot water and the sugar soaks out into it; in order to extract nearly all the sugar the slices are placed in one lot of water after another. The first container contains almost exhausted beet and pure water. The slightly sugary water passes on to a container with less exhausted beet, and so on through ten containers—the beet passes backward and the syrup forward. The juice is purified and condensed in vacuum pans.

The chief sources are the middle and northern states of the United States and a great part of western Europe. The latter region includes most of the countries west of a line drawn north and south across the middle of France, south of the Gulf of Finland, and north of a line from the south of France to the south of the Black Sea.

The growth of sugar-beet in England has been encouraged by means of a subsidy. There is now a considerable production of sugar in the east and south-east.

Maple sugar is obtained from the maple tree, chiefly in Canada, by tapping the trees and allowing the juice to run out.

sulphur : Used for medicinal purposes and in making sulphuric acid; used also in some kinds of bleaching and to harden rubber and to make vulcanite.

Native sulphur is found in the neighbourhood of volcanoes. The impure sulphur is piled in heaps over brushwood and then covered over. Some of the sulphur burns as well as the brushwood. The remaining sulphur melts and runs down. It is drawn off into moulds. Much of the sulphur is further purified by distilling. Sulphur gas comes off and is rapidly cooled in a retort. The cool sulphur forms a fluffy powder—flowers of sulphur.

Vulcanite and ebonite are made by heating rubber with sulphur. Fountain-pens and other articles can be moulded when soft and then hardened by vulcanising. It is now possible to vulcanise rubber without heat.

Some of the sulphurous gases ejected by volcanoes decompose and deposit sulphur about the vent.

The largest deposits of sulphur are found in Sicily, Transcaucasia, Japan, parts of western South America, and in Texas and Louisiana (U.S.A.).

The Louisiana deposits are covered by quicksands. They are mined by driving concentric pipes down into the deposits. Superheated steam is forced down the middle pipe to melt the sulphur. Compressed air is forced down the inner pipe; this forces molten sulphur up through the outer pipe.

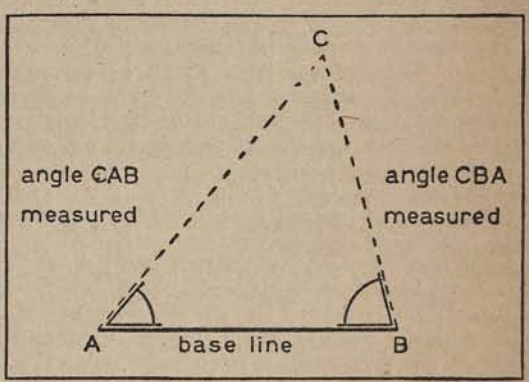
The United States now produces the greater part of the world supply.

Sundarbans : The seaward edge of the great delta of the Ganges. It is a great waste tract with a coast-line extending for 165 miles and an area of over 5,000 square miles. The Sundarbans are intersected everywhere by river channels. Between these are marshy areas covered with thick jungle where tigers and other wild beasts are plentiful. The inhabitants live largely in boats and make a living by fishing.

The name of the district is derived from the sundri tree which grows everywhere in it. This is a hard-wood tree whose wood is used for building houses and boats and for furniture.

Some of the larger channels are used as means of communication with the valleys of the Ganges and the Brahmaputra. The largest of these channels is the Hugli, on which stands Calcutta, the great port of Bengal.

Inland, towards the head of the delta, the Sundarbans give way to drained and settled land with villages and cultivated fields.



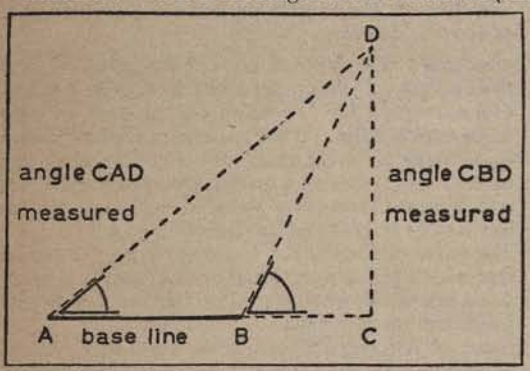
surveys : The basis of survey work is triangulation, or dividing the region to be surveyed into triangles. A base line AB is first measured with extreme accuracy. A distant point C is observed: the angles CAB and CBA are measured by means of a theodolite (a telescope mounted on a tripod; it swings round on a circle marked in degrees; so that the angle it swings through when pointed along AB and then along AC can be observed). As soon as the length AB and the two angles have been measured the

lengths of AC and BC can be calculated. (If a triangle can be drawn to scale from the information available the remaining sides and angles can always be calculated.)

One of the greatest difficulties in survey work is to measure the original base line. In very exact work carefully made and measured bars are used together with telescopes to fix them exactly in line; allowance is made for variations in length due to changes in temperature. The original base line is laid out on a level space, e.g. one of the original base lines for the survey of Great Britain was laid out on Salisbury Plain.

When the whole country being surveyed has been measured out in large triangles, each of the measured sides can be used as the basis for the survey of the area within the triangle. For these lesser surveys the theodolite and Gunter's chain are used.

Heights are measured in a similar way to measurements on the flat, but in this case vertical angles are measured. Thus if the length AB is measured (the



base line) and also the angles CAD, CBD, then the whole figure can be drawn to scale or the lengths of the sides calculated; hence the height CD can be calculated.

In surveying contours a point on the contour is fixed, say, a point 100 feet above sea-level. By moving the theodolite horizontally other points at this height can be found and their positions measured. The 100-foot contour is found by joining these points. The water-level is useful in surveying contours; it consists of two upright tubes joined by a horizontal tube. Points in the same horizontal plane are fixed by looking across the level of water in the two upright tubes.

Coastlines are usually drawn by fixing prominent points and sketching the coastline between these points.

Surveys of the ocean floor are of necessity much less accurate than those of the land. Depths are found by sounding, but since the sea-floor cannot usually be seen few details can be shown. Except near land exact measurements are unimportant and unnecessary. In any case the floor of the sea shows none of the angularity often found on land; hollows are filled with drifted materials either from the land or the skeletons of minute sea animals which sink to the bottom.

syncline : See *Anticline and Syncline.*

tablelands : See *Plateaux or Tablelands.*

tapioca : Made from the tuberous roots of the cassava or manioc plant, a native of Brazil. The roots are heated on iron plates; the starch bursts out in the familiar grains.

tea : An evergreen shrub which grows in warm damp climates. The leaves are picked, allowed to wither, rolled, and then allowed to ferment; fermentation is stopped by heating the leaves. Young leaves and buds produce the finest tea.

The tea plant is a native of Assam, but was first used for tea-making in China. The chief sources of tea are: China, India (especially Assam), and Ceylon. Tea-growing in Ceylon began about fifty or sixty years ago, when the coffee crops in that country were destroyed by disease.

The yearly consumption of tea in this country amounts to about 9 lb. per head.

Tell : A fertile region of plains and valleys in the north-west of Africa between the Atlas Mountains and the coast ranges.

temperate zones : This name is usually given to the regions between the tropics and the Arctic and Antarctic circles. The sub-tropical regions are often excluded and the name is confined to regions between the sub-tropics and the polar circles.

Land in the temperate zones is almost entirely in the northern hemisphere; in the southern hemisphere only New Zealand and the southern end of South America are included.

The typical vegetation of the temperate zone is deciduous forests in the damper parts and grasslands in the drier forests. The two great regions of deciduous forests (oak, ash, elm, sycamore, etc.) are in the east of North America, between the pine forests and the cypress swamps, and in a similar position in the east of Asia. In Europe most of the forests which once covered a great part of the land have been cut down to make way for farmlands. Only small patches of these forests now remain.

The name "temperate" describes the climate which is between the extreme heat of the tropics and the extreme cold of the frigid zone. Inland, however, the climate is extreme—very cold in winter and very hot in summer.

(See also: *Fruits—Temperate Fruits.*)

Terai : A region along the foot of the Himalayas which receives much of the heavy rain that falls on the lower slopes. The Terai is hot and swampy, and covered with dense jungle in which there are numerous wild animals. Recently parts of the Terai have been cleared.

textiles : See *Cotton, Hemp, Jute, Linen, Silk, Sisal Hemp, Wool.*

thermometer : Two types of thermometer are in common use for measuring temperatures: 1. The centigrade thermometer is used for scientific

measurements; the freezing-point of water is marked 0° and the boiling-point 100°. Temperatures below zero are preceded by — (minus); thus 3° below zero is — 3° C. 2. The Fahrenheit thermometer is commonly used in England. The freezing-point is 32° and the boiling-point 212°. Zero is 32° below freezing-point. Temperatures below zero are preceded by — (minus); thus 40° below freezing-point is — 8° F. Temperatures throughout this encyclopædia are given in degrees Fahrenheit.

To change Centigrade to Fahrenheit.—Multiply by $\frac{9}{5}$ and add 32. E.g. 10° C. = $(\frac{9}{5} \times 10 + 32)$° F. = 50° F.

To change Fahrenheit to Centigrade.—Subtract 32 and multiply by $\frac{5}{9}$. E.g. 68° F. = $(68 - 32) \times \frac{5}{9}$° C. = 20° C.

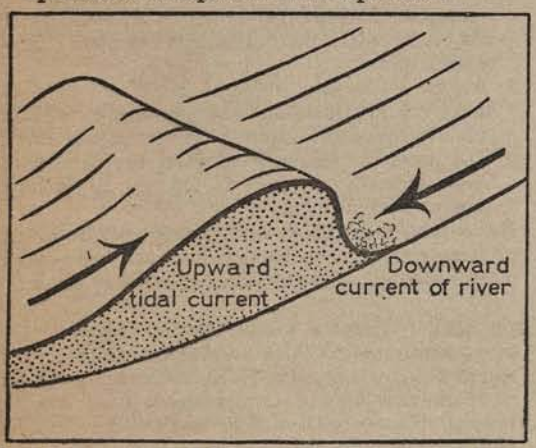
tidal bore: Tidal bores usually occur in funnel-shaped river mouths where there is a strong downward current met by a strong upward tidal current from the sea. The downward current checks the upward tidal current and piles it up. The piled-up tidal current then sweeps forward as a wall of water.

The height of a tidal bore is exaggerated by the funnel shape. As the wave advances into the funnel it is compressed from the sides and so the height of the wave is increased, especially at the sides.

Strong tidal bores occur, amongst English rivers, in the Severn, Trent, and Humber. That in the Severn is very high and sometimes reverses the current of the river up to Tewkesbury docks. The bore in the Humber is occasional.

The Bay of Fundy in eastern Canada is famous for high tides, which rise in some places to a height of over 60 feet. The bore which accompanies the incoming tide is from 3 to 6 feet high.

The greatest of all tidal bores is that of the Tsientang River in China. The bore is 15 feet high, and rushes up the river at a speed of 12 miles per hour.



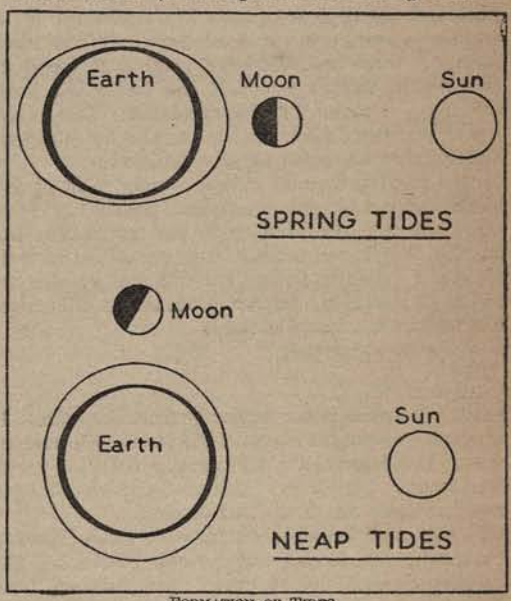
TIDAL BORE PRODUCED BY STRONG TIDAL CURRENT MEETING STRONG RIVER CURRENT.

tidal wave: This expression is often used for waves of exceptional size, although they have no connection with tides. The waves produced by earthquakes are often so described, and occasionally also great waves produced by hurricanes.

The expression is correctly used for the advancing tide. The great tides originate in the oceans. They are of small size; it is only on the shelving shores of continents that they are piled up and exaggerated.

tides: The daily rise and fall (flow and ebb) of the sea. The range of the tides, the distance between high and low water, varies with the phases of the moon. At full moon and new moon the range is at a maximum; at half-moon (first quarter and third quarter) it is at a minimum. The very high and very low tides are called spring tides, and the medium tides neap tides. Each day the tide is about 50 minutes later than on the previous day; there are two tides each day.

Tides are ascribed to the attraction of the moon and sun. The amount of attraction varies inversely as the square of the distance of the attracting objects (double the distance and the attraction is quartered). Considering the moon and the earth there is a greater pull on the side towards the moon and a minimum pull on the side away from the moon. Hence tides are piled up in these two positions. As the earth rotates each part comes in turn into the positions of high tide. The sun also piles up tides in two parts at opposite sides of the earth. The influence of the moon is greater than that of the sun, because it is much nearer (this in spite of the much greater mass



FORMATION OF TIDES.

of the sun). The greatest tides occur at full moon and new moon, when the sun and moon pile up tides in the same places; the tides are least when the sun and moon pile up tides in different places, at half-moon.

In inland seas the tides are small owing to the lesser extent of water to be piled up. In the Mediterranean, for example, the range is only a few inches, except in the neighbourhood of Gibraltar, and still more so at Venice, where the narrowing Adriatic increases the tidal range considerably.

There are many cases of tidal interference, e.g. the tidal wave enters the Irish Sea from both ends. Where both waves give high tide at once there are unusually high tides; where one gives high tide whilst the other gives low tide, the tides are insignificant. Southampton has the advantage of double tides—one tidal wave coming round each side of the Isle of Wight.

The reason for the tide being 50 minutes later each day is this: the moon moves round the earth in the same direction that the earth rotates; whilst the earth is completing its rotation the moon moves on, so that it takes more than 24 hours for any spot to

reach the tidal-wave position. The moon revolves round the earth in $27\frac{1}{3}$ days; hence the daily difference is $\frac{24}{27\frac{1}{3}}$ hours = about 50 minutes.

timber: The timber supplies of the world are in three groups:

1. The softwood conifer forests which form a belt round the world south of the tundras. There are lesser quantities of softwood timber on the slopes of mountains. The softwood forests are being used up (especially for paper pulp) much more rapidly than new wood is being produced, so that a softwood famine is in sight. The conifer forests are being drawn on for building timber and wood for cheap furniture, as well as for pulpwood.
2. The temperate hardwoods (the broad-leaved trees). There are three great temperate forest regions: (i) the north-east of the United States and the neighbouring part of Canada (this region merges into the conifer forest in the north, the prairies in the west, and the cypress swamps in the south); (ii) a similar region in the east of Asia; (iii) western Europe; there are still large patches of forest in this region, though much of the forest has been destroyed to make way for cornlands. Temperate hardwood is used for furniture and also for firewood. The supplies are being rapidly depleted.
3. The tropical forests. These supply most of the hardwoods used in cabinet-making (mahogany, rosewood, ebony). In addition to the hardwoods, the tropical forests can supply large quantities of softwood; a difficulty is that the different species are mixed so that it is often not profitable to cut unless the various kinds can be used.

time: See *Standard Time*.

tin: See *Metals*.

tobacco: Tobacco came originally from America. It is prepared from the leaves of the plant by fermentation. The tobacco plant (Virginian tobacco) grows well over a wide range of climates, and especially in tropical lands which are rather dry.

The best cigar tobaccos are grown in Cuba (Havana tobacco); Brazil also exports cigar tobacco; the eastern United States grow cigar tobacco from Havana seed; other sources of cigar tobacco are the Philippine Islands (Manila cheroots and cigars), Java, Sumatra, Madras, Burma.

Pipe and cigarette tobaccos come chiefly from the United States (Virginia, Maryland, Kentucky, Ohio), Venezuela, Turkey, and Syria (Latakia).

More recently the cultivation of tobacco has been extended through many parts of the British Empire (South Africa, Rhodesia, Kenya, etc.).

Tobacco was grown in England until suppressed by the Government; it is now being grown again, especially in Hampshire.

tornado: A violent storm of the cyclonic type to which the West Indies and neighbouring parts of the United States are subject, especially the Mississippi basin. They also occur in Australia.

Tornadoes originate in areas of extreme heat, where a small area of very low pressure is surrounded by much higher pressures. In calm weather the differences in pressure may accumulate until the unstable arrangement is suddenly upset by a clockwise whirl into the low-pressure centre. Tornadoes advance at 30 or 40 miles an hour and wreck everything in their narrow paths.

Tornadoes occur chiefly in spring and early summer.

town sites: Towns grow up in places where certain human necessities are met. Town sites have been analysed as follows:

River towns:

1. Commercial towns; situated at the head of navigation, the highest point which sea-going ships can reach. This is usually the most convenient point for collecting and distributing goods, since it is the point farthest inland that can be conveniently reached.
2. Bridge towns, at the lowest points where rivers can be bridged; that is, they stand on the lowest routes across the river.
3. Cataract towns; at or close to a waterfall. These towns grow up chiefly because of the water-power available, as in the case of the towns along the Fall Line in the eastern United States. Cataracts also may mark a limit to navigation.
   (See also: *Fall Line*.)
4. Towns at the confluence of two rivers, thus commanding two or more routes. Paris stands close to the confluences of the Seine with several of its tributaries.
5. Towns on river islands or in river loops. These positions were valuable in early days because they were easy to defend.

Route towns:

1. Towns at the entrances to convenient mountain passes. Sometimes these towns are some distance off from the pass, but on the route up to it. Where there is a wide gap in the hills or mountains there may be a *gap town* in or close to the gap. Vienna stands in the gap between the Alps and the Carpathians. Leeds is at the entrance to the Aire Gap. There are towns in or close to the gaps in the North and South Downs.
   (See also: *Weald*.)
2. Ferry towns, on straits. There are numerous examples of these: Dover and other south-coast towns, including Southampton; Gibraltar; Constantinople.
3. Towns where two different kinds of districts meet, e.g. industrial and manufacturing districts. Such towns often become great commercial cities.
4. The most conveniently situated harbours with rich agricultural, manufacturing, or mining regions behind them.

Industrial towns: These usually grow up close to the raw materials or where there is some convenience for manufacturing. They are often situated on rivers.

trade winds: Regular winds blowing towards the equator from the north-east and the south-east. The region about the equator is highly heated; the air is warm and light; air-pressure is low. Cooler, heavier air pours in from north and south and drives the light, warm air out. The rotation of the earth gives these north and south winds a twist towards the west (for explanation see *Anticyclone*), so that they appear as north-east and south-east winds.

The hot region towards which the trades blow moves north and south with the sun. In the northern summer it reaches a region about 12° north of the equator; in the southern summer the region is close to the equator. Hence in each hemisphere there is a region about 10° to 12° wide over which the trade winds blow in summer but not in winter. This region lies between 30° N. and 45° N. In the southern hemisphere it is between 25° S. and 40° S.

The regularity of the trade winds made them ex-

tremely valuable to the old sailing-ships. Ships sailing to America would sail south into the trades; in returning they would sail north into the westerlies, which brought them home.

The trade winds appear to have a considerable effect on the surface currents of the oceans. The steady winds towards the west, blowing throughout the year, drive the surface water westward. In each of the three oceans there is a westward drift on both sides of the equator, developing into definite currents in the west.

(See also: *Anti-trades.*)

transport: See *Communications.*

tropics: Two parallels of latitude—the tropic of Cancer 23½° north of the equator and the tropic of Capricorn 23½° south of the equator.

The sun is over the tropic of Cancer during northern summer and over the tropic of Capricorn during southern summer. At these times it is seen overhead at noon on one of the tropics. The sun appears to move north to the tropic of Cancer and then to turn south; hence the name "tropic" (turning-point).

Changes are slow at the turning-points, so that the sun is overhead at the tropics for a longer time than at any other part. This is one reason why deserts are found along the tropics.

The region between the two tropics is often called *the tropics.*

In the tropics the day and night vary little in length. The longest day at each tropic is 13½ hours and the shortest day 10½ hours. The period of twilight is very short.

(See also: *Fruits—Tropical Fruit.*)

tundras: Regions immediately south of the Arctic ice desert. They stretch along the Arctic shores of Europe, Asia, and America.

These plains are frozen to a great depth. In summer the surface thaws and is quickly covered with flowers, grasses, and dwarf trees a foot or more in height.

There is no underground drainage (because the ground is always frozen at a little depth); hence the tundras are swampy. The population is therefore small.

There are large numbers of insectivorous birds, which arrive in the early summer. The reindeer is the largest animal of the tundras; it provides the Lapps with milk, meat, clothing, material for tents, and draws sledges. The caribou, the American reindeer, travels north in the summer and south to the pine-woods in winter.

tungsten: See *Metals.*

tunnels: Railway tunnels are cut either for the purpose of crossing mountain ranges or passing under rivers. Where possible, railways pass round the ends of mountain ranges or use river gaps (as in the cases of the Aire and Tyne Gaps). Where this is impossible the railway is taken through the most convenient pass available. It may be necessary to tunnel under the pass—because the gradient increases towards the pass, because the pass may be blocked with snow in winter or in danger from avalanches, or because the pass may be over a glacier.

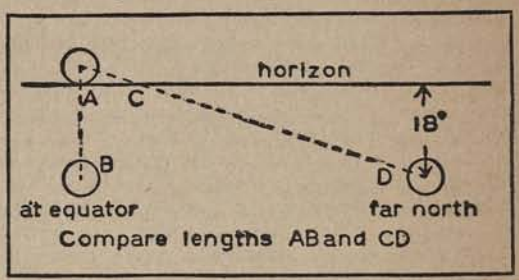
The greatest mountain tunnels are those through the Alps. Mont Cenis tunnel, 8 miles long; Simplon tunnel, 12 miles long; St. Gotthard tunnel, 9 miles long.

Tunnels are sometimes cut under rivers where these are too wide to be bridged. The tunnel under the Severn on the Great Western Railway is 4 miles 624 yards long; 2½ miles of the length is under the river. Several tunnels have been cut under the Thames in London: Woolwich tunnel (500 yards), Greenwich tunnel (406 yards), Blackwall tunnel (1¼ miles), Rotherhithe tunnel (1¼ miles); the shorter tunnels are for foot passengers only, the longer ones for both vehicles and foot passengers. In New York tunnels have been cut under the rivers to connect the city with Brooklyn.

turbines: See *Power—Sources of.*

twilight: The periods after sunset and before sunrise, when the land is still lighted by the sun. Even when the sun is below the horizon the upper air is still lit up by it; dust and clouds reflect some of the light to the earth and so cause twilight. Twilight lasts until the sun is 18° below the horizon.

In the tropics the sun drops almost vertically and so



TWILIGHT AT THE EQUATOR AND IN THE NORTH.

is quickly lost to sight; the period of twilight is very short. Away from the tropics the sun sets obliquely; it is a much longer time before it is low enough to cease causing twilight, and so the periods of twilight are long.

Tyne Ports: The group of ports at the mouth of the Tyne—Newcastle, Gateshead, Jarrow, North Shields, South Shields, Tynemouth. This group of ports together rank as the fourth port in the British Isles. An important export is coal from the Durham coalfield. The Tyne is second only to the Clyde, throughout the world, as a shipbuilding centre.

typhoon: A violent storm of the cyclonic type. These storms occur in the seas off the east coast of Asia, from the Philippines to Japan. They may be anything up to a hundred miles in diameter and travel slowly. They are most frequent from July to October.

(See also: *Tornado.*)

Tyrol: The western part of Austria, including the eastern Alps; it is much visited by tourists for the sake of the mountain scenery. Innsbruck, the capital, is at the end of the Brenner Pass, through which runs a railway connecting the German and Italian railways.

The chief rivers (Inn, Ems, Drava, and Adige) run in longitudinal valleys, which make north and south communications difficult.

valley: A long depression between hills or mountains, often carved out by a river or glacier. Valleys are classified as longitudinal or transverse. Longitudinal valleys run along the length and between ranges of hills or mountains; they are usually long, and with gently sloping sides. Transverse valleys cut across the ranges, generally by the river cutting back; these valleys usually have

much steeper sides and are shorter than longitudinal valleys.

In general a valley has steep sides and a steep upward slope towards the source of the river. The

River Valley with Steep Sides and Valley Plain.

slope of the valley floor and the slope of the sides become more gentle lower down the river, and the width of the valley increases.

The final result of denudation on a valley is to reduce it to a plain: the higher parts are being eroded and the matter deposited in the lower parts. The lower parts of valleys are usually fertile because of alluvial soil deposited in them.

Longitudinal valleys are often original folds in the land (synclines), between ranges of hills. Transverse valleys have usually been cut by rivers or glaciers. Original glacial valleys are distinguished from river valleys chiefly by their shape—glacial valleys are U-shaped and river valleys V-shaped. Ice, filling a glacial valley, protects the edges from erosion and so preserves the U-shape. Cañons are deep valleys with upright sides; the edges of the cañons are protected from erosion by the absence of rain.

Dry valleys may be original folds not carved by rivers. Very often dry valleys show that they have been eroded by rivers. In such cases there has usually been a change in the drainage of the area:

1. An uptilt of the land may have caused rivers to change their directions, leaving old valleys dry and carving out new valleys.
2. In cases of river capture part of the original bed of the captured stream may be left dry.
3. In limestone districts a river may dissolve a way through the rocks and form a new, underground bed at a lower level; the upper bed would be left dry.
4. In some cases rivers overflow the edges of their watersheds in times of flood. A new channel may be formed which is only open during floods. Gradually the barrier is worn down, and finally the river may follow the flood valley entirely. This appears to have been the history of the river Witham, which formerly flowed into the Trent and now flows into the Wash.

The wind is an erosive agent which may account for some dry valleys. Sand may be driven to and fro and by continual abrasion may change what was originally a minor hollow into a dry valley. Rain also helps in the erosion of dry valleys even where there is no river. It may happen that the soil is so porous that rain usually sinks into it very rapidly. During heavy rain small streams run down the slopes, only to dry up as soon as the rain ceases. The erosion in such cases is similar to that of river-beds, but slower.

The Saharan wadis are dry river-beds except during the occasional rains when they become torrents. The lower parts of the valleys of some of the Australian rivers are dry except in seasons of exceptionally heavy rainfall.

vanadium: See *Metals*.

vegetable oils: Vegetable oils are used in making margarine, soap, paints, printers' inks, etc.; for polishing and lubricating; for preserving food, especially fish.

Linseed oil is obtained from the seed of the flax plant; flax for oil is grown in Russia, Canada, and the United States, the Argentine, and India.

Hempseed oil comes from many parts of the northern plain of Europe, northern Italy, Canada and the United States, and India.

Cotton-seed oil is extracted from the seeds of cotton grown in the United States, Egypt, India, etc. It is used for a great variety of purposes, including soap, paints, linoleum, margarine, lard substitutes, salad oil, for packing sardines. (See also *Cotton*.)

Olive-oil is the most valuable of the edible vegetable oils. It is expressed from the fruit of the olive-tree, grown chiefly in the countries round the Mediterranean. It is used as salad oil, in cooking, and in packing sardines.

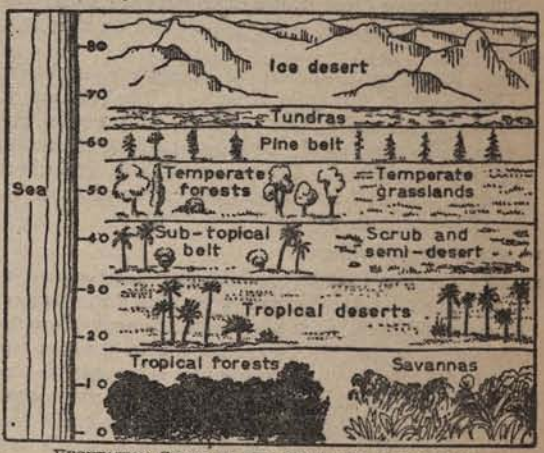
Coco-nut oil.—See *Coco-nut*.

Candlenut oil is obtained from the nuts of the candlenut tree which grows in the South Sea Islands: It is used there for lamps; it is also used for paints.

Castor oil is expressed from the seeds of the castor oil shrub, and comes chiefly from the East Indies. It is used medicinally.

Cocoa butter. See *Cocoa*.

Oil is obtained from numerous other trees and shrubs, usually from the seeds. Amongst these are: almond, walnut, apricot, colza oil (from rape seed, grown in England and on the Continent), ground-nut oil (Central America, South Africa, India, etc.), shea butter (from the nuts of the Karité tree; Sudan), sunflower oil (Russia, Hungary, India, and China), soya bean.



Vegetation Zones in the Northern Hemisphere.

vegetation zones: From the North Pole towards the equator the following zones succeed one another:

1. Polar ice desert; very little life.
2. Tundra; mosses and dwarf plants.
3. Pine forests.
4. (*a*) Near the sea—deciduous forests. (*b*) Inland —grasslands.

5. (*a*) Near the sea to the west of continents—sub-tropical region of evergreens. (*b*) Inland—steppes and semi-desert with many bulbous plants. (*c*) To the east—wet sub-tropical region.
6. (*a*) To the west—hot tropical desert. (*b*) To the east—semi-desert and hot forests towards the coast.
7. (*a*) Near the sea—tropical forests of exceeding luxuriance. (*b*) Inland—savannas (open park-lands), with numerous large animals.

The zones are modified in places by high mountain masses and by the monsoon climate of South-east Asia; with these exceptions the zones are fairly constant throughout the world.

Victoria Falls: See *Zambesi*.

vine: The vine is a native of sub-tropical countries. It grows well in countries where there are hot summers, even though the winters may be very cold. The vine is now grown throughout the sub-tropical regions; the northern limit of cultivation for wine-making runs roughly across the middle of France.

The products of the vine are: grapes, currants, raisins, sultanas, and wine. Currants were formerly called "raisins de Courantz" (raisins of Corinth), because they were exported from that city. The small, seedless grape from which currants are made is now grown successfully in other sub-tropical countries; large quantities of currants now come from Australia.

Sultanas were formerly bleached in order to give them a whitish appearance, but this practice is dying out; the best sultanas are now unbleached. Spain exports great quantities of fresh grapes and raisins; Greece and Asia Minor (Smyrna) export currants, raisins, and sultanas.

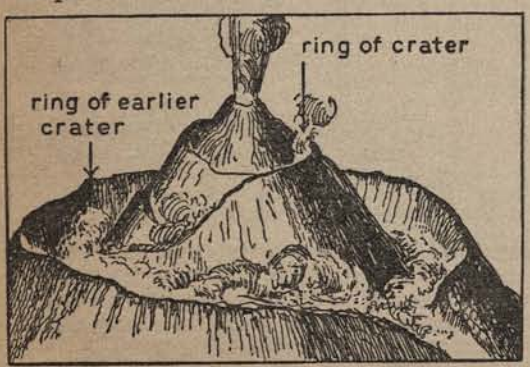
The proportion of dried fruit sent to Britain increases with distance: South Africa sends a large proportion of fresh fruit, whereas Australia and California send chiefly dried fruit.

(See also *Wine*.)

vinegar: originally soured wine; vinegar is still made from inferior wines in France and other wine-producing countries. In England vinegar is made from malt and also from cider.

vodka: See *Distilling*.

volcano: A mountain formed of materials erupted from the earth. Originally the volcano was a point of weakness on the earth's outer crust. Heated materials broke through and were thrown out, largely by explosions of superheated steam. The ejected materials fell back around the vent. Successive eruptions gradually built up a mountain of cone shape round the vent.



OLD CRATERS OF VESUVIUS

Volcanic activity usually runs in cycles—a period of intense activity with eruptions and earthquakes; the activity dies down, perhaps to quiescence; renewed activity heralded by minor earthquakes.

Volcanoes are usually cone-shaped because the ejected materials fall about the vent with some approach to uniformity. The vent pipe passes down the middle of the cone; there is usually a cup-shaped depression at the top, called a crater. Sometimes the vent pipe becomes blocked and a side (lateral) vent is blown out in a new place.

The materials ejected include lava (molten rock), volcanic ash, and dust, which sometimes falls at great distances from the vent, half-melted and twisted lumps of rock ("volcanic bombs"), and vast quantities of superheated steam. Sulphurous and acid gases are ejected, sometimes in large quantities.

Economic products associated with volcanoes include pumice stone (the frothy scum of lava), sulphur, and

SECTION THROUGH VOLCANO.

some other substances formed from the ejected gases. Diamonds are found in the throats of old volcanoes. Marble, slate, and other changed rocks are found in regions of former volcanic activity.

Volcanoes are found in regions that are known as lines of weakness. Thus, the crumpling of the earth's crust which caused the folding of the Andes left a line of weakness along the whole range; numerous volcanoes occur along this line. Perhaps the most extraordinary fact about volcanoes is the ring of volcanoes which encircles the Pacific. There is a string of volcanoes along the Andes, Central America and Mexico, the northern Rockies, Alaska, the islands fringing eastern Asia, and the East Indies.

The European volcanoes are Hekla (Iceland), Etna (Sicily), Vesuvius (near Naples), and Stromboli (Lipari Islands).

Water and volcanoes: Volcanoes occur as a rule not far from the sea or other sheets of water; there are, however, volcanoes in the centre of Asia, so that the presence of the sea is not a necessity. The explosions which occur during eruptions are chiefly due to masses of superheated steam. Vast quantities of steam are thrown out; the huge clouds which

appear over volcanoes are almost entirely steam. As this steam condenses in the upper air hot rain falls, often forming destructive floods. Sometimes the rain mingles with volcanic ash, and torrents of mud flow down the sides of the volcano.

In 1883 there was an extremely destructive eruption at Krakatoa, an island volcano in the East Indies. The eruption had proceeded for some time when the sea probably broke in. Vast quantities of superheated steam were formed, and a large part of the island was blown to dust. Enormous waves were formed on the sea; these swept over neighbouring islands and coasts, drowning thousands of people; the effects were felt thousands of miles away. Wonderful sunsets which occurred in that year were ascribed to volcanic dust blown into the upper air and carried round the world.

Lava: Lava is molten rock which glows with a vivid glare; the glare lights up the clouds at night and gives the effect of fire; though very little burning is associated with volcanic eruptions. The lava is impregnated with steam which escapes, sometimes with a roar like that of a jet of steam from a pipe. The lava may be forced up the pipe of the volcano till it pours over the edge, or it may find new vents through weak places in the cone. As a lava stream pours down it is covered with clouds of escaping steam. At first it may be completely molten and glowing hot. The surface quickly cools to blackish clinkers. The surface is full of minute holes formed by bubbles of steam; this material provides pumice stone. The frothy outer surface is a very bad conductor of heat, and the lava within cools with extreme slowness; it may retain its heat for years.

Lavas differ greatly in the way they weather. Some lavas remain barren for hundreds or thousands of years. Others weather very quickly; within a generation the first plants have begun to grow in crevices. This growth hastens disintegration and within a comparatively short period the lava sheet may be covered with vegetation.

Submarine volcanoes: Volcanoes break out on the floor of the sea just as on land. Volcanic matter is piled up in cone shape; there may be sufficient to bring the matter above sea-level, and a volcanic island is formed. Sometimes these islands are of short duration; the matter is loose and clinkery, and is quickly eroded by the sea. In other cases the matter is harder and the island persists and increases in size; the surface may be broken up to form soil; seeds may be brought by birds or swept along by ocean currents. Many of the volcanic oceanic islands must have been formed and fertilised in this way.

(See also: *Geyser, Mud Volcano, Solfatara.*)

Volga: The greatest river of Russia and the longest river in Europe (2,400 miles). It drains an area of nearly 600,000 square miles, including the middle and east of Russia and part of the south-east.

The Volga rises in marshes on the western side of the Valdai Hills; these marshes are less than 700 feet above sea-level and about 750 feet above the level of the Caspian, so that the river has an average fall throughout its course of only about 4 inches per mile. The river sprawls across the middle of Russia and receives important tributaries, which extend the navigable length of the river enormously; the Kama flows in from the direction of the Urals and the Oka from the west. Farther south the Volga approaches the Don; at the closest point the two are only 40 miles apart. The Volga then flows across the Caspian steppe and enters the Caspian Sea across a large delta by two hundred mouths.

The advantages of the Volga for navigation are:

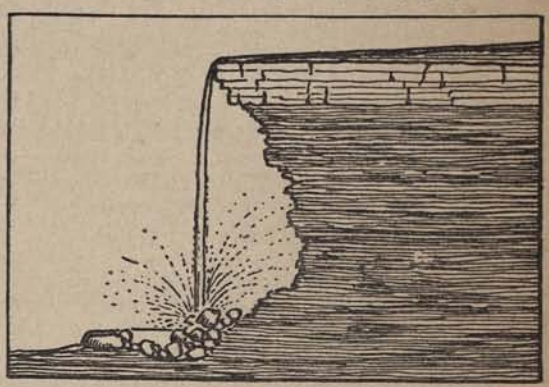
1. Its great length and the sprawling courses of the river and its tributaries; these cover the greater part of Russia.
2. It is close to other rivers with which it has been connected by canals: the upper Volga is connected with the Neva and thus with the Baltic, and also with the Dvina and the White Sea; a short railway connects it with the Don.
3. The rivers flow south, so that the lower basin is not subject to great spring floods as in the case of the rivers which flow north. There are, however, floods in some parts where ice remains after ice farther north has melted.

The disadvantages are:

1. The rainfall over the basin is deficient. In many parts of the river there are sandbanks and shoals and much of it is hardly navigable in dry periods.
2. The Volga flows into an inland sea. This disadvantage has been minimised by cutting canals to unite the Volga with the Baltic and the White Sea.
3. In winter the river and its tributaries are frozen for long periods. During these periods, however, the rivers are used as highways for sledges.

The fisheries of the Volga are valuable and important. The waters at the mouth of the Volga are one of the richest fishing-grounds in the world. When the ice melts shoals of fishes dash up the river to sandy spawning-grounds. Amongst these fishes is the sturgeon, from the roe of which caviare is made.

Wallace's Line: A belt of deep water following the Macassar Strait in the East Indies. This line marks the division between Australia and Asia; probably an ancient fracture along this line resulted in a final separation of the two continents. (The continental shelf on which the East Indies stands suggests that the whole of this region once formed a link between Asia and Australia.) To the east of the line the typical animals are those found in Australia—the marsupials. To the west of the line the animals are those found in Asia—elephant, tiger, ape, etc.



waterfalls: Waterfalls occur in a river when a layer of hard rock lies over layers of softer rock. The softer rock below is worn away and the harder rock above forms a sill over which the river pours. The points to look for in a waterfall are:

1. The sill of hard rock above.

2. A cave behind the fall where the soft rock has been worn away by spray from the falling water. The cave may be so shallow as to be merely a recess.
3. A pool worn out of the rock below by the falling water.
4. Blocks of stone fallen from the sill. The sill is slowly undermined and blocks fall.
5. The fall is usually at the head of a narrow valley. As the sill falls the valley extends farther and farther backward.

Famous Falls :

Niagara, in two parts separated by Goat Island—American Fall, 1,000 feet wide and 160 feet high ; Canadian or Horse-shoe Fall, 2,000 feet wide and 150 feet high ; depth of water at the sill, 20 feet ; the sill is hard limestone, 80 feet thick ; the "Cave of the Winds" behind the fall is entered from the Canadian side ; the Horse-shoe Fall is retreating at the rate of 4 or 5 feet each year = 1 mile per 1,000 years.

Victoria Falls (Zambesi River) : The river falls into a huge crack across its course ; the width is about half that of Niagara and the greatest height 343 feet ; the river pours out below the fall through a gorge only 100 feet wide ; it throws up columns of perpetual spray.

Kaietur Falls (Potaro River, tributary of the Essequibo River), in British Guiana ; clear drop of 741 feet.

Iquazu Falls, between Brazil and Argentina, are 2 miles wide, with a drop of 200 feet at the deepest part.

(See also : *Power—Sources of.*)

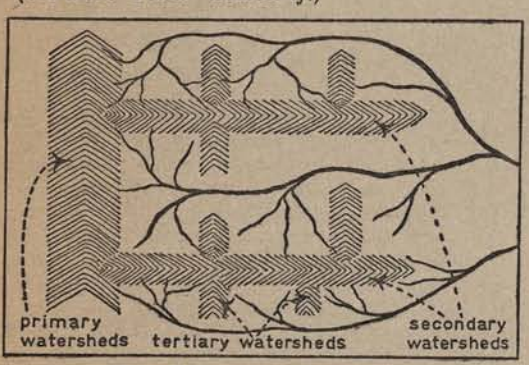


DIAGRAM ILLUSTRATING WATERSHEDS.

watershed : High land separating the basin of one river from that of another. The basin of a river may be found roughly on a map by drawing a line between its tributaries and those of other rivers ; the bounding line is the watershed.

A *primary watershed* separates one river basin from another. A *secondary watershed* separates tributaries of the same river. There may be further systems of watersheds separating tributaries of a tributary, and so on.

The chief watershed of England is formed by the Pennines and is continued south to the Cotswolds. The Alps and their prolongations form the chief watershed of Europe. The chief watershed of Asia consists of the Himalayas and their prolongations. In America the highest watershed is formed by the Rockies and the Andes ; the east and west watershed between Canada and the United States is low but important.

water-power : See *Power—Sources of.*

water-supply : The growth of large cities raises the problem of water-supply in a very acute form. Towns grew up where there was a good supply of water, but the supply was usually inadequate for a large town. The problem of water-supply has been solved in various ways :

1. Several English and Welsh towns draw water from the Welsh Mountains, where there is an ample supply. The narrow valleys are not difficult to dam ; dams have been constructed and artificial lakes created which serve as reservoirs. Lake Vyrnwy was created by building a dam across the valley of the river Vyrnwy, a tributary of the Severn. This lake covers an area of 1,000 acres. It supplies Liverpool, 68 miles away, by means of aqueducts.

Other towns which draw water from reservoirs in the Welsh Mountains are Birmingham, Swansea, and Merthyr Tydfil. Manchester draws its water-supply from Thirlmere, in the Lake District, and Glasgow from Loch Katrine.

2. The London water-supply is taken from the rivers Thames and Lea. This is made possible by the modern method of treating the water with chlorine in addition to filtering it.

3. The greatest aqueduct in the world is that between Mundaring and Kalgoorlie, in western Australia. The pipes carrying the water are 350 miles long, and contain a month's supply of water.

Weald : A region of Kent and Sussex surrounded by rings of chalk and sandstone escarpments facing inward. This is one of the most fertile regions in England, noted for hop-growing and fruit. The name means wood : the Weald was once covered with forest ; the wood was used to make charcoal to be used in iron smelting.

The arrangement of the various strata forming the Weald shows that the Weald was a dome of rocks eroded as they were being forced upward. The strata dip down everywhere, away from the centre of the Weald.

The mode of formation explains a peculiarity of the rivers of the Weald. The main streams cut their way through the ridges of hills by means of transverse valleys (valleys across the ridges). The tributaries flow in strike valleys (longitudinal valleys, parallel with the ridges).

The map shows how the main streams radiate out from the centre of the Weald. These streams evidently follow the original system of drainage, i.e. outward from the centre of the dome. As the dome rose, and was eroded at the same time, the rivers continued to cut down their original beds, so that their courses were not changed.

THE WEALD.

The tributary streams began in places where the original streams cut through soft rocks. These softer rocks were rapidly eroded and the side valleys extended farther and farther to left and right,

The formation explained above may be seen in: the Sussex Ouse, which flows through a gorge at Lewes; the Adur, which flows through at Shoreham Gap; the Arun, and the Wey. The tributary streams may be seen flowing along the foot of the escarpments and helping to erode them.

The river gaps are used for communications; they are used by both roads and railways. Some of the most important towns stand in or close to the gaps: Ashford close to the Stour gap, Maidstone in the Medway gap, and Lewes in the Ouse gap, are examples of these towns.

weather forecasts: Weather forecasts are based on reports from meteorological stations in all parts of the country. The Meteorological Office receives reports of air-pressures, direction and strength of winds, temperatures, etc. These are entered on charts already prepared. Isobars and isotherms are drawn, and the predictions based on these. The following are simple examples of such predictions:

1. An extensive anticyclone indicates fine weather. By comparing weather maps of consecutive days it may be seen whether the anticyclone is stationary, spreading, or advancing, or whether it is dispersing by the outflow of denser air.
2. Cyclones (depressions) indicate unsettled weather with rain. The movement of a depression may be predicted by observing its previous course. The gradual filling up of a depression by the inflow of denser air may also be predicted.
3. In an anticyclone winds blow outward from the centre, with a twist towards the right (clockwise). The strength of the wind depends on the nearness of the isobars to each other: the nearer the isobars the stronger the winds.
4. In a cyclone the winds are inward, with a twist towards the left (anti-clockwise).

Weather predictions are circulated to shipping and to farmers. They are especially valuable to sailors on the China seas, who may use them to avoid the worst effects of typhoons. Farmers regulate their operations by the forecasts, especially in such matters as harvesting and hay-making.

(See also: *Anticyclone, Cyclone, Isobar, Isotherms, Typhoon.*)

westerlies: The prevailing west winds which blow over the British Isles and western Europe, especially during the summer season. These winds bring rain from the Atlantic, so that the west of Europe, especially the mountainous parts, receives ample rain. The region of the westerlies begins just north of the trade winds. In winter, when the trade winds are at their southern limit, the westerlies blow over the sub-tropical regions and bring winter rain to these regions.

The westerly winds bring rain to the temperate regions throughout most of the year.

In the southern hemisphere the winds are more truly westerly. They blow strongly round the globe in the Roaring Forties. These winds were very useful to mariners in the days of sailing-ships. They were known as the Brave West Winds.

whale fishing: The modern whaling boats are small steamers up to 200 tons. Harpoons are fired from the Sven Foyn gun, first used in Norway. The Norwegians are the greatest of the whale fishers.

Whale fishing is carried on largely from land bases, especially on the coasts of Norway. The chief whaling region is now the Antarctic, where there are British, Norwegian, and Argentine companies. The bases are South Georgia, the South Orkneys, the South Shetlands, and South Sandwich.

Whales are hunted chiefly for the oil obtained from the blubber, a thick layer of fat under the skin. Whale oil is used for lamps, for making soap, and very largely as a lubricating oil for machinery. It is also used in leather dressing and for some other purposes. The flesh of the whale is used as food in some places. *Ambergris* is a wax-like substance sometimes found in the intestines of the sperm whale. It is used in perfumes. *Whalebone*, really the palate plates of the right-whale, is used as a stiffener by dressmakers.

wheat: See *Cereals.*

whisky: See *Distilling.*

Wieliczka: A small town, 9 miles from Cracow, which is famous for a wonderful salt mine that has been worked for nearly seven hundred years. The mass of salt is 500 miles long, 20 miles wide, and over 1,000 feet thick. The salt is cut out in galleries and large chambers supported by massive pillars of salt. Many of the workers live permanently underground. A complete village has been cut out in the salt, with streets of houses, and a church.

winds: Some of the most famous winds, with their special characteristics, are shown in the following list:

Chinook: A warm, dry wind which blows down from the Rocky Mountains and clears the prairies of snow.

Föhn: A wind, similar to the chinook; a warm, dry wind which blows from the Alps into the Swiss valleys in spring and melts the snow.

Gregale: A dry, cold north-east wind which blows over Malta.

Harmattan: A hot, dry wind from the Sahara which blows over the countries round the Gulf of Guinea in November.

Khamsin: A similar wind from the Sahara which blows over Egypt in early summer.

Mistral: A cold, biting wind from the interior of France which blows across the Riviera and sets everybody shivering. This wind blows occasionally in winter and early spring.

Northers: Dry, cold winds which blow over the states to the north of the Gulf of Mexico; they originate in the Rocky Mountains, and often follow suddenly on a period of hot weather.

Pampero: Cold, south-west wind, with sudden squalls of rain, which blows across the pampas of the Argentine, especially in the spring and autumn months.

Sirocco: A hot, scorching wind from the Sahara, which blows over southern Europe in the summer months.

wine: Fermented grape juice. Wines are produced most easily in the southern countries; the finest wines, however, are produced towards the northern limit of cultivation. In France the Médoc district (Gironde) is the greatest centre of wine production; this district includes Sauterne (white wine district), as well as a red wine district (claret exported from Bordeaux). Champagne takes its name from the old province of Champagne (Marne, etc.). Burgundy (Dijon and Mâcon) produces both red and white wines.

The best-known of the Spanish wines is sherry (from Jerez, the centre of the production). Port is the wine of Portugal (exported from Oporto). In Italy, Chianti is produced near Siena, Montferrat and

Asti in northern Italy, Lacryma Christi and Malvoisie on the slopes of Vesuvius. Marsala is the chief wine of Sicily. Tokay is a sweet wine from the Tokay district in Hungary. Hock and Moselle are the wines of Germany; the best wines are produced along the Rhine and the Moselle. Madeira and Canary are also noted for wines. Wine is now produced throughout the southern sub-tropical regions—South Africa and Australia.

Witwaters Rand: See *Rand.*

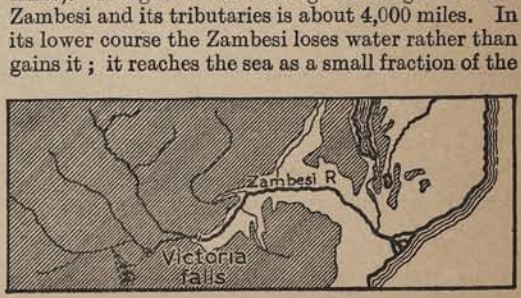
wood-pulp: Wood reduced to a paste and used for making paper, boards, and such small articles as bowls and trays (papier-mâché). The wood is sometimes ground to small fragments with water on grindstones. In making chemical wood-pulps the material round the fibres is dissolved away. As a rule small trees and the large branches of big trees are used for pulping. The chief sources of supply of wood-pulp are the pine forests of Canada, Newfoundland, the United States, Scandinavia, Russia, Austria, Hungary, and Germany.

wool: The most important of the textiles. It is made into cloth in several ways. *Felt* is woollen fibres compressed into cloth without spinning or weaving. *Worsted* is cloth made from wool with long fibres. *Woollens* are made from wool with shorter fibres. In *broadcloth* the woven appearance is obliterated by fulling (pressing).
Wool is sometimes woven with other textiles. *Poplin* is woven with a silk warp and worsted weft.
The chief sources of raw wool are:
Australia and New Zealand.
South America—Argentina, Chile, Peru.
North America—in the west, where the climate is too dry for agriculture.
South Africa.
British Isles—hilly and mountainous districts.
Steppes of Russia.
Germany.
Spain—the merino sheep has long, fleecy wool.
In England the woollen industry is concentrated in the West Riding of Yorkshire and neighbouring parts of Lancashire. Bradford and neighbouring towns make worsteds. Leeds, Halifax, and Wakefield make chiefly woollens, and Leeds ready-made clothing. Batley, Dewsbury, and Huddersfield make shoddy and blankets. (*Shoddy* is old woollen cloth torn to shreds and re-spun with some new wool.) Keighley makes textile machinery.
Wiltshire and Gloucestershire produce broadcloth. Tweeds are made in towns along the River Tweed. (The word "tweed" arose from a misspelling of "twills.") Harris tweeds are homespun tweeds from the Hebrides. Other woollen manufactures are: knitting-wool at Alloa, and hosiery at Leicester. The industrial region of Belgium and North-east France has many woollen towns—Roubaix, Lille, Liége, and Verviers. In Germany the chief woollen towns are in the industrial district of the Rhine (Elberfeld, Barmen, Aachen), and in Saxony (Plauen, Bautzen, Meerane).
In the United States the industry is centred in Massachusetts and other states of the industrial north-east (Lawrence, Worcester, Providence, Philadelphia (carpets)).
Alpaca.—Large flocks of alpacas are kept on the plateaux of Peru and Bolivia. The wool is very long and glossy; it is woven with a cotton warp.
Vicuna.—Not domesticated; found wild in the same region as the alpaca.
Angora Goat.—The hair (called mohair) is strong and silky; it is imported from Asia Minor.
Camel.—The hair is used for paint brushes, and is also woven into cloth.

Yangtse-kiang: The most important river of China; length, about 3,000 miles; area of basin, 650,000 square miles. It rises on the eastern side of the Tibetan plateau. For the first third of its course it flows parallel with the Mekong and Salwen; the three rivers are separated by very high ridges. The fall is extremely rapid in the upper part of the river, but below Ichang the fall is almost imperceptible; below Hankow it is only about an inch to the mile, and the tide affects the river to Wuhu, which is 200 miles from the mouth.
The Yangtse-kiang is in effect a huge canal stretching across China; together with its tributaries it forms what is one of the finest systems of water highways in the world. Lakes in the lower course take off some of the surplus flood waters, and the Yangtse-kiang does not suffer from the disastrous floods that affect the Hwang-ho.

Yellow River: The Hwang-ho, one of the great rivers of China; length, 2,500 miles. It gets its name from the yellow silt which it brings down from the loess region. The Hwang-ho rises in the Kwen Lun Mountain, and cuts through several of the ranges. It receives several tributaries from the loess region, and then flows through the Tungkwan Gorge, the gateway to the North China plain from the Wei-ho valley and the Tarim basin. At Kaifeng the Hwang-ho enters the plain. The lower course of the river is flat and the river is restrained by embankments. It has several times burst through the embankments and completely changed its lower course. Up to 1852 it flowed into the Yellow Sea direct. Now it flows into the Gulf of Pechili.
Because of disastrous floods the Hwang-ho has been called "the Sorrow of China." The lower course stands 15 feet above the surrounding plain and 30 feet at high-water. A breach in the embankments is sufficient to inundate vast stretches of country.
In the upper course the current of the Hwang-ho is too swift for navigation; in the lower course the river is too wide and shallow.

Zambesi: The largest of the African rivers which flow to the Indian Ocean; length, 2,000 miles; area of basin, about 500,000 square miles. The river is divided into three navigable sections—from near the source to a point above the Victoria Falls (about 650 miles), from the Falls to the Quebrabrasa Rapids (about 850 miles), from the Rapids to the mouth (400 miles). Altogether the navigable length of the Zambesi and its tributaries is about 4,000 miles. In its lower course the Zambesi loses water rather than gains it; it reaches the sea as a small fraction of the



ZAMBESI BASIN.

THE VICTORIA FALLS.

great river that plunges over the Victoria Falls. The delta is swampy, but in some places is very fertile and produces large crops of sugar-cane.

Victoria Falls: Discovered by Dr. Livingstone in 1856. These Falls resemble the Niagara Falls, in that the general level of the country is the same above and below the Falls. In both cases the river falls into a gorge. In the Victoria Falls the gorge runs right across the course of the river. The Falls are about a mile in width, but they are broken by islands. In some places the water plunges down into the gorge in a single fall, to a depth of 260 feet; in other places there are two or more falls. An extraordinary feature of the Falls is the large amount of mist. On calm days in the rainy season the mist rises in five columns (the "Five Fingers"); solar and lunar rainbows are produced by the mist; they are unusually large and vivid. Below the Falls the river is constrained by great chasms extending for 40 miles; these chasms wind in an extraordinary way—the Grand Cañon, a short distance below the Falls, is actually parallel to the chasm into which the river plunges at the Falls. The railway from Bulawayo crosses the Zambesi a little below the Falls.

Zodiac: A circle of twelve constellations through which the sun appears to move yearly, advancing from right to left (the opposite direction to the apparent movement of the sun). The constellation behind the sun cannot be observed, but that to the left can be seen just after sunset and that to the right just before sunrise. The most easily recognised of the zodiacal constellations are: the Ram, the Bull (including the Pleiades and Hyades), the Twins, and the Lion (including the Sickle).

The moon and the planets also appear to move through the zodiac. The reason is that the orbits of the bodies which form the solar system all lie very nearly in the same plane. (You do not, for example, find any of the planets revolving in orbits at right angles to that of the earth.)

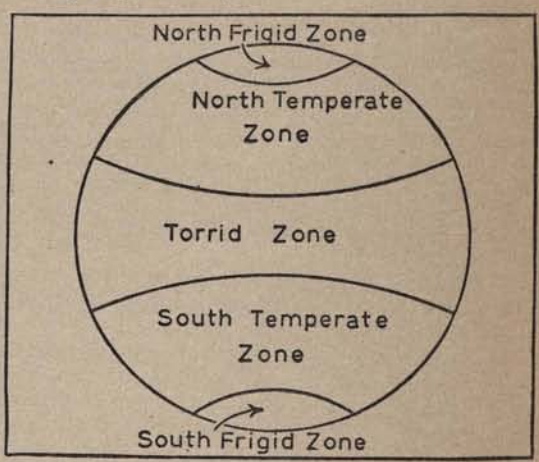
zones: Zones of temperature are clearly marked north and south of the equator. The conventional limits of the zones, as set out below, mark clearly the limits of the zones. These conventional limits accord well with the actual zones of vegetation.

1. *Torrid zone* or tropics, between 23½° N. and 23½° S.: The hot zone with perennial summer along the equator. Deserts occur along the tropics to the west sides of continents.
2. *Temperate zones*, between the tropics and the Arctic and Antarctic circles: These are the regions of moderate climate, between the extreme heat of the tropics and the extreme cold of the frigid zones. The northern temperate zone is the home of the chief cereals and the most important domestic animals. It was in this region that civilisation originated. The climate is suited to energetic life, without being so hot or so cold as to sap energy.
3. *Frigid zones* between the Arctic and Antarctic circles and the poles, that is, within 23½° of the poles: These are the regions of extreme cold—cool summers and extremely cold winters.

The zones as formally marked out by the tropics and polar circles conform very fairly with the actual conditions. There are, however, other circumstances which affect these regions. The chief of these are altitude and distance from the sea. Temperature decreases with altitude, so that high mountainous regions have a cooler climate and more rain than similarly situated lowland regions. Distance from the sea has a twofold effect:

1. Places distant from the sea have a more extreme climate (hot summers and very cold winters) than places close to the sea, which have cool summers and mild winters (a small range of temperature).
2. Places remote from the sea have a drier climate than places close to the sea. Here again altitude makes a great difference. Mountainous regions, even if far inland, have much more rainfall than surrounding plains.

(See also separate articles on *Tropics*, *Temperate Zones*, *Frigid Zones*.)



GAZETTEER INDEX

LIST OF ABBREVIATIONS

GEOGRAPHICAL PLACE-NAMES

Aber. . = Aberdeen.
Abys. . = Abyssinia.
A.-E. Sud. . = Anglo-Egyptian Sudan.
Afghan. . = Afghanistan.
Afr. . = Africa.
Ala. . = Alabama.
Alas. . = Alaska.
Alg. . = Algeria.
Alta. . = Alberta.
Ang. . = Angola.
Angl. . = Anglesey.
Ant. . = Antarctica.
Arab. . = Arabia.
Arg. . = Argentina.
Arg. . = Argyll.
Ariz. . = Arizona.
Ark. . = Arkansas.
A.S.S.R. . = Autonomous Socialist Soviet Republic.
Atl. . = Atlantic.
Aust. . = Austria.
Austral. . = Australia.
Azer. . = Azerbaijan.
Baluch. . = Baluchistan.
Basut. . = Basutoland.
Bech. . = Bechuanaland.
Beds. . = Bedfordshire.
Belg. . = Belgium, Belgian.
Beng. . = Bengal.
Berks . = Berkshire.
Bol. . = Bolivia.
Bom. . = Bombay.
Born. . = Borneo.
Braz. . = Brazil.
B.C. . = British Columbia.
Br., Brit. . = British.
Brec. . = Brecknockshire.
Br. Gui. . = British Guiana.
Bucks . = Buckinghamshire.
Bulg. . = Bulgaria.
Cær. . = Cærnarvonshire.
Caith. . = Caithness.
Cal. . = California.
Cambs. . = Cambridgeshire.
Camer. . = Cameroons.
Can. . = Canada.
Card. . = Cardiganshire.
Carm. . = Carmarthenshire.
Cey. . = Ceylon.
Ches. . = Cheshire.
Clack. . = Clackmannan.
Coch. Chin. . = Cochin China.
Col. . = Colombia.
Col. . = Colorado.
Conn. . = Connecticut.
Corn. . = Cornwall.
C.P. . = Central Provinces.
C. Rica . = Costa Rica.
Cumb. . = Cumberland.
Cz.-Slov. . = Czechoslovakia.
Dag. . = Dagestan.
D.C. . = District of Columbia.
D.E.I. . = Dutch East Indies.
Del. . = Delaware.
Den. . = Denmark.
Denb. . = Denbighshire.
Dev. . = Devonshire.
Dom. Rep. . = Dominican Republic.
Dors. . = Dorsetshire.
Du. Gui. . = Dutch Guiana.
Dumb. . = Dumbarton.
Dumf. . = Dumfries.
Dur. . = Durham.
E. . = East.
Ec. . = Ecuador.
Eng. . = England.
Est. . = Estonia.
Eur. . = Europe.
Fin. . = Finland.
Fla. . = Florida.
Form. . = Formosa.
Fr. . = France, French.
Fr. Eq. Afr. = French Equatorial Africa.
Fr. Gui. . = French Guiana.
Ga. . = Georgia.
G. Coast . = Gold Coast.
Germ. . = Germany, German.
Glam. . = Glamorganshire.
Gloucs. . = Gloucestershire.
Gr. . = Greece.
Green. . = Greenland.
Guat. . = Guatemala.
Gui. . = Guiana.
Hants. . = Hampshire.
Haw. . = Hawaii.
Here. . = Herefordshire.
Herts. . = Hertfordshire.
Holl. . = Holland.
Hond. . = Honduras.
Hung. . = Hungary.
Hunts. . = Huntingdonshire.
Hyd. . = Hyderabad.
I. of W. . = Isle of Wight.
Ice. . = Iceland.
I.F.S. . = Irish Free State.
Ill. . = Illinois.
Ind. . = Indiana.
Inver. . = Inverness.
Ire. . = Ireland.
It. . = Italy, Italian.
Jap. . = Japan, Japanese.
Kan. . = Kansas.
Kest. . = Kesteven.
Kinc. . = Kincardine.
Kinr. . = Kinross.
Kirk. . = Kirkcudbright.
Ky. . = Kentucky.
La. . = Louisiana.
Lab. . = Labrador.
Lancs. . = Lancashire.
Lat. . = Latvia.
Lee. Is. . = Leeward Islands.
Leics. . = Leicestershire.
Liber. . = Liberia.
Lincs. . = Lincolnshire.
Lind. . = Lindsey.
Lith. . = Lithuania.
Lux. . = Luxemburg.
Mad. . = Madras.
Madag. . = Madagascar.
Man. . = Manitoba.
Manch. . = Manchuria.
Mass. . = Massachusetts.
Md. . = Maryland.
Me. . = Maine.
Mer. . = Merionethshire.
Mex. . = Mexico.
Mich. . = Michigan.
Middx. . = Middlesex.
Minn. . = Minnesota.
Miss. . = Mississippi.
Mo. . = Missouri.
Mon. . = Monmouthshire.
Mong. . = Mongolia.
Mont. . = Montana.
Mont. . = Montgomeryshire.
Mor. . = Morocco.
Mozam. . = Mozambique.
Mys. . = Mysore.
N. . = North.
Nat. . = Natal.
N.B. . = New Brunswick.
N.C. . = North Carolina.
N.D. . = North Dakota.
Neb. . = Nebraska.
Neth. . = Netherlands.
Nev. . = Nevada.
Newf. . = Newfoundland.
N. Guin. . = New Guinea.
N.H. . = New Hampshire.
Nic. . = Nicaragua.
Nig. . = Nigeria.
N.J. . = New Jersey.
N. Mex. . = New Mexico.
Nor. . = Norway.
Norf. . = Norfolk.
Notts. . = Nottinghamshire.
N.S. . = Nova Scotia.
N.S.W. . = New South Wales.
Northants. . = Northamptonshire.
Northumb. . = Northumberland.
N.W.F. Prov. = North West Frontier Province.
N.Y. . = New York.
Nyasa. . = Nyasaland.
N.Z. . = New Zealand.
O.F.S. . = Orange Free State.
Okla. . = Oklahoma.
Ont. . = Ontario.
Ore. . = Oregon.
Ox. . = Oxfordshire.
Pa. . = Pennsylvania.
Pac. . = Pacific.
Pal. . = Palestine.
Pan. . = Panama.
Par. . = Paraguay.
P.E.I. . = Prince Edward Island.
Pem. . = Pembrokeshire.
Pers. . = Persia.
Phil. . = Philippines.
Pol. . = Poland.
Port. . = Portugal, Portuguese.
P. Rico. . = Porto Rico.
Prus. . = Prussia.
Pun. . = Punjab.
Qn. . = Queen.
Que. . = Quebec.
Queens. . = Queensland.
Rad. . = Radnorshire.
Raj. . = Rajputana.
Ren. . = Renfrew.
Rhod. . = Rhodesia.
R.I. . = Rhode Island.
Ross & Crom. = Ross & Cromarty.
Rox. . = Roxburgh.
R.S.F.S.R. . = Russian Socialist Federal Soviet Republic.
Rum. . = Rumania.
Rus. . = Russia, Russian.
S. . = South.
S.A. . = South America.
S. Afr. . = South Africa.
Sal. . = Salvador.
Sask. . = Saskatchewan.
S.C. . = South Carolina.
Scot. . = Scotland.
S.D. . = South Dakota.
Sel. . = Selkirk.
Sib. . = Siberia.
S. Leone . = Sierra Leone.
Som. . = Somerset.

GEOGRAPHICAL PLACE-NAMES—*continued*

Somal. = Somaliland.
Span. = Spanish.
S.S.R. = Socialist Soviet Republic.
St., Ste., Sta. = Saint, Sainte, Santa.
Staffs. = Staffordshire.
Stirl. = Stirling.
Str. Setts. = Straits Settlements.
Sud. = Sudan.
Suff. = Suffolk.
Sum. = Sumatra.
Sus. = Sussex.
Suther. = Sutherland.
Swed. = Sweden.
Switz. = Switzerland.
Tang. Ter. = Tanganyika Territory.
Tas. = Tasmania.
Tenn. = Tennessee.
Tex. = Texas.

Trans. = Transvaal.
Trans-Cauc. S.S.F.R. = Trans-Caucasian Socialist Soviet Federal Republic.
Trans-Jord. = Trans-Jordan.
Turk. = Turkey.
Ugan. = Uganda.
Ukr. = Ukraine.
Ukr. S.S.R. = Ukrainian Socialist Soviet Republic.
U.P. = United Provinces.
U. Provs. = United Provinces.
Urug. = Uruguay.
U.S.A. = United States of America.
U.S.S.R. = Union of Soviet Socialist Republics.

Va. = Virginia.
Ven. = Venezuela.
Vic. = Victoria.
Vt. = Vermont.
W. = West.
War. = Warwickshire.
Wash. = Washington.
Westmor. = Westmorland.
Wilts. = Wiltshire.
Wig. = Wigtown.
Wis. = Wisconsin.
Worcs. = Worcestershire.
W. Va. = West Virginia.
Wyo. = Wyoming.
Yorks. = Yorkshire.
Y-slav. = Yugoslavia.
Zan. = Zanzibar.
Zulu. = Zululand.

OTHER ABBREVIATIONS

a. = area.
adm. = administrative.
agric. = agriculture.
alt. = altitude.
anc. = ancient.
arch. = archipelago.
aut. area = autonomous area.
b. = bay, bight.
bk. = bank.
bldgs. = buildings.
bor. = borough, burgh.
c. = cape.
can. = canal.
can. = canton.
cap. = capital.
cas. = castle.
cath. = cathedral.
cent. = central.
chan. = channel.
co. = county.
col. = colony.
comm. = commune.
cont. = continent.
cr. = creek.
cr. col. = crown colony.
cy. = city.
dep. = dependency.
dept. = department.
des. = desert.
dist. = district.
div. = division.
dom. = dominion.
est. = estimated.
exp. = exports.
f. = firth.
fd. = fiord.
fed. = federal.
for. = forest.
ft. = feet.

g. = gulf.
gl. = glacier.
grp. = group.
gt. = great.
harb. = harbour.
hd. = head.
ho. = house.
hts. = heights.
i. = island.
is. = islands.
impl. = implements.
ind. = independent.
isth. = isthmus.
junc. = junction.
king. = kingdom.
l. = lake, loch, lough.
ld. = land.
lit. = little.
m. = miles.
met. bor. = metropolitan borough.
mftd. = manufactured.
mnfs. = manufactures.
mkt. = market.
mt. = mountain, mount.
mth. = mouth.
mun. = municipality.
mun. bor. = municipal borough.
mus. = museum.
nat. = natural.
nav. = navigable.
o. = oasis.
observ. = observatory.
oc. = ocean.
p. = pass.
p. = population.
pal. = palace.
par. = parish.
parl. = parliament.
pass. = passage.

pen. = peninsula.
pk. = peak.
pl. = plain.
plat. = plateau.
pres. = presidency.
prods. = products.
prot. = protectorate.
prov. = province.
pt., pte. = point, pointe.
pta. = punta.
pto. = porto.
qn. = queen.
r., riv. = river.
ra. = range.
rep. = republic.
rf. = reef.
rks. = rocks.
rly. = railway.
s. = sea.
sd. = sound.
sett. = settlement.
spt. = seaport.
sq. m. = square miles.
st. = state.
stn. = station.
str. = strait.
term. = terminus.
terr. = territory.
tn. = town.
trib. = tributary.
unf. = unfederated.
univ. = university.
urb. dist. = urban district.
val. = valley.
veg. = vegetation, vegetable.
vil. = village.
vol. = volcano.
w.-pl. = watering-place.

GAZETTEER

MAP

39 Aabenraa, tn., Den.: fishing; p. 8,817; 55 5N 9 25E
40 Aachen. See Aix la Chapelle.
39 Aakirkeby, tn., Bornholm, Den.; 55 12N 14 53E
39 Aalborg, spt., Den.; shipbuilding, fishing; p. 44,365; 57 3N 9 57E
39 Aalborg B., Den.; 57 0N 10 30E
39 Aalestrup, tn., Den.; 56 45N 9 30E
45 Aarau, tn., Switz.; silk, cotton, cement; p. 12,063; 47 23N 8 03E
45 Aarburg, tn., Switz.; 47 19N 7 53E
55 Aardal, tn., Nor.; 61 14N 7 45E
45 Aargau, Canton, Switz.; a. 548 sq. m.; cap. Aarau; p. 260,199; 47 24N 8 12E
39 Aarhus, spt., Den.; cath.; tobacco, distilleries; p. 81,279; 56 10N 10 12E
39 Aars, tn., Den.; 56 59N 9 30E
63 Abadan, tn., Pers.; oil refineries; p. 30,000; 30 18N 48 20E
63 Abadeh, tn., Pers.; fruit; p. 10,150; 31 12N 52 40E
114 Abancay, tn., Peru; sugar; 13 48S 73 0W
37 Abaucourt, tn., France; 49 9N 5 22E
63 Abargah, tn., Pers.; 31 8N 53 19E
50 Abbazia, tn., It.; 45 20N 14 18E
88 Abbeokuta, tn., Nig.; palm oil, hardwoods; p. 38,000; 7 10N 3 21E
32 Abbeyfeale, par., Limerick, I.F.S.; p. 947; 52 23N 9 17W
33 Abbeyleix, tn., Leix, I.F.S.; quarries; p. 836; 52 53N 7 22W
20 Abbey Town, vil., Cumberland, England; p. 937; 54 51N 3 17W
18 Abbots Bromley, par., Staffs, Eng.; p. 1,516; 52 48N 1 52W
19 Abbotsbury, vil., Dorset, England; p. 627; 50 40N 2 35W
27 Abbotsford, vil., Rox., Scot.; home of Sir Walter Scott; 55 35N 2 45W
39 Abelkoft, tn., Den.; 56 12N 10 40E
18 Aberayron, urb. dist.; Card., Wales; p. 1,155; 52 15N 4 15W
19 Abercarn, urb. dist., Mon., Eng.; coal; p. 20,554; 51 40N 3 10W
25 Aberchirder, bor., Banff., Scot.; p. 868; 57 34N 2 38W
82 Abercorn, tn., N. Rhod.; 8 47S 31 20E
19 Aberdare, urb. dist., Glam., Wales; coal, iron; p. 48,751; 51 42N 3 25W
18 Aberdaron, vil., Caernarvon, Wales; 52 48N 4 42W
25 Aberdeen, bor., co. tn., spt., Aberdeen, Scot.; univ., cath.; largely built of grey granite; shipbuilding, polishing granite fishing, textile, distilling; broadcasting sta.; p. 167,259; 57 9N 2 06W
25 Aberdeen, co., Scot.; a. 1,972 sq. m.; mountainous, Grampians, chief peaks, Ben Macdhui, Lochnagar; chief rivers, Dee and Don; agriculture, oats, barley, turnips; cattle, granite, brewing, distilling, paper; p. 300,430; 57 0 to 57 40N 2 00 to 2 40W
83 Aberdeen, tn., C. of Good Hope, S. Afr.; 32 30S 24 6E
103 Aberdeen, tn., Miss., U.S.A.; 33 47N 88 32W
107 Aberdeen, tn., S.D., U.S.A.; chemicals, foundry; p. 16,465; 45 30N 98 30W
106 Aberdeen, spt., Wash., U.S.A.; lumbering, salmon canning; p. 21,723; 46 59N 123 46W
27 Aberdour, par., Fife, Scot.; p. 2,055; 56 3N 3 17W
18 Aberdovey, spt., Mer., Wales; p. 1,263; 52 33N 4 03W
27 Aberfeldy, bor., Perth, Scot.; p. 1,505; 56 37N 3 51W
18 Aberffraw, par., spt., Anglesey, Wales; p. 861; 53 12N 4 27W
27 Aberfoyle, par., Perth, Scot.; p. 1,014; 56 11N 4 23W
19 Abergavenny, mun. bor., Mon., Eng.; coal, iron; p. 8,608; 51 50N 3 00W
25 Abergeldie, vil., Aber., Scot.; 57 2N 3 10W
18 Abergele, urb. dist., Denb., Wales; p. 2,651; 53 19N 3 36W
27 Aberlady, par., E. Lothian, Scot.; p. 1,094; 56 1N 2 52W
25 Aberlemno, par., Angus., Scot.; p. 677; 56 38N 2 46W
18 Aberllefeni, vil., Merioneth, Wales; 52 41N 3 50W
25 Aberlour, bor., Banff., Scot.; p. 1,175; 57 28N 3 12W
27 Abernethy, bor., Perth, Scot.; p. 595; 56 19N 3 18W
18 Aberporth, par., Cardigan, Wales; p. 371; 52 8N 4 31W
19 Abersychan, Mon., Eng.; coal, iron and steel; p. 25,627; 51 44N 3 05W
19 Aberthaw, vil., spt., Glamorgan, Wales; 51 24N 3 22W
19 Abertillery, urb. dist., Mon., Eng.; coal, tin; p. 31,799; 51 45N 3 10W
27 Aberuthven, vil., Perth, Scotland; 56 19N 3 38W
18 Aberystwyth, mun. bor., Card., Wales; univ. coll.; Nat. Library of Wales; seaside resort; machinery; p. 9,474; 52 25N 4 05W
80 Abeshr, tn., Fr. Eq. Afr.; p. 25,000; 13 50N 20 36E
60 Abha, tn., Arabia; 18 30N 43 35E
107 Abilene, tn., Tex., U.S.A.; 32 22N 99 43W
17 Abingdon, mun. bor., Berks, Eng.; woollens, motor cars; p. 7,240; 51 41N 1 17W
27 Abington, vil., Lanark, Scot.; 55 29N 3 42W
93 Abitibi L., Ont., Can.; 50 0N 81 30W
99 Abitibi, R., Ont., Can.; 50 0N 81 30W
67 Abkhazia, S.S.R., Georgia, Rus.; p. 200,000; 43 6N 41 0E
78 Abnuh, tn., Egypt; 27 15N 31 2E
88 Abomey, tn., Fr. W. Afr.; p. 20,000; 7 18N 2 02E
25 Aboyne, par., Aber., Scot.; p. 1,552; 57 4N 2 48W
113 Abrolhos Is., Braz., S.A.; 18 0S 38 30W
50 Abruzzi and Molise, Dept., It.; a. 5,951 sq. m.; p. 1,497,048; 42 0N 14 0E
66 Abu, mt., India; 5,653 ft.; Jain temples 24 48N 72 51E
60 Abu Arish, tn., Arabia; 16 50N 42 53E

MAP

61 Abu Dhabi, tn.; Arabia; 24 30N 54 30E
80 Abu Gher, tn., Fr. Eq. Afr.; 12 0N 16 15E
11 Abu Naim, tn., Libya; 29 0N 19 0E
79 Abu Simbel, Egypt; site of ancient temples; 22 19N 31 37E
78 Abu Tig, tn., Egypt; 27 2N 31 15E
10 Abuam, tn., Mor.; 30 45N 4 00W
78 Abukir, vil., Egypt; 31 17N 30 4E
63 Abushehr, tn., spt., Pers., on Persian Gulf; p. 17,000; 29 0N 50 45E
79 Abydos, vil., Egypt; 26 10N 31 59E
81 Abyssinia, N.E. Afr.; after conquest, annexed by Italy May, 1936; a. 350,000 sq. m.; tableland with average height 8,000 ft., Samen Mts. 15,000 ft.; pastoral farming, coffee; cap. Addis Ababa; p. 7,000,000 (est.); 5 00 to 15 0N 35 0 to 45 0E
110 Acajutla, spt., Sal.; 13 35N 89 52W
109 Acambaro, tn., Mex.; 20 2N 100 42W
108 Acaponeta, tn., Mex.; 22 33N 105 29W
109 Acapulco, spt., Mex.; exp. hides, cedar, fruit; p. 6,000; 16 50N 100 0W
112 Acarahu, tn., Braz., S.A.; 2 53S 40 2W
109 Acatlan, tn., Mex.; 18 9N 98 12W
109 Acayucan, tn., Mex.; 17 55N 95 1W
88 Accra, spt., cap., G. Coast, W. Afr.; exp. cocoa; p. 59,895; 5 38N 0 12W
18 Accrington, mun. bor., Lancs, Eng.; cotton; p. 42,973; 53 45N 2 22W
51 Acerra, tn., It.; p. 16,460; 40 58N 14 26E
24 Achanalt, vil., Ross and Cromarty, Scotland; 57 37N 4 54W
24 Acharacle, vil., Argyll, Scotland; 56 45N 5 47W
27 Acharn, vil., Perth, Scot.; 56 34N 4 01W
25 Achavannich, vil., Caithness, Scotland; 58 22N 3 23W
24 Achendrean, vil., Ross and Cromarty, Scotland; 57 58N 5 07W
30 Achill, par., Mayo, I.F.S.; p. 6,919; 53 56N 9 55W
24 Achilltibuie, vil., Ross and Cromarty, Scotland; 58 2N 5 21W
70 Achin, dist., Sum.; 4 25N 97 0E
24 Achintraid, vil., Ross and Cromarty, Scotland; 57 23N 5 35W
24 Achnasheen, vil., Ross and Cromarty, Scotland; 57 35N 5 03W
24 Achnashellach, vil., Ross and Cromarty, Scotland; 57 29N 5 20W
24 Achterneed, vil., Ross and Cromarty, Scotland; 57 36N 4 32W
61 Achzib. See Ez Zib.
51 Acircale, vil., Sicily, It.; 37 39N 15 11E
111 Acklin I., Bahama Is., W. Indies; p. 1,800; 22 30N 74 0W
30 Aclare, vil., Sligo, I.F.S.; 54 2N 8 54W
16 Acle, par., Norf., Eng.; p. 3,533; 52 38N 1 32E
113 Aconcagua, Mt., Chile; highest peak of the Andes, 23,081 ft.; 32 25S 70 0W
50 Acqui, tn., It.; cath.; sulphur springs; p. 16,000; 44 41N 8 27E
61 Acre. See Akka.
112 Acre Terr., Braz., S.A.; a. 58,672 sq. m.; rubber; p. 113,725; 9 00S 71 0W
96 Acton, tn., Ont., Can.; p. 1,855; 43 38N 80 5W
17 Acton, mun. bor., Middx., England; p. 70,523; see Greater London.
97 Acton Vale, tn., Que., Can.; p. 1,753; 45 47N 72 37W
88 Ada, vil., G. Coast; 6 0N 0 30E
62 Adalia, spt., Turk.; coasting trade; p. 12,310; 36 57N 30 45E
62 Adalia, G., Turk.; 36 30N 31 0E
88 Adamawa, dist., Camer.; ivory, groundnuts; 8 25N 13 30E
31 Adamsbay, vil., N.S.W., Austral.; 36 2S 148 12E
105 Adams, tn., Mass., U.S.A.; paper, cottons, woollens; p. 12,697; 42 36N 73 6W
104 Adams, tn., N.Y., U.S.A.; 43 48N 76 3W
68 Adams Bridge, India; sandy ridge and island chain, Palk Strait, between Ceylon and India; 9 15N 79 30E
68 Adam's Pk., mt., Cey., India; sacred mt., 7,352 ft.; 6 55N 80 45E
62 Adana, tn., Turk., on Seihan R.; centre for wool, cotton, grain and fruit; p. 72,577; 37 0N 35 12E
32 Adare, tn., Limerick, I.F.S.; p. 508; 52 34N 8 54W
123 Adavale, tn., Queens., Austral.; 25 58S 144 38E
81 Addis Ababa, tn., cap., Abys.; p. 65,000; 9 02N 38 43E
83 Adelaide, vil., C. of Good Hope, S. Afr.; 32 40S 26 18E
120 Adelaide, cy., cap., S. Austral.; on R. Torrens; univ., caths., government ho.; exp. wheat, wool, silver, wine; p. 324,420; 34 54S 138 36E
45 A'delboden, vil., Switz.; health resort, mineral springs; 46 29N 7 35E
128 Adelie Ld., Ant.; 69 0S 150 0E
60 Aden, tn., spt., Asia; Br.; coaling, oil; p. 50,809, 12 58N 45 1E
81 Aden, G. of, Arabian Sea; length 480 m., breadth 180 m.; 12 30N 48 0E
51 Aderno, tn., Sicily, It.; ancient ruins; p. 40,000; 37 42N 14 40E
10 Adghar, tn., Alg.; 27 30N 0 20W
57 Adigeisk, aut. area of Rus. S.F.S. Rep., Rus.; 45 0N 40 0E
105 Adirondack Mts., N.Y., U.S.A.; highest peak (Mt. Marcy) 5,345 ft.; 44 10N 74 30W
57 Adjaria, aut. S.S.R., Georgia, Rus.; 41 38N 42 0E
124 Admiralty Gulf, W. Austral.; 14 10S 125 50E
116 Admiralty Is., Pac. Oc.; Br.; p. 14,067; 2 10S 147 0E
68 Adoni, tn.; Mad., India; cotton mkt.; p. 30,232; 15 35N 77 20E
81 Adowa, tn., Abys.; p. 5,000; 14 8N 39 0E

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76 Adrar, oasis, Sahara Desert, Fr. W. Afr.; salt, dates, grain; 21 10N 12 30W
50 Adria, tn., It.; p. 15,860; 45 5N 12 4E
102 Adrian, tn., Mich., U.S.A.; p. 13,064; 41 54N 84 0W
53 Adrianople. See Edirne.
50 Adriatic Sea, arm of Mediterranean between Italy and Balkan Pen.; length 460 m., av. breadth 90 m., depth 20 to 870 fathoms; a. 60,000 sq. m.; 44 00N 14 0E
88 Adu, tn., Fr. W. Afr.; 5 40N 4 30W
44 Adula, mt., Switz.; 11,148 ft.; 46 30N 9 00E
25 Advie, par., Moray, Scotland; 57 24N 3 26W
53 Ægean Sea, Eur.; branch of Mediterranean between Greece and Asia Minor, 300 m. long; 38 0N 25 0E
53 Aegion, tn., Gr.; 38 12N 22 7E
38 Aerschot, tn., Belg.; 50 58N 4 51E
24 Affric Loch, Inver., Scot.; 57 15N 5 3W
66 Afghanistan, St., S.W. Asia; a. 245,000 sq. m.; mountainous; chief rivers, Helmund, Kabul; cereals, fruit, sheep, horses, camels; industries, carpets, woollen, silk; cap. Kabul; p. 12,000,000; 33 10N 65 0E
77 Africa, cont. S. of Med. S., bounded on W. by Atlantic Oc. and E. by Red S. and Indian Oc.; a. 11,500,000 sq. m., length 4,900 m., breadth 4,500 m.; surface characterized by deserts in N., forests in centre, and lofty plateaux in S.; principal mountains, in centre, Kilimanjaro 19,324 ft., Kenya 17,040 ft., Ruwenzori 16,794 ft., in N. Atlas Mts. 14,000 ft., in S. Drakensberg 11,000 ft.; chief rivers, Nile, Congo, Niger, Zambezi; chief lakes, Victoria, Tanganyika, Nyasa, Chad, Rudolf; races, chiefly Negro and Bantu, Arabs and Berbers in N., Hottentots and Bushmen in S.; communications, Cape to Cairo rly. largely constructed; agriculture, varied and often primitive, in N. wine, olives, wheat, esparto grass, in centre tropical products, cocoa, oil palm, groundnuts, coffee, cotton, in S. wheat, maize, wool; minerals, gold, diamonds, copper, coal; politically, largely divided among Britain, France, Italy, Belgium, Portugal and Spain; independent states, Egypt, Abyssinia, Liberia; p. 160,000,000 (est.); 37 0N to 35 0S 17 30W to 51 30E
62 Afyon Karahissar, tn., Turk.; p. 23,422; 38 40N 30 29E
76 Agadem, tn., Fr. W. Afr.; 17N 13E
76 Agades, tn., Fr. W. Afr.; 17N 8E
76 Agadir, spt., Mor.; p. 3,692; 30 30N 9 45W
35 Agen, tn., cap. Lot-et-Garonne, France; cath.; fruit, wine; p. 24,939; 44 13N 0 38E
53 Agia, tn., Greece; 39 42N 22 47E
79 Aglid, tn., Egypt; 24 29N 32 50E
67 Agra, tn., India, on R. Jumna; Taj Mahal; rly. centre; cotton, flour, carpets, gold, lace, inlaid mosaic work; p. 229,764; 27 7N 78 5E
67 Agra and Oudh. See United Provinces.
46 Agram. See Zagreb.
51 Agrigento, tn., Sicily, It.; grain, sulphur; p. 29,582; 37 18N 13 30E
108 Aguascalientes, tn., Mex.; hot springs; p. 48,000; 21 49N 102 21W
108 Aguascalientes, State, Mex.; a. 2,969 sq. m.; cereals, stockraising, textiles; p. 132,492; 21 50N 102 15W
48 Agueda, tn., Port.; 40 33N 8 27W
108 Aguililla, tn., Mex.; 18 30N 102 40W
83 Agulhas, C., S. point of Africa; 34 55S 20 0E
10 Ahaggar, plateau, Alg.; 23N 6E
62 Ahar, tn., Pers.; 38 28N 47 13E
30 Ahascragh, par., Galway, I.F.S.; p. 1,780; 53 24N 8 21W
52 Ahiole, tn.; Bulg.; 42 33N 27 40E
66 Ahmadabad, tn., Bombay, India; Jain temple, splendid mosques; pottery, silk, gold, cotton; p. 310,000; 23 3N 72 38E
66 Ahmadnagar, tn., Bombay, India; carpets, cottons, brass vessels; p. 49,878; 19 5N 74 45E
31 Ahogill, par., Antrim, N. Ire.; p. 5,976; 54 51N 6 22W
55 Ahvenanmaa Is., Fin.; group of 80 main islands, in Gulf of Bothnia; a. 551 sq. m.; p. 27,093; 60 15N 20 0E
63 Ahwaz, tn., Pers., on R. Karun; oil-pipe line passes through; p. 15,000; 31 23N 48 50E
62 Aidin, tn., Turk.; Morocco leather, cotton, fruits; p. 70,000; 37 51N 27 48E
45 Aigle, vil., Switz.; 46 18N 6 57E
35 Aigue Mortes, tn., France; 43 35N 4 14E
73 Aigun, tn., Manchuria, on R. Amur; cattle, flour; p. 36,800; 50 0N 127 20E
103 Aiken tn., S.C., U.S.A.; 33 33N 81 42W
35 Ain, Dept., Fr.; a. 2,248 sq. m.; farming, vines, grain, sheep, silk; cap. Bourg; p. 322,918; 46 4N 5 15E
10 Ain Beida, tn., Alg.; 35 47N 7 23E
10 Ain Salah, oasis, Sahara Desert, Alg.; 27 30N 2 30E
10 Ain Sefra, vil., Alg.; 32 20N 0 30W
10 Ain Shair, vil., Mor.; 32 20N 2 28W
53 Ainegöl, vil., Turk.; 40 8N 29 36E
18 Ainsdale, par., Lancs., Eng.; seaside resort; p. 2,942; 53 35N 3 3W
62 Aintab, tn., Turk.; hides, morocco leather; p. 39,998; 37 5N 37 23E
76 Air, dist., Fr. W. Afr.; Tuareg tribe; dates, indigo, senna; 18 25N 8 30E
18 Air, Pt. of, Flint, Wales; 53 21N 3 19W
24 Aird of Sleat, I. of Skye, Inver., Scot.; 57 2N 5 57W
27 Airdrie, bor., Lanark., Scot.; first adopted Free Library Act in Scotland; coal, iron, bricks; p. 25,954; 55 52N 3 57W
35 Aire, tn., Fr., on R. Lys 50 39N 2 23E

MAP

21 Aire, R., W. Riding, Eng. trib. of Yorkshire Ouse; 53 50n 1 40w
27 Airlie Castle, Angus, Scot.; 56 39n 3 08w
53 Airobol, tn., Turk.; 41 13n 27 7e
45 Airolo, vil., Switz.; 46 33n 8 36e
24 Airor, vil., Inverness, Scotland; 57 5n 5 45w
27 Airth, par., Stirl., Scot.; p. 2,226; 56 4n 3 46w
34 Aisne, R., France; trib. of Oise; Allied victory in Great War, 1914; 45 25n 4 0e
34 Aisne, dept., Fr.; a. 2,866 sq. m.; farming, timber, sugar, brewing, textiles; cap. Laon; p. 489,368; 49 34n 3 21e
52 Aitos, tn., Bulg.; p. 8,480; 42 42n 27 17e
62 Aiud, tn., Rum.; p. 6,643; 46 25n 23 30e
53 Aivaly, spt., Turk.; exp., raisins, wine; p. 17,000; 39 19n 26 48e
35 Aix, tn., Fr.; univ.; hot springs; olive oil; p. 38,332; 43 32n 5 28e
40 Aix la Chapelle, tn., Germ.; cath.; mineral springs; iron and steel, textiles; p. 162,774; 50 45n 6 5e
35 Aix-les-Bains, tn., France; hot springs; 45 41n 5 56e
35 Ajaccio, spt., cap. Corsica, France; birthplace of Napoleon I; winter resort; shipbuilding, wines, wood, sardines; p. 23,917; 41 55n 8 42e
125 Ajana, tn., W. Austral.; 28 0s 114 15e
66 Ajanta, tn., India; Buddhist cave temples hewn from solid rock; 20 30n 75 50e
66 Ajanta Hills, India; 20 30n 76 0e
66 Ajmer, tn., cap. of Ajmer-Merwara prov., India; cotton, salt, opium; p. 119,524; 26 29n 74 40e
66 Ajmer-Merwara, prov., India; a. 2,711 sq. m.; cotton, wheat, oil-seeds; p. 560,292; 26 20n 74 40e
67 Ajodhya, tn., India; 26 44n 82 17e
60 Akaba, tn.; Transjordan; 29 30n 35 0e
78 Akaba, G. of, Red S.; 28 30n 34 50e
127 Akaroa, bor., S.I. New Zealand; p. 600; 43 47s 173 0e
88 Akassa, tn., Nig.; ground nuts, palm oil; p. 35,000; 4 18n 6 4e
55 Akershus, co., Nor.; p. 235,399; 60 5n 11 10e
57 Akhalsikh, tn., Georgia, Rus.; silk, silver filigree work; p. 15,320; 41 37n 42 57e
62 Akhissar, tn., Turk.; carpets, opium, dyes, cotton; p. 18,026; 38 54n 27 52e
79 Akhmim, tn., Egypt; cottons; p. 28,000; 26 31n 31 45e
57 Akhtyrka, tn., Rus.; beet sugar, woollens; p. 25,750; 50 17n 34 58e
76 Akita, tn., Jap.; p. 60,646; 39 38n 139 59e
61 Akka, tn., Pal.; p. 6,420; 32 50n 35 7e
52 Akkerman, tn., Rum., on R. Dniester; wine, wool, fruit; p. 33,495; 46 12n 30 12e
92 Akkavik, tn., Mackenzie, Can.; 68 0n 135 0w.
58 Akmolinsk, tn., U.S.S.R.; trading centre; p. 10,000; 51 0n 71 30e
68 Akola, tn.; C.P. India; cotton; p. 37,864; 20 32n 77 5e
102 Akron, tn., Ohio, U.S.A.; rubber manufactures, maize mills, flour, woollens; p. 255,040; 41 8n 81 30w
88 Akropon, vil., G. Coast; 5 45n 2 10w
72 Ak-Su, tn., Sin Kiang; copper, iron, leather; p. 20,500; 41 0n 80 40e
66 Ak Tapa, tn., U.S.S.R.; 35 57n 62 48e
8 Akureyri, spt., Ice.; herrings; p. 3,613; 65 40n 18w
69 Akyab, spt., Burma, India; exp. rice; p. 36,569; 20 14n 93 0e
50 Ala, tn., It.; 45 47n 11 2e
103 Alabama (St.), U.S.A.; a. 51,998 sq. m.; southern state, length 336 m., breadth 220 m.; principal rivers, Alabama, Mobile, Tennessee; cotton, cereals, coal, gold, silver, timber; manfs., iron, steel, coke, turpentine, cotton goods; chief town, Mobile; p. 2,646,248; 32 50n 87 0w
103 Alabama R., U.S.A.; 32 15n 87 15w
112 Alagoas, st., Brazil; a. 22,577 sq. m.; sugar, cotton, tobacco, rubber; cap. Maceió; p. 1,189,214; 9 30s 37 0w
49 Alagón, tn., Sp.; 41 47n 1 10w
35 Alais, tn., France; 44 8n 4 04e
107 Alamogordo, tn., N. Mex., U.S.A.; 32 54n 105 55w
108 Alamos, tn., Mex.; 27 0n 109 0w
107 Alamosa, tn., Col., U.S.A. 37 32n 105 0w
109 Alaquines, tn., Mex.; 22 1n 99 44 0w
72 Ala Shan, desert, China; 39 30n 107 0e
62 Alashehr, tn., Turk.; mineral springs; wheat, tobacco; p. 33,000; 38 20n 28 54e
90 Alaska, terr., U.S.A., N. America; a. 586,400 sq. m.; mountainous (Mt. McKinley, 20,300 ft.); active volcanoes; rivers, Yukon R. 1,600 m. long, navigable throughout; forests; fisheries; salmon canning; gold, coal; cap. Juneau; p. 59,278; 65 0n 150 0w
90 Alaska, G. of, Alas., N. America; 59 0n 146 0w
90 Alaska Pen., Alas., N. America; 57 0n 158 0w
92 Alaska R., Alas., N. America; 63 0n 151 0w
50 Alatri, tn., It.; tapestry; p. 15,520; 41 41n 13 18e
56 Alatyr, tn., Rus.; grain; milling, brewing; p. 22,000; 54 48n 46 29e
54 Alavus, tn., Fin.; 62 40n 23 15e
120 Alawoona, tn., S. Austral.; 34 43s 140 30e
62 Alaya, tn.; Turk, 37 28n 32 5e
50 Alba, tn., Piedmont, It.; vine, silkworm; p. 13,740; 44 41n 8 01e
49 Albacete, tn.; Spain; p. 41,885; 39 0n 1 50w
120 Albacutya, L., Vic., Austral.; 35 45s 142 0e
48 Alba d. Tormes, tn., Spain; 40 48n 5 30w
52 Alba Julia, tn., Rum., on R. Mures; formerly Carlsburg; p. 12,457; 46 5n 23 39e
50 Albani, Mt., Italy; 41 44n 12 44e
47 Albania, king., Eur.; a. 10,629 sq. m.; length 290 m.; width 40 to 100 m.; mountains, fever-ridden coastal valleys; Albanians are warlike highlanders, speaking Gheg and Tosk languages, and chiefly Moslems; primitive farming, tobacco, olive oil, corn, dairying, timber, furs; minerals undeveloped; cap. Tirana; p. 1,003,068; 40 to 42n 20 0e
50 Albano, tn., Italy; 41 41n 12 40e
103 Albany, tn., Ga., U.S.A.; p. 14,500; 31 34n 84 10w
102 Albany, tn., cap., N.Y., U.S.A.; on R. Hudson; iron and brass, chemicals, textiles, paper; p. 127,412; 42 38n 74 0w
106 Albany, tn., Ore., U.S.A.; 44 38n 123 0w
125 Albany, tn., W. Austral.; p. 3,980; 35 1s 117 58e
99 Albany R., Ont., Can.; 51 35n 89 0w
49 Albarracin, tn., Spain; 40 25n 1 27w

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71 Albay, tn., Luzon I., Phil. Is.; manila hemp, sugar, copra; p. 33,000; 13 45n 123 10e
73 Albazin, tn., Liberia; 53 25n 124 20e
112 Albemarle, I., Galapagos Is., S.A.; 0 30s 91 10w
49 Alberique, tn., Spain; 39 8n 0 27w
87 Albert, tn., Nat., S. Afr.; 29 23s 30 30e
34 Albert, tn., France, on R. Ancre; severe damage Gt. War; paper, linen; 50 1n 2 40e
120 Albert, L., S. Austral.; 35 38s 139 15e
81 Albert, L., Uganda; a. 1,700 sq. m.; 100 m. long, 20 m. wide; 1 45n 29 45e
102 Albert Lea, tn., Minn., U.S.A.; p. 10,169; 43 40n 93 25w
98 Alberta, Mt., Alta., Can.; 52 15n 117 0w
98 Alberta, prov. Can.; a. 255,285 sq. m.; mountainous in W. (Rockies); principal rivers, Peace, Athabasca, Saskatchewan; wheat and other grains, alfalfa, vegetables, dairying, livestock; coal, natural gas, petroleum; cap. Edmonton; p. 731,605; 50 to 60n 110 to 120w
121 Alberton, tn., Vic., Austral.; 38 38s 146 42e
81 Albertville, tn., Belg. Congo; 5 57s 29 12e
35 Albertville, tn., France; 45 40n 6 23e
35 Albi, tn., cap. Tarn, France; cath.; wheat, wines, fruit; p. 29,351; 43 56n 2 7e
104 Albion, tn., N.Y., U.S.A.; 43 14n 78 12w
104 Albion, tn., Pa., U.S.A.; 41 53n 80 20w
62 Albistan, tn., Turk.; 37 59n 37 7e
49 Alboacaer, tn.; Spain; 40 20n 0 2w
48 Albuera, vil., Spain; battle 1811; 38 41n 6 47w
107 Albuquerque, tn., N. Mex., U.S.A.; wool, hides, timber; p. 26,570; 35 2n 106 42w
105 Alburg, tn., Vt., U.S.A.; 43 0n 73 19w
48 Alburquerque, vil., Spain; 39 16n 7 0w
121 Albury, tn., N.S.W., Austral., on R. Murray; sheep farming, currants; p. 9,320; 36 4s 146 57e
48 Alcacer do Sal, tn.; Port.; 38 22n 8 31w
48 Alcalá, tn., Spain; birthplace of Cervantes; p. 11,500; 40 28n 3 22w
48 Alcala la Real, tn., Spain; p. 16,250; 37 28n 3 55w
51 Alcamo, tn., Sicily, It.; olives, oranges, lemons; p. 63,000; 38 0n 12 53e
49 Alcanix, tn., Spain; 41 2n 0 5w
112 Alcantara, tn., Braz.; p. 10,250; 2 25s 44 40w
48 Alcantara, tn., Spain; 39 42n 6 55w
48 Alcazar, tn., Spain; rly. junc.; soap, gunpowder; wine; p. 16,000; 39 25n 3 11w
16 Alcester, par., War., Eng.; needles; p. 2,259; 52 13n 1 53w
112 Alcobaca, tn., Braz.; 3 40s 49 30w
48 Alcoutim, tn., Port.; 37 26n 7 30w
49 Alcoy, tn., Spain; farm implements, textiles, cigarette paper; p. 36,463; 38 43n 0 27w
109 Aldama, tn., Mex.; 22 58n 98 11w
21 Aldbrough, par., E. Riding, Eng.; p. 424; 53 49n 0 7w
16 Aldeburgh, mun. bor., Suff., Eng.; fisheries; p. 2,480; 52 9n 1 36e
48 Aldeia Gallega, tn., Port.; 38 41n 8 56w
34 Alderney, I., Chan. Is., Br.; most northerly island, holiday resort; cattle; 49 44n 2 13w
17 Aldershot, mun. bor., Hants, Eng.; military camps, permanently established 1854; bricks; p. 34,281; 51 15n 0 47w
47 Aleksinac, tn., Y-slav.; 43 32n 21 42e
48 Alemtejo, prov., Port.; a. 9,219 sq. m.; cereals, stock-raising, copper and iron; cap. Evora; p. 576,020; 38 0n 7 55w
34 Alençon, tn., cap. Orne, France; lace, woollens, linen; p. 16,688; 48 27n 0 05e
62 Aleppo, tn., cap., Syria; silks, cottons; p. 177,313; 36 14n 37 16e
57 Aleshki, tn., Rus.; 46 36n 32 30e
50 Alessandria, tn., It.; railway junct.; linen, hats, macaroni; p. 81,979; 44 55n 8 37e
47 Alessio, tn., Alb.; 41 48n 19 41e
54 Alesund, spt., Nor.; fishing; p. 13,373; 62 30n 6 10e
116 Aleutian Is., Alaska, Pac. Oc.; 52 0n 175 0w
84 Alexander B., C. of Good Hope, S. Afr.; 28 40s 16 40e
62 Alexandretta, autonomous sanjak, Syria; 36 30n 36 20e
62 Alexandretta, spt., Syria; exp. textiles, tobacco, fruit; p. 13,997; 36 30n 36 12e
83 Alexandria, tn., C. of Good Hope, S. Afr.; 33 40s 26 29e
78 Alexandria, spt., Egypt; floating dock; great emporium of Egypt; exp. cotton, wheat, rice, gum, dates; p. 573,063; 31 9n 29 53e
103 Alexandria, tn., La., U.S.A.; rice, foundries; p. 23,025; 31 15n 92 25w
52 Alexandria, tn., Rum.; p. 19,387; 43 48n 25 21e
102 Alexandria, spt., Va., U.S.A.; fertilizers, leather, silk; p. 24,149; 38 52n 77 12w
121 Alexandria, tn., Vic., Austral.; 37 10s 145 44e
26 Alexandria, par., Dumb., Scot.; bleaching, dye works; p. 10,359; 55 59n 4 35w
97 Alexandria, tn., Ont., Can.; p. 2,006; 45 19n 74 50w
120 Alexandria, L., S. Austral.; 35 30s 139 0e
62 Alexandropol, tn., Armenia, U.S.S.R.; silk; p. 50,000; 40 50n 43 53e
57 Alexandropol, See Leninakan.
53 Alexandroupolis, tn., Greece; timber, grain; p. 13,000; 40 49n 25 53e
57 Alexandrov-Gai, vil., Rus.; 50 12n 48 32e
54 Alexandrovsk, spt., Rus.; terminus of Murman rly.; 69 10n 33 28e
73 Alexandrovsk, tn., Siberia; 50 50n 142 0e
57 Alexandrovsk Grushevski, tn., Rus.; anthracite; p. 20,000; 47 41n 40 4e
88 Alfada, vil., Fr. W. Afr.; 6 35n 2 30e
38 Alfen, tn., Neth.; p. 17,676; 52 7n 4 40e
25 Alford, par., Aber., Scot.; cattle and corn; p. 1,336; 57 14n 2 43w
16 Alford, urb. dist., Lind., Eng.; rope, iron; p. 2,227; 53 16n 0 11e
105 Alfred, tn., Me., U.S.A.; 43 30n 70 43w
16 Alfreton, urb. dist., Derby, Eng.; coal, iron, stone; p. 21,232; 53 6n 1 23w
48 Algarve, prov., Port.; a. 1,937 sq. m.; fruit, fishing; p. 292,634; 37 10n 8 20w
120 Algebuckina, vil., S. Austral.; 27 59s 135 30e
48 Algeciras, spt., Sp.; fishing, oranges; p. 20,500; 36 7n 5 30w
10 Algeria, Fr. colony, N. Africa; a. 847,500 sq. m.; fer-

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tile mountain tracks and valleys, rugged mountains, barren plateaus, desert sands; Great Atlas Mts. 14,000 ft.; cereals, fruit, tobacco, olive oil, stock-raising, esparto grass, minerals; cap. Algiers; p. 6,553,451 (220,788 Europeans); 34 0n 3 0e
51 Alghero, spt., Sardinia, Italy; cath.; coral fisheries, fruit, wine; p. 12,500; 40 35n 8 20e
10 Algiers, spt., cap., Alg.; coaling stn.; exp. wheat, wine, olives; p. 257,122; 36 50n 2 50e
83 Algoa B., C. of Good Hope, S. Afr.; 33 43s 26 0e
96 Algoma, tn., Ont., Can.; copper; 46 9n 82 30w
96 Algonquin Park, Ont. Can.; 45 31n 78 36w
10 Alhucemas, tn., Spain; 35 15n 3 54w
49 Alicante, tn., spt., Spain; exp. olives, oranges, esparto grass; textiles; p. 73,071; 38 23n 0 28w
83 Alice, tn., C. of Good Hope, S. Afr.; 32 50s 26 55e
83 Alicedale, vil., C. of Good Hope, S. Afr.; 33 17s 26 3e
118 Alice Springs, tn., N. Terr., Austral.; 23 36s 133 53e
67 Aligarh, tn., India; p. 66,963; 27 47n 78 10e
55 Alingsås, tn., Swed.; p. 8,870; 57 55n 12 32e
83 Aliwal N., tn., C. of Good Hope, S. Afr., on Orange R.; sulphur springs; p. 2,677 (Eur.); 30 45s 26 45e
48 Aljustrel, tn., Port.; 37 52n 8 10w
38 Alkmaar, tn., Neth.; cheese, salt; p. 28,294; 52 38n 4 46e
67 Allahabad, tn., cap., U.P., India; at junc. of Ganges and Jumna; rly. centre; Mohammedan pilgrim centre; p. 183,914; 25 22n 81 52e
48 Allariz, tn., Sp.; 42 12n 7 48w
102 Allegheny, Pittsburgh, Penn., U.S.A.; 40 32n 80 0w
102 Allegheny Mts., U.S.A.; part of Appalachian Mts.; 38 30n 80 0w
33 Allen, Bog of, Ireland; largest series of bogs extending from Slieve Bloom Mts., E. through Offaly, Kildare, Leix, and Westmeath; 53 15n 0 7w
20 Allendale, par., Northumb., Eng.; p. 3,012; 54 54n 2 15w
108 Allende, tn., Mex.; 28 15n 100 38w
41 Allenstein, tn., Germ.; sawmills, beer; p. 38,100; 53 45n 20 32e
102 Allentown, tn., Pa., U.S.A.; furniture, silk, tobacco; p. 92,563; 40 35n 75 29w
68 Alleppey, tn., Travancore, India; coffee, cardamoms; p. 32,044; 9 29n 76 23e
40 Aller, R., Germ.; trib. of R. Weser; 52 45n 9 45e
107 Alliance, tn., Neb., U.S.A.; p. 6,999; 42 0n 103 1w
35 Allier, Dept., France; a. 2,848 sq. m.; min. springs, wine, wheat, coal, iron; cap. Moulins; p. 373,924; 46 28n 3 10e
39 Allinge, tn., Bornholm, Den.; 55 15n 14 50e
96 Alliston, tn., Ont., Can.; p. 1,355; 44 11n 80 4w
27 Alloa, bor., port, Clack., Scot.; coal, shipbuilding, yarns, distilling, glass; p. 13,322; 56 7n 3 47w
71 Allor Is., Dutch E. Indies; p. 90,567; 8 30s 124 30e
58 Alma Ata, tn., U.S.S.R.; cattle; fruits; p. 45,385; 43 28n 76 58e
48 Almada, tn., Port.; 38 36n 9 10w
48 Almaden, tn., Spain; mercury; p. 10,000; 38 48n 4 50w
49 Almansa, tn., Spain; p. 11,250; 38 53n 1 3w
48 Almanza, tn., Spain; 42 40n 5 7w
49 Almazora, tn., Spain; 39 56n 0 1w
48 Almeida, tn., Port.; 40 44n 6 57w
38 Almelo, tn., Neth.; cotton; damask; p. 32,515; 52 21n 6 40e
48 Almendralejo, tn., Spain; p. 12,750; 38 40n 6 26w
49 Almeria, tn., spt., Spain; cath.; exp. grapes, esparto grass, lead; p. 53,977; 36 29n 2 30w
48 Almodóvar, tn., Port.; 37 32n 8 05w
48 Almodóvar, tn., Spain; p. 12,720; 38 45n 4 10w
97 Almonte, tn., Ont., Can., p. 2,413; 45 15n 76 12w
48 Almonte, tn., Spain; 37 15n 6 32w
25 Almess, par., Ross and Crom., Scot.; p. 849; 57 42n 4 17w
20 Alnmouth, par., Northumb., Eng., p. 933; 55 24n 1 37w
20 Alnwick, urb. dist., Northumb., Eng.; castle, seat of Percy family from 14th century; brewing; p. 6,882; 55 26n 1 43w
48 Alora, tn., Spain; hot sulphur springs; olives, citrus, fruits; p. 11,500; 36 48n 4 43w
38 Alost, tn., Belg.; hops; linen, silk; p. 37,852; 50 58n 4 2e
102 Alpena, tn., Mich., U.S.A.; cement, paper, tanneries, sawmills; p. 12,105; 45 3n 83 25w
35 Alpes-Maritimes, Dept., France; a. 1,443 sq. m.; sheep, olives, wines, fruit; p. 493, 376; 43 48n 7 8e
44 Alps, mts., Europe; extensive mountain system of Cent. Europe stretching in wide sweep from G. of Genoa beyond head of Adriatic S.; length 660 m., breadth 30 to 150 m.; chief peaks—Mont Blanc 15,780 ft., Monte Rosa 15,217 ft., Matterhorn 14,775 ft., Finsteraarhorn 14,025 ft., Jungfrau 13,670 ft.; chief passes—Brenner, Furka, Grimsel, Gt. St. Bernard, Mont Cenis, Simplon, St. Gotthard; largest glacier, Aletsch; longest tunnels—Mont Cenis 7½ m., Simplon 12½ m., St. Gotthard 9½ m.; alpine plants—edelweiss, saxifrages, gentians; holiday centre both summer and winter, mountain and rock climbing, ski-ing, tobogganing, etc.; 44 0 to 48 0n 6 00 to 16 0e
34 Alsace-Lorraine, prov., France (retroceded 1919); a. 5,605 sq. m.; fertile, well wooded; agriculture, hay, wheat, oats, barley, potatoes, hops, beetroot, vine; minerals—iron, coal, salt, building stone in Lorraine, potash in Alsace; manfs.—iron and steel, porcelain, glass, textiles; now depts. of Bas-Rhin, Haut-Rhin, Moselle; chief towns—Strasbourg, Metz; p. 1,898,376; 47 30n to 49 30n 6 00 to 8 00e
54 Alsten, L., Nor.; 65 55n 12 30e
54 Alta, tn., Nor.; 69 55n 23 20e
72 Altai, prov., Sinkiang; 46 30n 88 0e
72 Altai, mts., Siberia; extend from Gobi to N.W. in parallel ranges; rich in minerals; 50 29n 85 0e
109 Altamira, tn., Mex.; 22 23s 98 2w
51 Altamura, tn., Italy; wines, wool; p. 27,000; 40 51n 16 38e
108 Altar, tn., Mex.; 30 41n 111 57w
108 Altata, tn., Mex.; 24 32n 108 0w
45 Altdorf, tn., Switz.; Tell monument; 46 53n 8 38e
40 Altenburg, tn., cap. Saxe-Altenburg, Germ.; cas.; cigars, woollen yarn; p. 42,570; 51 0n 12 21e
34 Altkirch, tn., France; 47 40n 7 14e

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25 Altnabreac, vil., Caithness, Scotland ; 58 24N 3 42W
24 Altnaharra, vil., Sutherland, Scotland ; 58 17N 4 50W
17 Alton, urb. dist., Hants, Eng. ; breweries, paper ; p. 6,172 ; 51 8N 0 58W
102 Alton, tn., Ill., U.S.A., on Mississippi R. ; machinery, glass, flour ; p. 30,151 ; 38 27N 90 15W
39 Altona, spt., Germ., on R. Elbe, adjoining Hamburg ; docks, shipyard, tobacco, iron, textiles, soap ; p. 241,970 ; 53 33N 9 57E
102 Altoona, tn., Pa., U.S.A. ; rly. centre ; coal ; p. 82,054 ; 40 35N 78 25W
18 Altrincham, urb. dist., Ches., Eng. ; iron, sawmills ; p. 21,356 ; 53 23N 2 21W
45 Altstetten, tn., Switz. ; 47 23N 9 33E
106 Alturas, tn., Cal., U.S.A. ; 41 28N 120 32W
67 Altyn Tagh, mts., Tibet ; 14,000 ft. ; 39 0N 89 0E
81 Alula, tn., It. Somal. ; 11 50N 50 50E
27 Alva, bor., Clack., Scot. ; woollens, bricks ; p. 3,820 ; 56 9N 3 47W
107 Alva, tn., Okla., U.S.A. ; 36 50N 98 45W
25 Alvah, par., Banff, Scot. ; p. 1,101 ; 57 38N 2 34W
109 Alvarado, tn., Mex., 18 45N 95 57W
23 Alves, par., Moray, Scot. ; stone ; p. 888 ; 57 39N 3 26W
25 Alvie, par., Inver., Scot. ; p. 541 ; 57 10N 3 51W
55 Älvsborg, co., Sweden ; 58 20N 12 20E
67 Alwar, tn., Raj., India ; palaces ; p. 44,760 ; 27 30N 76 38E
27 Alyth, bor., Perth, Scot. ; textiles ; p. 1,662 ; 56 38N 3 13W
118 Amadeus, L., N. Terr., Austral. ; 24 54S 131 0E
62 Amadia, tn., Iraq ; 37 5N 43 45E
93 Amadjuak L., Franklin, Can. ; 64 30N 71 0W
73 Amakusa, I., Japan ; 32 47N 130 4E
55 Amål, tn., Swed. ; p. 6,764 ; 59 2N 12 41E
51 Amalfi, tn., tourist resort ; cath. ; 40 38N 14 38E
110 Amapala, L., Hond. ; 13 5N 87 45W
60 Amara, tn., Iraq ; sieges of Kut-el-Amara in Gt. War ; 32 0N 47 10E
69 Amarapura, tn., Burma, India ; former capital ; 22 0N 96 0E
107 Amarillo, tn., Tex., U.S.A. ; rly. junc. ; oil refining, creameries ; p. 43,132 ; 35 20N 101 51W
62 Amasia, tn., Turk. ; fruit, salt, silk, wine ; p. 61,000 ; 40 33N 35 52E
62 Amasya, tn., Turk. ; p. 12,824 ; 41 36N 32 31E
83 Amatonga Land, Nat. S. Afr. ; 27 0S 32 30E
112 Amazon R., chief river of S. America ; length 3,600 m. ; 200 tributaries, 15 between 800 and 2,000 m. long ; chief tribs.—Madeira, Yapura, Negro, Putumayo, Purus, Tapajoz, Xingu ; a. of basin 2,000,000 sq.m. ; rises in Peruvian Andes, flows E. to Atlantic Oc. ; 2,000 m. navigable in Brazil ; 1 0N 49 0W
112 Amazonas (St.), Brazil ; a. 731,363 sq. m. ; forested ; rubber, timber, tropical fruits ; cap. Manáos ; p. 433,777 ; 4 30S 61 0W
80 Ambaca, tn., Angola ; coffee ; 9 15S 15 10E
67 Ambala, tn., Punjab, India ; cotton, flour ; p. 76,326 ; 30 20N 76 55E
77 Amber, C., Madagascar ; 12 0S 49 0E
40 Amberg, tn., Germ. ; coal, iron ; p. 26,330 ; 49 28N 11 50E
110 Ambergris Cay, Br. Hond. ; 18 0N 88 0W
35 Ambert, tn., France ; 45 32N 3 43E
20 Amble, urb. dist., Northumb., Eng. ; fire-bricks ; p. 4,208 ; 55 20N 1 35W
20 Ambleside, parish, Westmor., Eng. ; tourist resort at head of L. Windermere ; slates ; p. 2,343 ; 54 27N 2 57W
82 Amboella, dist., Angola ; 14 40S 17 30E
71 Amboina I., Dutch E. Indies ; p. 277,966 ; 3 30S 128 0E
34 Amboise, tn., France ; 47 22N 0 57E
80 Ambriz, tn., Angola ; exp.—sugar-cane, coffee, copper ; 7 50S 13 7E
108 Ameca, tn., Mex. ; 20 31N 104 2W
38 Ameland, I., Neth. ; 53 27N 5 45E
2 America, cont. land mass of W. Hemisphere ; a. 16,111,720 sq. m., length 9,500 m., greatest breadth 3,300 m. in N. America, 30 m. in Panama, 3,200 m. in S. America ; divided into continents of N. America and S. America, connected by Isth. of Panama ; 83 0N to 56 0S 170 0W to 35 0W
103 Americus, tn., Ga., U.S.A. ; 32 4N 84 12W
38 Amerongen, tn., Neth. ; 52 0N 5 28E
38 Amersfoort, tn., Utrecht, Neth. ; cottons, woollens, leather, tobacco ; p. 38,551 ; 52 9N 5 24E
86 Amersfoort, tn., Trans., S. Afr. ; 27 1S 29 58E
17 Amersham, par., Bucks, Eng. ; p. 4,221 ; 51 40N 0 37W
19 Amesbury, tn., Wilts, Eng. ; Neolithic earthworks ; p. 1,630 ; 51 10N 1 45W
105 Amesbury, tn., Mass., U.S.A. ; cotton ; 11,899 ; 42 50N 70 54W
81 Amhara, dist., Abys. ; 13 30N 37 40E
95 Amherst, cty., N.S., Can. ; shipbuilding ; p. 7,450 ; 45 48N 64 8W
69 Amherst, tn., Burma, India ; 16 3N 97 37E
105 Amherst, tn., N.H., U.S.A. ; 42 54N 71 35W
106 Amherstburg, tn., Ont., Can. ; p. 2,759 ; 42 5N 83 7W
84 Amiens, tn., cap. Somme, Fr., on R. Somme ; cath. ; linen, woollens, silks ; p. 90,211 ; 49 53N 2 18E
5 Amirante Is., Ind. Oc. ; 5 30S 53 15E
18 Amlwch, urb. dist., spt., Angl., Wales ; copper ; p. 2,561 ; 53 25N 4 20W
61 Amman, tn., cap., Transjordan ; 31 57N 35 57E
19 Ammanford, urb. dist., Carm., Wales ; coal ; p. 7,160 ; 51 47N 4 0W
63 Amol, tn., Pers. ; p. 10,150 ; 36 30N 52 15E
74 Amoy, treaty port, China ; exp. tea, fruits, bricks ; p. 196,717 ; 24 30N 118 10E
53 Amphissa, tn., Greece ; 38 30N 22 22E
16 Ampthill, urb. dist., Beds, Eng. ; p. 2,167 ; 52 2N 0 30W
67 Amraoti, tn., cap. Berar, India ; textiles ; p. 40,694 ; 20 56N 77 55E
66 Amritsar, tn., Punjab, India ; centre of Sikh religion ; shawls, silks, carpets ; p. 264,840 ; 31 47N 74 48E
67 Amroha, tn., U.P., India ; p. 40,448 ; 28 55N 78 33E
38 Amsterdam, spt., Neth., on R. Amstel, inlet of Zuider Zee ; Royal Palace, Bourse, Univ., excellent harbour, extensive trade ; exp.—dairy products, provisions, sugar, tobacco, cigars ; diamond polishing, shipbuilding ; p. 732,603 ; 52 21N 4 55E
102 Amsterdam, tn., N.Y., U.S.A. ; woollens ; p. 34,817 ; 42 58N 74 18W

MAP
58 Amu R., U.S.S.R. ; 41 0N 62 0E
27 Amulree, par., Perth, Scot. ; p. 292 ; 56 31N 3 47W
92 Amundsen G., Can. ; 71 0N 128 0W
71 Amuntai, tn., Born., Dutch E. Indies ; 2 30S 115 20E
73 Amur, R., Manchuria ; 1,500 m. long ; chief tribs.—Sungari, Usuri ; 53 30N 122 30E
127 Amuri Pass, New Zealand ; 42 26S 172 21E
61 Amwas, tn., Pal. ; 31 50N 34 59E
106 Anaconda, tn., Mont., U.S.A. ; copper, zinc, manganese ; p. 12,494 ; 46 7N 112 47W
59 Anadyr, G. of, U.S.S.R. ; 64 0N 180 0E
50 Anagni, tn., It. ; 41 43N 13 8E
62 Anah, tn., Iraq, on R. Euphrates ; farming, fruit ; p. 15,000 ; 34 29N 41 59E
68 Anakapalle, tn., Mad., India ; p. 20,360 ; 17 40N 83 5E
62 Anamur, vil., Turk. ; 36 2N 32 50E
68 Anantapur, tn., Mad., India ; 14 35N 77 43E
57 Ananyev, tn., Rus. ; wheat ; p. 20,000 ; 47 46N 29 51E
57 Anapa, tn., Rus. ; 44 56N 37 16E
32 Anascaul, vil., Kerry, I.F.S. ; 52 0N 10 3W
113 Añatuya, tn., Arg. ; 28 40S 60 50W
34 Ancenis, tn., France ; 47 23N 1 13W
50 Ancona, tn., Marches, Italy ; sugar refineries, shipbuilding ; p. 84,437 ; 43 37N 13 32E
27 Ancrum, par., Rox., Scot. ; p. 858 ; 55 31N 2 35W
113 Ancud, vil., Chile ; 42 0S 74 0W
48 Andalusia, old div., Spain ; fertile ; citrus fruits, sherry ; lead, copper ; chief towns—Seville, Granada ; 37 30N 5 00W
65 Andamans and Nicobars, prov., India ; a. 3,143 sq. m. ; p. 29,463 ; 7 0 to 15 0N 90 0 to 95 0E
69 Andaman Is., India ; timber ; p. 19,223 ; 12N 92 30E
112 Andarahy, tn., Brazil ; 12 20S 41 50W
45 Andeer, vil., Switz. ; 46 37N 9 27E
45 Andermatt, vil., Switz. ; 46 38N 8 34E
37 Andernach, tn., Germ., on R. Rhine ; p. 10,771 ; 50 25N 7 23E
102 Anderson, tn., Ind., U.S.A. ; iron, steel, brass, paper ; p. 29,804 ; 40 0N 85 40W
103 Anderson, tn., S.C., U.S.A. ; cotton ; p. 14,383 ; 34 27N 82 30W
112 Andes Mts., S.A. ; vast mt. system extending the whole length of S. America, parallel with the Pacific Ocean ; about 4,500 m. long ; highest peak, Aconcagua (extinct volcano 23,081 ft.) ; most of the loftiest peaks are volcanic ; rich in minerals, gold, silver, copper ; crossed by rly. via Uspallata P., 10,500 ft. ; 11 0S 75 0W
63 Andkhui, vil., Afghan. ; 36 50N 65 2E
49 Andorra, independent rep., Europe ; a. 191 sq. m., in Pyrenees between France and Spain ; livestock, wines, tobacco ; p. 5,231 ; 42 30N 1 29E
17 Andover, mun. bor., Hants, Eng. ; prehistoric earthworks ; Royal Air Force Staff Coll. ; ironworks ; p. 9,902 ; 51 13N 1 27W
105 Andover, Mass., U.S.A. ; woollen and rubber goods ; p. 9,969 ; 42 38N 71 8W
105 Andover, tn., Me., U.S.A. ; 44 39N 70 50W
77 Andovoranto, tn., Madagascar, 19 10S 48 40E
89 Andrada, vil., Mozambique ; 18 55S 32 50E
51 Andria, tn., Italy ; cath. ; almonds ; p. 60,000 ; 41 12N 16 18E
53 Andros, I., Greece ; 37 50N 24 50E
110 Andros Is., W. Indies ; sponge collecting ; sisal hemp ; p. 7,000 ; 24 40N 78 0W
48 Andujar, tn., Spain ; flour, candles ; p. 18,000 ; 38 2N 4 5W
88 Anecho, vil., Togo, Fr. W. Afr. ; 6 15N 1 38E
60 Aneiza, tn., Arabia ; p. 10,000 ; 26 27N 4 05E
59 Angarka, tn., U.S.S.R. ; 67 0N 166 0E
120 Angaston, tn., S. Austral. ; 34 31S 139 0E
55 Angelholm, tn., Sweden ; p. 5,269 ; 56 15N 12 45E
41 Angermünde, tn., Germ. ; 53 0N 14 0E
34 Angers, tn., cap. Maine-et-Loire, Fr. ; cas., cath. ; farming, wool, iron, slate ; p. 86,602 ; 47 29N 0 35W
18 Anglesey, I., co., Wales ; a. 275 sq. m. ; separated from mainland by Menai Str. ; known as Mona by Romans ; cattle rearing, farming ; p. 49,025 ; 53 15N 4 20W
81 Anglo-Egyptian Sudan, N.E. Africa ; a. 969,600 sq. m. ; jointly administered by British and Egypt, divided into 9 provs. ; forested in S., gum arabic, bamboo, papyrus ; large irrigation schemes, e.g. Gezira, for growing cotton ; sesamum, dates, hides and skins ; ivory, gold ; cap. Khartoum ; p. 5,816,000 ; 22 0 to 3 00N 22 0 to 35 0E
90 Angmagssalik, I., Greenland ; 65 30N 37 0W
113 Angol, tn., Chile ; p. 8,801 ; 37 50S 72 55W
82 Angola, Port. W. Africa ; a. 487,788 sq. m. ; forested ; palm oil, rubber, coffee, cotton, maize ; minerals—petroleum, asphalt, copper, iron, diamonds ; cap. São Paulo de Loanda ; p. 3,098,281 ; 10 0 to 17 30S 15 0 to 22 0E
62 Angora. See Ankara.
35 Angoulême, tn., cap. Charente, France, on R. Charente ; cath. ; cognac, paper ; p. 36,699 ; 45 40N 0 10E
115 Angra, tn., Brazil ; 23 0S 44 10W
111 Anguilla, I., W. Indies ; a. 35 sq. m. ; p. 4,200 ; 18 30N 63 4W
63 Angurkhan, tn., Persia ; 26 45N 57 50E
25 Angus (Forfar), co., Scot. ; a. 874 sq. m. ; mountainous in N., Strathmore, Sidlaw Hills, Carse of Gowrie ; agriculture, cattle, fruit, especially strawberries ; mnfs. flax, jute, bags, sacks ; p. 270,190 ; 56 39N 3 00W
40 Anhalt, St., Germany ; a. 888 sq. m. ; former duchy ; agriculture, sugar beetroot ; mining, lignite, silver ; brewing ; p. 351,045 ; 51 58N 12 20E
29 Anholt, I., Denmark ; 56 43N 11 39E
74 Anhwei, prov., China ; a. 54,826 sq. m. ; soya beans, rice, tea, wheat ; cap. Anking ; p. 20,198,840 ; 32 0N 117 0E
79 Aniheb, tn., Egypt ; on R. Nile ; 22 40N 32 5E
34 Anjou, old prov., France ; former cap. Angers ; 47 20N 0 30W
75 An-ju, tn., Korea ; 39 30N 125 50E
62 Ankara, tn., cap. Turkey ; centre for wheat, barley, fruit, honey ; mohair cloth ; p. 74,553 ; 39 52N 32 59E
25 Annanville, vil., Ross and Cromarty, Scotland ; 57 45N 4 00W
74 Anking, tn., cap. Anhwei, China ; on R. Yangtze Kiang ; p. 40,000 ; 30 35N 117 0E

MAP
41 Anklam, tn., Germ. ; p. 14,789 ; 53 50N 13 38E
81 Ankober, tn., Abyss. ; p. 2,000 ; 9 35N 39 54E
38 Anller, tn., Belgium ; 49 47N 5 37E
74 Anlu, tn., China ; 31 20N 112 23E
70 Annam, Fr. protectorate, Indo-China ; a. 39,758 sq. m. ; rice, cotton, cinnamon bark, silk, tea, coffee, tobacco ; dyewoods, lacquer ; minerals, coal, iron ; cap. Hué ; p. 4,820,000 ; 12 to 17N 108 0E
27 Annan, bor., Dumf., Scot. ; cotton, ropes ; p. 3,959 ; 54 59N 3 15W
95 Annapolis, tn., N.S. Canada ; fruit ; 44 46N 65 26W
102 Annapolis, tn., cap., Md., U.S.A. ; oyster canning ; p. 12,531 ; 39 0N 76 33W
102 Ann Arbor, tn., Mich., U.S.A. ; motor lorries, farm implements, pianos ; p. 26,944 ; 42 14N 83 45W
105 Anniscuam, tn., Mass., U.S.A. ; 42 33N 70 38W
103 Anniston, tn., Ala., U.S.A. ; coal, iron, chemicals, cotton goods ; p. 22,345 ; 33 40N 85 48W
80 Annobon I., (Span.) Afr. ; 1 40S 5 40E
35 Annonay, tn., France ; paper, silk, leather ; p. 15,427 ; 45 15N 4 41E
74 Anping, spt., Formosa, Japan ; 23 0N 120 10E
40 Ansbach, tn., Germ. ; machinery, weaving ; p. 21,923 ; 49 20N 10 37E
105 Anson, tn., Me., U.S.A. ; 44 55N 69 57W
105 Ansonia, tn., Com., U.S.A. ; clocks ; p. 19,898 ; 41 17N 73 7W
27 Anstruther, W. and E. See Kilrenny.
62 Antakie. See Antioch.
62 Antalya, G. See Adalia G.
77 Antananarivo, tn., cap., Madagascar ; p. 70,847 ; 19 0S 47 20E
128 Antarctic Oc. See Southern Oc.
128 Antarctica, land lying within Antarctic Circle, plateau cont. 7,000 to 10,000 ft. high, surrounded by ice barrier ; S. Magnetic Pole located by Shackleton 1909, S. Pole by Amundsen 1911, Scott 1912 ; penguins abound ; Political Divisions :—the Australian Dependency, Ross Dependency of New Zealand, and the Falkland Is. Dependencies. Adelie Land, which is a French dependency of Réunion, and the Norwegian dependencies of Bouvet Is. and Peter 1st Is.
48 Antequera, tn., Spain ; woollens, silks, tanneries ; p. 31,950 ; 37 3N 4 30W
119 Anthony Lagoon, sta., N. Terr. Austral. ; 18 0S 135 42E
10 Anti Atlas, mts., Mor. ; 31 0N 9 0W
35 Antibes, tn., Fr. ; health resort ; oranges, flowers ; p. 26,071 ; 43 35N 7 9E
93 Anticosti I., G. of St. Lawrence, Que., Canada ; a. 3,145 sq. m. ; 49 20N 62 40W
95 Antigonish, tn., N.S. Canada ; p. 1,764 ; 45 39N 62 0W
111 Antigua, I., W. Indies, Br. ; a. 108 sq. m. ; sugar, rum, pine-apples ; p. 31,000 ; 17 5N 61 48W
62 Antioch, Syria ; on R. Orontes ; tobacco, olives, maize, cotton, soap, silk ; p. 28,000 ; 36 4N 36 10E
112 Antioquia, tn., Colombia ; 6 40N 76 25W
116 Antipodes I., Pac. Oc. ; N.Z. ; 49 45S 178 40E
107 Antlers, tn., Okla., U.S.A. ; 34 12N 95 35W
113 Antofagasta, spt., Chile ; exp. nitrates, borates, copper, silver ; p. 53,591 ; 23 39S 70 25W
115 Antonina, tn., Brazil ; 25 27S 48 30W
31 Antrim, co., N. Ireland ; a. 1,159 sq. m. ; tableland broken by valleys, Giant's Causeway, columnar basaltic formations ; salmon, farming ; p. 191,618 ; 54 53N 6 10W
31 Antrim, tn., Antrim, co., N. Ireland ; linen ; p. 1,979 ; 54 43N 6 14W
74 Antung, port, Manchuria ; on Yalu R. ; exp. soya beans, timber ; p. 93,781 ; 40 0N 124 30E
38 Antwerp, spt., Belg., on R. Scheldt ; cath. ; shipbuilding, sugar, textiles, lace, petroleum, tobacco, distilling, diamond cutting ; p. 294,902 ; 51 14N 4 23E
38 Antwerp, prov., Belgium ; a. 1,093 sq. m. ; grain, flax ; cap. Antwerp ; p. 1,175,363 ; 51 20N 4 30E
104 Antwerp, tn., N.Y., U.S.A. ; 44 12N 75 33W
31 An Uaimh. See Navan.
54 Anundsjö, tn., Swed. ; 63 25N 18 10E
68 Anuradhpura, tn., Ceylon ; 8 22N 80 23E
120 Anxious Bay, S. Austral. ; 33 20S 134 45E
73 Aomori, spt., Japan ; salmon ; p. 93,413 ; 40 52N 140 44E
50 Aosta, tn., Italy ; p. 20,744 ; 45 47N 7 20E
103 Apalachee B., Fla., U.S.A. ; 30 0N 84 0W
103 Apalachicola, tn., Fla., U.S.A. ; 29 42N 85 0W
109 Apam, tn., Mex. ; 19 40N 98 35W
46 Apatin, tn., Y.-slav., on R. Danube ; rope, madder, silk ; 45 40N 19 0E
108 Apatzingan, tn., Mex. ; 19 10N 102 18W
38 Apeldoorn, tn., Neth. ; paper ; p. 60,332 ; 52 12N 5 58E
50 Apennines, mts., Italy ; stretching through peninsula of Italy ; chief peak, Gran Sasso d'Italia, 9,580ft. ; 44 0N 12 0E
116 Apia, chief tn. Upolu, W. Samoa ; 13 50S 171 40W
71 Apo, vol., Phil. Is. ; 6 30N 125 15E
40 Apolda, tn., Germ. ; hosiery ; p. 25,703 51 3N 11 30E
53 Aponomi, tn., Greece ; 40 22N 22 59E
102 Appalachian (Mts.), U.S.A. ; extending 1,320 m. from N. to S. along Atlantic coast ; highest peak 6,707 ft. ; 38 0N 80 0W
45 Appenzell, tn., Switz. ; 47 20N 9 25E
38 Appingadam, tn., Neth. ; 53 19N 6 51E
20 Appleby, mun. bor., co. tn., Westmor., Eng. ; castle ; malting ; p. 1,618 ; 54 35N 2 30W
24 Applecross, par., Ross and Crom., Scot. ; salmon ; p. 1,033 ; 57 26N 5 47W
19 Appledore, vil., Dev., Eng. ; p. 2,705 ; 51 4N 4 11W
17 Appledore, vil., Kent, Eng. ; p. 560 ; 51 2N 0 47E
27 Applegarth, par., Dumf., Scot. ; p. 807 ; 55 4N 3 24W
102 Appleton, tn., Wis., U.S.A. ; paper ; p. 25,267 ; 44 20N 88 25W
57 Apsheron, C., Russia ; 40 16N 50 27E
121 Apsley, vil., Tas., Austral. ; 42 20S 147 7E
112 Apua Falls, Brazil ; 5 0S 55 0W
51 Apulia, dept., Italy ; a. 7,376 sq. m. ; wheat, barley, maize, olive oil, fruits ; cattle, horses, sheep, marble ; p. 2,480,966 ; 41 0N 17 0E
112 Apurimac R., Peru ; 12 30S 73 30W

MAP
50 **Aquila degli Abruzzi**, tn., Italy; summer resort; lace; p. 52,465; 42 21N 13 21E
60 **Arabia**, S.W. pen. of Asia; a. 1,000,000 sq. m. (est.), length 1,500 m., breadth 800 m.; mostly arid wilderness and plateau with many oases; fertile tracts between mts. and sea in W. and S.; coffee, dates, gums, spices; horses, camels; inhabited by nomadic Bedouin tribes; nominally under jurisdiction of Kingdom of Saudieh (Nejd and Hejaz), includes Yemen, Hadramaut, and Aden Prot. (Br.); p. 7,000,000 (est.); 15 to 30N 35 to 55E
78 **Arabian Des.**, Egypt; 27 to 28N 31 to 33E
66 **Arabian S.**, 20N 65E
62 **Arabkir**, vil., Turkey; 38 51N 38 30E
112 **Aracaju**, spt., Brazil; sugar, soap; p. 49,000; 11 0S 37 0W
52 **Arad**, tn., Rumania, on R. Maros; rly. centre; wine, corn, tobacco; p. 77,255; 46 12N 21 20E
80 **Arada**, tn., Fr. Eq. Afr.; 15 0N 20 22E
63 **Aradan**, tn., Persia; 35 15N 52 29E
71 **Arafura S.**, Dutch E. Indies; 9 30S 133 0E
49 **Aragon**, old prov., Spain; forests, coal, iron; 41 30N 1 0W
112 **Araguayá, R.**, Brazil; 8 0S 49 30W
69 **Arakan Yoma**, mts., Burma, India; 20 0N 94 30E
58 **Aral, L.**, Cent. Asia; a. 26,100 sq. m.; 43 30N 59 30E
121 **Aralnen**, tn., N.S.W. Austral; 35 40S 149 47E
123 **Aramac**, tn., Queens., Austral.; 23 0S 145 17E
109 **Aramberri**, tn., Mex.; 24 1N 99 54W
30 **Aran I.**, Tirconaill, I.F.S.; 55 0N 8 32W
32 **Aran Is.**, Irish Free State; 53 5N 9 50W
41 **Arangyelovatz**, tn., Y.-slav.; 44 19N 20 37E
48 **Aranjuez**, tn., Spain; market gardens; p. 14,000; 40 1N 3 38W
120 **Ararat**, tn., Vic., Austral.; 37 10S 142 30E
62 **Ararat, Mt.**, Turkey; 16,920 ft.; 39 50N 44 15E
66 **Aravalli Hills**, India; 25 30N 73 30E
115 **Arasca**, tn., Brazil; 19 47S 46 53W
114 **Arauco**, tn., Chile; 37 12S 73 19W
27 **Arbirlot**, par., Angus, Scot.; p. 726; 56 33N 2 39W
55 **Arboga**, tn., Sweden; 59 30N 15 50E
45 **Arbon**, tn., Switz.; on L. Constanz; 47 33N 9 26E
27 **Arbroath**, bor., Angus, Scot.; abbey ruins; leather, fisheries; p. 17,637; 56 34N 2 35W
34 **Arc**, tn., France; 47 28N 5 25E
35 **Arcachon**, tn., France; 44 39N 1 12W
53 **Arcadia**. See Kyparissia.
56 **Archangel**, tn. spt., Russia; ice-free May to Nov.; timber, fishing; p. 194,300; 64 38N 40 36E
104 **Archibald**, tn., Pa., U.S.A.; p. 9,587; 41 30N 75 34W
25 **Archiestown**, vil., Moray, Scot.; p. 239; 57 29N 3 16W
68 **Arcot**, tn., Mad., India; p. 10,800; 12 54N 79 16E
128 **Arctic Oc.**, extending from the Arctic Circle to the N. Pole
62 **Ardaban**, tn., Turkey; 41 8N 42 47E
30 **Ardara**, Tirconaill, I.F.S.; p. 501; 54 46N 8 25W
24 **Ardavasar**, vil., I. of Skye, Inverness, Scotland; 57 3N 5 54W
26 **Ardchavaig**, vil., Mull, Argyll, Scotland; 56 17N 6 12W
25 **Ardclach**, par., Nairn, Scot.; p. 639; 57 29N 3 45W
62 **Ardebil**, tn., Persia; dried fruits, carpets, rugs; p. 18,000; 38 12N 48 30E
35 **Ardéche**, Dept., France; a. 2,144 sq. m.; olives, wine, silk, iron, coal; cap. Privas; p. 282,911; 44 38N 4 52E
31 **Ardee**, par., Louth, I.F.S.; p. 2,368; 53 52N 6 33W
38 **Ardennes**, mts., wooded, hilly dist. in Belg., France, Luxembourg; 50 0N 5 30E
34 **Ardennes**, Dept., France; 2,027 sq. m.; farming, iron, slates, woollens; cap. Mézières; p. 293,746; 49 33N 4 37E
26 **Ardentinny**, vil., Argyll, Scotland; 56 3N 4 55W
27 **Ardeonaig**, vil., Perth, Scotland; 56 29N 4 09W
26 **Ardfern**, vil., Argyll, Scot.; 56 11N 5 32W
32 **Ardfert**, par., Kerry, I. F.S.; cath.; p. 2,018; 52 0N 9 47W
24 **Ardgay**, vil., Ross and Cromarty, Scotland; 57 53N 4 22W
31 **Ardglass**, tn., Down, N. Ire.; fishing; p. 786; 54 16N 5 37W
24 **Ardgour**, par., Arg., Scot.; p. 509; 56 44N 5 15W
80 **Ardh el Khalifa**, tn., Fr. Eq. Africa; 10 12N 20 50E
24 **Ardhasig**, vil., Harris, Scotland; 57 56N 6 51W
63 **Ardistan**, tn., Persia; p. 10,250; 33 29N 52 21E
26 **Ardlui**, vil., Dumb., Scot.; 56 18N 4 43W
26 **Ardlussa**, vil., Jura, Argyll, Scotland; 56 2N 5 46W
26 **Ardminish**, tn., Argyll, Scotland; 55 40N 5 43W
107 **Ardmore**, tn., Okla., U.S.A.; coal, cotton, oil refineries; p. 15,641; 51 57N 7 44W
32 **Ardnacrusha**, vil., Clare, I.F.S.; hydro-electric power stn.; 52 42N 8 38W
24 **Ardnamurchan**, par., Arg., Scot.; p. 1,137; 56 44N 6 0W
32 **Ardrahan**, par., Galway, I.F.S.; p. 1,550; 53 9N 8 49W
26 **Ardrishaig**, par., Argyll, Scot.; fishing, distillery; p. 1,244; 56 1N 5 26W
26 **Ardrossan**, bor., Ayr, Scot.; shipbuilding; p. 6,888; 55 39N 4 48W
120 **Ardrossan**, tn., S. Austral.; 34 24S 137 52E
26 **Ardtalla**, vil., Islay, Argyll, Scotland; 55 43N 6 03W
24 **Ardvourlie**, vil., Harris, Scotland; 57 59N 6 45W
54 **Are**, tn., Sweden; 63 25N 13 10E
111 **Arecibo**, spt., Porto Rico; coffee, sugar; p. 11,000; 18 29N 66 46W
48 **Arenas**, tn., Spain; 40 15N 5 5W
55 **Arendal**, tn., Nor.; wood pulp, aluminium; p. 10,403; 58 28N 8 51E
113 **Arequipa**, tn., Peru; minerals, wool; p. 65,000; 16 10S 71 25W
50 **Arezzo**, tn., Italy, cath.; silk, leather, pottery; p. 56,845; 43 28N 11 52E
34 **Argentan**, tn., France; 48 44N 0 03W
35 **Argentat**, tn., France; 45 7N 1 57E
113 **Argentina**, rep. S. America,; a. 1,153,119 sq. m.; mts. Andes in W.; drained by Rio de la Plata, Paranà, Paraguay, Uruguay, Pilcomayo, Rio Negro, Chubut; great plains, pampas, desert in Patagonia; N. forested, hardwoods, quebracho; agriculture, wheat, maize, linseed; pastoral farming, sheep, cattle; exp. wool, hides, meat, dairy products, wheat, maize, linseed; cap. Buenos Aires; p. 12,393,000; 22 0 to 50 0S 66 0 to 70 0W
113 **Argentina, L.**, Arg.; 50 30S 71 0W
35 **Argenton**, tn., France; 46 33N 1 30E
60 **Arghana**, tn., Turkey; 38 18N 39 57E
79 **Argin**, tn., Egypt; 22 0N 31 0E
53 **Argos**, tn., Greece; anc. acropolis, theatre; p. 10,000; 37 38N 22 42E
53 **Argostoli**, spt., Greece; shipbuilding; p. 8,293; 38 9N 20 30E
76 **Arguin I.**, Fr. W. Afr.; 20 48N 16 26W
26 **Argyll**, co., Scot.; a. 3,110 sq. m.; deeply indented coastline, Sd. of Mull, L. Linnhe, F. of Lorne, Sd. of Jura, L. Fyne, L. Long; mountainous, moors, deer forests; cattle, sheep, fisheries, distilling; p. 63,014; 55 30 to 56 50N 4 40 to 6 00W
47 **Argyrokastro**, tn., Albania; p. 12,000; 40 7N 20 10E
51 **Ariano**, tn., Italy; cath.; sulphur; 41 11N 15 6E
113 **Arica**, tn., Chile; exp. copper, silver; p. 13,140; 18 25S 70 10W
35 **Ariège**, dept., France; a. 1,892 sq. m.; livestock, fruit, iron, copper; p. 161,265; 42 54N 1 25E
30 **Arigna**, vil., Roscommon, I.F.S.; 54 5N 8 07W
26 **Arinagour**, vil., Argyll, Scotland; 56 37N 6 31W
112 **Arinda**, tn., Br. Guiana; 4 45N 58 45W
108 **Ario**, tn., Mex.; 19 10N 101 48W
24 **Arisaig and Moidart**, Inver., Scot.; p. 1,175; 56 55N 5 50W
108 **Arispe**, tn., Mex.; 30 20N 110 18W
106 **Arizona (St.)**, U.S.A.; a. 113,956 sq. m.; sheep, cattle raising, farming, fruit, gold, silver; cap. Phœnix; p. 435,573; 31 30 to 37 0N 109 0 to 114 0W
103 **Arkadelphia**, tn., Ark., U.S.A.; 34 6N 93 4W
103 **Arkansas (St.)**, U.S.A.; a. 53,335 sq. m.; farming, fruit, horses, cattle, sheep, lumbering, coal, petroleum; cap. Little Rock; p. 1,854,482; 33 0 to 36 0N 90 0 to 95 0W
103 **Arkansas R.**, U.S.A.; 2,000 m. long; 34 30N 92 10W
107 **Arkansas City**, tn., Kan., U.S.A.; oil, flour, foundries; p. 13,946; 37 3N 97 2W
33 **Arklow**, urb. dist., Wicklow, I.F.S.; fisheries; p. 4,526; 52 47N 6 10W
35 **Arles**, tn., France, on R. Rhône; Roman ruins; corn, wine, hats, silk; p. 32,485, 43 41N 4 39E
45 **Arlesheim**, vil., Switz.; 47 30N 7 35E
38 **Arlon**, tn., Belg.; p. 11,634; 49 40N 5 47E
24 **Armadale**, Skye, Scot.; 57 4N 5 53W
25 **Armadale**, vil., Suther., Scot.; 58 33N 4 05W
27 **Armadale**, bor., W. Lothian, Scot.; limestone, coal, iron; p. 4,854; 55 54N 3 42W
31 **Armagh**, co., N. Ire.; a. 512 sq. m.; salmon, linen; p. 110,083; 54 21N 6 39W
31 **Armagh**, urb. dist., co. Armagh, N. Ire.; cath.; linen, whisky; p. 7,401; 54 22N 6 35W
57 **Armavir**, tn., Russia; p. 90,200; 45 2N 41 2E
57 **Armenia**, S.S.R., Transcaucasia, Russia; a. 12,399 sq. m.; agriculture, cotton, tobacco, rice, fruits; cattle rearing, forestry, copper; cap. Erivan; p. 880,000; 40 0N 41 0E
34 **Armentières**, tn., France, on R. Lys; cloth, linen; p. 22,704; 50 41N 2 53E
121 **Armidale**, tn., N.S.W., Austral.; gold, farming, stock-raising; p. 7,090; 30 19S 151 36E
99 **Armstrong**, tn., Ont., Canada; 50 27N 89 0W
25 **Arnage**, vil., Aberdeen, Scotland; 57 25N 2 06W
119 **Arnhem, C.**, N. Terr., Austral.; 12 10S 137 1E
50 **Arno, R.**, Italy; 43 40N 10 16E
16 **Arnold**, urb. dist., Notts, Eng.; lace, hosiery; p. 14,470; 53 1N 1 7W
97 **Arnprior**, tn., Ont., Canada; p. 4,023; 45 25N 76 26W
40 **Arnsberg**, tn., Germ.; rly. works, paper; p. 11,791; 51 22N 8 05E
41 **Arnswalde**, tn., Germ.; machinery; p. 10,911; 53 9N 15 24E
48 **Aroche**, tn., Spain; 37 57N 7 00W
45 **Arosa**, tn., Switz.; 46 46N 9 39E
67 **Arrah**, tn., Bihar, India; p. 40,769; 25 30N 84 44E
26 **Arran I.**, Scot.; fishing, game; oats, potatoes, cattle; 55 35N 5 13W
34 **Arras**, tn., cap. Pas-de-Calais, France, on R. Scarpe; battle, Gt. War (1917); grain, dyeing, hosiery, brewing; p. 29,490; 50 16N 2 48E
125 **Arrino**, tn., W. Austral.; 29 27S 115 40E
26 **Arrochar**, par., Dumb., Scot.; p. 670; 56 13N 4 42W
48 **Arronches**, tn., Port., 39 2N 7 20W
120 **Arrowie**, tn., S. Austral.; 30 50S 139 18E
48 **Arroyo**, tn., Spain; 39 26N 6 38W
56 **Arsamas**, tn., Russia; 55 29N 43 58E
53 **Arta**, tn., Greece; p. 7,468; 39 8N 21 0E
57 **Artemovsk**, tn., Russia; rly. junc.; salt, coal, iron, quicksilver; p. 37,000; 48 27N 37 40E
107 **Artesia**, tn., N. Mex., U.S.A.; 32 57N 104 10W
94 **Arthabaska**, tn., Que., Canada; flour; p. 1,608; 46 8N 71 55W
121 **Arthur, R.**, Tas., Austral.; 41 7S 145 0E
127 **Arthur's Pass**, New Zealand; 42 57S 171 19E
34 **Artois**, old prov., France; 50 20N 2 20E
71 **Aru Is.**, Dutch E. Indies; a. 3,244 sq. m.; pearl, tortoise-shell; p. 18,139; 6 00S 134 30E
17 **Arundel**, mun. bor., Sus., Eng.; cas.; p. 2,489; 50 51N 0 34W
68 **Aruppukkottal**, tn., Mad., India; p. 31,579; 9 30N 78 5E
81 **Arusha**, tn., Tang. Ter.; 3 22S 36 42E
80 **Aruwimi, R.**, Belg. Congo; 2 00N 26 0E
31 **Arvagh**, vil., Cavan, I.F.S.; 53 56N 7 34W
54 **Arvidsjaur**, tn., Sweden; 65 35N 19 5E
55 **Arvika**, tn., Sweden; p. 7,979; 59 38N 12 35E
10 **Arzew**, tn., Algeria; 35 53N 0 19W
39 **Asaa**, tn., Den.; 57 8N 10 20E
81 **Asab**, vil., Eritrea; 13 0N 42 42E
88 **Asaba**, tn., Nigeria; 6 12N 6 43E
67 **Asansol**, tn., Bengal, India; p. 26,499; 23 40N 87 5E
105 **Asbury Park**, tn., N.J., U.S.A.; p. 14,981; 40 12N 74 0W
77 **Ascension, I.**, Atlantic Oc., Br.; a. 34 sq. m.; cap. George Town; 7 55S 14 20W
40 **Aschaffenburg**, tn., Germ.; paper, chemicals; p. 34,056; 49 58N 9 06E
40 **Aschersleben**, tn., Germ.; woollens, hardware; p. 28,637; 51 45N 11 28E
26 **Ascog**, vil., Bute, Scotland; 55 49N 5 01W
25 **Ascoile**, vil., Sutherland, Scotland; 58 5N 4 00W
50 **Ascoli Piceno**, tn., Italy; cath.; paper; p. 36,979; 42 52N 13 35E
54 **Asele**, tn., Sweden; 64 10N 16 40E
79 **Ashab**, dist., Egypt; 24 0N 34 30E
88 **Ashaku**, vil., Nigeria; 7 5N 10 45E
88 **Ashanti**, Br. protectorate, Gold Coast; a. 24,379 sq. m.; timber, cereals; cap. Kumasi; p. 582,868; 7 15N 1 20W
18 **Ashbourne**, urb. dist., Derby, Eng.; centre for Dovedale; farming, angling, condensed milk, corsets; p. 4,147; 53 1N 1 44W
19 **Ashburton**, urb. dist., Dev., Eng.; p. 2,505; 50 31N 3 46W
127 **Ashburton**, bor., S.I., New Zealand; p. 5,310; 43 53S 171 45E
127 **Ashburton, R.**, New Zealand; 43 49S 171 40E
124 **Ashburton, R.**, W. Austral.; 22 0S 115 3E
16 **Ashby-de-la-Zouch**, urb. dist., Leics., Eng.; cas.; hosiery, ironstone, coal; p. 5,093; 52 45N 1 27W
61 **Ashdod**. See Esdud.
17 **Ashdown For.**, Sus., Eng.; 51 3N 0 05E
103 **Asheville**, tn., N.C., U.S.A.; health resort; leather, textiles, furniture; p. 50,193; 35 35N 82 32W
42 **Ashevo**, tn., Russia; 57 10N 29 45E
121 **Ashford**, tn., N.S.W., Austral.; 29 16S 151 3E
17 **Ashford**, urb. dist., Kent, Eng.; leather, rly. works; p. 15,239; 51 9N 0 52E
61 **Ashkelon**. See Askalan.
102 **Ashland**, tn., Ky., U.S.A., on R. Ohio; iron, steel, lumber, leather; p. 29,074; 38 30N 82 40W
106 **Ashland**, tn., Ore., U.S.A.; 42 7N 122 40W
102 **Ashland**, tn., Wis., U.S.A.; iron, steel; p. 10,622 46 32N 90 55W
104 **Ashley**, tn., Pa., U.S.A.; p. 7,093; 41 12N 75 56W
127 **Ashley R.**, New Zealand; 43 13S 172 20E
78 **Ashmun**, tn., Egypt, on R. Nile; 30 16N 30 56E
63 **Ashraf**, tn., Persia; silk, cotton; 36 40N 53 24E
104 **Ashtabula**, tn., Ohio, U.S.A.; farm implements, iron, steel, leather; p. 23,301 41 52N 80 52W
16 **Ashwell**, par., Herts., England; p. 1,163; 52 44N 0 44W
16 **Ashwell**, par., Rutland, Eng.; p. 216; 52 44N 0 44W
18 **Ashton-under-Lyne**, mun. bor., Lancs, Eng.; on R. Tame; cotton, engineering, hats, coal; p. 51,573; 53 30N 2 07W
58 **Asia**, largest cont.; a. 16,500,000 sq. m.; coast much indented; chief mountain ranges—Himalayas (Everest 29,002 ft.), Kwen-lun, Tien Shan, Altai; Tibetan plateau, 10,000 to 17,000 ft.; volcanoes in Japan, Java; chief rivers—Ob, Yenisei, Yangtse-kiang, Lena, Amur, Hwang-ho, Ganges, Brahmaputra, Indus, Irrawaddy, Tigris, Euphrates; chief lakes—Caspian Sea, Aral, Balkhash, Baikal; tundra in N.; deserts—Gobi, Thar, Arabia; vegetation diverse, varying with height, climate, and latitude, coniferous, deciduous, monsoon, and equatorial forests; agriculture, temperate and tropical products; rich in minerals; fauna, varied and prolific; races, Indo-Aryan, Mongolian, Dravidian, Malayan; p. 1,100,000,000 (est.); 80 0N to 10 0S 30 0E to 180 0E
62 **Asia Minor (Anatolia)**, W. of Asia; a. 199,272 sq. m., p. 11,000,000 (est.); 39 0N 31 0E
60 **Asir**, prov., Arabia; 19 30N 42 30E
63 **Askabad**, tn., cap. Turkmenistan, U.S.S.R.; carpets, cotton, tanning; p. 59,000; 37 58N 58 25E
61 **Askalan**, tn., Pal.; 31 40N 34 33E
32 **Askeaton**, par., Limerick, I.F.S.; p. 535; 52 36N 8 58W
55 **Askersund**, tn., Sweden; 59 0N 14 50E
20 **Askrigg**, vil., N. Riding, Eng.; grouse moors; p. 481; 54 19N 2 03W
76 **Asmara**, tn., cap. of Eritrea; p. 14,700; 25 30N 38 40E
20 **Aspatria**, par., Cumb., Eng.; p. 3,239; 54 46N 3 22W
107 **Aspen**, tn., Col., U.S.A.; 39 12N 106 51W
127 **Aspiring Mt.**, New Zealand; 44 20S 168 30E
69 **Assam**, prov., India; a. 55,114 sq. m.; fertile well-watered valleys, densely forested; agriculture; tea, rice, cotton; coal; hardwoods; cap. Shillong; p. 8,622,251; 22 30 to 27 0N 90 0 to 95 0E
66 **Assaye**, vil., Hyderabad, India; Maratha defeat 1803 20 13N 76 0E
38 **Assen**, tn., Neth.; p. 17,652; 54 0N 6 34E
39 **Assens**, tn., Odense, Den.; p. 4,842; 55 16N 9 55E
98 **Assiniboine, Mt.**, Alta, Canada; 11,870 ft.; 50 50N 115 30W
50 **Assisi**, tn., Italy; native place of St. Francis; p. 20,000; 43 4N 12 38E
24 **Assynt**, par., Suther., Scot.; p. 1,342; 58 12N 5 10W
62 **Astarà**, tn., Persia; on Caspian Sea; 38 22N 48 50E
50 **Asti**, tn., Italy; silk, wines; p. 25,000; 44 54N 8 12E
16 **Aston Manor**, part of Birmingham, War., England; 52 30N 1 54W
48 **Astorga**, tn., Spain; cath.; 42 30N 6 06W
106 **Astoria**, tn., Ore., U.S.A. on R. Columbia; lumbering, flour, salmon canning; p. 10,349; 46 7N 123 48W
39 **Astorp**, tn., Sweden; 56 10N 12 58E
63 **Astrabad**, tn., Pers.; carpets, cotton, rice; p. 22,000; 36 48N 54 27E
57 **Astrakhan**, tn., Russia, on R. Volga; univ.; fish, caviare, astrakhan wool, fruits, wheat; p. 225,400; 46 13N 48 0E
48 **Astudillo**, tn., Spain; 42 12N 4 20W
48 **Asturias**, old prov., Spain; 43 10N 6 00W
113 **Asuncion**, tn., cap., Paraguay, on R. Paraguay; cath; tobacco, sugar, leather; p. 90,000; 25 15S 57 35W
79 **Aswan**, tn., Egypt, on R. Nile; tourist centre; Aswan dam, 3½ m. above town; p. 16,458; 24 6N 32 51E
78 **Asyût**, tn., Egypt; pottery, ivory work; p. 57,136; 27 12N 31 2E
113 **Atacama**, tn., Chile; 22 50S 68 20W
113 **Atacama Desert**, Chile; arid coastal tract, rich in nitrates; 25 0S 70 20W
53 **Atalanti**, tn., Greece; 38 39N 23 3E
58 **Atbasar**, tn., U.S.S.R.; 52 5N 68 10E
107 **Atchison**, tn., Kan., U.S.A.; 39 33N 95 10W
49 **Ateca**, tn., Spain; 41 21N 1 48W
88 **Ateobu**, vil., Gold Coast; 7 35N 1 10W
78 **Atfih**, tn., Egypt, on R. Nile; 29 23N 31 18E

MAP

38 Ath, tn., Belgium; textiles, foundries; p. 10,186; 50 39N 3 47E
98 Athabaska, R., Canada; 765 m. long; 58 0N 111 19W
31 Athboy, tn., Meath, I.F.S.; p. 574; 53 38N 6 55W
32 Athea, vil., Limerick, I.F.S.; 52 27N 9 17W
30 Athenry, tn., Galway, I.F.S.; p. 791; 53 18N 8 45W
53 Athens, tn., cap. Greece; museum, univ.; noted chiefly for ancient ruins, Acropolis crowned by Parthenon and many splendid temples; spinning, distilling, tanning, carpets; p. 452,919; 37 59N 23 47E
103 Athens, tn., Ga., U.S.A.; univ.; cotton goods, lumber; p. 18,192; 33 50N 83 15W
105 Athens, tn., N.Y., U.S.A.; 42 17N 73 48W
16 Atherstone, par., War., Eng.; coal, hosiery; p. 5,957; 52 35N 1 32W
122 Atherton, vil., Queens., Austral.; 17 10S 145 28E
30 Athleague, vil., Roscommon, I.F.S.; p. 369; 53 34N 8 17W
61 Athlit, tn., Pal.; 32 38N 34 54E
30 Athlone, urb. dist., Westmeath, I.F.S.; distilling, milling, linen; p. 7,546; 53 26N 7 57W
105 Athol, tn., Mass., U.S.A.; footwear, furniture; 10,677; 42 30N 72 12W
25 Atholl, Perth., Scot.; deer-forest, grouse moors, beautiful glens; 56 48N 3 40W
53 Athos, Mt., Greece; 6,332 ft.; monastery; 40 10N 24 25E
33 Athy, urb. dist., Kildare, I.F.S.; p. 3,459; 52 59N 6 59W
75 Atkesi, tn., Japan; p. 38,956; 43 6N 144 41E
103 Atlanta, tn., cap., Ga., U.S.A.; univ.; cotton, paper, farm implements; p. 270,366; 33 45N 84 20W
102 Atlantic City, tn., N.J., U.S.A.; seaside resort; p. 66,198; 39 26N 74 30W
6 Atlantic Oc., separating America on W. from Europe and Africa on E.; a. 34,500,000 sq. m., greatest length 8,500 m., breadth 1,800 to 5,000 m., greatest depth 27,360 ft. in Porto Rico Deep
76 Atlas Mts., N.W. Africa, extending from W. Morocco to Tunis; highest peak, Tizi-n-Tamjurt 14,500 ft.; 31 40N 6 20W
98 Atlin, tn., B.C., Canada; 59 40N 133 30W
109 Atlixco, tn., Mex.; 18 54N 98 31W
63 Atrek, R., Persia; 37 30N 54 50E
24 Attadale, vil., Ross and Cromarty, Scotland; 57 24N 5 26W
33 Attanagh, vil., Kilkenny, I.F.S.; 52 50N 7 21W
104 Attica, tn., N.Y., U.S.A.; 42 52N 78 17W
16 Attleborough, par., Norf., Eng.; stone; p. 2,453; 52 32N 1 00E
66 Attock, tn., Pun., India; 33 55N 72 20E
102 Au Sable, tn., Mich., U.S.A.; 44 26N 83 21W
35 Aubagne, tn., France; 43 18N 5 36E
34 Aube, dept., France; a. 2,326 sq. m.; cereals, fruit, livestock; cap. Troyes; p. 296,880; 48 18N 4 20E
34 Aube, R., France; 48 34N 4 15E
35 Aubenas, tn., France; 44 36N 4 23E
34 Aubigny, tn., France; 47 28N 2 26E
33 Aubin, tn., France; 44 30N 2 14E
45 Auboune, tn., Switz., on L. Geneva; 46 28N 6 22E
106 Auburn, tn., Cal., U.S.A.; 38 52N 121 7W
102 Auburn, tn., Me., U.S.A.; footwear, p. 18,571; 44 6N 79 19W
102 Auburn, tn., N.Y., U.S.A.; shoes, woollens, farm implements; p. 36,652; 42 55N 76 40W
35 Aubusson, tn., France; 45 56N 2 09E
35 Auch, tn., France; cotton, woollens, poultry, wines; 43 39N 0 34E
27 Auchengray, vil., Lanark, Scot.; quarrying, bricks, mining; 55 46N 3 36W
25 Auchinblae, vil., Kincardine, Scotland; 56 54N 2 27W
27 Auchinleck, par., Ayr, Scot.; coal; p. 6,624; 55 29N 4 17W
25 Auchmill, vil., Aberdeen, Scotland; 57 10N 2 10W
25 Auchnagatt, vil., Aberdeen, Scotland; 57 27N 2 08W
27 Auchterarder, bor., Perth, Scot.; p. 2,254; 56 18N 3 42W
27 Auchterderran, par., Fife, Scot.; coal, iron, linen; p. 16,664; 56 9N 3 28W
27 Auchterhouse, par., Angus, Scot.; p. 600; 56 32N 3 04W
25 Auchterless, par., Aber., Scot.; p. 1,459; 57 27N 2 29W
27 Auchtermuchty, bor., Fife, Scot.; distilling, cotton spinning; p. 1,253; 56 18N 3 13W
126 Auckland (City), cap. Auckland, prov., N.I., New Zealand; univ.; sawmills, sugar refining, shipbuilding, glass; p. 103,600; 36 54S 174 46E
126 Auckland (Prov.), N.I., New Zealand; a. 25,400 sq. m.; farming; gold, kauri gum, coal; p. 463,700; 36 0 to 39 0S, 173 0 to 178 0E
35 Aude, Dept., France; a. 2,448 sq. m.; grain, fruit, wine; slate, iron, marble; cap. Carcassonne; p. 242,596; 43 10N 2 40E
38 Audenaarde, tn., Belg.; 50 51N 3 37E
34 Audierne, tn., France; 48 2N 4 35W
18 Audley, par., Staffs, Eng.; coal; p. 13,619; 53 4N 2 22W
123 Augathella, tn., Queens., Austral.; 25 47S 146 32E
31 Augher, vil., Tyrone, N. Ire.; p. 356; 54 26N 7 07W
31 Aughnacloy, tn., Tyrone, N. Ire.; p. 1,009; 54 25N 6 59W
30 Aughrim, par., Galway, I.F.S.; p. 645; 53 18N 8 20W
33 Aughrim, vil., Wicklow, I.F.S.; p. 291; 52 52N 6 20W
40 Augsburg, cy., Bavaria, Germ.; famous in Middle Ages. Town Hall, univ.; textiles, machinery, beer; p. 176,631; 48 23N 10 55E
51 Augusta, tn., Italy; salt; p. 17,000; 37 12N 15 15E
103 Augusta, tn., Ga., U.S.A., on Savannah R.; cotton, cotton seed-oil, chemicals, foundries; p. 60,342; 33 26N 81 57W
102 Augusta, tn., cap., Me., U.S.A.; footwear, cotton goods, paper, lumber; p. 17,198; 44 20N 69 56W
125 Augusta, tn., W. Austral.; 34 15S 115 15E
43 Augustov, tn., Poland; 53 52N 23 0E
11 Aujila, vil. and oasis, Libya; 29 0N 21 0E
25 Auldearn, par., Nairn, Scot.; p. 1,193; 57 35N 3 48W
27 Auldgirth, vil., Dumf., Scot.; 55 10N 3 42W
113 Aullagas, L., Bol.; ht. 16,400 ft.; 18 40S 67 25W

MAP

24 Aultbea, vil., Ross and Cromarty, Scotland; 57 50N 5 34W
25 Aultmore, vil., Banff, Scot.; distillery; 57 34N 3 00W
24 Aultnacallagach, vil., Sutherland, Scotland; 58 3N 4 55W
34 Aumale, tn., France; cloth, steel, leather; 49 47N 1 43E
35 Aunis, old prov., France; 46 7N 0 50W
68 Aurangabad, tn., Hyd., India; textiles; p. 36,876; 19 53N 75 21E
34 Auray, tn., France; 47 37N 3 00W
35 Aurillac, tn., cap. Cantal, France; market tn., umbrellas; p. 17,643; 44 56N 2 27E
102 Aurora, tn., Ill., U.S.A.; textiles, foundries; p. 46,589; 41 45N 88 20W
107 Aurora, tn., Mo., U.S.A.; 36 59N 93 45W
96 Aurora, tn., Ont., Canada; foundries; p. 2,587; 44 0N 79 20W
55 Aust-Agder, co., Norway; a. 3,607 sq. m.; p. 73,735; 58 30N 8 10E
46 Austerlitz, tn., Cz.-slov.; Napoleonic victory 1805; 49 0N 16 52E
102 Austin, tn., Minn., U.S.A.; food packing; p. 12,276; 43 43N 92 55W
106 Austin, tn., Nev., U.S.A.; 39 30N 117 6W
107 Austin, tn., cap., Tex., U.S.A., on Colorado R.; univ.; farming centre; flour, bricks, furniture; p. 53,120; 30 19N 97 42W
117 Austral Is. See Tubuai Is.
118 Australia, Commonwealth of, a. 2,974,581 sq. m.; largest island in world; extreme length E. to W. 2,400 m., N. to S. 2,000 m.; separated from Tasmania by Bass Str.; mountains—in E., Gt. Dividing Ra., including New England Ra., Blue Mts., Australian Alps (Kosciusko 7,328 ft.); in S., Flinders Ra.; in centre, Macdonnell Ra.; most salient feature great interior plains; chief rivers—Murray-Darling, Swan, Murchison, Fitzroy, Burdekin, Hunter; saline lakes—Eyre, Torrens, Gairdner, Amadeus; agriculture, wheat, hay, cane sugar, fruit, cotton; pastoral farming, sheep, cattle, dairying; forest, jarrah, karri, eucalyptus; minerals—gold, lead, silver, coal, copper; crossed by Trans-Australian Rly., rly. gauges vary in different states; Commonwealth proclaimed 1901, federation of 6 states—New South Wales, Victoria, Queensland, South Australia, Western Australia, and Tasmania; includes also federal territory, Northern Territory; cap. Canberra, largest tn. Sydney; p. 6,500,000 (est.); 10 0 to 42 0S 113 0 to 154 0E
121 Australian Alps, Vic., Austral; Gt. Dividing Ra.; highest peak, Kosciusko, 7,328 ft.; 36 30S 148 15E
46 Austria, Rep., Cent. Eur.; a. 32,369 sq. m.; mountainous, forested, drained by R. Danube; potatoes, rye, oats, sugar-beet; lignite, anthracite, iron, salt; textiles, pianos, furniture; cap. Vienna; p. 6,760,233; 47 to 49N 10 to 17E
46 Austria-Hungary, former dual monarchy, dismembered by Treaty of Versailles, 1919. See Austria, Czechoslovakia, Hungary, Yugoslavia, etc.
44 Austrian Alps, Austria; 47 50N 14 50E
108 Autlan, tn., Mex.; 19 45N 104 32W
34 Autun, tn., France; leather, furniture, brewing; 46 57N 4 21E
35 Auvergne, old prov.; France; 45 40N 3 00E
111 Aux Cayes, spt., Haiti; p. 12,000; 18 19N 73 52W
83 Aux Sources, Mt., O.F.S., S. Afr.; 28 42S 29 0E
34 Auxerre, tn., cap. Yonne, France; cath.; vineyards; manfs.—bricks, iron, and steel; p. 22,900; 47 48N 3 33E
34 Auxonne, tn., France, on R. Saône; market gardening; 47 12N 5 26E
69 Ava, tn., Burma, India; former capital; p. 35,500; 21 57N 95 55E
34 Avallon, tn., France; 47 32N 3 52E
19 Avebury, par., Wilts, Eng.; prehistoric stone monuments; p. 525; 51 26N 1 50W
48 Aveiro, tn., Port.; sardines, wine, fruit; p. 10,357; 40 36N 8 40W
51 Avellino, tn., Italy; hazel nuts, linen, paper; p. 27,404; 40 59N 14 46E
51 Aversa, tn., Italy; wine, hemp, cotton, furniture; p. 23,000; 40 59N 14 12E
111 Aves I., W. Indies; Br.; 15 37N 63 38W
34 Avesnes, tn., France; 50 8N 3 55E
35 Aveyron, Dept., France; a. 3,385 sq. m.; grain, wheat; dairying, sheep; coal; cap. Rodez; p. 323,782; 44 26N 2 40E
50 Avezzano, tn., Italy; 42 2N 13 22E
25 Aviemore, vil., Inver., Scot.; tourist resort; 57 12N 3 49W
51 Avigliano, tn., Italy; marble; p. 18,110; 40 47N 15 42E
35 Avignon, tn., cap. Vaucluse, France; cath., palace of popes; flour, soap, chemicals, leather; p. 57,228; 43 56N 4 50E
48 Avila, tn., Spain; cath.; p. 15,223; 40 38N 4 40W
48 Aviles, spt., Spain; fishing; p. 15,000; 43 32N 5 56W
25 Avoch, par., Ross and Crom., Scot.; p. 1,408; 57 34N 4 10W
51 Avola, tn., Italy; honey, wine, almonds, sugar; p. 16,500; 36 53N 15 9E
104 Avon, tn., N.Y., U.S.A.; 42 54N 77 44W
19 Avon, R., Som., Eng.; 51 15N 1 48W
16 Avon, R., War., Eng.; 52 25N 2 25W
19 Avonmouth, spt., Glouc., Eng.; outport of Bristol docks; 51 30N 2 41W
34 Avranches, tn., France; 48 42N 1 22W
127 Awatere, R., New Zealand; 41 51S 173 40E
26 Awe, L., Arg., Scot.; 56 15N 5 15W
75 Awomori, tn., Honshu, Japan; 40 56N 140 34E
19 Awre, par., Glouc, Eng.; p. 1,032; 51 52N 2 15W
19 Axbridge, par., Som., Eng.; p. 919; 51 18N 2 49W
38 Axel, vil., Neth.; 51 17N 3 54E
88 Axim, tn., Gold Coast; 4 52N 2 15W
19 Axminster, urb. dist., Dev., Eng.; brushes; well-known carpets now made at Wilton; p. 2,327; 50 49N 3 00W
19 Axmouth, par., Dev., Eng.; fishing; p. 594; 50 43N 3 03W

MAP

81 Axum, tn., Abys.; p. 5,000; 14 0N 38 43E
34 Ay, tn., France; 49 5N 4 02E
114 Ayacucho, tn., Peru; univ; p. 20,000; 12 50S 74 10W
59 Ayan, tn., U.S.S.R.; 56 40N 138 0E
20 Aycliffe, par., Dur., Eng.; p. 820; 54 36N 1 34W
17 Aylesbury, mun. bor., Bucks, Eng.; vale; famous for duck breeding; printing, dairying; p. 13,382; 51 49N 0 49W
96 Aylmer, tn., Ont., Canada; p. 2,283; 42 48N 81 1W
97 Aylmer, tn., Que., Canada; p. 2,835; 45 23N 75 55W
16 Aylsham, par., Norf., Eng.; p. 2,466; 52 48N 1 15E
16 Aynho, vil., Northants., England; p. 462; 52 0N 1 15W
123 Ayr, vil., Queens., Austral.; 19 30S 147 20E
26 Ayr, bor. co. tn., spt., Ayr., Scot.; carpets; p. 36,784; 55 28N 4 37W
26 Ayr, co., Scotland; a. 1,132 sq. m.; dairy produce, early potatoes; coal, iron; woollens, tweeds, cottons, carpets; p. 285,182; 55 30N 4 30W
20 Aysgarth, par., N. Riding, Eng.; p. 290; 54 18N 1 59W
70 Ayuthia, tn., Siam; temples; former capital; p. 12,000; 14 25N 100 30E
109 Ayutla, tn., Mex.; 16 57N 99 19W
76 Azbeu. See Air.
10 Azemur, tn., Morocco; p. 8,708; 33 5N 6 45W
57 Azerbaijan, S.S.R., Transcaucasia, Russia; a. 32,686 sq. m.; farming, cattle, oil, salt, fishing; cap. Baku; p. 2,510,800; 40 30N 48 0E
10 Azgar, dist., Algeria; 25 30N 8 00E
6 Azores, Is., Atl. Oc.; Port.; a. 922 sq. m.; winter resort; off W. coast of Afr.; largest island, San Miguel; fruit, wine; p. 232,012; 37 30N 26 0W
57 Azov, tn., Russia; on R. Don; fisheries; p. 17,500; 47 0N 39 23E
57 Azov, Sea of, Russia; arm of Black Sea; fisheries; 46 0N 36 30E
48 Azuaga, tn., Spain; woollens; p. 16,600; 38 17N 5 42W

62 Baalbek (anc. Heliopolis), tn., Syria; vast ruins; p. 4,600; 34 0N 36 10E
53 Baba Eski, tn., Turkey; 41 26N 27 7E
52 Babadag, tn., Rumania; p. 4,607; 44 54N 28 52E
19 Babbacombe B., Dev., Eng.; 50 29N 3 30W
60 Bab el Mandeb, Str., connecting Red S. and Indian Oc.; 20 m. broad; 12 40N 43 15E
62 Babylon, anc. cty., Iraq; ruins; 32 31N 44 30E
52 Bacau, tn., Rumania; oil; p. 31,264; 46 10N 27 35E
108 Bacerac, tn., Mex.; 30 20N 108 51W
120 Backstairs Passage, S. Austral.; 35 12S 138 0E
16 Bacton, par., Norf., Eng.; p. 585; 52 50N 1 27E
18 Bacup, mun. bor., Lancs, Eng.; cotton, coal, stone; p. 20,606; 53 42N 2 13W
48 Badajoz, cty., Spain; captured by Wellington (1812); cath.; woollens, wax; p. 43,729; 38 51N 6 56W
64 Badakshan, prov., Afghan.; drained by R. Oxus and tribs.; salt; cap. Faizabad; 36 30N 70 0E
24 Badcall, vil., Ross and Cromarty, Scotland; 57 53N 5 20W
40 Baden, st., Germ.; a. 5,819 sq. m.; former grand duchy; mountainous, chief rivers—Rhine, Danube; forested, agriculture; grain, tobacco, hops, vines, limestone, gypsum, textiles, beet sugar, wooden ornaments, toys, chemicals; cap. Karlsruhe; p. 2,312,462; 48 0N 8 30E
40 Baden, tn., cap. Baden, Germ.; health resort, mineral springs; wood carving; p. 25,692; 48 56N 8 15E
45 Baden, tn., Switz.; health resort, mineral springs; p. 10,258; 47 28N 8 17E
25 Badenoch, dist., Inver., Scot.; mountainous; drained by R. Spey; deer forest; 57 0N 4 05W
67 Badrinath, pk., U.P., India; pilgrim shrine of Vishnu; 30 44N 79 31E
68 Badulla, tn., Ceylon; 7 02N 81 5E
88 Badumbe, Fr. W. Afr.; 13 28N 10 10W
48 Baena, tn., Spain; olive-oil, horse-breeding; p.18,000; 37 39N 4 17W
115 Baependi, tn., Brazil; 21 55S 44 36W
88 Baffa, Fr. W. Afr.; 7 32N 2 30E
93 Baffin Bay, Canada; 73 0N 67 0W
93 Baffin, I., Canada; a. 236,000 sq. m.; inhabited by scattered Eskimos; 68 0N 71 0W
62 Bafra, tn., Turkey; 41 28N 35 59E
63 Bafk, tn., Pers.; 31 40N 55 27E
63 Baft, tn., Pers.; 29 22N 56 28E
81 Bagamoyo, spt., Tang. Ter.; p. 5,000; 13 42S 10 50W
113 Bage, tn., Braz.; 31 10S 54 0W
33 Bagenalstown, tn., Carlow, I.F.S.; milling, granite; p. 1,871; 52 42N 6 58W
62 Baghdad, cty. and cap. Iraq; on R. Tigris; a port, caravan centre; textiles, gum; p. 270,000; 33 18N 44 30E
51 Bagnara, tn., Italy; p. 19,000; 38 4N 13 30E
35 Bagnères de Luchon, tn., France; 42 48N 0 33E
94 Bagotville, tn., Que., Canada; p. 2,468; 48 21N 70 55W
110 Bahama, W. Indies; p. 2,000; 26 40N 79 0W
110 Bahama Is., Br. W. Indies; a. 4,404 sq. m.; fruits, tomatoes, maize, cotton, Bahama hemp, sponges; cap. Nassau, New Providence I.; p. 61,741; 24 0N 75 0W
66 Bahawalpur, st., India; p. 984,612; 28 55N 71 30E
66 Bahawalpur, tn., cap. Bahawalpur st., India; p. 18,750; 29 25N 71 47E
112 Bahia, spt., Brazil; cocoa, tobacco, hides; p. 330,000; 10 40S 36 27W
112 Bahia (St.), Braz.; a. 164,601 sq. m.; coffee, cotton, sugar, tobacco; p. 4,135,894; 12 3S 42 5W
113 Bahia Blanca, spt., Arg.; chief naval stn.; wool, wheat, maize; p. 45,000; 38 30S 62 20W
81 Bahr-el-Ghazal, R., A.-E. Sud.; trib. of White Nile R.; 9 00N 29 40E
61 Bahr Lut. See Dead Sea.
61 Bahr Tubariya. See Sea of Galilee.
67 Bahraich, tn., U.P., India; cloth; p. 27,371; 27 32N 81 42E
63 Bahramabad tn., Pers.; 30 27N 55 58E
60 Bahrein Is., Br., Persian Gulf; a. 280 sq. m.; pearl fishing; cap. Manama; p. 120,000; 26 0N 50 35E
115 Bahura, tn., Brazil; 22 10S 49 0W
62 Baiji, tn., Iraq; 35 0N 43 27E

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59 Baikal, L., Sib.; a. 13,450 sq. m.; enclosed by mountains; sturgeon, salmon; 53 0N 107 0E
72 Baikal Mts., Sib.; 53 30N 106 0E
33 Baile Atha Cliath. See Dublin.
48 Bailen, tn., Spain; lead ore; p. 9,000; 38 5N 3 45W
52 Bailesti, tn., Rumania; p. 13,271; 44 2N 23 21E
31 Bailieborough, par., Cavan, I.F.S.; p. 3,030; 53 55N 6 59W
36 Bailleul, tn., France; lace, linen; 50 45N 2 43E
80 Bailundu, Angola; 12 10S 15 52E
53 Bairamich, tn., Turkey; 39 48N 26 40E
121 Bairnsdale, spt., Vic., Austral.; 37 50S 147 39E
46 Baja, tn., Hungary; pigs, grain; p. 27,940; 46 13N 18 59E
63 Bajistan, tn., Fers.; 34 32N 58 16E
88 Bakel, vil., Senegal; 14 52N 12 20W
106 Baker, tn., Ore., U.S.A.; 44 46N 117 51W
116 Baker Is., Pac. Oc.; 0 10N 176 35E
106 Bakersfield, cy., Cal., U.S.A.; airport; oil; p. 26,015; 35 26N 118 58W
16 Bakewell, urb. dist., Derby, Eng.; mining, woollens; p. 3,012; 53 12N 1 41W
57 Bakhchisarai, tn., Crimea, Rus.; p. 10,000; 44 47N 33 56E
46 Bakony Forest, mts., Hungary, 47 20N 18 0E
57 Baku, cap. Azer., Rus.; on Caspian S.; univ.; oil wells; p. 709,500; 40 22N 49 46E
62 Bakuba, tn., Iraq; 33 40N 44 42E
83 Bakwena, tr., Bech. Prot., S. Afr.; 23 45S 24 0E
18 Bala, urb. dist., Mer., Wales; p. 1,395; 52 55N 3 36W
18 Bala, L., Mer., Wales; 4 m. long, ½ m. wide; 52 55N 3 36W
71 Balabac Str., Phil. Is.; 7 30N 117 0E
57 Balaklava, tn., Crimea, Rus.; scene of charge of Light Brigade (1854); 44 34N 33 32E
57 Balashov, tn., Rus.; 51 32N 43 0E
67 Balasore, spt., Orissa, India; 21 31N 86 58E
46 Balaton L., Hungary; a. 245 sq. m., 50 m. long, 2 to 7 m. wide; 46 48N 17 40E
27 Balbeggia, vil., Perth, Scotland; 56 27N 3 20W
110 Balboa. See Panama.
31 Balbriggan, tn., Dublin, I.F.S.; hosiery; p. 2,272; 53 37N 6 12W
52 Balcik, tn., Rumania; p. 6,323; 43 24N 28 10E
127 Balclutha, bor., N.Z.; p. 1,550; 46 12S 169 47E
17 Balcombe, par., Sus., Eng.; quarries; p. 1,226; 51 4N 0 09W
16 Baldock, urb. dist., Herts, Eng.; straw plaiting, corn, malt; p. 3,171; 51 59N 0 12W
104 Baldwinsville, tn., N.Y., U.S.A.; 43 9N 76 19W
49 Balearic Is., Spain; a. 1,936 sq. m.; fruit, fish, pigs; including Majorca (largest), Minorca, Iviza, Formentera; cap. Palma; p. 350,000; 40 0N 3 00E
27 Balfron, par., Stirl., Scot.; p. 1,200; 56 0N 4 19W
25 Balgowan, vil., Inver., Scot.; 57 1N 4 15W
88 Bali, tn., Nigeria; 22 39N 88 23E
62 Balikesir, tn., Turkey; p. 25,740; 39 39N 27 55E
25 Balintore, vil., Ross and Crom., Scot.; fishing; 57 45N 3 55W
52 Balkan Mts., Bulgaria; highest pk. 7,780 ft.; Shipka Pass; 43 0N 25 0E
52 Balkan Pen., most easterly of three great peninsulas of Europe; includes Yugoslavia, Bulgaria, Albania, Greece; chief mountains—Rhodope, Pindus, Balkan; chief rivers—Danube, Maritza, Vardar; chief lakes—Scutari, Okhrida; fertile valleys; inhabited by several races; 44 0 to 36 0N 18 0 to 28 0E
58 Balkash, L., U.S.S.R.; length 450 m., breadth 30 to 50 m.; 46 0N 75 0E
61 Balkh, cty., Afghan.; silk; p. 10,210; 36 46N 67 5E
64 Balkh, R., Afghan.; 35 30N 67 0E
30 Balla, par., Mayo, I.F.S.; p. 898; 53 48N 9 08W
124 Balla-balla, vil., W. Austral.; 20 43S 117 45E
26 Ballachulish, vil., Argyll, Scot.; slate quarries; 56 41N 5 07W
30 Ballaghadereen, tn., Roscommon, I.F.S.; 1,316; 53 54N 8 35W
24 Ballalan, vil., Lewis, Scotland; 58 5N 6 35W
30 Ballanagar, Roscommon, I.F.S.; 53 51N 8 23W
26 Ballantrae, par., Ayr, Scot.; fishing; p. 1,076; 55 0N 5 00W
120 Ballarat, tn., Vic., Austral.; formerly goldfields; farming centre, flour milling, wool; p. 42,050; 37 32S 143 50E
25 Ballater, bor., Aber., Scot.; on R. Dee; tourist resort, mineral wells; p. 1,198; 57 2N 3 02W
30 Ballina, urb. dist., spt., Mayo, I.F.S.; brewing, salmon fishing; p. 4,872; 54 7N 9 10W
121 Ballina, tn., spt., N.S.W., Austral.; p. 2,550; 28 50S 153 34E
32 Ballina, vil., Tipperary, I.F.S.; p. 167; 52 49N 8 26W
30 Ballinafad, vil., Sligo, I.F.S.; 54 2N 8 21W
33 Ballinakill, tn., Leix, I.F.S.; p. 370; 52 52N 7 19W
31 Ballinamore, tn., Leitrim, I.F.S.; p. 647; 54 3N 7 48W
32 Ballinascarthy, vil., Cork, I.F.S.; 51 40N 8 52W
30 Ballinasloe, urb. dist., Galway, I.F.S.; farming centre; p. 5,243; 53 20N 8 13W
32 Ballincollig, tn., Cork, I.F.S.; p. 814; 51 53N 8 37W
25 Ballindalloch, vil., Banff, Scotland; 57 25N 3 25W
30 Ballindine, vil., Mayo, I.F.S.; p. 220; 53 41N 8 57W
32 Ballineen, vil., Cork, I.F.S.; 51 44N 8 58W
33 Ballingarry, par., Tipperary, I.F.S.; p. 2,140; 52 35N 7 33W
32 Ballingarry, tn., Limerick, I.F.S.; p. 462; 52 23N 8 52W
27 Ballinluig, vil., Perth, Scot.; 56 39N 3 38W
30 Ballinrobe, tn., Mayo, I.F.S.; p. 1,682; 53 38N 9 14W
30 Ballintra, vil., Tirconaill, I.F.S.; p. 360; 54 35N 8 08W
30 Ballintubber, par., Roscommon, I.F.S.; limestone; p. 800; 53 43N 8 25W
33 Ballitore, vil., Kildare, I.F.S.; p. 306; 53 2N 6 49W
26 Balloch, vil., Dumb., Scot.; 56 0N 4 35W
105 Balston, tn., N.Y., U.S.A.; 43 1N 73 49W
31 Ballybay, tn., Monaghan, I.F.S.; flax; p. 1,206; 54 8N 6 53W
30 Ballybofey, tn., Tirconaill, I.F.S.; p. 795; 54 48N 7 47W
32 Ballybunion, vil., Kerry, I.F.S.; p. 350; 52 30N 9 40W
33 Ballycanew, vil., Wexford, I.F.S.; p. 490; 52 37N 6 19W

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31 Ballycastle, urb. dist., spt., Antrim, N. Ire.; abbey and castle ruins; resort; p. 1,984; 55 12N 6 15W
30 Ballycastle, vil., Mayo, I.F.S.; p. 300; 54 17N 9 23W
31 Ballyclare, urb. dist., Antrim, N. Ire.; paper, linen, dyeing; p. 3,367; 54 46N 6 00W
31 Ballyconnell, tn., Cavan, I.F.S.; p. 379; 54 7N 7 36W
33 Ballyduff, vil., Waterford, I.F.S.; p. 133; 52 9N 8 03W
30 Ballygar, tn., Galway, I.F.S.; p. 372; 53 32N 8 20W
30 Ballyhaunis, tn., Mayo, I.F.S.; p. 1,150; 53 47N 8 47W
31 Ballyjamesduff, tn., Cavan, I.F.S.; p. 606; 53 52N 7 13W
32 Ballylanders, tn., Limerick, I.F.S.; p. 310; 52 25N 8 22W
32 Ballylongford, vil., Kerry, I.F.S; p. 485; 52 33N 9 28W
31 Ballymahon, tn., Longford, I.F.S.; p. 660; 53 34N 7 47W
31 Ballymena, urb. dist., Antrim, N. Ire.; linen, dyeing; p. 11,875; 54 52N 6 16W
30 Ballymoe, vil., Galway, I.F.S.; p. 120; 53 42N 8 27W
31 Ballymoney, urb. dist., Antrim, N. Ire.; linen, dairying; p. 3,161; 55 5N 6 30W
31 Ballymore, par., Westmeath, I.F.S.; p. 970; 53 29N 7 40W
33 Ballymore Eustace, par., Kildare, I.F.S.; linen; p. 1,197; 53 8N 6 37W
30 Ballymote, tn., Sligo, I.F.S.; p. 930; 54 6N 8 31W
33 Ballymurphy, vil., Carlow, I.F.S.; 52 34N 6 52W
31 Ballynacarrgy, vil., Westmeath, I.F.S.; p. 257; 53 35N 7 33W
31 Ballynahinch, tn., Down, N. Ireland; p. 1,668; 54 24N 5 54W
33 Ballyragget, tn., Kilkenny, I.F.S.; p. 510; 52 47N 7 20W
30 Ballysadare, par., Sligo, I.F.S.; p. 2,733; 54 12N 8 31W
30 Ballyshannon, spt., Tirconaill, I.F.S.; salmon fishery; p. 2,170; 54 30N 8 12W
30 Ballyvary, vil., Mayo, I.F.S.; 53 54N 9 09W
32 Ballyvaughan, vil., Clare, I.F.S.; p. 116; 53 7N 9 08W
27 Balmaclellan, par., Kirk., Scot.; p. 628; 55 5N 4 6W
26 Balmaha, Stirling, Scotland; 56 0N 4 31W
27 Balmerino, par., Fife, Scot.; p. 599; 56 25N 3 2W
25 Balmoral, Aber., Scot.; castle, royal res.; 52 2N 3 13W
27 Balquhidder, par., Perth, Scot.; p. 619; 56 22N 4 22W
120 Balranald, tn., N.S.W., Austral.; 34 35S 143 31E
109 Balsas, R. See Mexcala R.
57 Balta, tn., cap. Moldavia, Russia; wheat, horses, cattle; p. 24,000; 47 59N 29 30E
52 Bălți, tn., Rumania; p. 30,667; 47 48N 28 0E
42 Baltic Port. See Paldiski.
55 Baltic Sea, a. 160,000 sq. m., length 950 m., greatest breadth 150 m., enclosed by Scandinavia, Baltic States, Germany; partly frozen in winter; 56 0N 25 0E
55 Baltic States, comprising Estonia, Latvia, Lithuania; 58 0N 26 0E
32 Baltimore, vil., Cork, I.F.S.; p. 442; 51 29N 9 22W
102 Baltimore, cy. spt., Md., U.S.A., on R. Patapsco, Chesapeake B.; Johns Hopkins Univ., fine public buildings; mnfs. clothing, machinery, bricks; shipbuilding, food canning; p. 804,874; 39 23N 76 35W
33 Baltinglass, tn., Wicklow, I.F.S.; p. 800; 52 57N 6 42W
66 Baltistan, dist., India; mountainous; 35 10N 76 15E
66 Baluchistan, dist., India; a. 134,638 sq. m., including Br. Baluchistan, a. 54,228 sq. m.; rugged, barren country; cereals, potatoes, fruits, dates; cap. Kalat; p. 868,617; 25 to 30N 61 to 70E
63 Bam, tn., Persia; dates, henna; p. 13,000; 29 4N 58 20E
83 Bamangwato, Tr., dist., Bech. Prot., S. Afr.; p. 35,000; 22 10S 26 0E
40 Bamberg, cy., Germ.; cath.; cottons, tobacco; p. 54,161; 49 54N 10 50E
20 Bamburgh Cas., Northumb., Eng.; 55 37N 1 44W
61 Bami, tn., U.S.S.R., 37 45N 56 50E
19 Bampton, par., Dev., Eng.; quarries; p. 1,392; 50 59N 3 29W
17 Bampton, par., Oxford, Eng.; p. 1,104; 51 45N 1 33W
63 Bampur, tn., Persia; 27 19N 60 15E
33 Banagher, tn., Offaly, I.F.S.; p. 890; 53 11N 8 0W
70 Banam, tn., Fr. Indo-China; on R. Me-kong; 11 10N 105 20E
123 Banana, tn., Queens., Austral.; 24 23S 150 18E
80 Banana, spt., Belgian Congo; nr. mth. of R. Congo; 1 0S 12 10E
24 Banavie, vil., Inver., Scot.; 56 51N 5 5W
31 Banbridge, urb. dist., Down, N. Ire.; linen; p. 4,852; 54 21N 6 17W
16 Banbury, mun. bor., Oxford, Eng.; ancient cross destroyed by Puritans; noted for buns; leather, rope; p. 13,953; 52 4N 1 20W
25 Banchory, bor., Kinc., Scot.; p. 1,690; 57 3N 2 30W
67 Bands, tn., India; cotton; p. 20,629; 25 24N 80 25E
71 Banda S., Dutch E. Indies; 6 0S 128 0W
63 Bandar Abbas, spt., Persia; exp. dates, raisins, almonds, carpets; p. 9,000; 27 15N 56 19E
63 Bandar Shah, spt., Persia; 37 0N 54 5E
68 Bandarawela, tn., Ceylon; 6 50N 81 0E
82 Bandawe, tn., Nyasa.; 11 55S 34 11E
107 Bandera, tn., Tex., U.S.A.; 29 41N 99 4W
64 Band-i-Turkestan, dist., Afghan.; 35 30N 64 0E
32 Bandon, tn., Cork, I.F.S., on R. Bandon; market tn.; distilling; p. 3,122; 51 44N 8 43W
70 Bandon, tn., Siam; 9 0N 99 20E
98 Banff, tn., Alta. Canada; tourist resort in Rockies; 51 10N 115 38W
25 Banff, bor., co. tn., Banff, Scot.; fisheries; p. 3,489; 57 40N 2 32W
25 Banff, co., Scotland; a. 630 sq. m.; mountainous in S.; oats, barley; slate, granite; fisheries; p. 54,835; 57 25N 3 10W
68 Bangalore, cy., cap. Mysore, India; military cantonment; silks, cottons, carpets; p. 306,365; 12 59N 7 38E
70 Bangkok, cap., spt., Siam, on R. Menam; Royal pal., univ.; rice, tea, teak; p. 452,000; 13 45N 100 30E
30 Bangor, tn., Mayo, I.F.S.; 54 9N 9 45W
31 Bangor, urb. dist., spt., Down, N. Ire.; linen, fisheries; p. 13,316; 54 40N 5 40W
102 Bangor, tn., Me., U.S.A.; on R. Penobscot; lumber,

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boots and shoes, clothing, paper; p. 28,749; 44 46N 68 45W
18 Bangor, mun. bor., Caer., Wales; cath., univ. coll.; holiday centre for Snowdon and N. Wales; slate; p. 11,460; 53 14N 4 07W
83 Bangwaketse, tr., Bech. Prot., S. Afr.; 24 20S 24 0E
82 Bangweulu, L., N. Rhod.; a. 1,970 sq. m.; 11 0S 30 0E
80 Bania, tn., Fr. Eq. Africa; 4 0N 16 4E
61 Banias, vil., Syria; 33 12N 35 42E
47 Banjaluka, tn., Y-slav.; hot springs; tobacco; p. 18,000; 44 50N 17 13E
70 Banjermassin, tn., cap. Dutch S. and E. Borneo; wax, resins, rattans; p. 64,223; 3 30S 114 13E
70 Banka, L., Dutch E. Indies; tin; p. 205,433; 2 0S 106 0E
70 Banka Str., Dutch E. Indies; 3 0S 106 0E
27 Bankend, vil., Dumfries, Scotland; 55 0N 3 32W
27 Bankfoot, vil., Perth, Scotland; 56 30N 3 30W
90 Banks I., Franklin, Can.; 53 30N 130 10W
127 Banks Pen., New Zealand; 43 45S 173 0E
121 Banks Str., Tas., Austral.; 74 30S 146 0W
27 Bannockburn, par., Stirling, Scot.; battle 1314, when Robert Bruce defeated Edward II of England; woollens; p. 9,147; 56 5N 3 56W
33 Bansha, vil., Tipperary, I.F.S.; 52 27N 8 04W
46 Banska Bystrice, com., Cz.-slov.; p. 11,321; 48 32N 19 10E
46 Banska Sliamica, com., Cz.-slov.; p. 13,292; 48 28N 18 58E
32 Banteer, vil., Cork, I.F.S.; p. 102; 52 7N 8 55W
32 Bantry, tn., Cork, I.F.S.; fishing, farming; p. 3,133; 51 40N 9 27W
32 Bantry B., Cork, I.F.S.; 51 34N 9 55W
80 Banza Manteka, tn., Belg. Congo; 5 30S 13 25E
36 Bapaume, comm., France; captured by Br. in Gt. War, Mar. 1917, Sept. 1918; 50 7N 2 50E
57 Bar, tn., Russia; wheat; leather, distilling; p. 9,400; 49 10N 27 34E
102 Bar Harbour, tn., spt., Me., U.S.A.; 44 23N 68 13W
111 Baracoa, spt., Cuba; exp. bananas, coconuts; p. 5,200; 20 27N 77 35W
121 Baradine, tn., N.S.W., Austral.; 30 54S 149 1E
123 Baralaba, tn., Queens., Austral.; 24 14S 149 35E
83 Baralong, tr., C. of Good Hope, S. Afr.; 25 30S 23 0E
43 Baranovichi, tn., Poland; 53 8N 26 0E
115 Barbacena, tn., Brazil; farming, gold; 21 11S 43 44W
111 Barbados, I., W. Indies, Br.; a. 166 sq. m.; sugar, molasses, rum, cotton; cap. Bridgetown; p. 172,000; 13 10N 59 30W
49 Barbastro, tn., Spain; 42 2N 0 6E
83 Barberton, tn., Trans., S. Afr.; gold, asbestos; 25 50S 31 6E
35 Barbezieux, tn., France; 45 28N 0 11W
111 Barbuda, I., Leeward Is., W. Indies, Br.; a. 62 sq. m.; sea island cotton; 17 33N 61 45W
123 Barcaldine, tn., Queens., Austral.; 23 30S 145 17E
48 Barcarrota, tn., Spain; 38 32N 6 53W
51 Barcellona, tn., Sicily, Italy; silks; 38 9N 15 13E
112 Barcellos, tn., Brazil, on R. Negro; 1 10S 62 50W
49 Barcelona, spt., Spain; cath.; "Manchester of Spain"; cottons, paper, leather, glass, soap; exp. olives, wines, cork; p. 1,005,565; 41 22N 2 10E
112 Barcelona, tn., spt., Venezuela; p. 16,000; 10 0N 64 55W
35 Barcelonnette, tn., France; 44 22N 6 38E
119 Barcoo, R., Queens., Austral.; 24 30S 145 40E
46 Bares, tn., Hungary, on R. Drave; 45 59N 17 29E
76 Bardai, tn., Fr. W. Africa; 21 0N 17 10E
81 Bardera, tn., It., Somal., on R. Juba; 2 20N 42 20E
16 Bardney, par., Lind., Eng.; p. 1,373; 53 13N 0 18W
125 Bardoo, tn., W. Austral.; 20 15S 121 28E
18 Bardsey I., Caer., Wales; reputed to be last home of Welsh bards; p. 58; 52 45N 4 47W
46 Bardyjov, com., Cz.-slov.; p. 7,666; 49 18N 21 19E
67 Bareilly, tn., India; bamboo furniture; p. 144,031; 28 20N 79 30E
121 Barellan, tn., N.S.W., Austral.; 34 12S 146 32E
58 Barents Sea, Asia; pack ice; cod, haddock; 74 0N 90 0E
34 Bardieux, C., France; 49 43N 1 17W
63 Barfurush, tn., Persia; mkt. tn.; fruits; cottons, silks; p. 30,000; 36 32N 52 30E
59 Bargusin, tn., U.S.S.R.; 53 40N 109 30E
17 Barham, par., Kent, Eng.; p. 905; 51 12N 1 10E
51 Bari, spt., cap. Apulia, Italy; cath.; olive oil, wines, fruit, soap; p. 171,622; 41 8N 16 52E
70 Baria, tn., Fr. Indo-China; 10 30N 107 10E
69 Barisal, tn., Bengal, India, on R. Barisal; p. 26,744; 22 41N 90 24E
11 Barka, dist., Libya; a. 60,000 sq. m.; p. 360,000; 32 0N 22 0E
98 Barkerville, tn., B.C., Canada; 53 3N 121 25W
17 Barking, mun. bor., Essex, Eng.; jute, chemicals; p. 51,277; 51 33N 0 5E
85 Barkly East, tn., C. of Good Hope, S. Afr.; 31 0S 27 37E
85 Barkly June., C. of Good Hope, S. Afr.; 33 9S 24 32E
119 Barkly Tableland, N Terr., Austral.; 19 10S 138 30E
83 Barkly W., tn., cap. Griqualand, W., C. of Good Hope, S. Afr., on Vaal R.; diamonds; 28 31S 24 32E
72 Barkul, tn., Sin Kiang; 43 40N 93 0E
52 Bârlad, tn., Rumania; p. 26,189; 46 16N 27 37E
34 Bar-le-Duc, tn., cap. Meuse, France; cotton, hosiery; p. 16,550; 48 46N 5 11E
125 Barlee, L., W. Austral.; 29 0S 119 30E
118 Barlee Ra., W. Austral.; 23 40S 116 30E
51 Barletta, tn., spt., Italy; wine; p. 60,000; 41 17N 16 20E
40 Barmen. See Elberfeld-Barmen.
18 Barmouth, urb. dist., Mer., Wales; tourist resort; p. 2,491; 52 43N 4 03W
20 Barnard Castle, urb. dist., Dur., Eng.; health resort; p. 5,883; 54 33N 1 55W
59 Barnaul, tn., U.S.S.R., on R. Ob; dairying; smelting; p. 109,200; 53 25N 83 0E
17 Barnes, mun. bor., Surrey, England; p. 42,439; see Greater London.
17 Barnet, urb. dist., Herts, Eng.; fairs; p. 14,721; 51 39N 0 12W
16 Barnetby, par., Lincs., Eng.; p. 1,626; 53 34N 0 23W
21 Barnsley, co. bor., W. Riding, Eng.; linen, iron, coal, brewing; p. 71,522; 53 33N 1 29W
19 Barnstaple, mun. bor., Devon, Eng.; lace; p. 14,693; 51 5N 4 02W

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105 Barnstaple, cy., Mass., U.S.A.; fisheries; p. 7,271; 41 39N 70 20W
19 Barnstaple B., Devon, Eng.; 51 5N 4 20W
88 Baro, tn., Nigeria; 8 38N 6 20E
66 Baroda, st., India; a. 8,099 sq. m.; cereals, cotton, sugar, tobacco, opium; p. 2,443,007; 22 20N 73 14E
66 Baroda, tn., cap. Baroda, India, palaces, Hindu temples; p. 112,862; 22 0N 73 14E
82 Barotse, tr., N. Rhodesia; 16 0S 25 0E
112 Barquisimeto, tn., Venezuela; coffee, cocoa; p. 23,000; 9 55N 69 10W
26 Barr, par., Ayr, Scot.; p. 494; 55 13N 4 42W
22 Barra Is., Hebrides, Scotland; 57 0N 7 30W
121 Barraba, tn., N.S.W., Austral.; 30 19S 150 18E
67 Barrackpore, tn., India; p. 22,460; 22 45N 88 30E
112 Barrancas, tn., Venezuela, on R. Orinoco; 8 25N 62 35W
112 Barranquilla, tn., spt., Colombia, on R. Magdalena; coffee, bananas, cotton; p. 140,000; 11 1N 74 52W
26 Barrapoll, vil., Tiree, Argyll, Scotland; 56 29N 6 57W
105 Barre, cy., Vt., U.S.A.; granite; p. 11,307; 44 12N 72 30W
115 Barretos, tn., Brazil; 20 30S 48 55W
27 Barrhead, bor., Renfrew, Scot.; iron, cotton; p. 12,308; 55 48N 4 25W
26 Barrhill, tn., Ayr, Scot.; 55 6N 4 46W
96 Barrie, tn., Ont., Canada; leather; p. 7,776; 44 23N 79 45W
105 Barrington, tn., Mass., U.S.A.; 42 10N 73 23W
20 Barrow-in-Furness, co. bor., Lancs, Eng.; iron and steel, paper, shipbuilding, engineering; p. 66,366; 54 7N 3 13W
27 Barry, par., Angus, Scot.; p. 4,508; 56 30N 2 46W
19 Barry, urb. dist., Glam., Wales; docks; exp. coal; p. 38,916; 51 24N 3 17W
66 Barsi, tn., India; cotton, oil seeds; p. 22,074; 18 10N 75 50E
34 Bar-sur-Aube, tn., France; wine, brandy; 48 16N 4 44E
34 Bar-sur-Seine, tn., France; 48 7N 4 22E
62 Bartan, tn., Turkey; 41 30N 32 22E
41 Bartenstein, tn., Germ.; 54 14N 20 52E
39 Barth, spt., Germ.; 54 20N 12 42E
112 Bartica, spt., Br. Guiana; 6 15N 58 40W
122 Bartle Frere, mt., Queens., Austral.; 5,438 ft.; 17 30S 145 48E
16 Barton-upon-Humber, urb. dist., Lincs., Eng.; pottery, bricks, malting; p. 6,330; 53 41N 0 27W
80 Barue, tr., Mozambique; 18 0S 33 35E
80 Baruwa, tn., Fr. W. Africa; 14 0N 13 2E
24 Barvas, par., Lewis, Scot.; p. 6,660; 58 22N 6 31W
121 Barwan, R., N.S.W., Austral.; 28 40S 149 45E
79 Basaliya, tn., Egypt, on R. Nile; 25 10N 32 45E
45 Basel (cant.), Switz.; a. 177 sq. m.; farming, vines; forests; p. 235,000; 47 33N 7 34E
45 Basel, cy., cap. Basel, Switz., on R. Rhine; univ.; chemicals, ribbons; p. 154,424; 47 33N 7 34E
83 Bashee, R., C. of Good Hope, S. Afr.; 32 15S. 28 55E
56 Bashkir Rep., Rus. S.F.S. Rep.; a. 59,713 sq. m.; farming; gold, copper, coal; cap. Ufa; p. 2,741,000; 54 0N 57 0E
53 Bashmakli, tn., Bulgaria; 41 33N 24 39E
51 Basilicata (now called Lucania), dept., Italy; a. 3,855 sq.m.; wheat, maize, vines; olive-oil; p. 504,397; 40 30N 16 0E
17 Basingstoke, mun. bor., Hants, Eng.; farm implements; p. 13,865; 51 15N 1 05W
80 Basoko, tn., Belg. Congo; 1 18N 23 40E
49 Basque Provs., Spain; a. 2,739 sq. m.; comprising 3 provs.—Alava, Guipuzcoa, Vizcaya; p. 85,000; 43 0N 2 40W
62 Basra, tn., river pt., Iraq, on R. Shatt-el-Arab, Persian Gulf; exp. dates; p. 85,000; 30 34N 47 50E
34 Bas Rhin, Dept., France; a. 1,848 sq. m.; cereals, potatoes, fruit, vine; cap. Strasbourg; p. 688,242; 48 50N 7 30E
121 Bass Str., Australia; 39 28S 146 0E
70 Bassac, tn., Fr. Indo-China, on R. Me-kong; 14 50N 105 50E
50 Bassano, tn., Italy, on R. Brenta; vines, olives; majolica; p. 10,000; 45 48N 11 43E
111 Basse Terre, spt., cap. Guadeloupe; p. 8,000; 16 2N 61 45W
68 Bassein, tn., Bom., India; p. 11,350; 19 25N 72 52E
69 Bassein, tn., Burma, India, on R. Bassein; exp. rice; p. 42,563; 17 45N 94 53E
69 Bassein R., Burma, India; 15 50N 94 22E
20 Bassenthwaite, L., Cumb., Eng.; length 4 m., breadth ½ m.; fishing; 54 40N 3 14W
35 Basses-Alpes, Dept., France; a. 2,697 sq. m.; mountainous; olives; wine; cap. Digne; p. 87,366; 44 0N 6 0E
35 Basses-Pyrénées, Dept., France; a. 2,977 sq. m.; cattle, sheep; forests; cap. Pau; p. 422,719; 43 11N 0 45W
39 Bästad, tn., Sweden; 56 30N 12 45E
67 Bastar, St., Cent. Prov., India; a. 13,062 sq. m.; forests, jungles; tanning; cap. Jagdalpur; p. 522,283; 19 20N 81 30E
35 Bastelica, tn., France; 42 1N 9 05E
35 Bastia, tn., France; 44 41N 9 28E
88 Bastogne, tn., Belg.; 50 0N 5 42E
83 Basutoland, Br. cr. col., S. Africa; a. 11,716 sq. m.; mountainous plateau; maize, wool, mohair; cap. Maseru; p. 558,091; 29 30S 28 0E
48 Batalha, tn., Port.; 39 40N 8 53W
67 Batalpashinsk, tn., Russia; 44 16N 42 3E
72 Batang (Baanfu), tn., cap. Sikang, China; 30 0N 99 30E
71 Batanga, tn., Phil. Is.; p. 41,182; 14 0N 121 10E
46 Bátaszék, tn., Hungary; 46 14N 18 41E
70 Batavia, spt., cap. Java, Dutch E. Indies; commercial centre; exp.—coffee, rice, sugar, indigo, spices, rubber, petroleum; p. 290,000; 6 10S 106 50E
104 Batavia, cy., N.Y., U.S.A.; farm implements; p. 17,375; 42 58N 78 18W
121 Bateman, tn., N.S.W., Austral.; 35 46S 150 8E
103 Batesville, cy., Ark., U.S.A.; 35 45N 91 43W
19 Bath, co. bor., Som., Eng.; known by Romans as *Aquae Sulis*; Roman baths; hot springs, med. waters; society centre in 18th century; p. 68,801; 51 23N 2 20W

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102 Bath, tn., Me., U.S.A., on R. Kennebec; p. 9,100; 43 23N 69 55W
104 Bath, tn., N.Y., U.S.A.; 42 19N 77 18W
27 Bathgate, bor., W. Lothian, Scot.; coal, iron; p. 10,097; 55 54N 3 38W
121 Bathurst, tn., N.S.W., Austral.; brewing, boots and shoes; p. 9,990; 33 28S 149 31E
95 Bathurst, tn., spt., N.B., Canada; p. 3,300; 47 37N 64 43W
88 Bathurst, tn., port, cap. Gambia; ground-nuts; p. 6,100; 13 28N 16 38W
83 Bathurst, tn., C. of Good Hope, S. Afr.; 33 33S 26 50E
21 Batley, mun. bor., W. Riding, Eng.; woollens, shoddy; p. 34,573; 53 43N 1 38W
80 Batoka, tr., Mozambique; 17 10S 33 20E
82 Batoka, tr., N. Rhodesia; 16 40S 27 0E
103 Baton Rouge, par., cap. La., U.S.A.; cotton seed, oil refining; p. 30,729; 30 27N 91 5W
82 Batowana, tr., Bech. Prot., S. Afr.; 21 0S 21 0E
17 Battersea, met. bor.; p. 159,542; see London.
68 Batticaloa, tn., cap. E. Prov., Ceylon; p. 7,500; 7 44N 81 42E
17 Battle, par., Sussex, Eng.; abbey ruins on reputed site of Battle of Hastings fought in 1066; p. 3,490; 50 55N 0 29E
102 Battle Cr., tn., Mich., U.S.A.; engineering; p. 43,575; 42 23N 85 5W
106 Battle Mt., tn., Nev., U.S.A.; 40 49N 117 1W.
98 Battle, R., Alta, Canada; 53 0N 110 25W
98 Battleford, tn., Sask., Canada; mixed farming; p. 1,096; 52 44N 108 25W
62 Batum, tn., spt., U.S.S.R.; petroleum, silk; p. 40,000; 41 37N 41 32E
88 Bauchi, tn., Nigeria; tin; 10 18N 9 50E
34 Baugé, tn., France; 47 32N 0 10W
93 Bauld, C., Newfoundland; 51 30N 55 15W
42 Bauska, tn., Latvia; 56 27N 24 11E
41 Bautzen, tn., Germ.; cath.; machinery, woollens; p. 40,335; 51 12N 14 26E
40 Bavaria, fed. st., Germ.; a. 29,334 sq. m., includes Palatinate; hilly, forested; chief rivers—Danube, Main, Inn, Rhine; chief industries—agriculture, dairying; rye, oats, potatoes, hops, sugar-beet, vines; brewing, glass, sugar, toys, chemicals, jewellery; cap. Munich; p. 7,379,594; 47 24 to 50 30N 9 to 14E
44 Bavarian Alps, Germ.; 47 35N 11 20E
108 Bavispe, tn., Mex.; 30 29N 108 24W
16 Bawdsey, par., Suffolk, Eng.; p. 462; 52 1N 1 25E
16 Bawtry, par., Notts, Eng.; p. 1,210; 53 26N 1 01W
102 Bay City, tn., Mich., U.S.A., on Saginaw R.; fishing, chemicals, beet-sugar; p. 47,355; 43 35N 83 50W
62 Bayazid, tn., Turkey; 39 30N 44 19E
34 Bayeux, tn., France; cath., mus., Bayeux tapestry; depicts events in life of William the Conqueror, including the Battle of Hastings; 49 18N 0 45W
35 Bayonne, tn., France; cath.; leather; p. 31,727; 43 28N 1 29W
105 Bayonne, cy., N.J., U.S.A.; chemicals, oil refining; p. 88,979; 40 40N 74 7W
40 Bayreuth, cy., Germ.; opera house; textiles; p. 35,306; 49 57N 11 34E
52 Bazargic. See Dobrich.
120 Beachport, tn., S. Austral.; 37 30S 139 59E
17 Beachy Hd., Sussex, Eng.; chalk promontory, 575 ft. high; 50 44N 0 15E
121 Beaconsfield, tn., Tas., Austral.; p. 5,000; 41 11S 146 48E
17 Beaconsfield, urb. dist., Bucks, Eng.; p. 4,843; 51 36N 0 39W
83 Beaconsfield, tn., C. of Good Hope, S. Afr.; diamonds; p. 20,300; 28 55S 24 40E
19 Beaminster, par., Dor., Eng.; p. 1,651; 50 48N 2 44W
35 Béarn, prov., France; 43 14N 0 50W
107 Beatrice, cy., Neb., U.S.A.; p. 10,297; 40 22N 96 43W
27 Beattock, tn., Dumf., Scot.; 55 18N 3 27W
35 Beaucaire, tn., France; 43 50N 4 38E
121 Beaudesert, tn., Queens., Austral.; 27 59S 153 2E
103 Beaufort, tn., N.C., U.S.A.; 34 43N 76 36W
103 Beaufort, tn., S.C., U.S.A.; 32 28N 80 41W
120 Beaufort, tn., Vic., Austral.; 37 27S 143 23E
90 Beaufort Sea, N. America; 75 0N 135 0W
83 Beaufort West, tn., C. of Good Hope, S. Afr.; sheep; p. 3,337 (Eur.); 32 23S 22 35E
97 Beauharnois, tn., Que., Canada; p. 3,729; 45 18N 73 55W
17 Beaulieu, par., Hants, Eng.; abbey ruins; p. 1,011; 50 50N 1 27W
24 Beauly, tn., Inver., Scot.; p. 890; 57 29N 4 28W
18 Beaumaris, mun. bor., Anglesey, Wales; cas. ruins; p. 1,708; 53 16N 4 05W
107 Beaumont, cy., Tex., U.S.A., on Neches R.; lumbering; petroleum; p. 57,732; 30 2N 94 0W
34 Beaune, tn., France; wines, casks, farming implements, p. 13,780; 47 1N 4 51E
94 Beauport, tn., Que., Canada; p. 3,242; 46 55N 71 14W
34 Beauvais, tn., France; cath.; Gobelin tapestry; p. 18,738; 49 28N 2 6E
107 Beaver, tn., Okla., U.S.A.; 36 50N 100 40W
104 Beaver, tn., Pa., U.S.A.; 40 42N 80 21W
106 Beaver, tn., Utah, U.S.A.; 38 19N 112 40W
104 Beaver Falls, tn., Pa., U.S.A.; machinery, pottery; p. 17,147; 40 46N 80 20W
66 Beawar, tn., India; cotton; p. 22,362; 26 2N 74 21E
16 Beccles, mun. bor., Suffolk, Eng.; farming implements; p. 6,644; 52 27N 1 33E
82 Bechuanaland, dist., Bech. Prot., S. Afr.; 24 45S 21 to 24 40E
83 Bechuanaland Prot., S. Afr., Br.; a. 275,000 sq. m.; part of Cent. African plateau 4,000 ft. high; inhabited by tribes, chief, Bamangwato (cap. Serowe); cattle rearing; some farming, maize; adm. centre, Mafeking; p. 152,983; 24 0S 22 0E
17 Beckenham, urb. dist., Kent, Eng.; p. 43,834; 51 24N 0 2W
26 Bedale, par., N. Riding, Eng.; p. 1,064; 54 17N 1 36W
35 Bedarieux, tn., France; 43 37N 3 09E
18 Beddgelert, par., Caer., Wales; resort; slate; p.1,055; 53 2N 4 6W
104 Bedford, tn., Pa., U.S.A.; 40 1N 78 30W
97 Bedford, tn., Que., Canada; p. 1,570; 45 8N 72 59W
16 Bedford, co., Eng.; a. 466 sq. m.; flat surface, drained

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by Gt. Ouse R.; corn, market gardening; mnfs.; strawplaiting, farm implements; p. 220,474; 52 4N 0 28W
16 Bedford, mun. bor., co. tn., Beds, Eng.; relics of John Bunyan, imprisoned in Bedford Gaol 1660–1672; farm implements; p. 40,573; 52 9N 0 28W
83 Bedford, tn., C. of Good Hope, S. Afr.; 32 44S 26 10E
20 Bedlington, urb. dist., Northumb., Eng.; coal, iron; p. 27,315; 55 7N 1 38W
120 Beech Forest, tn., Vic., Austral.; 38 39S 143 32E
121 Beechworth, tn., Vic., Austral.; gold; p. 8,000; 36 20S 146 42E
19 Beer Alston, vil., Devon, England; 50 29N 4 12W
61 Beersheba, tn., Pal.; Biblical site; 31 17N 34 54E
121 Bega, tn., N.S.W., Austral.; 36 11S 149 48E
18 Beguildy, vil., Radnor, Wales; 52 25N 3 12W
63 Behbehan, tn., Persia; 31 37N 50 20E
62 Beibazar, tn., Turkey; 40 8N 32 0E
89 Beira, spt., Mozambique; exp. sugar, maize, cotton; p. 17,000; 19 46S 34 50E
89 Beira, prov., Port.; a. 9,208 sq. m.; cereals, fruit, olives; sheep farming; p. 1,663,921; 40 30N 8 0W
54 Beiseren, tn., Norway; 67 0N 15 48E
62 Beirut, spt., Syria; silk, wool, fruits; p. 134,655; 33 54N 35 32E
42 Beisagola, tn., Lithuania; 55 38N 23 42E
61 Beisan, tn., Pal.; 32 31N 35 30E
62 Beishehr, tn., Turkey; 37 35N 31 54E
89 Beitbridge, tn., S. Rhodesia; on Limpopo R.; 22 15S 30 12E
26 Beith, par., Ayr, Scot.; coal; p. 5,977; 55 45N 4 37W
61 Beit Jibrin, tn., Pal.; 31 8N 34 52E
61 Beit Lahm, tn., Pal.; p. 6,658; 31 5S 23 30E
48 Beja, tn., Port.; cath.; olive oil, pottery; p. 10,521; 38 2N 7 53W
10 Beja, tn., Tunis; 36 45N 9 15W
48 Bejar, tn., Spain; 40 21N 5 45W
41 Békés, tn., Hungary; wheat; p. 28,833; 46 48N 21 13E
41 Békéscsaba, tn., Hungary; milling, rly. jn.; p. 49,293; 46 41N 21 9E
66 Bela, tn., Baluchistan; 26 17N 66 17E
47 Bela Crkva, tn., Y-slav.; 44 55N 21 28E
104 Belair, tn., Md., U.S.A.; 39 33N 76 22W
88 Belang, tn., Fr. W. Africa; 12 58N 0 2W
49 Belchite, tn., Spain; 41 20N 0 41W
30 Belcoo, vil., Fermanagh, N. Ireland; 54 18N 7 52W
56 Belebei, tn., U.S.S.R.; 54 1N 54 12E
112 Belem. See Para.
31 Belfast, co. bor., co. tn., spt., cap. N. Ireland; univ., city hall, Houses of Parl.; Stormont, cas.; shipbuilding, linen, distilling; p. 415,007; 54 37N 5 55W
105 Belfast, tn., Me., U.S.A.; 44 23N 69 0W
86 Belfast, tn., Trans., S. Afr.; 25 44S 30 8E
120 Belfast Harb. See Port Ferry.
20 Belford, par., Northumb., Eng.; p. 653; 55 36N; 1 50W
34 Belfort, tn., France; cotton, brewing, machinery; p. 42,511; 47 39N 6 52E
34 Belfort, Dept., France; a. 235 sq.m.; cereals, brewing; p. 99,403; 47 39N 6 52E
41 Belgard, tr., Germ.; p. 12,478; 54 0N 16 0E
68 Belgaum, tn., Bom., India; cotton; p. 48,320; 15 55N 74 33E
80 Belgian Congo, col., Cent. Africa; a. 918,000 sq. m.; basin of R. Congo, tropical forests; agriculture, palm oil, cotton, rice, copal, coffee, cattle rearing, ivory, rubber, minerals, copper, gold, diamonds, tin; cap. Leopoldville; p. 9,290,816; 5 to 12S 12 to 31E
38 Belgium, King., Europe; a. 11,755 sq. m.; flat surface; chief rivers, Scheldt, Meuse; chief industries: agriculture, cereals, sugar-beet, potatoes, cattle, pigs, horses, minerals, coal; mnfs. iron and steel machinery, engineering, metals, shipbuilding, textiles, brewing, distilling; exp. chiefly mfd. goods; cap. Brussels; p. 8,092,004; 50 30N 4 0E
47 Belgrade, cy. and cap., Y-slav.; on R. Danube; cath., roy. pal., univ., mus.; tobacco, woollens; p. 241,542; 44 50N 20 31E
110 Belize, tn., cap., Br. Honduras; exp. mahogany, dyewoods, bananas; p. 14,000; 17 30N 88 12W
110 Belize, R., Br. Honduras; 17 30N 88 12W
121 Bell, dist., Queens., Austral.; 22 0S 147 15E
115 Bella Vista San Roque, tn., Arg.; on R. Parana; 28 10S 59 5W
50 Bellagio, tn., Italy; on L. Como; resort; 45 46N 9 19E
45 Bellano, tn., Italy; on L. Como; 46 3N 9 18E
68 Bellary, tn., Mad., India; cotton; p. 39,842; 15 10N 76 55E
121 Bellata, tn., N.S.W., Austral.; 29 51S 149 45E
30 Bellaugh, vil., Roscommon, I.F.S.; 53 29N 7 59W
107 Belle Fourche, tn., S.D., U.S.A.; 44 50N 103 50W
34 Belle Ile, France; pilchards; 47 15N 3 20W
93 Belle I., Newfoundland; 51 50N 55 10W
93 Belle Isle Str., N. America; 51 30N 56 30W
30 Belleek, par., Fermanagh, N. Ire.; 54 29N 8 5W
104 Bellefonte, tn., Pa., U.S.A.; 40 53N 77 48W
35 Bellegarde, tn., France; 46 7N 5 49E
121 Bellerive, tn., Tas., Austral.; 42 47S 147 27E
96 Belleville, tn., Ont., Canada; dairying, fruit; p.13,790; 44 12N 77 27W
102 Belleville, tn., Ill., U.S.A.; brewing, iron founding, shoes, flour; p. 28,425; 38 30N 90 3W
106 Bellevue, tn., Idaho, U.S.A.; 43 25N 114 18W
35 Belley, tn., France; 45 47N 5 43E
121 Bellingen, tn., N.S.W., Austral.; 30 29S 152 50E
20 Bellingham, par., Northumb., Eng.; p. 1,392; 55 10N 2 15W
106 Bellingham, tn., spt., Wash., U.S.A.; on Puget Sd.; sawmills, paper mills, salmon canning; p. 30,823; 48 45N 122 25W
45 Bellinzona, tn., Switz.; p. 10,676; 46 12N 9 2E
113 Bello Horizonte, Brazil; gold; p. 109,000; 19 50S 44 20W
105 Bellows Falls, tn., Vt., U.S.A.; 43 9N 72 30W
50 Belluno, tn., Italy; silk; p. 25,423; 46 8N 12 17E
98 Belly R., Alta., Canada; 49 55N 113 10W
105 Belmar, tn., N.J., U.S.A.; 40 30N 74 0W
104 Belmont, tn., N.Y., U.S.A.; 42 14N 78 3W
106 Belmont, tn., Nev., U.S.A.; 38 33N 116 59W
49 Belmonte, tn., Spain; 39 35N 2 43W

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113 Belmonte, tn., Brazil; 16 5s 39 0w
30 Belmullet, vil., Mayo, I.F.S.; p. 680; 54 13w 10 0w
52 Belogradchik, tn., Bulgaria; 43 35s 2° 41e
102 Beloit, tn., Wis., U.S.A.; implements; p. 23,611; 42 31s 89 5w
16 Belper, urb. dist., Derby, Eng.; hosiery, lace; p. 13,023; 53 2s 1 29w
120 Beltana, tn., S. Austral.; 30 51s 138 22e
31 Belturbet, urb. dist., Cavan, I.F.S.; distilling; p. 1,305; 54 6s 7 27w
80 Bembe, tn., Angola; 7 0s 14 10e
89 Bemberi, R., S. Rhodesia; 19 15s 28 0e
17 Bembridge, par., I. of W., Eng.; p. 1,973; 50 42s 1 5w
24 Ben Dearg, mt., Ross and Crom., Scot.; 57 47s 4 55w
121 Ben Lomond, mt., N.S.W., Austral.; 5,000 ft.; 30 0s 151 44e
121 Ben Lomond, mt., Tas., Austral.; 5,010 ft.; 41 37s 147 40e
26 Ben Lomond, mt., Stirling, Scot., 3,192 ft.; 56 11s 4 37w
25 Ben Macdhui, mt., Aberdeen, Scot.; 4,296 ft.; 57 3s 3 38w
26 Ben More, mt., Perth, Scot.; 3,843 ft.; 56 24s 4 30w
24 Ben More Assynt, mt., Suther., Scot.; 3,273 ft.; 58 8s 4 47w
24 Ben Nevis, mt., Inver., Scot.; highest in Br. Is., 4,406 ft.; 56 48s 4 58w
24 Ben Wyvis, mt., Ross & Crom., Scot.; 3,429 ft.; 57 42s 4 35w
121 Benalla, tn., Vic., Austral.; p. 4,000; 36 31s 145 59e
67 Benares, tn., India, on R. Ganges; Hindu holy city, annual pilgrimages, temples, mosques, palaces, brocade, gold filigree, silver, brass and lacquer work; p. 205,315; 25 18s 83 2e
125 Bencubbin, tn., W. Austral.; 31 0s 17 50e
62 Benderegli, tn., Turkey; 41 10s 31 20e
52 Benderi, tn., Rumania; on R. Dniester; timber, sawmills; p. 31,698; 46 52s 29 21e
121 Bendigo, tn., Vic., Austral.; gold, fruit; p. 33,690; 36 45s 144 19e
43 Bendin. See Sosnowiec.
51 Benevento, tn., Italy; cath.; leather; p. 36,962; 41 7s 40 47e
67 Bengal, pres., India; a. 82,955 sq. m.; alluvial plain, chief rivers, Ganges, Brahmaputra; chief industries: agriculture, rice, jute, sugar-cane, oilseeds; minerals, coal, iron; mnfs., cottons, silks, gunny bags; cap. Calcutta; p. 51,087,338; 24 15s 89 45e
65 Bengal, B., Indian Oc.; 18 0s 91 0e
11 Benghazi, spt., Libya; cereals; p. 33,700; 32 0s 20 0e
70 Bengkalis, tn., Sumatra, D.E.I.; 1 30s 102 10e
80 Benguela, spt., Angola; exp. rubber; 12 35s 13 25e
78 Benha, tn., Egypt; p. 28,626; 30 23s 31 8e
25 Benholm, par., Kinc., Scot.; p. 1,092; 56 49s 2 20w
10 Beni Abbas, tn., Algeria; 30 0s 2 30w
78 Beni Adi, tn., Egypt; 27 17s 30 49e
10 Beni Saf., tn., Algeria; p. 11,819; 35 20s 1 50w
78 Beni Suef, tn., Egypt; on R. Nile; carpets, cotton; p. 39,595; 29 2s 31 5e
88 Benin, tn., Nigeria; palm oil, mahogany; 6 30s 5 30e
88 Benin, Bight of, W. Africa; 5 0s 3 0e
49 Benisa, tn., Spain; 38 42s 0 03e
70 Benkulen, spt., Sumatra; 3 45s 102 0e
105 Bennington, tn., Vt., U.S.A.; p. 7,390; 42 40s 73 15w
16 Bentley, par., Suffolk, Eng.; p. 417; 51 59s 1 7w
88 Benue, R., Nigeria; trib. of R. Niger; 7 46s 8 30e
47 Beograd. See Belgrade.
31 Beragh, tn., Tyrone, N. Ire.; p. 400; 54 33s 7 10w
47 Berane, tn., Y-slav.; 42 50s 19 50e
67 Berar, dist., Cent. Provs., India; leased from Nizam of Hyderabad; cotton, millet, wheat; p. 3,443,765 20 30s 77 30e
47 Berat, tn., Albania; p. 10,403; 40 44s 19 59e
81 Berbera, spt. cap., Brit. Somaliland; p. 23,000; 10 15s 44 50e
112 Berbice, R., Br. Guiana; 5 40s 57 40w
57 Berdichev, tn., Russia; tobacco; p. 55,613; 49 55s 28 30e
57 Berdyansk, spt., Russia; 46 45s 36 46e
17 Bere, For. of, Hants, Eng.; 50 55s 1 05w
83 Berea, tn., Basut., S. Africa; 29 16s 27 40e
56 Berezov, tn., Russia; gold; 64 5s 65 0e
49 Berga, tn., Spain; 42 5s 1 50e
62 Bergama, Turkey; p. 13,223; 39 0s 27 10e
50 Bergamo, tn., Italy; cath.; textiles; p. 82,101; 45 42s 9 40e
39 Bergedorf, tn., Germ., on R. Elbe; glass, leather; p. 18,320; 53 30s 10 13e
55 Bergen, spt., Norway; shipping, fishing; p. 98,546; 60 25s 5 20e
38 Bergen op-Zoom, tn., Neth.; sugar-beet; p. 21,618; 51 29s 4 17e
35 Bergerac, tn., France, on R. Dordogne; grain, wine; p. 17,520; 44 51s 0 29e
67 Berhampur, tn., Orissa, India; rice; p. 32,731; 19 18s 84 50e
67 Berhampore, tn., India; p. 26,670; 23 50s 88 22e
116 Bering Sea, Pac. Oc.; fisheries; 56 0s 174 0e
90 Bering Str., joins Arctic Oc. and Pacific Oc., separates Asia and America; 66 0s 170 0w
19 Berkeley, par., Glouce, Eng.; p. 790; 51 42s 2 25w
17 Berkhampstead, par., Herts, Eng.; chemicals, wooden ware; p. 7,295; 51 45s 0 35w
52 Berkovitza, tn., Bulgaria; p. 5,961; 43 15s 23 8e
17 Berkshire, co., England; a. 722 sq. m.; Berkshire Downs (Inkpen Beacon); "White Horse," 400 ft. in length, cut in chalk downs; drained by R. Thames and tribs. Kennet, Cole, Pang; wooded; agriculture, oats, dairying; includes Windsor Castle, royal residence; p. 311,334; 51 26s 1 00w
41 Berlin, cy., cap., Germany; on R. Spree; bldgs.—royal palace, Reichstag, univ.; "Unter den Linden"; mnfs.—textiles, machinery, pottery, beer; publishing and printing centre; p. 4,242,501; 52 34s 13 20e
85 Berlin, tn., C. of Good Hope, S. Afr.; 32 51s 27 35e
103 Berlin, tn., N.H., U.S.A., lumber, wood pulp; p. 20,018; 44 28s 71 15w
113 Bermejo, R., Argentina; 25 0s 61 30w

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49 Bermeo, tn., Spain; 43 26s 2 48w
17 Bermondsey, met. bor.; p. 111,526; see London.
6 Bermudas, Is., Atlantic Oc.; a. 19 sq. m.; health resort; vegetables; cap. Hamilton; p. 31,500; 32 15s 64 50w
40 Bernburg, tn., Germ.; chemicals, machinery; p. 34,305; 51 46s 11 45e
45 Berne, tn., cap., Switz., on R. Aar; cath., univ.; textiles; p. 113,114; 46 38s 7 28e
45 Berne, can., Switz.; fertile valleys; dairying; watches, wood carving; p. 691,101; 46 50s 7 20e
24 Berners, wil., Inverness, Scot.; p. 605; 57 14s 5 37w
45 Bernese Oberland, Switz.; Alpine region; chief peaks—Finsteraarhorn, Jungfrau; resorts—Interlaken, Grindelwald; 46 25s 7 30e
45 Bernina, Piz., mt., Switz.; 13,300 ft.; 46 22s 9 56e
25 Berriedale, par., Caithness, Scot.; p. 778; 58 11s 2 29w
121 Berrigan, tn., N.S.W., Austral.; 35 39s 145 50e
121 Berry, tn., N.S.W., Austral.; 34 47s 150 41e
97 Berthier, tn., Que., Canada; p. 2,431; 46 8s 73 12w
25 Bervie, bor., Kincardine, Scot.; p. ,032; 56 51s 2 27w
27 Berwick, co., Scot.; a. 457 sq. m.; hilly, Lammermoors in N.; agriculture, sheep, cattle; woollens; fishing; p. 26,601; 55 55s 2 30w
104 Berwick, tn., Pa., U.S.A.; p. 12,660; 41 3s 76 17w
20 Berwick-upon-Tweed, mun. bor., spt., Northumb., Eng.; fishing; p. 12,299; 55 48s 2 00w
18 Berwyn Mts., Wales; 2,713 ft.; 52 52s 3 34w
34 Besançon, tn., France; univ.; farm implements, textiles; p. 60,367; 47 15s 6 01e
52 Bessarabia, Dist., Rumania; a. 17,146 sq. m.; formerly in Russia; flat, fertile; agriculture, wheat, maize, cattle; p. 2,865,506; 47 0s 28 30e
103 Bessemer, tn., Ala., U.S.A.; iron and steel; p. 20,271; 33 26s 87 0w
48 Betanzos, tn., Spain; 43 18s 8 11w
83 Bethanie, tn., O.F.S., S. Afr.; 29 32s 26 1e
83 Bethany, tn., S.W. Afr.; 26 30s 16 52e
83 Bethel, tn., C. of Good Hope, S. Afr.; 30 25s 17 50e
83 Bethel, tn., Transvaal, S. Afr.; 26 50s 29 1e
85 Bethelsdorp, tn., C. of Good Hope, S. Afr.; 33 52s 25 32e
18 Bethesda, urb. dist., Caer., Wales; slate; p. 4,476; 53 12s 4 00w
61 Bethlehem (Beit-Lahm.), tn., Palestine; birthplace of Christ; p. 6,658; 31 42s 35 12e
83 Bethlehem, tn., O.F.S., S. Afr.; p. 4,856 (Eur.); 28 5s 28 30e
104 Bethlehem, tn., Pa., U.S.A.; iron and steel; p. 57,892; 40 38s 75 23w
17 Bethnal Green, met. bor.; p. 108,178; see London.
83 Bethulie, tn., O.F.S., S. Afr.; 30 30s 26 0e
34 Bethune, tn., France; oil, salt; p. 19,956; 50 32s 2 40e
38 Bettemburg, tn., Luxemburg; 49 31s 6 05e
67 Bettiah, tn., Bihar, India; p. 24,291; 26 45s 84 37e
18 Betws-y-Coed, urb. dist., Caer., Wales; resor p. 912; 53 5s 3 48w
41 Beuthen, tn., Germ.; lead, zinc; p. 100,584; 50 22s 19 0e
21 Beverley, mun. bor., E. Riding, Eng.; iron, leather, wool; p. 14,011; 53 51s 0 27w
104 Beverley, tn., W. Va., U.S.A.; 38 47s 79 53w
125 Beverley, tn., W. Austral.; 32 0s 117 0e
105 Beverly, tn., Mass., U.S.A.; boots and shoes, machinery; p. 25,086; 42 46s 70 47w
18 Bewdley, mun. bor., Worcs, Eng.; leather, iron, coal; p. 4,267; 52 23s 2 19w
17 Bexhill, mun. bor., Sussex, Eng.; resort; p. 21,229; 50 50s 0 28e
35 Béziers, tn., France; wines, brandy; chemicals; p. 71,527; 43 21s 3 14e
68 Bezwada, tn., Madras, India; rice; p. 44,159; 16 33s 80 36e
67 Bhagalpur, tn., Bihar, India; rice, maize; p. 68,878; 25 12s 87 5e
69 Bhamo, tn., Burma, India, on R. Irrawaddy; teak; 24 15s 97 12e
67 Bharatpur, tn., India; cloth; p. 33,495; 27 11s 77 29e
66 Bhatinda, tn., Punjab, India; p. 20,154; 30 13s 74 15e
66 Bhaunagar, tn., spt., India; cotton; p. 59,392; 21 47s 72 14e
67 Bhilsa, tn., India; 23 32s 77 50e
66 Bhiwani, tn., India; cottons; p. 33,270; 28 45s 76 13e
67 Bhopal, tn., Cent. India, India; cotton cloth; p. 45,094; 23 15s 77 28e
66 Bhor Ghat, India; 18 50s 73 40e
66 Bhusawal, tn., Bombay, India; p. 25,557; 21 0s 75 15e
67 Bhutan, ind. st., Asia; a. 18,000 sq. m.; mountainous, forested; agriculture, rice, maize, millet; cap. Punakha; p. 300,000; 27 30s 91 0e
80 Biafra, Bight of, W. Africa; 2 30s 8 0e
43 Bialystok, tn., Poland; woollens, boots, shoes; p. 91,335; 53 6s 23 18e
35 Biarritz, tn., France; seaside resort; p. 22,955; 43 27s 1 35w
94 Bic, tn., Que., Canada; p. 1,020; 48 20s 68 51w
17 Bicester, urb. dist., Oxford, Eng.; lace; p. 3,109; 51 54s 1 09w
88 Bida, tn., Nigeria; 9 05s 4 49e
68 Bidar, tn., Hyderabad, India; p. 11,500; 17 55s 77 34e
102 Biddeford, tn., Me., U.S.A.; resort; p. 17,633; 43 40s 70 30w
18 Biddulph, urb. dist., Staffs., Eng.; coal, iron; p. 8,346; 53 8s 2 08w
19 Bideford, mun. bor., spt., Devon, Eng.; ropes, sails; p. 8,782; 51 1s 4 13w
37 Biebrich, tn., Germ.; on R. Rhine; dyes; p. 21,250; 50 2s 8 14e
45 Biel, tn., Switz.; watches; p. 37,856; 47 8s 71 4e
52 Biela, tn., Bulgaria; p. 5,935; 43 29s 25 46e
40 Bielefeld, tn., Germ.; linen; machinery; p. 121,031; 52 2s 8 30e

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43 Bielitz, tn., Poland; woollens, linen; p. 17,150; 49 50s 19 1e
50 Biella, tn., Italy; p. 19,340; 45,32s 8 06e
70 Bien-hoa, tn., Fr. Indo-China; 10 25s 107 0e
45 Bienne. See Biel.
92 Big R., Sask., Canada; 54 10s 74 0w
27 Bigar, bor., Lanark, Scot.; p. 1,323; 55 37s 3 31w
16 Biggleswade, urb. dist., Beds, Eng.; corn; p. 5,844; 52 6s 0 15w
62 Bigha, tn., Turkey; 40 15s 27 18e
53 Bighadich, tn., Turkey; 39 28s 28 10e
47 Bihač, tn. Y.-slav.; 44 51s 15 56e
67 Bihar, tn., Bihar, India; p. 36,720; 25 2s 85 38e
7 Bihar, prov., India; a. 69,348 sq. m.; chief river, Ganges; agriculture, rice, wheat, maize, sugar cane, tobacco, oil seeds; minerals, coal, iron, mica; industries, iron and steel; cap. Patna; p. 31,371,434; 24 30s 85 30e
80 Bihé, dist., Angola; 12 40s 16 58e
68 Bijapur, tn.; Bombay, India; cotton; p. 32,483; 16 53s 75 50e
63 Bijar, tn., Persia; 35 48s 47 32e
66 Bikaner, tn., Rajputana, India; woollens, carpets; p. 69,410; 28 2s 73 22e
67 Bilaspur, tn., India; silks, cottons; p. 24,295; 22 0s 82 15e
48 Bilbao, tn., spt., Spain; iron ore, smelting; p. 161,937; 44 17s 2 55w
16 Bildeston, par., Suffolk, Eng.; p. 685; 52 6s 0 55e
47 Bilek, tn., Y.-slav.; 42 54s 18 23e
17 Billericay, mun. bor., Essex, Eng.; p. 1,526; 51 37s 0 25e
16 Billingshay, par., Kest., Eng.; p. 1,226; 53 5s 0 16w
106 Billings, tn., Mont., U.S.A.; wool; p. 16,380; 45 47s 108 40w
70 Billiton I., Dutch E. Indies; tin; p. 73,400; 3 00s 108 0e
76 Bilma, oasis, Fr. W. Africa; 18 50s 13 20e
103 Biloxi, tn., Miss., U.S.A.; fishing; p. 14,850; 30 23s 88 59w
18 Bilston, mun. bor., Staffs., Eng.; coal, iron, engineering; p. 31,360; 52 33s 2 03w
68 Bimlipatam, tn., Madras, India; 17 55s 83 30e
16 Binbrook, par., Lindsey, Eng.; p. 796; 53 27s 0 10w
80 Binder, tn., Fr. Cameroons; 10 0s 14 28e
121 Bingara, tn., N.S.W., Austral.; 29 46s 150 31e
40 Bingen, tn., w. pl., Germ.; on R. Rhine; wine; p. 10,186; 49 58s 7 57e
88 Bingerville, tn., cap., Fr. Ivory Coast; 5 20s 3 52w
16 Bingham, par., Notts., Eng.; p. 1,576; 52 57s 0 37w
104 Binghamton, tn., N.Y., U.S.A.; engineering; p. 76,662; 42 7s 75 50w
70 Binh-dinh, tn., Fr. Indo-China; 14 0s 109 0e
70 Binh-thuan, tn., Fr. Indo-China; 11 10s 108 30e
63 Binth, tn., Persia; 28 32s 59 24e
123 Birdsville, tn., Queens., Austral.; 25 50s 139 20e
62 Birejik, tn., Turkey; 37 3s 38 0e
61 Bir es Seba. See Beersheba.
63 Birjand, tn., Persia; 32 57s 59 8e
40 Birkenfeld, tn., Germ.; 49 40s 7 08e
18 Birkenhead, co. bor., spt., Cheshire, Eng.; on R. Mersey; connected by ferry and tunnels under R. Mersey with Liverpool; docks; shipbuilding, machinery, flour milling; p. 151,400; 53 23s 3 02w
16 Birmingham, co. bor., Warwick, Eng.; univ., cath., town hall; greatest Midland industrial centre; engineering, metal work, small arms, motor cars, cycles, hardware; good communications by rail and canal; p. 1,002,413; 52 29s 1 52w
103 Birmingham, tn., cap., Ala., U.S.A.; coal, iron, cotton; p. 259,678; 33 30s 86 54w
27 Birnam, vil., Perth, Scot.; 56 33s 3 13w
33 Birr (Parsonstown), urb. dist., Offaly, I.F.S.; farming; p. 3,391; 53 6s 7 55w
25 Birse, par., Aberdeen, Scot.; p. 944; 57 3s 2 43w
56 Birsk, tn., Russia; 55 25s 55 30e
99 Birtle, tn., Man., Canada; 51 0s 101 30w
106 Bisbee, tn., Ariz., U.S.A.; silver; p. 8,023; 31 30s 110 0w
35 Biscay, Bay of, Atlantic Oc.; heavy seas; 45 50s 2 10w
51 Bisceglie, tn., spt., Italy; p. 32,000; 41 15s 16 29e
45 Bischofszell, tn., Switz.; 47 31s 9 13e
20 Bishop Auckland, urb. dist., Durham, Eng.; coal, iron; p. 12,269; 54 40s 1 40w
18 Bishops Castle, mun. bor., Salop, Eng.; p. 1,332; 53 30s 3 00w
17 Bishop's Stortford, urb. dist., Herts, Eng.; grain; p. 9,509; 51 52s 0 10e
17 Bishop's Waltham, par., Hants, Eng.; bricks; p. 2,597; 50 58w 1 12w
10 Biskra, tn., Algeria; olives, dates; p. 9,000; 34 55s 5 36e
17 Bisley, par., Surrey, Eng.; Nat. Rifle Assn. competition; p. 955; 51 45s 2 09w
71 Bislig, tn., Philippine Is.; 8 20s 126 20e
107 Bismarck, tn., N.D., U.S.A.; dairying; p. 11,090; 46 38s 100 47w
122 Bismarck Arch., Terr. New Guinea, Br.; 4 00s 150 0e
122 Bismarck Mts., Terr. of New Guinea; Peaks 15,000 to 16,000 ft.; 6 30s 145 30e
88 Bismarckburg, tn., Togo; 8 10s 0 40e
52 Bistrita, tn., Rumania; p. 13,251; 47 9s 30 31e
52 Bistritz. See Bistrita.
88 Bissao, tn., spt., Port. Guinea; 11 50s 15 40w
88 Bisugu, tn., Fr. W. Afr.; 11 40s 2 00e
62 Bitlis, tn., Turkey; 38 29s 42 0e
47 Bitolj, tn. Y.-slav., sanjiq, carpets; p. 32,982; 41 2s 21 20e
51 Bitonto, tn., Italy; olive oil, wine; p. 32,000; 41 8s 16 42e
72 Bitsk, tn., Siberia; 52 40s 85 0e
40 Bitterfeld, tn., Germ.; p. 19,384; 51 38s 12 18e
88 Bitterfontein, tn., C. of Good Hope, S. Afr.; 30 24s 19 3e
10 Bizerta, tn., spt., Tunis; fishing; p. 20,393; 37 30s 10 0e
46 Bjelovar, tn., Y.-slav.; 45 58s 16 51e
55 Bjerna, tn., Finland; 60 10s 23 0e

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54 Birrholm, tn., Sweden ; 63 55N 19 10E
123 Blackall, tn., Queens., Austral. ; 24 20S 145 32E
19 Black Down, Dorset, Eng. ; 50 44N 2 40W
19 Black Down Hills, Devon, Eng. ; 50 57N 3 10W
40 Black For., mts., Germ. ; resort ; forested ; 48 20N 8 10E
19 Black Mts., Carmarthen, Wales ; 51 52N 3 50W
57 Black Sea, Europe ; a. 150,000 sq. m., length 715 m., greatest breadth 380 m. ; between Europe and Asia communicating with Mediterranean thro' S. of Marmara ; 43 0N 35 0E
127 Blackball, tn., S.I., New Zealand ; p. 1,056 ; 42 24S 171 23E
18 Blackburn, co. bor., Lancs, Eng. ; cottons, machinery ; p. 122,695 ; 53 45N 2 29W
106 Blackfoot, tn., Idaho, U.S.A. ; 43 13N 112 20W
27 Blackford, par., Perth, Scot. ; p. 1,399 ; 56 15N 3 46W
18 Blackpool, co. bor., Lancs, Eng. ; seaside resort ; p. 101,543 ; 53 49N 3 03W
33 Blackrock, urb. dist., Dublin, I.F.S. ; p. 9,931 ; 53 8N 6 11W
17 Blackwater, R., Essex, Eng. ; 51 34N 0 52E
32 Blackwater R., I.F.S. ; 53 42N 6 45W
19 Blaenavon, urb. dist., Mon., Eng. ; coal, iron ; p. 11,075 ; 51 45N 3 04W
19 Blagdon, par., Somerset, Eng. ; p. 958 ; 51 19N 2 42W
73 Blagoveshchensk, tn., Siberia ; on R. Amur ; flour mills ; exp. cattle, wheat ; p. 61,000 ; 50 25N 127 30E
123 Blair Athol, tn., Queens., Austral. ; 22 30S 147 30E
25 Blair Atholl, par., Perth, Scot. ; tourist resort ; p. 1,537 ; 56 46N 3 50W
27 Blairgowrie and Rattray, bor., Perth, Scot. ; fruit ; linen ; p. 4,676 ; 56 36N 3 20W
26 Blairmore, Argyll, Scot. ; 56 0N 4 54W
104 Blairsville, tn., Pa., U.S.A. ; p. 5,296 ; 40 30N 79 20W
52 Blaj, tn., Rumania ; p. 4,716 ; 46 10N 24 0E
33 Blanc, Mt., France ; highest peak of Alps (15,782 ft.) ; 45 50N 6 53E
107 Blanca Pk., Col., U.S.A. ; 14,390 ft. ; 37 30N 105 30W
84 Blanco, tn., C. of Good Hope, S. Afr. ; 33 56S 22 25E
76 Blanco, C., Fr. W. Africa ; 21 0N 17 0W
106 Blanco, C., Ore., U.S.A. ; 43 0N 124 32W
19 Blandford, mun. bor., Dorset, Eng. ; p. 3,371 ; 50 52N 2 08W
49 Blanes, tn., Spain ; 41 40W 2 50E
38 Blankenberge, tn., Belgium ; seaside resort ; 51 18N 3 07E
89 Blantyre, tn., Nyasaland ; 15 46S 35 7E
27 Blantyre, par., Lanark, Scot. ; birthplace of Dr. Livingstone ; coal ; p. 17,015 ; 55 47 4 06W
32 Blarney, vil., Cork, I.F.S. ; p. 778 ; 51 56N 8 33W
121 Blayney, tn., N.S.W., Austral. ; 33 30S 149 13E
46 Bleiburg, tn., Austria ; p. 3,480 ; 46 38N 14 51E
55 Blekinge, co., Sweden ; a. 1,173 sq. m. ; p. 144,841 ; 56 20N 15 10E
96 Blenheim, tn., Ont., Canada ; p. 1,737 ; 42 22N 82 0W
40 Blenheim, vil., Bavaria, Germ. ; Marlborough's victory over French, 1704 ; 48 40N 10 40E
127 Blenheim, bor., S.I., New Zealand ; fruit ; p. 5,280 ; 41 29S 173 59E
83 Blessington, Wicklow, I.F.S. ; 53 11N 6 32W
16 Bletchley, urb. dist., Bucks, Eng. ; p. 6,169 ; 52 0N 0 45W
10 Blida, tn., Algeria ; flour, citrus fruits ; p. 39,371 ; 36 26N 2 51E
126 Blinman, tn., S. Austral. ; 31 7S 138 41E
83 Bloemfontein, tn., cap. O.F.S., S. Afr. ; cattle centre ; p. 28,503 (Eur.) ; 29 9S 26 13E
83 Bloemhof, tn., Trans., E. Afr. ; 27 40S 25 37E
34 Blois, comun., France ; on R. Loire ; château ; wines ; p. 24,667 ; 47 36N 1 19E
43 Blonie, tn., Poland ; 52 12N 29 39E
87 Blood, R., Natal, S. Afr. ; 28 0S 30 25E
102 Bloomington, tn., Ill., U.S.A. ; coal, motor-cars ; p. 30,930 ; 40 30N 89 5W
104 Bloomsburg, tn., Pa., U.S.A. ; p. 9,093 ; 41 0N 76 25W
110 Bluefields, spt., Nicaragua ; p. 5,000 ; 12 0N 83 48W
121 Blue Mts., N.S.W., Australia ; Gt. Dividing Ra. ; 33 40S 150 25E
110 Blue Mts., Jamaica, W. Indies ; 18 0N 76 30W
103 Blue Ridge, U.S.A. ; 36 0N 82 0W
127 Bluff. See Campbelltown.
113 Blumenau, tn., Brazil ; Germ. col. ; butter, sugar ; p. 40,000 ; 27 0S 49 0W
20 Blyth, mun. bor., spt., Northumb., Eng. ; exp. coal ; shipbuilding ; p. 32,670 ; 55 8N 1 30W
16 Blythburgh, par., Suffolk, Eng. ; p. 673 ; 52 20N 1 35E
83 Blythswood, tn., C. of Good Hope, S. Afr. ; 32 7S 28 0E
112 Boa Vista, tn., Brazil ; on R. S. Francisco ; 8 50S 39 50W
68 Bobbili, tn., Madras, India ; 18 33N 83 30E
57 Bobrinets, tn., Ukraine, U.S.S.R. ; 48 2N 32 2E
57 Bobruisk, tn., White Russia, U.S.S.R. ; on R. Beresina ; flour ; p. 51,296 ; 53 8N 29 13E
110 Bocas del Toro, tn., Panama ; p. 10,000 ; 9 30N 82 22W
43 Bochnia, tn., Poland ; 49 59N 20 38E
40 Bocholt, tn., Germ. ; machinery, woollens ; p. 30,268 ; 51 52N 6 37E
40 Bochum, tn., Germ. ; coal, iron and steel ; p. 314,546 ; 51 28N 7 17E
121 Bodalla, tn., N.S.W., Austral. ; 36 7S 150 1E
25 Boddam, par., Aberdeen, Scot. ; p. 1,367 ; 57 27N 1 47W
54 Boden, tn., Sweden ; p. 6,517 ; 65 50N 22 0E
44 Boden See. See Constanz L.
85 Bodiam, tn., C. of Good Hope, S. Afr. ; 33 40S 27 30E
68 Bodinayakkunur, tn., Madras, India ; p. 20,341 ; 10 1N 77 20E
19 Bodmin, mun. bor., Cornwall, Eng. ; boots ; p. 5,526 ; 50 29N 4 43W
19 Bodmin Moor, Cornwall, Eng. ; 50 30N 4 40W
54 Bodö, tn., spt., Norway ; fishing ; 67 15N 14 25E
88 Bona, tn., Fr. W. Africa ; 10 10N 14 6W
83 Bogenfels, tn., S.W. Afr. ; diamonds ; 27 20S 15 20E
39 Bogense, tn., Denmark ; 55 34N 10 7E
121 Boggabri, tn., N.S.W., Austral. ; 30 39S 150 0E
17 Bognor Regis, urb. dist., Sussex, Eng. ; seaside resort ; p. 13,510 ; 50 47N 0 40W
121 Bogong, Mt., Vic., Austral. ; 36 48S 147 30E
56 Bogostovsk, tn., Russia ; 59 42N 60 0E

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112 Bogota, tn., cap., Colombia ; cath., univ., mus. ; soap, cloth, cordage ; p. 235,000 ; 4 30N 74 30W
46 Bohemia, prov., Czechoslovakia ; a. 20,102 sq. m. ; plateau girdled by mountains, drained by R. Elbe ; agriculture—wheat, rye, hops, flax, sugar-beet ; minerals—lignite, graphite ; mnfs.—textiles, sugar, pottery, glass, machinery, boots ; cap. Prague ; p. 7,106,766 ; 50 0N 14 0E
46 Bohemian Forest, mts. between Bohemia and Bavaria ; forested ; 49 20N 13 5E
81 Bohodle, tn., Brit. Somaliland ; 8 10N 46 30E
71 Bohol, I., Phil. Is. ; a. 1,534 sq. m. ; p. 460,800 ; 10 0N 124 30E
106 Boisé, tn., Idaho, U.S.A. ; silver ; p. 21,544 ; 43 43N 116 13W
99 Boissevain, tn., Man., Canada ; 49 3N 100 2W
76 Bojador, C., Rio de Oro, Afr. ; 26 0N 14 30W
88 Boke, tn., Fr. W. Africa ; 10 55N 14 13W
61 Bokhara, tn., Uzbek, U.S.S.R. ; cottons, silks ; p. 75,000 ; 39 45N 64 35E
83 Boksburg, tn., Trans., S. Afr. ; gold, coal ; p. 13,977 (Eur.) ; 26 12S 28 15E
66 Bolan P., Baluchistan, India ; 30 0N 67 30E
108 Bolanos, tn., Mex. ; 22 9N 104 13W
52 Bolgrad, tn., Rumania ; p. 12,821 ; 45 42N 28 39E
113 Bolivar, tn., Argentina ; 36 0S 61 15W
113 Bolivia, rep., S. America ; a. 514,400 sq. m. ; plateau, mountains, Bolivian Andes (Illampu, Sorata, 21,700 ft.), volcanoes ; L. Titicaca, Poopo, 13,000 ft. ; drained by tribs. of Amazon ; monkeys, jaguar ; condors, humming birds ; forests, savannahs ; agriculture, maize, wheat, cocoa, fruits, rubber ; pastoral, sheep, cattle, alpaca, llama, vicuna ; minerals, silver, tin, copper, zinc, lead ; cap. and commercial centre La Paz ; nominal cap. Sucre ; p. 3,077,333 ; 17 0S 64 0W
57 Bolkhov, tn., Russia ; 53 28N 35 28E
18 Bollington, urb. dist., Cheshire, Eng. ; silks ; p. 5,027 ; 53 18N 2 07W
55 Bollnäs, tn., Sweden ; 61 20N 16 40E
80 Bolobo, tn., Belg. Congo ; on R. Ubangi ; 2 10S 16 18E
50 Bologna, tn., Italy ; cath., univ. ; riy. jn. ; sugar, macaroni ; p. 245,647 ; 44 29N 11 21E
59 Bolsheryetsk, tn., U.S.S.R. ; 53 0N 156 20E
108 Bolson de Mapimi, dist., Mex. ; 27 15N 104 15W
16 Bolsover, urb. dist., Derby, Eng. ; limestone, coal ; p. 11,811 ; 53 13N 1 17W
38 Bolsward, tn., Neth. ; 53 4N 5 32E
19 Bolt Hd., Devon, Eng. ; 50 13N 3 47W
18 Bolton, co. bor., Lancs, Eng. ; cotton, iron, coal, chemicals ; p. 177,263 ; 53 35N 2 28W
21 Bolton Abbey, W. Riding, Eng. ; grouse moors ; 53 59N 1 54W
62 Boly, tn., Turkey ; 41 41N 41 32E
50 Bolzano, tn., Italy ; resort ; p. 40,590 ; 46 31N 11 21E
80 Boma, tn., Belg. Congo ; formerly cap. ; on R. Congo ; 5 48S 13 0E
121 Bombala, tn., N.S.W., Austral. ; 36 58S 149 12E
66 Bombay, pres., India ; a. 77,221 sq. m. ; chief physical features—W. Ghats, Satpura Ra. ; rivers—Indus, Narbada, Tapti ; agriculture—cotton, wheat, rice, millet ; industries—cottons, carpets, silks, brass ; hydro-electric power from W. Ghats ; cap. Bombay ; p. 17,992,053 ; 22 0N 72 15E
66 Bombay, spt., cap. of pres., Bombay, India ; harbour, docks, riy. centre ; mnfs.—cotton, metals, dyeing, tanning ; p. 1,157,851 ; 18 0N 72 55E
115 Bomfim, tn., Brazil ; 10 20S 49 0W
10 Bon, C., Tunis ; 37 5N 11 2E
10 Bona, tn., spt., Algeria ; exp.—phosphates, sheep, esparto ; p. 68,778 ; 37 0N 7 50E
25 Bonar Bridge, vil., Sutherland, Scot. ; p. 331 ; 57 53N 4 20W
93 Bonavista, tn., Newfoundland ; p. 4,052 ; 48 40N 53 30W
93 Bonavista B., Newfoundland ; 48 40N 53 30W
26 Bonawe, Argyll, Scot. ; 56 27N 5 12W
27 Bo'ness, bor., spt., W. Lothian, Scot. ; shipping ; iron, bricks ; p. 10,095 ; 56 1N 3 36W
80 Bondo, tn., Belgian Congo ; 4 0N 23 55E
81 Bonga, tn., Abyssinia ; 7 20N 36 50E
89 Bonga, tn., Mozambique ; on R. Zambezi ; 16 30S 33 40E
26 Bonhill, par., Dumbarton, Scot. ; dyeing ; p. 15,565 ; 55 59N 4 33W
35 Bonifacio, spt., Corsica, Fr. ; oliveoil ; 41 22N 9 11E
51 Bonifacio, Str. of, Italy ; 41 18N 9 10E
116 Bonin Is., Pac. Oc., Jap. ; 27 40N 142 10E
11 Bonjem, tn., Libya ; 30 30N 15 50E
40 Bonn, tn., Germany ; on R. Rhine ; univ. ; stoneware ; p. 98,659 ; 50 43N 7 04E
88 Bonny, R., Nigeria ; 4 30N 7 22E
88 Bonny Town, spt., Nigeria ; palm-oil ; 4 30N 7 23E
27 Bonnyrigg and Lasswade, bor., Midlothian, Scot. ; paper, coal ; p. 4,483 ; 55 52N 3 06W
71 Bonthain, tn., Celebes, D.E.I. ; 5 30S 120 0E
120 Booleroo, tn., S. Austral. ; 32 13S 138 17E
121 Booligal, tn., N.S.W., Austral. ; 33 50S 144 55E
38 Boom, tn., Belgium ; bricks, tanning ; p. 19,288 ; 51 7N 4 20E
87 Boomplaats, tn., O.F.S., S. Afr. ; 29 45S 25 30E
121 Boonah, tn., Queens., Austral. ; 28 0S 152 40E
102 Boone, tn., Iowa, U.S.A. ; coal ; p. 11,886 ; 42 2N 93 58W
104 Boonesboro', tn., Md., U.S.A. ; 39 30N 77 40W
125 Boorabbin, tn., W. Austral. ; 31 15S 120 28E
121 Boorowa, tn., N.S.W., Austral. ; 34 35S 148 43E
99 Boothia, G., Canada ; 70 30N 90 0W
18 Bootle, co. bor., Lancs, Eng. ; continuous with Liverpool ; docks ; iron founding, jute mills ; p. 76,799 ; 53 27N 2 59W
20 Bootle, par., Cumb., Eng. ; p. 806 ; 54 17N 3 22W
81 Bor, tn., Anglo-Eg. Sudan ; 6 12N 31 32E
55 Borås, tn., Sweden ; textiles ; p. 38,236 ; 57 45N 13 30E
35 Bordeaux, tn., spt., France ; on R. Garonne ; univ., cath. ; wines, fruit, grain ; chemicals ; p. 262,990 ; 44 51N 0 37W
41 Border Prov., Germ. ; a. 2,978 sq. m. ; p. 332,483 ; 52 20N 17 0E
120 Border Town, S. Austral. ; 36 17S 140 45E

MAP

50 Bordighera, tn., Italy ; Riviera winter resort ; 43 49N 7 40E
17 Bordon, Hants, Eng. ; military camp ; 51 8N 0 51W
55 Borgholm, tn., Sweden ; 56 50N 16 50E
50 Borgo S. Lorenzo, tn., Italy ; 43 59N 11 29E
88 Borgu, dist., Fr. W. Africa ; 18 15N 18 30E
27 Borgue, par., Kirk., Scot. ; p. 990 ; 54 49N 4 08W
57 Borisoglyebsk, tn., Russia ; p. 22,800 ; 51 26N 42 0E
57 Borisov, tn., White Russia, U.S.S.R. ; p. 15,250 ; 54 12N 28 28E
76 Borku, dist., Fr. Eq. Africa ; 18 30N 19 0E
38 Borkulo, tn., Neth. ; 52 7N 6 32E
55 Borlänge, tn., Sweden ; 62 25N 15 20E
50 Bormio, tn., Italy ; 46 28N 10 22E
70 Borneo, largest island, Malay Arch. ; a. 285,000 sq. m., length 830 m., breadth 600 m. ; Kinabalu Ra. 13,700 ft. ; forests, jungle, swamps ; rice, sago, spices, coconuts ; rubber, hardwoods ; politically divided into Dutch Borneo (cap. Banjermassin), Sarawak, Br. N. Borneo ; p. 2,165,015 ; 1 00N 115 0E
39 Bornholm, I., Denmark ; a. 210 sq. m. ; agriculture, fishing ; cap. Ronne ; p. 44,000 ; 55 5N 15 0E
88 Bornu, tr. dist., Nigeria ; a. 57,000 sq. m. ; 12 0N 12 0E
88 Boromo, tn., Fr. W. Africa ; 11 42N 2 56W
21 Boroughbridge, par., W. Riding, Eng. ; p. 807 ; 54 6N 1 24W
52 Borovan, tn., Bulgaria ; 43 27N 23 48E
56 Borovichi, tn., Russia ; 58 27N 33 47E
119 Borraloola, N. Terr., Austral. ; sheep ; 16 10S 136 15E
18 Borth, vil., Cardigan, Wales ; 52 29N 4 03W
27 Borthwick, par., Midlothian, Scot. ; p. 3,169 ; 55 49N 3 00W
51 Bosa, tn., Sardinia, Italy ; 40 19N 8 29E
19 Boscastle, spt., Cornwall, Eng. ; resort ; pilchard fishing ; 50 42N 4 40W
83 Boshof, tn., O.F.S., S. Afr. ; 28 30S 25 12E
47 Bosnia, prov. Yugoslavia ; a. 19,768 sq. m. (including Herzegovina) ; mountainous, forested, fertile valleys ; agriculture, tobacco, cereals, fruit ; cattle, sheep, pigs ; cap. Sarajevo ; p. 1,889,929 ; 44 0N 17 0E
53 Bosporus, str., Europe, joins S. of Marmara to Black S. ; 18 m. long ; 41 5N 29 5E
88 Bosso, tn., Nigeria ; 13 30N 13 0E
63 Bostam, tn., Persia ; 36 37N 55 3E
16 Boston, mun. bor., Holl., Eng. ; sailcloth ; p. 22,249 ; 52 59N 0 01W
102 Boston, cy., spt., cap. Mass., U.S.A. ; univ., mus. ; fine harb., 2nd Atlantic port ; industries—printing, textiles, boots ; riy. centre ; p. 781,188 ; 42 20N 71 5W
121 Botany B., N.S.W., Austral. ; resort ; 1st Brit. Sett. 1787 ; 34 0S 151 12E
16 Botesdale, par., Suffolk, Eng. ; p. 385 ; 52 20N 1 01E
83 Bothaville, tn., O.F.S., S. Afr. ; 27 22S 26 40E
54 Bothnia, G., Scandinavia, N. arm Baltic S. ; 63 23N 20 40E
121 Bothwell, vil., Tas., Austral. ; 42 15S 147 1E
27 Bothwell, par., Lanark, Scot. ; coal, iron ; p. 60,660 ; 55 48N 4 04W
17 Botley, par., Hants, Eng. ; p. 1,166 ; 50 55N 1 17W
52 Botosani, tn., Rumania ; flour ; p. 32,107 ; 47 45N 26 39E
35 Bouches-du Rhône, Dept., France ; a. 2,025 sq. m. ; cereals, olives, vines ; pottery, silk ; cap. Marseilles ; p. 1,101,679 ; 43 34N 5 13E
45 Boudry, tn., Switz. ; 46 57N 6 51E
80 Boue, tn., Fr. Eq. Africa ; 0 05S 11 55E
10 Bougie, tn., spt., Algeria ; exp.—wool, hides ; p. 25,261 ; 36 45N 5 00E
38 Bouillon, tn., Belgium ; 49 47N 5 03E
107 Boulder, tn., Col., U.S.A. ; gold, silver ; p. 11,223 ; 40 2N 105 22W
125 Boulder, tn., W. Austral. ; gold ; p. 5,705 ; 31 47S 121 30E
34 Boulogne-sur-Mer, spt., France ; resort, fishing ; iron and steel, cement, chocolate ; p. 51,854 ; 50 43N 1 36E
116 Bounty Is., S. Pac. Oc., New Zealand ; 47 40S 178 40E
35 Bourbonnais, old prov., France ; 46 26N 3 00E
35 Bourg, tn., France ; copper goods, pottery ; p. 23,117 ; 46 14N 5 15E
34 Bourges, tn., France ; cath. ; brewing, cutlery ; p. 45,067 ; 47 5N 2 21E
121 Bourke, tn., N.S.W., Austral. ; 30 5S 145 55E
16 Bourn, urb. dist., Kest., Eng. ; p. 4,889 ; 52 47N 0 23W
17 Bournemouth, co. bor., Hants, Eng. ; seaside resort ; p. 116,780 ; 50 44N 1 52W
128 Bouvet I., Southern Ocn. ; Nor. ; whaling ; 54 0S 4 00W
19 Bovey Tracey, par., Devon, Eng. ; p. 2,783 ; 50 36N 3 40W
51 Bovino, tn., Italy ; 41 12N 15 20E
98 Bow R., Alta, Canada ; 51 0N 114 0W
125 Bowelling, tn., W. Austral. ; 33 30S 116 40E
123 Bowen, tn., Queens., Austral. ; 20 0S 148 16E
26 Bower, par., Caithness, Scot. ; p. 1,059 ; 58 30N 3 22W
20 Bowes, N. Riding, Eng. ; p. 653 ; 54 32N 2 01W
83 Bowesdorp, tn., C. of Good Hope, S. Afr. ; 30 7S 17 55E
21 Bowland For., hills, Lancs, W. Riding, Eng. ; 53 59N 2 30W
103 Bowling Green, tn., Ky., U.S.A. ; petroleum ; p. 12,348 ; 37 0N 86 30W
122 Bowling Green, C., Queens., Austral. ; 19 15S 147 53E
96 Bowmanville, tn., Ont., Canada ; p. 4,080 ; 43 55N 78 42W
26 Bowmore, spt., Argyll, Scot. ; 55 45N 6 16W
20 Bowness, par., Cumb., Eng. ; p. 1,107 ; 54 57N 3 12W
20 Bowness, par., Westmor., Eng. ; on L. Windermere ; tourist centre ; p. 1,107 ; 54 23N 2 55W
121 Bowral, tn., N.S.W., Austral. ; 34 29S 150 22E
121 Bowraville, tn., N.S.W., Austral. ; 30 41S 152 51E
30 Boyle, par., Roscommon, I.F.S. ; dairying ; p. 5,655 ; 53 59N 8 19W
31 Boyne, R., Meath, I.F.S. ; battle 1690 ; 53 43N 6 16W
125 Boyup, tn., W. Austral. ; 33 42N 116 31E
50 Bozen. See Bolzano.
50 Bra, tn., Italy ; p. 15,990 ; 44 42N 7 51E
38 Brabant, prov., Belgium ; a. 1,268 sq. m. ; former duchy ; mnfs.—linen, cloth, paper, lace ; cap. Brussels ; p. 1,080,065 ; 50 40N 4 30E

MAP

38 **Brabant, North.**, prov., Neth.; a. 1,921 sq. m.; farming and cattle rearing; p. 897,810; 61 35n 5 00e
24 **Bracadale**, vil., Skye, Scot.; p. 740; 57 22n 6 23w
96 **Bracebridge**, tn., Ont., Canada; p. 2,436; 45 3n 79 20w
16 **Bracebridge**, par., Kest., Eng.; p. 1,848; 52 14n 0 39w
54 **Bricks**, tn., Sweden; 62 45n 16 30e
16 **Brackley**, mun. bor., Northants, Eng.; p. 2,181; 52 2n 1 09w
27 **Braco**, vil., Perth., Scot.; 56 16n 3 53w
104 **Braddock**, tn., Pa., U.S.A.; iron and steel; p. 19,329; 40 24n 79 52w
21 **Bradford**, co. bor., W. Riding, Eng.; worsted, woollens, silk, coal, iron, engineering; p. 298,041; 53 48n 1 45w
102 **Bradford**, tn., Pa., U.S.A.; oil; p. 19,306; 41 56n 78 42w
19 **Bradford-on-Avon**, urb. dist., Wilts, Eng.; woollens; p. 4,735; 51 21n 2 13w
17 **Bradwell**, par., Essex, Eng.; p. 257; 51 44n 0 55e
23 **Braemar Dist.**, Aberdeen, Scot.; 57 0n 3 20w
23 **Braemar**, par., Aberdeen, Scot.; on R. Dee; tourist resort; p. 1,029; 57 1n 3 24w
24 **Braemore**, vil., Ross and Crom., Scot.; 57 46n 5 01w
48 **Braga**, tn., Portugal; cath.; steel goods; p. 21,970; 41 33n 8 30w
114 **Bragado**, tn., Argentina; 35 20s 60 20w
115 **Bragança**, tn., Brazil; p. 10,230; 0 55s 47 10w
48 **Bragança**, tn., Portugal; silk; 41 50n 6 50w
69 **Brahmaputra**, R., India; known as Tsangpo in Tibet; length 1,800 m.; 26 40n 93 30e
18 **Braich-y-Pwll**, C., Caernarvon, Wales; 52 47n 4 45w
121 **Braidwood**, tn., N.S.W., Austral.; 35 29s 149 48e
52 **Braila**, tn., Rumania; on R. Danube; exp. wheat; p. 68,310; 45 19n 27 59e
102 **Brainerd**, tn., Minn., U.S.A.; p. 10,221; 46 20n 94 15w
17 **Braintree**, urb. dist., Essex, Eng.; p. 8,912; 51 53n 0 33e
96 **Brampton**, tn., Ont., Canada; dairying; p. 5,532; 43 41n 79 47w
20 **Brampton**, par., Cumb., Eng.; tweeds; p. 2,590; 54 57n 2 43w
16 **Brancaster**, par., Norfolk, Eng.; p. 974; 52 58n 0 39e
112 **Branco**, R., Brazil; 1 00s 61 0w
39 **Brande**, tn., Denmark; 55 58n 9 08e
41 **Brandenburg**, prov., Prussia; a. 15,071 sq. m.; farming, flax, barley; coal; cap. Berlin; p. 2,592,430; 52 30n 13 40e
40 **Brandenburg**, tn., Germ.; cloth, paper, leather; p. 64,190; 52 24n 12 34e
83 **Brandfort**, tn., O.F.S., S. Afr.; 28 35s 26 30e
99 **Brandon**, tn., Man., Canada; machinery; p. 17,082; 49 50n 99 58w
16 **Brandon**, par., Suffolk, Eng.; p. 2,462; 52 26n 0 38e
32 **Brandon B.**, Kerry, I.F.S.; 52 17n 10 5w
83 **Brandsvlei**, tn., C. of Good Hope, S. Afr.; 30 30s 20 30e
96 **Brantford**, tn., Ont., Canada; farm implements, cycles; p. 30,107; 43 11n 80 20w
52 **Brasso**, tn., Rumania; cloth, leather; p. 56,234; 45 40n 25 39e
52 **Brasov**. See Brasso.
48 **Bratislava**, cy., Cz.-slov.; formerly Pressburg, on R. Danube; 2 palaces, univ.; rly. centre; beer, tobacco, cabinet-making; p. 123,852; 48 10n 17 6e
41 **Braunsberg**, tn., spt., Germ.; brewing; p. 13,893; 54 22n 19 50e
85 **Braunschweig**, tn., S. Afr.; 32 48s 27 20e
81 **Brava**, spt., It. Somaliland; 1 00n 44 0e
33 **Bray**, urb. dist., Wicklow, I.F.S.; p. 8,639; 53 13n 6 06w
112 **Brazil**, rep., S. America; a. 3,291,000 sq. m., length 2,000 m., greatest breadth 2,690 m.; in S. plateau bounded on E. by mountains, in N. valley of R. Amazon; enormous forests with rich flora and fauna; chief river, Amazon and tribs.—São Francisco, Parana, Paraguay; agriculture, coffee, maize, sugar-cane, cotton, rubber, fruits; hardwoods; cattle raising; minerals—manganese, iron, gold, diamonds; mnfs.—textiles, brewing; administered through 20 states, fed. dist., and Acre Terr.; cap. Rio de Janeiro; p. 45,332,660; 0 00 to 30 0s 35 0 to 75 0w
107 **Brazos**, R., Tex., U.S.A.; length 950 m.; 30 30n 96 15w
80 **Brazzaville**, tn., cap. Fr. Eq. Africa; on Stanley Pool, R. Congo; 4 18s 15 16e
47 **Brčka**, tn., Y.-slav.; 44 53n 18 47e
27 **Breadalbane**, Perth., Scot.; mountainous dist.; Ben Lawers; 56 30n 4 00w
127 **Breaksea Sd.**, New Zealand; 45 35s 166 42e
Brechin, bor., Angus, Scot.; sailcloth, linen, distilling; p. 6,838; 56 44n 2 40w
18 **Brecknock**, co., Wales; a. 744 sq. m., mountainous; rivers—Wye, Usk; cereals, dairy produce; timber; coal, iron; p. 57,771; 52 0n 3 30w
19 **Brecknock Beacons**, Wales; mts., 2,910 ft.; 51 54n 3 25w
18 **Brecon**, mun. bor., co. tn., Brec., Wales; lime, worsted; p. 5,332; 51 57n 3 23w
38 **Breda**, tn., Neth.; linen, carpets, soap, brewing; p. 44,868; 51 36n 4 47e
83 **Bredasdorp**, tn., C. of Good Hope, S. Afr.; 34 32s 20 0e
46 **Bregenz**, tn., Austria; on L. Constanz; resort; p. 7,700; 47 30n 9 45e
40 **Bremen**, St., Germ.; a. 99 sq. m.; cattle rearing, market gardening; p. 338,846; 53 6n 8 46e
40 **Bremen**, tn., spt., Germ.; on R. Weser; cath.; woollens, cottons, iron, brewing; p. 323,331; 53 6n 8 46e
39 **Bremerhaven**, tn., spt., Germ.; harb. docks; p. 25,896; 53 32n 8 32e. Also known as Wesermunde.
83 **Bremersdorp**, tn., Swaziland, S. Afr.; 26 33s 31 29e
19 **Brendon Hs.**, Somerset, Eng.; 51 6n 3 28w
50 **Brenner Pass**, Italy 4,500 ft.; 47 0n 11 20e

MAP

17 **Brentford and Chiswick**, mun. bor., co. tn., Middx., Eng.; brewing, soap, coal gas; p. 61,617; 51 29n 0 19w
17 **Brentwood**, urb. dist., Essex, Eng.; farming, brewing; p. 7,209; 51 37n 0 18e
50 **Brescia**, tn., Italy; cath., palace; silks, woollens, iron and steel; p. 118,881; 45 36n 10 12e
41 **Breslau**, tn., Germ.; on R. Oder; cath., univ.; machinery, rly. works, musical instruments, glass; p. 625,198; 51 8n 17 0e
52 **Bresnik**, tn., Bulgaria; 42 45n 22 54e
34 **Bressuire**, tn., France; 46 50n 0 30w
34 **Brest**, tn., spt., France; naval sta., arsenal; fishing, ropes, soap; p. 69,481; 48 26n 4 30w
43 **Brest Litovsk**, tn., Poland; 52 7n 23 44e
95 **Breton, C.**, N.S., Canada; 45 57n 59 51w
112 **Breves**, tn., Brazil; p. 12,330; 2 00s 1 50w
35 **Brevik**, tn., port, Norway; 59 10n 9 40e
121 **Brewarrina**, tn., N.S.W., Austral.; 29 58s 146 54e
20 **Bride**, par., I. of Man, Eng.; p. 501; 54 24n 4 25w
19 **Bridgend**, urb. dist., Glamorgan, Wales; iron, coal, stone; p. 10,033; 51 30n 3 34w
27 **Bridge of Allan**, bor., Stirling, Scot.; mineral springs; p. 2,897; 56 9n 3 57w
27 **Bridge of Dee**, vil., Kirk., Scot.; 54 55n 3 59w
27 **Bridge of Earn**, vil., Perth, Scot.; 56 21n 3 23w
26 **Bridge of Orchy**, vil., Argyll, Scot.; 56 32n 4 46w
102 **Bridgeport**, tn., Conn., U.S.A.; sewing machines, hardware, machinery; p. 146,716; 41 14n 73 20w
104 **Bridgeton**, tn., N.J., U.S.A.; iron; p. 15,699; 39 22n 75 8w
125 **Bridgetown**, tn., W. Austral.; 33 58s 116 7e
111 **Bridgetown**, tn., cap. of Barbados, W. Indies; p. 13,500; 13 0n 60 0w
95 **Bridgewater**, tn., spt., N.S., Canada; salmon; p. 3,262; 44 25n 64 35w
Bridgewater, tn., Mass., U.S.A.; p. 9,055; 42 0n 71 0e
18 **Bridgnorth**, mun. bor., Salop, Eng.; worsted, carpets; p. 5,151; 52 32n 2 25w
19 **Bridgwater**, mun. bor., Somerset, Eng.; brewing, bricks; p. 17,139; 51 7n 3 00w
19 **Bridgwater B.**, Somerset, Eng.; 51 15n 3 05w
20 **Bridlington**, mun. bor., E. Riding, Eng.; watering pl.; p. 19,704; 54 5n 0 12w
21 **Bridlington Bay**, E. Riding, Eng.; 54 5n 0 12w
21 **Bridlington Quay**, E. Riding, Eng.; 54 5n 0 12w
19 **Bridport**, mun. bor., Dorset, Eng.; sailcloth, hemp goods; p. 5,917; 50 44n 2 45w
41 **Brieg**, tn., Germ.; on R. Oder; textiles; p. 27,344; 50 54n 17 26e
38 **Brielle**, tn., Neth.; 51 55n 4 10e
34 **Brienne**, tn., France; 48 24n 4 32e
45 **Brienz**, Switz.; resort; wood-carving; 46 46n 8 01e
34 **Briey**, tn., France; iron; 49 17n 5 56e
16 **Brigg**, urb. dist., Lincs., Eng.; p. 4,019; 53 34n 0 29w
106 **Brigham**, tn., Utah, U.S.A.; farming; p. 5,093; 41 29n 112 0w
17 **Brightlingsea**, urb. dist., Essex, Eng.; on R. Colne; oysters; p. 4,145; 51 49n 1 02e
121 **Brighton**, tn., Vic., Austral.; 37 55s 145 0e
96 **Brighton**, tn., Ont., Canada; p. 1,580; 44 3n 77 49w
17 **Brighton**, co. bor., Sussex, Eng.; resort; p. 147,427; 50 49n 0 09w
49 **Brihuega**, tn., Spain; 40 44n 2 52w
17 **Brill**, par., Bucks, Eng.; p. 1,019; 51 49n 1 03w
51 **Brindisi**, tn., spt., Italy; cath., cas.; exp.—wine, olive-oil, silk; p. 38,985; 40 39n 17 54e
120 **Brinkworth**, tn., S. Austral.; 33 39s 138 27e
35 **Brioude**, tn., France; 45 16n 3 23e
121 **Brisbane**, tn., port, cap. Queens., Austral.; on R. Brisbane; univ.; docks; meats, wool, hides and skins; p. 313,251; 27 30s 152 54e
19 **Bristol**, co. bor., spt., Glouc, Eng.; on R. Avon; cath., univ.; docks; chocolate, glass, tobacco; p. 402,042; 51 27n 2 33w
105 **Bristol**, tn., Pa., U.S.A.; cottons, woollens; p. 11,799; 40 6n 74 56w
105 **Bristol**, tn., port, R.I., U.S.A.; p. 12,000; 41 38n 71 18w
103 **Bristol**, cy., Va., U.S.A.; dairy produce, tobacco; p. 20,849; 36 35n 82 17w
19 **Bristol Chan.**, England; noted tidal bores; 51 20n 3 30w
83 **British Bechuanaland**, dist., C. of Good Hope, S. Afr.; 27 0n 23 0e
98 **British Columbia**, prov., Canada; a. 366,255 sq. m.; mountainous, largely forested; principal rivers—Columbia, Fraser, Kootenay, Peace; farming, dairying and livestock, fruit growing, canning, lumbering; minerals—coal, copper, gold, lead, silver; cap. Victoria; p. 694,263; 50 0 to 60 0n 115 0 to 135 0w
81 **British East Africa**. See Kenya.
4 **British Empire**, largest in world; a. 13,355,426 sq. m.; See under specific countries—England, Canada, Australia, India, etc.; p. 495,764,000
112 **British Guiana**, cr. col., S. America; a. 89,480 sq. m.; flat, swampy coast, interior highlands; tropical forests; agriculture, sugar, rice, coffee; cattle; hardwoods; minerals—bauxite, diamonds, gold; cap. Georgetown; p. 310,933; 4 00n 59 0w
110 **British Honduras**, cr. col., Cent. America; a. 8,598 sq. m.; mahogany, logwood; bananas; cap. Belize; p. 51,347; 17 0n 88 45w
12 **British Isles**, arch., N.W. Europe, comprising 2 large islands—Great Britain, Ireland—and 5,000 small islands; see England, Scotland, Irish Free State, Northern Ireland, Wales; a. 121,633 sq. m.; p. 49,000,000
122 **British New Guinea**. See Papua.
70 **British N. Borneo**, col. Borneo; a. 31,106 sq. m.; hardwoods, rubber; spices, sago, rattans; cap. Sandakan; p. 270,223; 5 00n 118 0e
81 **British Somaliland**, prot., N.E. Afr.; a. 68,000 sq. m.; hides, ostrich feathers; cap. Berbera; p. 344,700; 9 30n 46 30e
19 **Briton Ferry**, tn., Glamorgan, Wales; coal, blast furnaces; p. 9,176; 51 57n 3 49w
83 **Britstown**, C. of Good Hope, S. Afr.; 30 35s 25 31e
34 **Brittany**, prov., France; a. 13,643 sq. m.; farming, fishing; p. 3,000,000 48 0n 2 40w

MAP

35 **Brive**, tn., France; vegetables, wines; p. 26,713; 45 10n 1 32e
48 **Brivieseca**, tn., Spain; 42 33n 3 20w
50 **Brixen**, tn., Italy; resort; 46 45n 11 40e
19 **Brixham**, urb. dist., Devon, Eng.; fishing; p. 8,147; 50 24n 3 30w
46 **Brno**, tn. and cap. Moravia, Cz.-slov.; woollens, metal goods, brewing; p. 263,546; 49 11n 16 38e
66 **Broach**, tn., India; cottons; p. 42,648; 21 45n 73 3e
16 **Broads, The**, Norfolk, Eng.; yachting, fishing and fowling centre; 52 30n 1 10e
17 **Broadstairs**, urb. dist., Kent, Eng.; resort; p. 12,748; 51 21n 1 26e
18 **Broadway**, par., Worcs, Eng.; p. 1,860; 51 5n 1 57w
105 **Brockton**, cy., Mass., U.S.A.; shoes, machinery; p. 63,797; 42 5n 71 2w
97 **Brockville**, tn., Ont., Canada; on R. St. Lawrence; farm implements; p. 9,736; 44 37n 75 46w
47 **Brod**, tn., port, Y.-slav.; on R. Sava; p. 10,600; 45 8n 18 0e
26 **Brodick**, par., Bute, Scot.; p. 1,760; 55 35n 5 08w
43 **Brody**, tn., Poland; p. 17,750; 50 5n 25 7e
121 **Broken B.**, N.S.W., Austral.; 33 35s 151 12e
120 **Broken Hill**, tn., N.S.W., Austral.; silver, lead, zinc; p. 22,990; 31 58s 141 29e
89 **Broken Hill**, tn., N. Rhodesia; zinc, copper; 14 19s 28 40e
43 **Bromberg**. See Bydgoszcz.
17 **Bromley**, mun. bor., Kent, Eng.; p. 45,348; 51 25n 0 01e
18 **Bromsgrove**, urb. dist., Worcs, Eng.; nails; p. 9,520; 52 20n 2 04w
18 **Bromyard**, urb. dist., Hereford, Eng.; p. 1,571; 52 11n 2 29w
102 **Brookfield**, tn., Mo., U.S.A.; p. 6,428; 39 50n 93 6w
102 **Brookings**, tn., S. Dak., U.S.A.; 44 20n 91 15w
102 **Brooklyn**, bor., N.Y., U.S.A.; incorporated in New York; trading and manuf. centre; p. 2,560,401; 40 45n 74 5w
125 **Brookton**, tn., W. Austral.; 33 0s 117 0e
124 **Broome**, tn., spt., W. Austral.; pearl fishing; 18 0s 122 15e
25 **Brora**, vil., Sutherland, Scot.; 58 0n 3 50w
20 **Brough**, par., Westmorland, Eng.; p. 628; 54 32n 2 20w
31 **Broughshane**, vil., Antrim, N. Ire.; p. 560; 54 54n 6 12w
20 **Broughton**, par. Lancs, Eng.; p. 794; 54 17n 3 12w
27 **Broughton**, par., Peebles, Scot.; p. 632; 55 37n 3 25w
27 **Broughty Ferry**, Angus, Scot.; 56 29n 2 52w
106 **Brownsville**, tn., Tex., U.S.A.; livestock, sugar-cane; p. 22,021; 25, 58n 97 30w
19 **Brownwilly Mt.**, Cornwall, Eng.; 1,375 ft.; 50 30n 4 40w
107 **Brownwood**, tn., Tex., U.S.A.; p. 12,789; 31 42n 98 47w
125 **Bruce Rock**, tn., W. Austral.; 31 50s 118 20e
37 **Bruchsal**, tn., Germ.; tobacco, paper, machinery; p. 16,469; 49 8n 8 35e
32 **Bruff**, tn., Limerick, I.F.S.; p. 649; 52 29n 8 34w
38 **Bruges**, tn., Belgium; mediæval cy., famous belfry lace; p. 51,191; 51 13n 3 12e
45 **Brugg**, tn., Switz.; 47 29n 8 11e
70 **Bruit**, tn., Borneo; 2 50n 111 20e
16 **Brundall**, par., Norfolk, Eng.; p. 633; 52 37n 1 26e
70 **Brunei**, Br. prot., Borneo; a. 2,500 sq. m.; cutch, rubber, sago; p. 25,444; 4 55n 114 55e
45 **Brunig P.**, Switz.; 46 47n 8 10e
46 **Brünn**. See Brno.
127 **Brunner**, bor., S.I., New Zealand; p. 680; 42 29s 171 21e
40 **Brunswick**, tn., cap. of St., Germany; mediæval bldgs.; printing, jute, chemicals, machinery, sugar; p. 166,817; 52 15n 10 30e
40 **Brunswick, St.**, Germany; a. 1,418 sq. m.; Harz Mts.; forests; coal, iron, sugar; p. 501,875; 51 53n 9 58e
103 **Brunswick**, tn., Ga., U.S.A.; p. 14,022; 31 13n 81 30w
83 **Brusa**. See Bursa.
38 **Brussels**, cy., cap. Belgium; tn. hall, pal., parliament houses, univ., mus.; mnfs.—lace, carpets, silk, cottons; p. 839,581; 50 51n 4 21e
121 **Bruthen**, tn., Vic., Austral.; 37 45s 147 48e
43 **Bryansk**, tn., Poland; 52 48n 22 50e
57 **Bryansk**, tn., Russia; timber, flour, machinery; p. 67,000; 53 20n 34 20e
19 **Brynmawr**, urb. dist., Brec., Wales; iron, coal; p. 7,247; 51 48n 3 07w
47 **Brza Palanka**, tn., Y.-slav.; 44 26n 22 30e
88 **Buale**, tn., Gold Coast; 8 45n 2 30w
112 **Bucaramanga**, tn., Colombia; coffee, tobacco; p. 44,000; 7 20n 73 20w
27 **Buccleuch**, Selkirk, Scot.; 55 25n 3 04w
121 **Buchan**, tn., Vic., Austral.; 37 31s 148 11e
25 **Buchan Mess**, Aberdeen, Scot.; 57 28n 1 47w
52 **Bucharest**, tn. cap., Rumania; cath., pal., univ.; textiles, grain; p. 631,288; 44 25n 26 5e
27 **Buchlyvie**, par., Stirling, Scot.; p. 815; 56 6n 4 17w
40 **Bückeburg**, tn., Germany; p. 5,632; 52 17n 9 02e
27 **Buckhaven and Methil**, bor., Fife, Scot.; flax, coal; p. 17,643; 56 10n 3 02w
25 **Buckie**, bor., Banff, Scot.; fisheries; p. 8,688; 57 40n 2 58w
97 **Buckingham**, tn., Que., Canada; mining; p. 4,038; 45 35n 75 25w
16 **Buckingham**, mun. bor., Bucks, Eng.; p. 3,082; 52 1n 1 00w
17 **Buckingham**, co., England; a. 743 sq. m.; well-wooded, beeches; includes well-known Vale of Aylesbury; farming, dairy produce, ducks, sheep; mnfs. chairs, lace, paper; p. 271,365; 51 20n 0 50w
52 **Bucuresti**. See Bucharest.
43 **Buczacz**, tn., Poland; 49 5n 25 24e
46 **Budapest**, cy. and cap., Hungary; on R. Danube; parliament, univ.; milling, tanning, brewing, leather; mineral springs; p. 1,004,699; 47 29n 19 5e
67 **Budaun**, tn., U. Provs., India; sugar-cane, rice; p. 39,118; 28 1n 79 12e
19 **Bude**, Cornwall, Eng.; p. 3,836; 50 50n 4 32w
46 **Budejovice**, tn., Cz.-slov., formerly Budweis; pencils, beer, porcelain; p. 43,886; 48 59n 14 30e

MAP

67 **Budge Budge**, tn., Bengal, India; p. 25,723; 22 29n 88 20e
19 **Budleigh Salterton**, urb. dist., Devon, Eng.; watering pl.; p. 3,162; 50 38n 3 18w
50 **Budrio**, tn., Italy; 44 36n 11 33e
53 **Budrum**, tn., Turkey; 37 1n 27 30e
46 **Budweis**. See Budejovice.
112 **Buenaventura**, tn., Colombia; p. 8,000; 4 05n 77 0w
113 **Buenos Aires**, cy., cap. Argentina; on R. La Plata, fine buildings; largest cy. in S. Hemisphere; centre of trade; carpets, cloth, cigars, boots and shoes; p. 2,148,719; 34 40s 58 30w
113 **Buenos Aires**, prov., Argentina; a. 117,777 sq. m.; treeless plain; sheep and cattle; cereals and fruit, tobacco; p. 3,109,946 (est.); 36 30s 60 0w
102 **Buffalo**, cy. port., N.Y., U.S.A.; on L. Erie; iron, steel, oil refining, meat packing, brewing, shipbuilding; p. 563,076; 42 55n 78 58w
107 **Buffalo**, tn., Wyo., U.S.A.; 44 30n 106 50w
43 **Bug**, R., Poland; 52 38n 21 35e
47 **Bugojno**, tn., Yugoslavia; 44 1n 17 26e
56 **Buguima**, tn., Russia; 54 40n 52 44e
72 **Bugur**, tn., China; 41 40n 84 40e
57 **Buguruslan**, tn., Russia; p. 12,000; 53 45n 52 21e
52 **Buhushi**, tn., Rumania; p. 8,681; 46 41n 26 42e
18 **Builth**, urb. dist., Brec., Wales; mineral springs; p. 1,663; 52 9n 3 24w
63 **Bujnurd**, tn., Persia; 37 22n 57 12e
80 **Bukama**, tn., Belg. Congo; 9 10s 25 50e
57 **Bukeyev**, terr., Russia; 48 30n 48 30e
81 **Bukoba**, tn., Tanganyika Terr.; 1 10s 31 50e
52 **Bukovina**, dist., Rumania; a. 4,030 sq. m.; Carpathian Mts., forested; farming, cereals, cattle; cap. Cernauti; p. 800,098; 47 53n 25 30e
88 **Bukuru**, tn., Nigeria; tin mines; 9 46n 8 53e
45 **Bülach**, tn., Switzerland; 47 31n 8 35e
53 **Bulair**. See Gelibolu.
89 **Bulawayo**, tn., S. Rhodesia; commercial centre; gold; p. 31,000; 20 13s 28 41e
62 **Buldar**, tn., Turkey; 37 42n 30 8e
52 **Bulgaria**, king., Europe; a. 39,824 sq. m.; mountainous, Balkan Mts.; R. Danube forms N. boundary; farming, wheat, wine; cap. Sofia; p. 6,090,215; 41 10 to 44 0n 22 30 to 28 0e
45 **Bulle**, tn., Switzerland; 46 37n 7 03e
125 **Bullfinch**, tn., W. Austral.; 31 0s 119 15e
121 **Bulli**, tn., N.S.W., Austral.; 34 20s 150 55e
126 **Bulls**, bor., N.I., New Zealand; p. 540; 40 9s 175 21e
85 **Bultfontein**, tn., C. of Good Hope, S. Afr.; diamonds; 28 48s 24 50e
87 **Bultfontein**, tn., O.F.S., S. Afr.; 28 20s 26 4e
59 **Bulun**, tn., U.S.S.R.; 70 50n 124 0e
83 **Bulwer**, tn., Natal, S. Afr.; 29 49s 29 46e
125 **Bunbury**, tn., spt., W. Austral.; p. 5,100; 33 16s 115 41e
33 **Bunclody**. See Newtownbarr
31 **Buncrana**, urb. dist., Tirconaill, I.F.S.; salmon; p. 2,309; 55 8n 7 27w
123 **Bundaberg**, tn. spt., Queens., Austral.; timber, sugar; p. 11,250; 24 50s 152 22e
121 **Bundarra**, tn., N.S.W., Austral.; 30 7s 151 6e
67 **Bundelkand**, group of Native Sts.; India; 24 30n 79 30e
30 **Bundoran**, urb. dist., Tirconaill, I.F.S.; p. 1,337; 54 29n 8 17w
16 **Bungay**, urb. dist., Suffolk, Eng.; p. 3,098; 52 27n 1 29e
120 **Buninyong**, tn., Vic. Austral.; 37 41s 143 51e
16 **Buntingford**, tn., Herts, Eng.; p. 4,926; 51 57n 0 02w
41 **Bunzlau**, tn., Germany; woollens, linen, pottery; p. 17,977; 51 16n 15 36e
61 **Burdalik**, tn., U.S.S.R.; 38 18n 64 30e
67 **Burdwan**, tn., Bengal, India; silk, indigo; p. 34,616; 23 10n 88 0e
60 **Bureida**, tn., Arabia; p. 10,000; 26 30n 44 0e
17 **Burford**, par., Oxford, Eng.; p. 987; 51 49n 1 28w
39 **Burg**, tn., Germany; woollens, boots; p. 24,406; 52 27n 10 12e
52 **Burgas**, tn., spt., Bulgaria; exp. wheat, wool; p. 31,157; 42 40n 27 29e
45 **Burgdorf**, tn., Switzerland; 47 3n 7 35e
25 **Burghead**, bor., Moray, Scot.; fisheries; broadcasting sta.; p. 1,255; 57 43n 3 28w
83 **Burghersdorp**, tn., C. of Good Hope, S. Afr.; 31 5s 26 15e
48 **Burgos**, tn., Spain; cath.; hosiery, leather, cloth; p. 40,065; 42 42n 3 40w
34 **Burgundy**, prov., France; farming, wines; 46 50n 4 40e
17 **Burgess Hill**, urb. dist., Sussex, Eng.; bricks, tiles; p. 5,975; 50 58n 0 08w
68 **Burhanpur**, tn., Cent. Prov., India; textiles; p. 35,916; 21 20n 76 20e
122 **Burke Town**, Queens., Austral.; 17 58s 139 35e
102 **Burlington**, cy., Iowa, U.S.A.; on R. Mississippi; machinery, furniture; p. 26,755; 40 47n 91 10w
105 **Burlington**, tn., N.J., U.S.A.; on Delaware R.; iron pipes; p. 10,844; 40 3n 74 54w
102 **Burlington**, cy. Vt., U.S.A.; on L. Champlain; lumber; p. 24,789; 44 29n 73 13w
69 **Burma**, Br. Crown Col.; a. 233,492 sq. m., including Upper and Lower Burma, Shan States, Karenni; chief mountains, Arakan Yoma, Pegu Yoma; chief rivers, Irrawaddy, Salween; forested; agriculture, rice, fruit, tobacco; timber, teak; minerals, petroleum, precious stones, rubies, sapphires; industries, carving, lacquer; cap, Rangoon; p. 14,667,146; 21 0n 96 0e
69 **Burma, Lower**. See Burma.
69 **Burma, Upper**. See Burma.
123 **Burnett**, R., Queens., Austral.; 25 10s 152 6e
17 **Burnham**, urb. dist., Essex, Eng.; p. 3,395; 51 37n 0 49e
19 **Burnham-on-Sea**, urb. dist., Somerset, Eng.; p. 5,120; 51 37n 2 59w
16 **Burnham Westgate**, par., Norfolk, Eng.; p. 849; 52 57n 0 44w
121 **Burnie**, tn., Tas., Austral.; p. 4,200; 41 2s 145 52e
18 **Burnley**, co. bor., Lancs, Eng.; cotton, weaving, coal; p. 98,259; 53 47n 2 15w
27 **Burntisland**, bor., Fife, Scot.; p. 5,389; 56 4n 3 13w

MAP

120 **Burra**. See Kooringa.
125 **Burracoppin**, tn., W. Austral.; 31 18s 118 48e
49 **Burriana**, tn. spt., Spain; oranges, wine; p. 14,000; 39 52n 0 05w
121 **Burrinjuck**, tn., N.S.W., Austral.; irrigation scheme; 35 0s 148 31e
118 **Burrundie**, tn., N. Terr., Austral.; 13 33s 131 55e
19 **Burry Port**, urb. dist., Carm., Wales; p. 5,752; 51 39n 4 16w
62 **Bursa**, tn., Turkey; silk, carpets; p. 61,690; 40 8n 29 10e
20 **Burton**, par., Westmorland, Eng.; p. 460; 53 15n 3 02w
18 **Burton-on-Trent**, co. bor., Staffs, Eng.; brewing, malting; p. 49,485; 52 48n 1 38w
54 **Burträsk**, tn., Sweden; 64 35n 20 30e
71 **Buru** I., Dutch E. Indies; p. 19,631; 3 30s 126 30e
63 **Burujird**, tn., Persia; cottons, carpets; p. 21,000; 33 56n 48 47e
18 **Bury**, co. bor., Lancs., Eng.; on R. Irwell; cotton spinning, weaving, dyeing, machinery; p. 56,186; 53 27n 2 07w
16 **Bury St. Edmunds**, mun. bor., Suffolk, Eng.; named after King Edmund the Martyr; farm implements; p. 16,708; 52 15n 0 43e
48 **Busaco**, Portugal; 40 23n 8 23w
63 **Bushire**. See Abushehr.
31 **Bushmills**, tn., Antrim, N. Ire.; p. 972; 55 13n 6 31w
63 **Bushruiah**, tn., Persia; 33 59n 57 20e
55 **Buskerud**, co., Norway; a. 5,735 sq. m.; p. 142,996; 60 20n 8 20e
73 **Busse**, tn., Siberia; 45 30n 133 30e
125 **Busselton**, tn. spt., W. Austral.; 33 31s 115 21e
57 **Busuluk**, tn., Russia; 52 50n 52 3e
80 **Buta**, tn., Belgian Congo; 0 35 s 24 59e
26 **Bute**, co., Scot.; a. 218 sq. m.; farming, cattle, sheep; fishing; p. 18,822; 55 50n 5 05w
81 **Butiaba**, tn., Uganda; 1 44s 31 30e
104 **Butler**, tn., Pa., U.S.A.; natural gas and oil; p. 26,568; 40 53n 79 52w
71 **Buton**, I., and tn., Celebes; 5 30s 122 30e
106 **Butte**, tn., Mont., U.S.A.; copper, lead, silver; p. 39,532; 46 0n 112 30w
83 **Butterworth**, tn., C. of Good Hope, S. Afr.; 32 23s 28 12e
32 **Buttevant**, tn., Cork, I.F.S.; p. 1,755; 52 14n 8 41w
71 **Butuan**, tn., Phil. Is.; 8 55n 125 30e
57 **Buturlinovka**, tn., Russia; 50 50n 40 30e
67 **Buxar**, tn., India; p. 15,000; 25 30n 84 2e
16 **Buxton**, mun. bor., Derby, Eng.; celebrated spa and holiday resort in Peak dist. near source of R. Wye; p. 15,363; 53 15n 1 54w
11 **Buzuima**, tn., Libya; 25 0s 22 20e
52 **Buzău**, tn., Rumania; rly. centre; wheat; timber; petroleum; p. 36,115; 45 8n 26 54e
89 **Bwana Mkubwa**, tn., N. Rhodesia; copper; 12 57s 28 50e
43 **Bydgoszcz**, tn., Poland; rye, potatoes, flax; timber; p. 117,519; 53 8n 18 0e
43 **Byela**, tn., Poland; 52 3n 23 2e
57 **Byelaya Tserkov**, tn., Russia; 49 50n 30 4e
57 **Byelev**, tn., Russia; 53 47n 36 0e
43 **Byelgoral**, tn., Poland; 50 36n 22 41e
57 **Byelgorod**, tn., Russia; 50 34n 36 29e
43 **Byelovyeja**, tn., Poland; 52 41n 23 52e
56 **Byelozersk**, tn., Russia; 60 0n 37 56e
43 **Byelsk**, tn., Poland; 52 47n 23 11e
55 **Byeland**, tn., Norway; 58 50n 7 50e
57 **Bykhov**, tn., Russia; 53 30n 30 17e
87 **Byrnetown**, Natal, S. Afr.; 29 50s 30 11e
121 **Byrock**, tn., N.S.W., Austral.; 30 38s 146 24e

114 **Cabezas**, tn., Bolivia; 18 40s 63 2w
115 **Cabo Frio**, tn., Brazil; 22 30s 42 30w
121 **Caboolture**, tn., Queens., Austral.; 27 4s 52 55e
108 **Caborca**, tn., Mexico; 30 43n 112 15w
93 **Cabot Str.**, Canada; 47 0n 59 0w
113 **Cacequy**, tn., Brazil; 30 0s 54 30w
48 **Caceres**, tn., Spain; cereals, olive-oil; p. 25,869; 39 5n 6 21w
112 **Cachoeira**, tn., Brazil; 12 40s 39 0w
18 **Cader Idris**, Mt., Mer., Wales; 2,929 ft.; grand views; 52 43n 3 55w
109 **Caderyta**, tn., Mexico; 25 32n 100 1w
48 **Cadiz**, tn., spt., Spain; univ.; gloves, tobacco; exp.—wine, corks, olive-oil, tunny fish; p. 75,769; 36 30n 6 20w
48 **Cadiz**, G. of, Spain; 36 40n 7 20w
34 **Caen**, tn., France; univ., cas.; lace, gloves; p. 47,228; 49 13n 0 21w
18 **Caerfwrlle**, par., Flint., Wales; p. 1,340; 53 7n 3 04w
19 **Caerleon**, urb. dist., Monmouth, Eng.; p. 2,326; 51 37n 2 57w
18 **Caernarvon**, co., Wales; a. 565 sq. m.; mountainous, Snowdon 3,560 ft.; farming, oats, barley; sheep, cattle; slate, lead; p. 120,810; 53 2n 4 07w
18 **Caernarvon**, mun. bor., co. tn., Caer., Wales; castle, where first Prince of Wales, later Edward II, was christened; slate; p. 8,469; 53 8n 4 15w
18 **Caernarvon B.**, Caer., Wales; 53 3n 4 56w
19 **Caerphilly**, urb. dist., Glamorgan, Wales; malting, cheese, coal, iron; p. 35,760; 51 35n 3 13w
61 **Caesarea**. See el Kalsarieh.
61 **Cæsarea Philippi**. See Banias.
50 **Cagli**, tn., Italy; 43 36n 12 39e
51 **Cagliari**, spt., cap. Sardinia, Italy; exp.—lead, zinc; p. 101,869; 39 15n 9 08e
32 **Caha Mts.**, Kerry, I.F.S.; 2,251 ft.; 51 47n 9 40w
33 **Caher**, tn., Tipperary, I.F.S.; p. 3,972; 52 22n 7 55w
32 **Cahirciveen**, tn., Kerry, I.F.S.; p. 1,895; 51 57n 10 14w
35 **Cahors**, tn., France; on R. Lat; cath.; wine; 44 26n 1 25e
110 **Caibarien**, tn., Cuba; 22 28n 79 32w
111 **Caicos Is.** (with Turks Is.), W. Indies; a. 165 sq. m.; p. 4,800; 21 50n 72 0w
4 **Caird Coast**, Antarctica; 75 0s 28 0w
122 **Cairns**, spt., Queens., Austral.; exp.—gold, copper, sugar; p. 9,750; 16 58s 145 44e
78 **Cairo**, cy., cap. Egypt; on R. Nile; univ.; tourist centre; mnfs.—cotton, paper, silk; p. 1,064,567; 30 1n 31 13e

MAP

16 **Caister**, par., Norfolk, Eng.; p. 2,346; 52 38n 1 43e
16 **Caistor**, par., Lindsey, Eng.; p. 1,571; 53 30n 0 18w
25 **Caithness**, co., Scotland; a. 686 sq. m.; barren, mountainous; poor agriculture, oats; fisheries; distilling; p. 25,656; 58 25n 3 25w
112 **Cajamarca**, tn., Peru; cottons, woollens, silver; p. 30,000; 7 00s 79 30w
112 **Calaboza**, vil., Venezuela; 8 40n 67 30w
51 **Calabria**, dept., Italy; a. 5,819 sq. m.; mountainous, forested; agriculture—cereals, fruits; minerals—copper, marble; tunny fishing; cap. Reggio di Calabria; p. 1,670,539; 39 0n 16 30e
53 **Calafat**, tn., Rumania; p. 7,705; 43 49n 23 0e
49 **Calahorra**, tn., Spain; cath.; fruit, wine; p. 10,700; 42 18n 1 59w
34 **Calais**, tn., spt., France; cross-Channel passenger traffic; lace, fishing; p. 70,213; 50 58n 1 50e
114 **Calama**, tn., Chile; 22 25s 69 4w
71 **Calapan**, tn., Mindoro, Phil. Is.; 13 30n 121 5e
52 **Călărasi**, tn., Rumania; p. 4,736; 44 12n 17 22e
49 **Calatayud**, tn., Spain; p. 11,550; 41 22n 1 38w
67 **Calcutta**, tn., cap. Bengal, India; on R. Hooghly; cap. of India till 1911; cath., univ.; docks; jute and cotton mills; exp.—jute, cotton, sugar-cane, rice, tea, silk, coal; p. 1,196,833; 22 32n 88 30e
48 **Caldas**, tn., Portugal, 39 22n 9 10w
21 **Calder**, R., W. Riding, Eng.; 53 42n 1 43w
113 **Caldera**, tn., Chile; 27 0s 70 50w
106 **Caldwell**, tn., Idaho, U.S.A.; 43 42n 116 40w
19 **Caldy I.**, Pembroke, Wales; 51 38n 4 40w
83 **Caledon**, tn., C. of Good Hope, S. Afr.; 29 30n 27 20e
83 **Caledon**, R., O.F.S., S. Afr.; 30 0s 26 50e
96 **Caledonia**, tn., Ont., Canada; p. 1,396; 43 8n 80 0w
113 **Caledonia**, tn., Du. Guiana; 6 00n 56 0w
24 **Caledonian Canal**, Scotland, joins L. Linnhe with Moray F. through L. Lochy and L. Ness; 57 0n 5 00w
114 **Caleta Buena**, tn., Chile; 19 59s 70 23w
20 **Calf of Man**, I. of Man, Eng.; 54 3n 4 49w
98 **Calgary**, tn., Alta., Canada; lumber mills, tanneries p. 83,761; 51 0n 114 2w
112 **Cali**, tn., Colombia; farming, copper, gold; p. 123,000; 3 30n 76 50w
68 **Calicut**, tn., spt., Madras, India; exp.—coffee, spices; p. 82,334; 11 15n 75 45e
108 **California**, G. of, Mexico; 28 0n 112 0w
106 **California**, st., U.S.A.; a. 158,297 sq. m.; mountains in W.; fertile valleys of San Joaquin R. and R. Sacramento; forests; agriculture, barley, wheat, maize, rice, hay, fruits; cattle, sheep; fishing; minerals—petroleum, natural gas, gold, silver, copper; industries—oil refining, motion pictures, meat packing, fruit canning; cap. Sacramento; p. 5,677,251; 32 0n to 42 0n 115 0 to 124 0w
33 **Callan**, tn., Kilkenny, I.F.S.; p. 1,987; 52 33n 7 23w
27 **Callander**, bor., Perth, Scot.; p. 1,672; 56 14n 4 12w
112 **Callao**, tn., spt., Peru; docks; exp.—sugar, cotton, copper, silver; p. 77,000; 12 2s 77 10w
19 **Callington**, par., Cornwall, Eng.; p. 1,801; 50 30n 4 18w
123 **Calliope**, tn., Queens., Austral.; 24 4s 151 6e
19 **Calne**, mun. bor., Wilts, Eng.; dairying; p. 3,463; 51 26n 1 59w
51 **Caltanissetta**, tn., Sicily, Italy; sulphur; p. 46,400; 37 14n 14 1e
34 **Calvados**, dept., France; a. 2,197 sq. m.; livestock, dairying, fisheries; textiles; p. 401,356; 49 3n 0 12w
83 **Calvinia**, tn., C. of Good Hope, S. Afr.; 31 30s 19 45e
16 **Cam**, R., Cambridge, Eng.; 52 10n 0 05e
110 **Camagüey**, tn., Cuba; sugar-cane; p. 49,000; 21 22n 77 59w
113 **Camana**, tn., Peru; 16 20s 72 30w
113 **Camargo**, tn., Bolivia; 20 55s 64 40w
108 **Camargo**, tn., Mexico; 26 19n 98 58w
66 **Cambay**, tn., spt.; India; p. 27,251; 22 22n 72 38e
66 **Cambay**, G., India; 22 0n 72 0e
17 **Camberwell**, met. bor.; p. 251,373. See London.
70 **Cambodia**, king. Fr. prot., Fr. Indo-China; a. 67,550 sq. m.; agriculture—rice, coffee, pepper, rubber, cotton; fisheries; iron; cap. Phôm-Penh; p. 2,602,914; 12 0n 105 0e
70 **Cambodia**, C., Fr. Indo-China; 8 30n 104 45e
19 **Camborne**, part of Camborne-Redruth, urb. dist., Cornwall, Eng.; tin, copper; p. 14,157; 50 13n 5 18w
34 **Cambrai**, tn., France; on R. Schelde; linen, brewing, soap; p. 28,542; 50 10n 3 16e
16 **Cambridge**, mun. bor., co. tn., Cambs, Eng.; on R. Cam; university comprising 17 colleges; women's colleges—Girton, Newnham; p. 66,803; 52 13n 0 07e
16 **Cambridge**, co., England; a. 877 sq. m.; flat, fens in N.; chief rivers—Ouse, Nen, Cam; agriculture, wheat, oats, potatoes; dairying; p. 140,094; 52 15n 0 10e
126 **Cambridge**, bor., N.I., New Zealand; p. 2,055; 37 52s 175 29e
105 **Cambridge**, tn., Mass., U.S.A.; Harvard Univ.; industrial centre; p. 113,643; 42 19n 71 6w
102 **Cambridge**, tn., Md., U.S.A.; on Chesapeake B.; oysters; p. 5,544; 38 35n 76 5w
27 **Cambuslang**, par., Lanark, Scot.; coal, iron, limestone; p. 27,128; 55 49n 4 10w
121 **Camden**, tn., N.S.W., Austral.; 34 5s 150 37e
103 **Camden**, tn., Ark., U.S.A.; p. 7,273; 33 30n 92 50w
102 **Camden**, tn., N.J., U.S.A.; iron foundries, chemicals, glass; shipbuilding; p. 118,700; 40 0n 75 0w
19 **Camel**, R., Cornwall, Eng.; 50 30n 4 48w
19 **Camelford**, tn., Cornwall, Eng.; p. 377; 50 37n 4 41w
50 **Camerino**, tn., Italy; univ., cath.; p. 12,350; 43 11n 13 1e
88 **Cameroon**, Mt., G. Cameroons; 4 30n 9 45e
88 **Cameroons**, W. Africa; a. 200,825 sq. m.; former Ger. col., now L. of N. mandate shared by G. Britain and France; palm oil, ivory; p. 2,678,733
112 **Cametá**, tn., Brazil; 2 25s 49 40w
48 **Caminha**, tn., Portugal; 41 49n 8 50w
123 **Camooweal**, tn., Queens., Austral.; 19 58s 138 13e
50 **Campagna, Italy**; malarial coastal dist. round Rome; now being drained, new communes of Littoria founded 1932 40 40n 15 7e

MAP

51 Campagna, dept., Italy; a. 5,276 sq. m.; farming, wines; sulphur; p. 3,493,379; 41 0N 14 0E
115 Campanha, tn., Brazil; p. 21 58s 45 25w
121 Campbell Town, tn., Tas., Austral.; 41 55s 147 30E
94 Campbellton, tn., spt., N.B., Canada; lumbering, fishing; p. 6,505; 48 1N 66 43w
121 Campbelltown, tn., N.S.W., Austral.; 34 4s 150 37E
127 Campbelltown, bor., S.I., New Zealand; p. 1,625; 46 38s 168 19E
25 Campbelltown, Inver., Scot.; 57 34N 4 02w
26 Campbeltown, bor., spt., Argyll, Scot.; distilling, fishing; p. 6,309; 55 25N 5 37w
109 Campeche, tn., spt., Mexico; exp.—logwood, sisal hemp; p. 16,900; 19 50N 90 32w
109 Campeche, prov., Mexico; a. 18,089 sq. m.; flat; agriculture—rice, cotton, tobacco, sisal hemp; logwood; p. 84,971; 19 0N 90 30w
120 Camperdown, tn., Vic., Austral.; 38 12s 143 10E
87 Camperdown, tn., Natal, S. Afr.; 29 42s 30 32E
48 Campillos, tn., Spain; 37 3N 4 50w
113 Campinas, tn., Brazil; p. 150,000; 22 50s 47 0w
50 Campobasso, tn., Italy; cutlery; p. 16,300; 41 33N 14 41E
113 Campos, tn., Brazil; coffee, sugar; p. 48,000; 22 0s 41 36w
27 Campsie, par., Stirling, Scot.; coal, iron; p. 5,296; 55 59N 4 13w
90 Canada, Dominion of, N. America; a. 3,690,043 sq. m.; length, N. to S. 2,100 m., greatest width 3,600 m.; comprising N. half of N. America except Newf., Labrador, Alaska; chief physical features—Great Lakes (largest fresh-water area in the world), St. Lawrence, Nelson, Saskatchewan, Fraser and Mackenzie rivers, Rocky Mts. (highest peak Mt. Logan, 19,850 ft.) and Great Plains; chief industries—agriculture, wheat and oats, pulp, paper, mineral, coal, gold, copper, nickel; fishery, salmon, lobster, cod; furs; large hydro-electric power; important mnfs.; good railway communications; federation of 9 provinces of Nova Scotia, New Brunswick, Prince Edward I., Quebec, Ontario, Manitoba, Saskatchewan, Alberta, Br. Columbia and Yukon and N.W. Territories; cap. Ottawa, largest town, Montreal; p. 10,376,786; 42 0 to 70 0N 60 0 to 140 0w
107 Canadian R., U.S.A.; 35 59N 101 0w
113 Cananéa, tn., Brazil; 25 0s 48 0w
108 Cananea, tn., Mexico; 31 0N 110 20w
6 Canary Is., W. Africa; Sp.; a. 2,810 sq. m.; group of 7 principal islands, Teneriffe, Grand Canary, Palma, Ferro; farming; fruit; fishing; chief town, Las Palmas; p. 503,151; 28 30N 16 0w
121 Canberra, fed. cap., Fed. Terr., Austral.; a. 940 sq. m.; p. 8,947; 35 15s 149 10E
53 Candia, tn., spt., Crete; olive-oil, raisins; p. 33,400; 35 18N 25 0E
53 Candia, I. See Crete I.
115 Candones, tn., Uruguay; 34 39s 56 0w
53 Canea, tn., cap., Crete; soap, oil; p. 26,600; 35 32N 24 1E
114 Cañete, tn., Peru; p. 5,000; 12 52s 26 19w
49 Canfranc, tn., Spain; 42 42N 0 30w
80 Cangamba, tn., Angola; 13 40s 19 40E
48 Cangas de Tineo, tn., Spain; woollens, linens; p. 23,000; 43 10N 6 32w
51 Canicstti, tn., Italy; sulphur; p. 25,000; 37 21N 13 48E
68 Cannanore, tn., Madras, India; exp.—timber, coconuts; p. 27,705; 11 53N 75 23E
35 Cannes, tn., France; health resort; mnfs.—perfumes; p. 47,209; 43 32N 6 29E
18 Cannock, urb. dist., Staffs, Eng.; coal; p. 34,588; 52 43N 2 01w
18 Cannock Chase, dist., Staffs, Eng.; formerly forested; coal; 52 45N 2 00w
45 Canobbio, tn., Italy; 46 4N 8 40E
27 Canonbie, par., Dumfries, Scot.; p. 1,506; 55 5N 2 55w
51 Canosa, tn., Italy; cath.; p. 24,700; 41 13N 16 3E
50 Canossa, tn., Italy; 44 37N 10 31E
95 Canso, spt., N.S., Canada; p. 1,575; 45 14N 61 0w
95 Canso C., N.S., Canada; 45 18N 60 59w
95 Canso, Strait of, N.S., Canada; 45 34N 61 20w
48 Cantabrian Mts., Spain; 43 5N 4 30w
35 Cantal, dept., France; a. 2,229 sq. m.; part of Auvergne plateau; mineral springs, grain, dairying; coal, marble; cap. Aurillac; p. 193,505; 45 13N 2 46E
48 Cantanhede, tn., Portugal; 40 20N 8 37w
17 Canterbury, co. bor., Kent, Eng.; on R. Stour; cath.; see of Primate of England, Archbishop of Canterbury; brewing; p. 24,450; 51 17N 1 05E
127 Canterbury, prov., New Zealand; a. 13,940 sq. m.; contains Canterbury Plains, famous sheep pasturage; wheat; cap. Christchurch; p. 213,890; 43 40s 171 26E
127 Canterbury Bight, New Zealand; 44 20s 172 0E
127 Canterbury Plains, New Zealand; a. 3,900 sq. m.; famous sheep pasturage; 43 50s 171 30E
74 Canton, tn., treaty port, cap. Kwangtung, China; various industries; exp.—silk, tea, matting; p. 812,241; 23 15N 113 20E
102 Canton, tn., Ill., U.S.A.; p. 11,718; 40 30N 90 2w
105 Canton, tn., Me., U.S.A.; 44 30N 70 20w
102 Canton, tn., Ohio, U.S.A.; coal; farm machinery, engineering; p. 104,906; 40 53N 81 20w
74 Canton, R., or Si-kiang, China; 23 30N 111 30E
45 Cantons, Lake of the Four, Switzerland; 47 0N 8 25E
107 Canyon City, tn., Col., U.S.A.; 38 30N 105 20w
97 Cap de la Madaleine, tn., Que., Canada; p. 8,748; 46 24N 72 32w
95 Cape Breton Island, N.S., Canada; a. 3,125 sq. m.; farming, timber, fishing; p. 130,000; 46 30N 60 45w
88 Cape Coast, tn., Gold Coast; palm oil; p. 17,685; 5 09N 1 16w
102 Cape Girardeau, tn., Mo., U.S.A.; p. 16,227; 37 12N 89 40w
105 Cape May, tn., N.J., U.S.A.; 38 59N 74 58w
83 Cape of Good Hope, prov., S. Africa; a. 277,169 sq. m.; formerly Cape Colony; country rises in terraces to interior; chief mountains—Drakensberg, Roggeveld, Nieuwveld; chief rivers—Orange, Caledon; chief

MAP

physical features—Gt. Karroo, Little Karroo, scrub covered; agriculture, maize, fruit; pastoral, farming, sheep, cattle, goats, ostriches; wool, mohair; minerals, diamonds; races—Dutch, English, Bantus, Hottentots; cap. Cape Town; p. 3,522,231; 31 48s 18 0 to 30 0E
84 Cape of Good Hope, S. Africa; famous headland; 34 24s 18 29E
83 Cape Town, tn., cap. C. of Good Hope, S. Afr.; docks, cath., Houses of Parliament for Union of South Africa; exp.—wool, gold, diamonds, fruit, mohair; p. 150,914 (Eur.); 33 58s 18 26E
6 Cape Verde Is., W. Africa, Port.; a. 1,517 sq. m.; volcanic; coffee, castor oil; p. 150,160; 15 0N 23 0w
119 Cape York, pen., Queens., Australia; 14 0s 143 0E
123 Capella, tn., Queens., Austral.; 23 11s 148 4E
61 Capernaum. See Tell Hum.
111 Cap Haitien, tn., Haiti; p. 22,000; 19 42N 72 22w
50 Caporetto, tn., Italy; 46 14N 13 34E
33 Cappawhite, vil., Tipperary, I.F.S.; p. 430; 52 35N 8 10w
33 Cappoquin, tn., Waterford, I.F.S.; p. 1,070; 52 9N 7 51w
51 Caprera, I., off Sardinia, Italy; 41 16N 9 28E
51 Capri, I., Italy; tourist resort; 40 31N 14 12E
51 Capua, tn., Italy; cath.; p. 10,000; 41 6N 14 18E
27 Caputh, par., Perth, Scot.; p. 1,079; 56 33N 3 28w
88 Carabane, tn., Fr. W. Africa; 12 30N 16 40w
52 Caracal, tn., Rumania; p. 14,769; 44 8N 24 21E
112 Caracas, tn., cap. Venezuela; cath., univ.; exp.—coffee, cacao; p. 135,000; 10 31N 66 59w
49 Caravaca, tn., Spain; iron, tanning; p. 16,000; 38 6N 1 53w
113 Caravellas, tn., Brazil; 17 35s 39 25w
102 Carbondale, tn., Pa., U.S.A.; anthracite; p. 20,061; 41 35N 75 30w
35 Carcassonne, tn., France; on R. Aude; mediæval fortress town, farm implements, wines; p. 34,921; 43 11N 2 21E
110 Cardenas, tn., Cuba; sugar, tobacco; p. 29,000; 23 0N 81 15w
19 Cardiff, co. bor., co. tn., spt., Glamorgan, Wales; univ. coll., town hall, municipal buildings, Cathays Park; docks; engineering, smelting, iron and tinplate; chemicals; exp.—coal, machinery; p. 223,589; 51 28N 3 10w
18 Cardigan, co., Wales; a. 692 sq. m.; mountainous, Plynlimmon 2,468 ft.; barley, oats; sheep, cattle rearing; mining; p. 55,164; 52 12N 4 10w
18 Cardigan, mun. bor., co. tn. Cardigan, Wales; bricks; p. 3,350; 52 5N 4 39w
18 Cardigan B., Wales; 52 20N 4 40w
26 Cardross, par., Dumbarton, Scot.; p. 11,105; 55 58N 4 38w
122 Cardwell, tn., Queens., Austral.; 18 0s 145 30E
52 Careli, tn., Rumania; sawmills, textiles; p. 16,085; 47 42N 22 30E
121 Cargelligo, tn., N.W.S., Austral.; 33 18s 146 22E
27 Cargill, par., Perth, Scot.; p. 1,257; 56 31N 3 22w
110 Caribbean Sea, a. 7,500 sq. m.; between W. Indies and S. and Cent. America; 15 0N 72 0w
98 Cariboo, tn., Yukon, Canada; 60 3N 134 40w
98 Cariboo Mts., B.C., Canada; 53 30N 121 0w
121 Carinda, tn., N.S.W., Austral.; 30 27s 147 42E
112 Carinhanha, tn., Brazil; 14 0s 43 50w
51 Carini, Italy; 38 8N 13 11E
46 Carinthia, prov., Austria; a. 3,680 sq. m.; mountainous; mineral springs; agriculture, rye, oats; minerals—lead, iron; cap. Klagenfurt; p. 370,817; 46 50N 14 0E
44 Carinthian Alps, Austria; 46 45N 14 40E
27 Carlaverock Castle, Dumfries, Scot.; 54 58N 3 32w
97 Carleton, tn., Ont., Canada; p. 4,105; 45 10N 76 12w
31 Carlingford, tn., Louth, I.F.S.; p. 602; 54 2N 6 12w
20 Carlisle, co. bor., co. tn. Cumberland, Eng.; on R. Eden; cath., cas.; rly. centre; cottons, iron founding; p. 57,107; 54 54N 2 55w
104 Carlisle, bor., Pa., U.S.A.; boots and shoes; p. 12,497; 40 10N 77 17w
51 Carloforte, tn., Sardinia, Italy; 39 16N 8 19E
33 Carlow, co., Leinster, I.F.S.; a. 346 sq. m.; farming, dairying; limestone, marble; p. 34,504; 52 45N 6 50w
33 Carlow, urb. dist., co. tn. Carlow, I.F.S.; on R. Barrow; brewing, milling; p. 7,175; 52 50N 6 55w
27 Carluke, par., Lanark, Scot.; engineering; p. 10,507; 55 44N 3 51w
99 Carman, tn., Man., Canada; p. 1,418; 49 31N 98 5w
18 Carmarthen, co., Wales; a. 918 sq. m.; mountainous, farming, oats, barley; dairying; mining; p. 179,063; 51 55N 4 10w
19 Carmarthen, mun. bor. co. tn., Carm., Wales; tinplate; p. 10,310; 51 51N 4 18w
19 Carmarthen B., Carm., Wales; 51 42N 4 30w
61 Carmel, Mt. See J. Kurmul.
18 Carmel Hd., Anglesey, Wales; 53 25N 4 33w
48 Carmona, tn., Spain; olives, wines, fruit; p. 22,100; 37 27N 5 43w
27 Carmyllie, par., Angus, Scot.; p. 753; 56 35N 2 44w
34 Carnac, vil., France; prehistoric stone monuments; 47 36N 79 0E
68 Carnatic, dist., Madras, India; 12 0N 79 0E
18 Carnarvon. See Caernarvon.
83 Carnarvon, tn., C. of Good Hope, S. Afr.; 31 2s 22 10E
125 Carnarvon, tn., W. Austral.; 24 52s 114 0E
31 Carndonagh, tn., Tirconaill, I.F.S.; p. 668; 55 15N 7 15w
18 Carnedd Llewelyn, mt., Caer., Wales; 3,484 ft.; 53 12N 3 57w
104 Carnegie, bor., Pa., U.S.A.; steel, iron; p. 12,497; 40 23N 80 4w
33 Carnew, tn., Wicklow, I.F.S.; granite, slate; p. 2,983; 52 43N 6 30w
20 Carnforth, urb. dist., Lancs, Eng.; p. 3,193; 54 7N 2 45w
44 Carnic Alps, mts., Italy; N.E. frontier of Italy; 46 40N 12 55E
31 Carnlough, vil., Antrim, N. Ire.; p. 760; 55 0N 6 00w
18 Carno par., Montgomery, Wales; p. 655; 52 33N 3 32w
80 Carnot, tn., Fr. Eq. Africa; 5 01N 16 2E

MAP

88 Carnotville, tn., Fr. W. Africa; 8 50N 2 20E
27 Carnoustie, bor., Angus, Scot.; summer resort; linen; p. 4,806; 56 31N 2 43w
27 Carnwath, par., Lanark, Scot.; coal; p. 5,253; 55 42N 3 37w
112 Carolina, tn., Brazil; 6 45s 47 45w
83 Carolina, tn., Trans., S. Afr.; 26 8s 30 12E
117 Caroline I., Pac. Oc.; Br.; 10 0s 150 0w
116 Caroline Is., Pac. Oc., Jap. mandate; copra; p. 39,000; 8 00N 150 0E
46 Carpathian Mts., Europe; 850 m. long, highest pk., Tatra, 8,740 ft.; 49 0N 19 0E
119 Carpentaria, G., Queens., Austral.; 15 30s 139 0E
50 Carrara, tn., Italy; marble; p. 52,700; 44 5N 10 7E
26 Carrick, tn., Ayr, Scot.; 55 13N 4 37w
31 Carrickfergus, urb. dist., Antrim, N. Ire.; flax; p. 4,751; 54 43N 5 49w
31 Carrickmacross, urb. dist., Monaghan, I.F.S.; p. 2,000; 53 58N 6 43w
30 Carrick-on-Shannon, co. tn. Leitrim, I.F.S.; p. 1,014; 53 57N 8 05w
33 Carrick-on-Suir, tn., Tipperary, I.F.S.; coal, timber; p. 5,236; 52 21N 7 25w
120 Carrisbrook, tn., S. Austral.; 32 27s 138 32E
31 Carrigallen, par., Leitrim, I.F.S.; p. 2,903; 53 59N 7 39w
48 Carrión, tn., Spain; 42 23N 4 38w
27 Carronbridge, vil., Dumfries, Scot.; 55 16N 3 48w
106 Carson City, tn., cap. Nev., U.S.A.; gold, silver; p. 1,600; 39 13N 119 47w
27 Carsphairn, vil., Kirkcudbright, Scotland; p. 365; 55 13N 4 14w
27 Carstairs, par., Lanark, Scot.; p. 2,289; 55 42N 3 41w
112 Cartagena, spt., Colombia; exp.—hides, gold; p. 92,000; 10 30N 75 31w
49 Cartagena, spt., Spain; fruits, silver-lead; p. 96,981; 37 37N 0 57w
110 Cartago, tn., Costa Rica; coffee, fruits; p. 16,000; 9 57N 84 0w
20 Carter Fell, mt., Northumb., Eng.; 1,815 ft.; 55 22N 2 28w
127 Carterton, bor., N.I., New Zealand; p. 1,865; 40 59s 175 31E
10 Carthage, Tunis; ruins of ancient Phœnician city; 36 53N 10 5E
102 Carthage, tn., Mo., U.S.A.; p. 9,736; 37 8N 94 20w
20 Cartmel, vil., Lancs, Eng.; 54 13N 2 58w
93 Cartwright, tn., Labrador; 53 40N 57 0w
114 Casa Blanca, tn., Chile; 33 18s 71 28w
10 Casa Blanca, spt., Morocco; exp.—wheat, hides, wool; p. 161,113; 33 30N 8 00w
115 Casa Branca, tn., Brazil; 21 40s 47 0w
50 Casale, tn., Italy; cath.; cement; p. 34,000; 45 10N 8 26E
106 Cascade Range, U.S.A.; extends N. and S. through Br. Columbia, Washington and Oregon, highest peak, Mt. Rainier, 14,440 ft. 45 0N 121 30w
48 Cascaes, tn., Portugal; 38 40N 9 43w
51 Caserta, tn., Italy; cath.; silks; p. 35,200; 41 4N 14 20E
33 Cashel, urb. dist., Tipperary, I.F.S.; cath.; p. 2,945; 52 31N 7 54w
121 Casino, tn., N.S.W., Austral.; 28 50s 153 1E
107 Casper, tn., Wyo., U.S.A.; petroleum; p. 16,619; 42 53N 106 25w
57 Caspian Sea, Rus.; lies between E. Europe and W. Asia, largest inland sea in world, 760 m. long, 115 to 260 m. wide, 26 to 500 fathoms deep, 84 ft. below level of Black Sea; a. 170,000 sq. m.; fisheries, sturgeon; chief ports—Astrakhan, Baku, Derbent; 43 0N 51 0E
40 Cassel, tn., Germany; on R. Fulda; palace; machinery; textiles; p. 175,179; 51 18N 9 25E
98 Cassiar Mts., B.C., Canada; 60 0N 130 0w
112 Cassiquiare, Bifurcation of the, Venezuela; 2 30N 65 0w
50 Castel di Sangio, tn., Italy; 41 46N 14 8E
50 Castel S. Pietro, tn., Italy; 44 23N 11 32E
51 Castelbuono, tn., Italy; p. 10,900; 37 56N 14 5E
51 Castellammare, tn., Italy; mineral springs; p. 39,200; 40 41N 14 27E
48 Castello Branco, tn., Portugal; p. 10,486; 39 50N 7 33w
49 Castellon. See Catalonia.
49 Castellón de la Plana, tn., Spain; silk, porcelain; p. 36,781; 39 58N 0 01w
41 Castelnuovo, tn., Yugoslavia; 42 30N 18 33E
51 Castelvetrano, tn., Italy; wine; p. 24,880; 37 42N 12 46E
120 Casterton, tn., Vic., Austral.; 37 33s 141 27E
48 Castile, New, Spain; old prov., a. 28,015 sq. m.; 40 0N 3 00w
48 Castile, Old, Spain; old prov., a. 25,403 sq. m.; 41 55N 3 40w
19 Castle Cary, par., Somerset, Eng.; p. 1,646; 51 5N 2 30w
27 Castle Douglas, bor., Kirk., Scot.; farming implements; p. 3,008; 54 57N 3 56w
30 Castlebar, urb. dist., co. tn., Mayo, I.F.S.; p. 4,256; 53 52N 9 18w
31 Castleblayney, urb. dist., Monaghan, I.F.S.; p. 1,553; 54 7N 6 45w
33 Castlecomer, par., Kilkenny, I.F.S.; p. 872; 52 48N 7 14w
31 Castlederg, tn., Tyrone, N. Ire.; p. 835; 54 43N 7 35w
33 Castledermott, par., Kildare, I.F.S.; p. 1,180; 52 55N 6 50w
32 Castleisland, tn., Kerry, I.F.S.; p. 1,332; 52 14N 9 28w
121 Castlemaine, tn., Vic., Austral.; fruit, wine; p. 7,170; 37 4s 144 14E
32 Castlemaine, tn., Kerry, I.F.S.; 52 10N 9 37w
30 Castlereagh, tn., Roscommon, I.F.S.; p. 1,223; 53 47N 8 29w
33 Castletown, tn., Leix, I.F.S.; 52 58N 7 30w
20 Castletown, spt., I. of Man, Eng.; p. 1,713; 54 5N 4 40w
32 Castletownroche, par., Cork, I.F.S.; p. 1,150; 52 11N 8 29w
32 Castletownsend, vil., Cork, I.F.S.; p. 556; 51 32N 9 11w
31 Castlewellan, tn., Down, N. Ire.; p. 820; 54 15N 5 57w

MAP

35 Castres, tn., France; woollens, soap, earthenware; p. 28,084; 43 36N 2 15E
51 Castrogiovanni, tn., Italy; rock salt; p. 26,500; 37 40N 14 21E
48 Castro Urdiales, port, Spain; iron ore; p. 11,800; 43 25N 3 18W
48 Castro Verde, tn., Portugal; 37 42N 8 05W
51 Castrovillari, tn., Italy; cheese, wine; p. 10,000; 39 51N 16 12E
48 Castuera, tn., Spain; 38 44N 5 32W
13 Catalão tn., Brazil; 17 50S 48 25W
49 Catalonia, aut. region, Spain; a. 12,427 sq. m.; mountainous, wooded; farming, cereals; mnfs.—cottons, woollens, silks; cap. Barcelona; p. 2,490,889; 41 40N 1 20E
114 Catamarca, tn., Argentina; p. 13,300; 28 20S 66 0W
51 Catania, tn., Sicily, Italy; cath., univ.; textiles, dyeing; p. 263,630; 37 29N 15 6E
51 Catania, G. of, Italy; 37 25N 15 10E
51 Catanzaro, tn., Italy; silks, velvets; p. 34,300; 38 57N 16 38E
83 Cathcart, tn., C. of Good Hope, S. Afr.; 32 22S 27 15E
83 Cathkin Pk., mt., Basut., S. Afr.; in Drakensberg, 10,360 ft.; 29 0S 29 15E
109 Catoche, C., Mexico; 21 30N 87 0W
108 Catorce, tn., Mexico; 23 36N 101 0W
27 Catrine, par., Ayr, Scot.; p. 2,274; 55 31N 4 19W
105 Catskill, tn., N.Y., U.S.A.; p. 5,082; 42 13N 73 52W
105 Catskill Mts., N.Y., U.S.A.; in Appalachians; resort; 42 20N 74 30W
47 Cattaro, tn., Yugoslavia; 42 23N 18 46E
20 Catterick, par., N. Riding, Eng.; p. 564; 54 23N 1 38W
57 Caucasus Mts., Russia; between Caspian S. and Black S., 950 m. long; Mt. Elbruz, 18,463 ft.; 43 0N 45 0E
49 Caudete, tn., Spain; 38 45N 0 58W
114 Cauquenes, tn., Chile; p. 12,007; 35 53S 72 20W
110 Canto, R., Cuba; 20 30N 76 30W
68 Cauvery, R., Madras, India; 415 m. long; 12 30N 76 30E
31 Cavan, co., I.F.S.; a. 730 sq. m.; farming, distilling; p. 82,447; 53 56N 7 11W
31 Cavan, urb. dist., co. tn. Cavan, I.F.S.; p. 3,056; 53 59N 7 22W
17 Caversham, Reading, Berks, England; 51 58N 0 58W
25 Cawdor, par., Nairn, Scot.; p. 767; 57 32N 3 56W
67 Cawnpore, tn., U. Provs., India; massacre, 1857; rly. centre; grain, cotton, woollens; p. 243,755; 26 24N 80 24E
112 Caxias, tn., Brazil; cotton, rice; p. 25,000; 5 10S 43 35W
16 Caxton, par., Cambridge, England; p. 393; 52 14N 0 05W
112 Cayenne, cap. Fr. Guiana; p. 13,900; 4 49N 52 18W
31 Ceannanus Mor. See Kells.
112 Ceará, tn., Brazil; exp.—sugar, rubber; p. 99,000; 3 50S 38 40W
112 Ceará, st., Brazil; a. 40,241 sq. m.; sugar, cotton, coffee, rubber; p. 1,626,025; 5 00S 40 0W
71 Cebu, tn., Phil. Is.; exp.—copra, tobacco, sugar; p. 86,000; 10 30N 124 0E
71 Cebu, I., Phil. Is.; a. 1,695 sq. m.; mountainous; forested; p. 1,066,000; 10 30N 124 0E
102 Cedar Falls, tn., Iowa, U.S.A.; p. 7,362; 42 30N 92 30W
102 Cedar Rapids, tn., Iowa, U.S.A.; farm machinery, lumber; p. 56,097; 41 55N 91 38W
51 Cefalu, tn., Italy; sardines; p. 13,200; 38 1N 14 1E
109 Celaya, tn., Mexico; silver, carpets; p. 26,000; 20 30N 100 58W
33 Celbridge, vil., Kildare, I.F.S.; p. 842; 53 20N 6 34W
71 Celebes, I., Dutch E. Indies; a. 73,160 sq. m.; mountainous; forested; copra, spices; waxes; p. 3,678,815; 2 00S 120 30E
71 Celebes S., Dutch E. Indies; 3 20N 122 0E
46 Celje, tn., Yugoslavia; 46 15N 15 15E
40 Celle, tn., Germany; printing; p. 25,545; 52 40N 10 9E
48 Celorico, Portugal; 40 37N 7 28W
18 Cemmaes, par., Mont., Wales; p. 744; 53 25N 4 26W
102 Centerville, tn., Iowa, U.S.A.; p. 8,147; 40 45N 92 58W
50 Cento, tn., Italy; 44 43N 11 10E
110 Central America, between isth. of Panama and isth. of Tehuantepec, includes Guatemala, Honduras, Nicaragua, Salvador, Costa Rica, Panama, Br. Honduras; 7 00 to 18 30N 77 0 to 94 30W
10 Central Atlas, mts., Morocco; 33 0N 4 00W
118 Central Australia. See Northern Territory.
105 Central Falls, tn., R.I., U.S.A.; cotton goods; p. 25,898; 41 53N 71 22W
67 Central India, agency, India; a. 51,505 sq. m.; includes 28 salute sts. and 59 minor sts.; cotton, millet, opium; p. 6,615,120; 24 0N 76 0E
68 Central Provinces, st., India; a. 82,109 sq. m.; p. 12,028,863; 21 50N 80 0E
67 Central Provinces and Berar, prov., India; a. 99,876 sq. m.; rice, cotton, millet, wheat, oil-seeds; coal, manganese; chief towns—Nagpur, Jubbulpore; p. 15,472,528; 21 50N 80 0E
102 Centralia, tn., Ill., U.S.A.; p. 12,583; 38 30N 89 20W
53 Cephalonia I., Greece; a. 256 sq. m.; currants, olive-oil; p. 71,186; 38 15N 20 30E
71 Ceram I., Dutch E. Indies; a. 6,800 sq. m.; sago; p. 98,744; 3 00S 129 30E
71 Ceram S., Dutch E. Indies; 2 30S 128 30E
27 Ceres, par., Fife, Scot.; p. 1,425; 56 17N 2 58W
83 Ceres, tn., C. of Good Hope, S. Afr.; 33 25S 19 16E
51 Cerignola, tn., Italy; p. 36,000; 41 18N 15 57E
53 Cerigo I. See Kythera I.
52 Cernauți, tn., Rumania; wheat, dairy produce; p. 111,122; 48 18N 25 56E
19 Cerne Abbas, par., Dorset, Eng.; p. 511; 50 48N 2 27W
18 Cerrig-y-Druidon, par., Denbigh, Wales; p. 1,072; 53 1N 3 34W
109 Cerritos, tn., Mexico; 22 24N 100 20W
112 Cerro de Pasco, tn., Peru; silver, copper, coal, lead; copper smelting; p. 25,000; 10 50S 76 0W
49 Cervera, tn., Spain; 42 1N 1 57W

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50 Cesena, tn., Italy; cath.; sulphur, wines; p. 54,000; 44 7N 12 15E
121 Cessnock, tn., N.S.W., Austral.; coal; p. 13,930; 32 52S 151 18E
52 Cetatea Alba. See Akkerman.
47 Cetinje, tn., cap. Montenegro, Y.-slav.; p. 5,500; 42 25N 18 58E
35 Cette, spt., France; wines, oysters; chemicals; p. 35,400; 43 23N 3 41E
10 Ceuta, tn., spt., Sp. Morocco; cath.; p. 35,219; 35 50N 5 15W
35 Cevennes, mts., France; 44 30N 4 00E
68 Ceylon, I., Asia; Br. cr. col.; a. 25,332 sq. m., length 267 m., breadth 137 m.; fertile plains, mountainous interior; tea, rice, rubber, spices, copra, plumbago; cap. Colombo; p. 5,312,548; 7 30N 81 0E
89 Chabane, tn., Mozambique; 22 28S 31 40E
112 Chachapoyas, tn., Peru; 6 20S 77 22W
80 Chad, dist., Fr. Eq. Africa; a. 398,955 sq. m.; p. 973,611; 12 0N 19 50E
80 Chad, L., Fr. W. Africa; shallow, drying up; 830 ft. above sea-level; 14 0N 14 0E
19 Chagford, par., Devon, Eng.; stone circles; p. 1,715; 50 41N 3 50W
5 Chagos Is., Indian Ocean; 6 00S 72 0E
74 Chahar, dist., China; 42 30N 115 0E
83 Chaleddice dist., Greece; p. 64,799; 40 25N 23 20E
53 Chalkis, tn., Greece; p. 17,297; 38 26N 23 40E
34 Châlons s. Marne, tn., France; cath.; brewing, champagne; p. 32,307; 48 59N 4 23E
34 Chalon-s.-Saône, tn., France; glass, iron; p. 32,533; 46 48N 4 52E
102 Chambersburg, tn., Pa., U.S.A.; foundries, brewing; p. 13,788; 39 55N 77 45W
35 Chambéry, tn., France; silk, leather; p. 26,407; 45 43N 5 55E
97 Chambly, tn., Que., Canada; p. 1,287; 45 27N 73 32W
35 Chamonix, tn., France; tourist resort; p. 1,360; 45 56N 6 51E
34 Champagne, old prov., France; champagne, wine; 48 50N 4 30E
102 Champaign, tn., Ill., U.S.A.; foundries; p. 20,348; 40 6N 88 25W
97 Champlain, dist., Que., Canada; 46 29N 72 25W
102 Champlain, L., U.S.A.; 44 30N 73 30W
109 Champoton, tn., Mexico; 19 20N 90 47W
83 Chanak Kalessi, tn., Turkey; 40 8N 26 29E
113 Chañaral, tn., Chile; 26 0S 70 36W
114 Chanares, tn., Argentina; 32 0S 63 28W
114 Chancay, tn., Peru; 11 9S 77 24W
67 Chanda, tn., India; p. 22,981; 19 57N 79 28E
53 Chandarli, tn., Turkey; 38 58N 26 58E
67 Chandausi, tn., U. Provs., India; rly. centre; cotton, hemp.; p. 25,164; 28 23N 78 50E
67 Chandernagore, tn., India, Fr.; on R. Hooghly; cotton cloth; p. 27,262; 22 50N 88 28E
74 Chang-chow, tn., China; silk; 24 30N 117 40E
73 Changchun, tn., cap. Manchukuo, now called Hsinking, Manchuria; rly. centre; p. 80,000; 44 0N 125 0E
74 Chang-kia-kow. See Kalgan.
74 Chang-pu, China; 24 2N 117 33E
74 Changsha, tn., China; tea, rice; p. 606,972; 28 30N 112 40E
74 Changteh, tn., China; 29 0N 111 30E
34 Channel Is., Br. Isles; a. 75 sq. m.; include Jersey, Guernsey; fruit, vegetables; p. 93,061; 49 30N 2 40W
74 Chao-chow, tn., China; 23 55N 116 30E
72 Chao-kia-ying, tn., China; 27 0N 103 0E
72 Chao-tung, tn., China; 27 30N 103 55E
74 Chaoyang, Manchukuo, 41 42N 120 26E
115 Chapado, tn., Brazil; 5 30S 45 28W
108 Chapala, L., Mexico; 20 15N 103 0W
16 Chapel-en-le-Frith, par., Derby, Eng.; cotton, paper; p. 5,283; 53 20N 1 56W
96 Chaplean, tn., Ont., Canada; 47 48N 83 20W
67 Chapra, tn., Bihar, India; indigo; p. 42,415; 25 45N 84 47E
108 Charcas, tn., Mexico; 23 7N 101 11W
128 Charcot Land, Antarctica; 70 0S 78 0W
19 Chard, mun. bor., Somerset, Eng.; woollens; p. 4,475; 50 53N 2 57W
35 Charente, dept., France; a. 2,305 sq. m.; cognac; granite; cap. Angoulême; p. 310,489; 45 50N 0 15E
35 Charente Inférieure, dept., France; a. 2,791 sq. m.; farming; brandy; oysters, pilchards; cap. La Rochelle; p. 415,249; 45 57N 0 40W
35 Charente R., France; 46 0N 0 15E
47 Charevo, tn., Yugoslavia; 41 59N 22 48E
38 Charleroi, tn., Belgium; coal, glass; p. 28,069; 50 28N 4 28E
104 Charleroi, tn., Pa., U.S.A.; steel, glass; p. 11,260; 40 9N 80 0W
103 Charleston, spt., S.C., U.S.A.; rly. centre; manures; exp.—cotton, rice, lumber; p. 62,265; 32 50N 80 0W
102 Charleston, cap., W. Va., U.S.A.; coal, salt, hardware; p. 60,408; 38 25N 81 5W
30 Charlestown, vil., Mayo, I.F.S.; p. 669; 53 57N 8 48W
83 Charlestown, tn., Trans., S. Afr.; 27 25S 29 55E
121 Charleville, tn., Queens., Austral.; 26 28S 146 13E
34 Charleville, tn., France; on R. Meuse; iron, bricks; p. 22,708; 49 47N 4 43E
32 Charleville, tn., Cork, I.F.S.; p. 1,926; 52 22N 8 41W
103 Charlotte, tn., N.C., U.S.A.; rly. junc.; cotton, machinery; p. 82,675; 35 15N 80 50W
55 Charlottenberg, tn., Sweden; 59 55N 12 20E
41 Charlottenburg, tn., Germany; on R. Spree; suburb of Berlin, palace; china, beer, machinery; 52 32N 13 15E
102 Charlottesville, tn., Va., U.S.A.; iron, lumber, cigars; p. 15,245; 38 0N 77 35W
95 Charlottetown, cap., spt., P.E.I., Canada; Parliament buildings; iron foundry, shipyards, fisheries; p. 12,361; 46 19N 63 10W
120 Charlton, tn., Vic., Austral.; 36 17S 143 20E
19 Charmouth, par., Dorset, Eng.; p. 668; 50 45N 2 52W
16 Charnwood For., Leics, Eng.; 52 15N 1 13W
89 Charter, tn., S. Rhodesia; 18 33S 31 8E
123 Charters Towers, tn., Queens., Austral.; gold; p. 9,200; 20 1S 146 8E

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53 Chatalja, tn., Turkey; 41 8N 28 30E
45 Chateau d' Oex, tn., Switzerland; 46 28N 7 07E
34 Château Thierry, tn., France; on R. Marne; p. 7,200; 49 4N 3 25E
34 Châteaubriant, tn., France; 47 43N 1 24W
34 Châteaudun, tn., France; flour; 48 3N 1 19E
35 Châteauroux, tn., France; on R. Indre; textiles, machinery; p. 26,707; 46 47N 1 41E
38 Châtelet, tn., Belgium; coal, pottery; p. 15,124; 50 24N 4 30E
35 Châtellerault, tn., France; cutlery, small arms; p. 17,704; 46 48N 0 32E
95 Chatham, tn., N.B., Canada; lumbering; p. 4,017; 47 2N 65 30W
96 Chatham, cy., Ont., Canada; farming, fruit, machinery; p. 14,569; 42 25N 82 12W
17 Chatham, mun. bor., port, Kent, Eng.; dockyards, royal arsenal; bricks, lime, shipbuilding, timber sawing; p. 43,230; 51 23N 0 32E
116 Chatham Is., Pac. Oc., N.Z.; p. 562; 43 50S 176 30W
103 Chattahoochee R., U.S.A.; 31 30N 85 10W
103 Chattanooga, tn., Tenn., U.S.A.; rly. centre; cottons, iron and steel, chemicals; p. 119,798; 35 3N 85 7W
16 Chatteris, urb. dist., I. of Ely, Eng.; p. 5,153; 52 29N 0 05E
74 Chau-choo, tn., China; 37 52N 114 48E
94 Chaudière, tn., Que., Canada; 46 44N 71 20W
97 Chaudière Falls, Ont., Canada; hydro-electric power stn.; 45 25N 75 42W
34 Chaumont, tn., France; on R. Marne; gloves, leather; p. 15,941; 48 8N 5 07E
104 Chautauqua L., N.Y., U.S.A.; 42 12N 79 30W
48 Chaves, tn., Portugal; 41 45N 7 30W
70 Cheam Kaan, tn., Fr. Indo-China; 14 10N 104 50E
46 Cheb, tn., Cz.-slov.; formerly Eger; brewing, textiles; p. 31,549; 50 7N 12 22E
102 Cheboygan, tn., Mich., U.S.A.; 45 35N 84 30W
57 Chechen, aut. area, Russia; 43 10N 46 2E
19 Cheddar, par., Somerset, Eng.; famous cliffs and stalactite caves in Cheddar Gorge; cheese; p. 2,007; 51 16N 2 45W
121 Cheepie, tn., Queens., Austral.; 26 40S 144 59E
74 Chefoo, tn., treaty port, China; exp.—silk, groundnuts, soya beans; p. 119,305; 37 30N 121 30E
73 Cheguan, tn., Manchuria; 46 35N 123 10E
74 Che-kiang, prov., China; a. 36,680 sq. m.; agriculture, silk, cotton, tea; p. 24,139,765; 29 0N 120 0E
17 Chelmsford, mun. bor., co. tn. Essex, Eng.; cath.; farming implements, brewing; p. 26,537; 51 42N 0 82E
17 Chelsea, met. bor.; p. 59,026. See London.
19 Cheltenham, mun. bor., Glouc., Eng.; mineral springs; p. 49,385; 51 53N 2 05W
56 Chelyabinsk, tn., Russia; wheat; distilleries, tanneries; p. 210,000; 55 26N 61 28E
82 Chemba, tn., Mozambique; 17 13S 34 42E
41 Chemnitz, tn., Germany; cottons, woollens; locomotives; p. 350,734; 50 52N 12 50E
75 Chemulpo, spt., Korea; exp.—soya beans, rice; p. 53,700; 37 10N 126 55E
66 Chenab, R., India; trib. of Indus; 500 m. long; 30 45N 71 45E
74 Chenchowfu, tn., China; 33 42N 115 6E
73 Cheng-te, tn., China; 41 0N 118 0E
74 Cheng-ting, tn., China; 38 15N 114 30E
72 Cheng-tu, cap., Szechwan, China; silk, rice; p. 500,000; 31 0N 104 10E
70 Chentaban, tn., Fr. Indo-China; 12 35N 101 45E
114 Chepes, tn., Argentina; 31 12S 66 30W
19 Chepstow, urb. dist., Monmouth, Eng.; on R. Wye; castle; salmon fishing; p. 4,303; 51 38N 2 40W
34 Cher, dept., France; a. 2,819 sq. m.; grain, wines, iron; porcelain; cap. Bourges; p. 293,918; 47 0N 2 30E
34 Cherbourg, spt., France; naval sta.; shipbuilding, ropes, fishing; p. 37,461; 49 38N 1 38W
56 Cherdin, tn., Russia; 60 31N 56 28E
59 Cheremkovo, tn., U.S.S.R.; coal; 53 20N 103 0E
56 Cherepovetz, tn., Russia; 59 14N 37 58E
57 Cherkassy, tn., Russia; tobacco, sugar; p. 38,500; 49 27N 32 0E
57 Cherkess, aut. area, Russia; 44 27N 41 40E
57 Chernigov, tn., Russia; caths.; flour; p. 34,300; 51 30N 31 12E
57 Cherniyar, tn., Russia; 47 58N 45 57E
69 Cherrapunji, tn., Assam, India; reputed wettest place in world; av. annual rainfall 500 in.; 25 14N 91 43E
17 Chertsey, urb. dist., Surrey, Eng.; on R. Thames; farming, malt; p. 17,130; 51 24N 0 31W
17 Cherwell, R., Oxford, Eng.; trib. of R. Thames; 51 45N 1 19W
102 Chesapeake B., U.S.A.; oysters; 38 0N 76 0W
17 Chesham, urb. dist., Bucks, Eng.; shoes; p. 8,809; 51 42N 0 36W
18 Cheshire, co., England; a. 1,056 sq. m.; plain; rivers—Mersey, Dee; market gardening, dairying; salt, coal, iron; mnfs.—textiles, chemicals, shipbuilding; p. 1,087,544; 53 15N 2 30W
53 Cheshme, tn., Turkey; 38 19N 26 20E
17 Cheshunt, urb. dist., Herts, Eng.; bricks, market gardening; p. 14,551; 51 43N 0 01W
19 Chesil Bank, Dorset, Eng.; shingle ridge; 50 33N 2 33W
18 Chester, co. bor., co. tn. Cheshire, Eng.; on R. Dee; cath.; anc. walls; boots, gloves, iron; p. 41,433; 53 12N 2 54W
102 Chester, tn., Pa., U.S.A.; textiles; p. 59,164; 39 55N 75 23W
16 Chesterfield, mun. bor., Derby, Eng.; weaving, machinery; p. 64,146; 53 14N 1 25W
99 Chesterfield Inlet, Canada; 63 30N 91 0W
116 Chesterfield Is., Pac. Oc.; Br.; 19 52S 158 15E
20 Chester-le-Street, urb. dist., Durham, Eng.; coal, iron; p. 10,639; 54 52N 1 34W
16 Chesterton, par., Cambridge, England; p. 11,611; 52 14N 0 09E
20 Cheviot, The, mt., Northumb., Eng.; 2,676 ft.; 55 30N 2 10W
27 Cheviot Hs., mt. range, Scotland; 2,672 ft.; 55 20N 2 35W

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107 Cheyenne, tn., Wyo., U.S.A.; rly. centre; cattle; p. 17,361; 41 7N 104 51W
67 Chhindwara, tn., Cent. Provs., India; weaving, pottery; p. 13,400; 22 0N 79 0E
109 Chiapa, tn., Mexico; 16 42N 93 0W
109 Chiapas, st., Mexico; a. 27,527 sq. m.; mountainous, forested; hardwoods; cattle, coffee; cap. Tuxtla Gutierrez; p. 521,318; 16 30N 92 30W
50 Chiavari, tn., Italy; p. 12,950; 44 18N 9 21E
45 Chiavenna, Switzerland; 46 19N 9 27E
73 Chiba, tn., Japan; p. 57,445; 35 43N 140 13E
89 Chibababa, tn., Mozambique; 20 12S 33 42E
89 Chibinga, tn., Mozambique; 16 16S 31 35E
67 Chicacole, tn., India; 18 15N 84 0E
102 Chicago, cy., Ill., U.S.A.; on L. Michigan; univ.; rly. centre; 2nd city in U.S.A.; grain mkt., pork, beef canning; tanneries, farming implements, iron and steel, machinery, clothing, furs; p. 3,376,438; 41 50N 87 45W
17 Chichester, mun. bor., Sussex, Eng.; cath.; p. 14,180; 50 51N 0 47W
107 Chickasha, tn., Okla., U.S.A.; maize, cotton; p. 14,099; 34 30N 97 20W
105 Chicopee, tn., Mass., U.S.A.; hardware, carpets, cars; p. 43,930; 42 9N 72 37W
94 Chicoutimi, tn., Que., Canada; hydro-electric power sta.; lumber, pulp, paper; p. 11,877; 48 32N 70 50W
83 Chicualla, tn., Mozambique; 22 30S 31 53E
98 Chidley, C., Labrador; 60 20N 64 30W
70 Chiengkai, tn., Siam; 19 50N 99 50E
70 Chiengmai, tn., Siam; rly. terminus; teak; p. 30,000; 19 0N 99 0E
50 Chieri, tn., Italy; silks, cottons; p. 14,000; 45 1N 7 49E
50 Chieti, tn., Italy; woollens; p. 17,900; 42 22N 14 12E
73 Chihli, prov., China; a. 115,830 sq. m.; wheat, millet; chief tns.—Peking, Tientsin; p. 38,905,695; 39 40N 116 40E
74 Chihli, G., China; 38 30N 118 30E
108 Chihuahua, tn., Mexico; silver; cottons, woollens; p. 44,000; 28 32N 106 5W
108 Chihuahua, prov., Mexico; a. 90,036 sq. m.; cattle rearing; silver, gold; p. 491,893; 26 0 to 31 48N 104 0 to 108 40W
74 Chi-kau, tn., China; 38 32N 117 40E
89 Chilanga, tn., N. Rhodesia; 15 30S 28 0E
109 Chilapa, tn., Mexico; 17 25N 99 19W
68 Chilaw, tn., Ceylon; 7 35N 79 53E
123 Childers, tn., Queens., Austral.; 25 9S 152 17E
107 Childress, tn., Texas, U.S.A.; p. 7,163; 34 26N 100 15W
113 Chile, rep., S. America; a. 285,133 sq. m.; length 2,660 m., breadth 60 to 270 m.; coastal strip rising rapidly to Andes (Aconcagua, 23,081 ft.) in N. rainless Atacama Des., in centre fertile valleys, in S. forested; chief industries, agriculture, dairying, sheep, wool; minerals, nitrates, copper, iron ore, coal, iodine; cap. Santiago; p. 4,287,445; 17 30 to 55 0S 71 15W
66 Chilianwala, vil., India; 32 44N 73 36E
122 Chillagoe, tn., Queens., Austral.; 17 20S 144 29E
113 Chillan, tn., Chile; cattle, wheat; p. 39,511; 36 30S 72 15W
102 Chillicothe, tn., Mo., U.S.A.; p. 8,177; 39 50N 93 33W
102 Chillicothe, tn., Ohio, U.S.A.; furniture, leather; p. 18,340; 39 17N 82 58W
45 Chillon, Switzerland; on L. Geneva; 46 25N 6 55E
113 Chiloé, I., Chile; 42 40S 74 0W
109 Chilpancingo, tn., Mexico; 17 31N 99 12W
17 Chiltern Hills, England; chalk range running N.E. through Oxfordshire and Buckinghamshire; 51 40N 0 54W
89 Chilwa, L., Nyasaland; 15 5S 35 50E
112 Chimborazo, Mt., Ecuador; 20,498 ft.; extinct vol.; 1 15S 81 0W
112 Chimbote, tn., Peru, p. 1,000; 9 0S 78 30W
61 Chimkent, tn., Kazak Rep., U.S.S.R.; flour, tobacco, cotton; p. 21,700; 42 15N 69 30E
82 Chimoio, tn., Mozambique; 19 0S 33 25E
72 China, rep., Asia; a. 3,771,000 sq. m.; in N. and W. mountainous, in E. alluvial plain, fertile valleys; chief mountains—Kwenlun, Tien Shan, Khingan; chief rivers—Hwang-ho, Yangtzekiang, Sikiang; loess in N.; agriculture, rice, silk, tea, soya beans, wheat, millet, cotton, pigs; minerals, enormous reserves, coal, iron, oil, antimony; bamboo, camphor; densely populated; includes China Proper (18 provinces), Manchuria (q.v.), Tibet, Sikang, Taiughai, Sinkiang, Mongolia; cap. Nanking, former cap. Peiping (Peking); p. 457,364,000; 18 0 to 48 0N 74 0 to 135 0E
109 China, tn., Mexico; 25 39N 99 23W
123 Chinchilla, tn., Queens., Austral.; 26 42S 150 42E
48 Chinchon, tn., Spain; 40 8N 3 25W
73 Chinchow, tn., Manchuria; 41 0N 121 0E
89 Chinde, tn., spt., Mozambique; 18 40S 36 26E
89 Chindio, tn., Mozambique; 17 55S 36 32E
69 Chindwin, R., Burma, India; chief trib. of Irrawaddy R.; 22 45N 95 30E
108 Chinipas, tn., Mexico; 27 30N 108 24W
74 Chin-kiang, tn., treaty port, China; on R. Yangtze-kiang; trading centre; p. 153,613; 32 20N 119 45E
74 Chinnampo, tn., Korea; 38 50N 125 20E
72 Chin-ngan, tn., China; 23 30N 106 25E
34 Chinon, tn., France; p. 4,170; 47 12N 0 15E
74 Chinwangtao, port, China; p. 19,000; 40 0N 119 55E
74 Chin-wu, tn., China; 35 2N 115 55E
38 Chiny, Belgium; 49 44N 5 20E
50 Chioggia, spt., Italy; fishing; p. 36,100; 45 17N 12 25E
53 Chios I., Greece; wines, figs, fruits; marble; p. 75,080; 38 20N 26 0E
89 Chipawa, tn., N. Rhodesia; 15 7S 29 57E
19 Chippenham, mun. bor., Wilts, Eng.; dairying; p. 8,493; 51 27N 2 06W
96 Chippewa, tn., Ont., Canada; p. 1,266; 34 3N 79 5W
102 Chippewa Falls, tn., Wis., U.S.A.; flour, lumber; p. 9,539; 44 56N 91 28W
18 Chipping Campden, par., Gloucs, Eng.; p. 1,627; 52 3N 1 47W
16 Chipping Norton, mun. bor., Oxford, Eng.; gloves, woollens; p. 3,489; 51 57N 1 33W

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19 Chipping Sodbury, par., Gloucs, Eng.; p. 952; 51 32N 2 21W
113 Chiquisaca. See Sucre.
72 Chira, tn., Sin-Kiang; 36 55N 80 45E
82 Chiramba, tn., Mozambique; 16 55S 34 25E
110 Chiriqui, Vol., Panama; 11,970 ft.; 8 45N 82 15W
18 Chirk, par., Denbigh, Wales; slate, coal; p. 2,576; 52 57N 3 4W
27 Chirnside, par., Berwick, Scot.; p. 1,414; 55 48N 2 13W
82 Chiromo, vil., Nyasaland; 16 30S 35 10E
53 Chirpan, tn., Bulgaria; 42 13N 25 20E
57 Chirskaya, tn., Russia; 48 20N 42 54E
52 Chisinau. See Kishinev.
56 Chistopol, tn., Russia; p. 20,250; 55 18N 50 28E
17 Chiswick. See Brentford and Chiswick.
73 Chita, tn., Siberia; exp.—furs, hides; p. 81,900; 52 0N 113 50E
68 Chitaldroog, tn., Mysore, India; 14 15N 76 25E
89 Chambo, tn., N. Rhodesia; 12 25S 30 28E
89 Chitanga, tn., S. Rhodesia; 1 00S 31 30E
66 Chitral, tn., N.W. Frontier Prov., India; 35 47N 71 40E
69 Chittagong, tn., Bengal, India; exp.—rice, jute, tea; p. 36,031; 22 25N 91 58E
50 Chiusi, tn., Italy; 43 0N 11 57E
114 Chivilcoy, tn., Argentina; wheat, maize, cattle; p. 23,250; 34 50S 59 58W
20 Chollerton, par., Northumberland, England; p. 1,245; 55 4N 2 08W
56 Cholmogory, tn., Russia; 41 32N 64 49E
70 Cholon, tn., Fr. Indo-China; rice; p. 233,726; 10 40N 106 40E
75 Chôn-ju, tn., Korea; 35 47N 127 25E
113 Chonos Arch., Chile; 45 0S 74 0W
112 Chorillos, tn., Peru; 12 10S 76 50W
18 Chorley, mun. bor., Lancs, Eng.; cotton yarns, bleaching, coal; p. 30,795; 53 39N 2 38W
53 Chorlu, tn., Turkey; carpets; p. 10,000; 41 10N 27 48E
60 Chorum, tn., Turkey; p. 19,664; 40 40N 43 54E
43 Chorzow. See Krolewska Huta.
73 Chosen. See Korea.
67 Chotan, tn., Tibet; 37 8N 79 55E
67 Chota Nagpur, div., Bih. and Or., India; a. 27,065 sq. m.; mountainous, forested; rice, coal; p. 6,639,041; 23 10N 84 0E
52 Choumen, tn., Bulgaria; clothing; p. 25,137; 43 20N 26 52E
17 Christchurch, mun. bor., Hants, Eng.; on R. Avon; hosiery; p. 13,109; 50 44N 1 47W
127 Christchurch, cy., S.I., New Zealand; cath.; boots, farm implements; p. 88,500; 43 31S 172 37E
55 Christiania. See Oslo.
83 Christiana, tn., Trans., S. Afr.; p. 2,052 (Eur.); 27 58S 25 10E
88 Christiansborg, tn., Gold Coast; 5 40N 0 0
93 Christianshaab, tn., Greenland; 69 0N 51 0W
117 Christmas I., Br., largest atoll in Pac. Oc.; 2 00N 157 20W
74 Chuan-chow, spt., China; rice; p. 200,000; 24 50N 118 40E
113 Chubut, R., Argentina; 43 30S 70 0W
72 Chu-ching, tn., China; 25 30N 103 45E
74 Chüchow, tn., China; 29 0N 118 50E
19 Chudleigh, par., Devon, Eng.; p. 1,869; 50 37N 3 36W
19 Chulmleigh, par., Devon, Eng.; p. 1,143; 50 54N 3 55W
72 Chung-king, tn., treaty port, China; on R. Yangtze Kiang; exp. silk, soya-beans, sugar; p. 635,000; 29 35N 106 38E
114 Chuquibamba, tn., Peru; 15 38S 72 50W
45 Chur, tn., Switzerland; p. 15,767; 46 52N 9 33E
18 Church Stretton, urb. dist., Salop, Eng.; p. 1,705; 52 33N 2 49W
99 Churchill, tn., Man., Canada; N. terminus of Hudson Bay Rly.; 58 45N 94 0W
99 Churchill, C., Man., Canada; 58 55N 93 7W
99 Churchill, R., Sask., Canada; 1,000 m. long; 57 8N 96 30W
74 Chusan Arch., China; 30 0N 123 30E
74 Chusan I., China; tea, rice; p. 200,000; 30 0N 122 5E
56 Chuvash, aut. area, Russia; a. 7,107 sq. m.; forests; oats; dairying; p. 900,000; 55 30N 47 30E
72 Chwanpien (Sikang), prov., China; cap. Baanfu; 30 0N 98 0W
110 Cienfuegos, tn., Cuba; sugar, tobacco; 39,900; 22 12N 80 32W
49 Cieza, tn., Spain; flour, wines; p. 13,740; 38 15N 1 25W
102 Cincinnati, cy., Ohio, U.S.A.; on R. Ohio; machinery, furniture, clothing, boots; p. 451,160; 39 3N 84 30W
38 Ciney, tn., Belgium; 50 18N 5 05E
48 Cintra, tn., Portugal; 38 46N 9 25W
98 Circle, tn., Alaska; 65 35N 144 0W
19 Cirencester, urb. dist., Gloucs., Eng.; p. 7,200; 51 43N 1 58W
50 Cittadella, tn., Italy; p. 9,750; 45 39N 11 44E
51 Cittanova, tn., Italy; p. 11,920; 38 22N 6 03E
112 Ciudad Bolivar, tn., Venezuela; coffee, cattle; p. 17,000; 8 07N 63 52W
108 Ciudad Juarez, tn., Mexico; p. 39,000; 31 33N 107 45W
48 Ciudad Real, tn., Spain; grain, olive oil, wine; p. 23,401; 38 58N 3 55W
48 Ciudad Rodrigo, tn., Spain; 40 35N 6 30W
111 Ciudad Trujillo. See Santo Domingo.
49 Ciudadela, Spain; 39 59N 3 52E
50 Civita Castellana, tn., Italy; 42 17N 12 25E
50 Civitanova, tn., Italy; p. 11,350; 43 18N 13 20E
50 Civitavecchia, spt., Italy; cement, sulphur springs; p. 23,300; 42 7N 11 48E
27 Clackmannan, co., Scotland; a. 54½ sq. m.; surface, flat in Carse, and hilly elsewhere; coal, woollens, shipbuilding; p. 31,947; 56 10N 3 44W
27 Clackmannan, par. co., tn., Clackmannan, Scot.; coal; p. 2,585; 56 6N 3 44W
17 Clacton-on-Sea, urb. dist., Essex, Eng.; p. 15,851; 51 47N 1 10E

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83 Clanwilliam, C. of Good Hope, S. Afr.; 32 8S 18 52E
33 Clara, tn., Offaly, I.F.S.; p. 1,024; 53 21N 7 37W
16 Clare, vil., Suffolk, Eng.; 52 0N 0 35E
32 Clare, co., Irish Free State; a. 1,332 sq. m.; oats, potatoes; sheep, cattle; oyster beds, salmon; p. 95,028; 52 36 to 53 10N 8 30 to 9 50W
32 Clare, tn., Clare, I.F.S.; p. 538; 52 49N 8 59W
120 Clare, tn., S. Austral.; 33 48S 138 36E
30 Clare I., Irish Free State; 53 48N 10 0W
123 Clarence, tn., W. Austral.; 32 11S 115 47E
121 Clarence, R., N.S.W., Austral.; 29 17S 152 30E
121 Clarencetown, tn., N.S.W., Austral.; 32 35S 151 44E
83 Clarkebury, tn., C. of Good Hope, S. Afr.; 31 45S 28 20E
104 Clarksburg, tn., W. Va., U.S.A.; machinery, glass, pottery; p. 28,866; 39 17N 80 17W
103 Clarksville, tn., Tenn., U.S.A.; p. 9,242; 36 30N 87 23W
16 Claypole, vil., Kest., England; p. 547; 53 0N 0 45W
32 Clear C., I.F.S.; most S. pt. of Ireland; 51 25N 9 30W
104 Clearfield, tn., Pa., U.S.A.; p. 9,221; 41 1N 78 31W
20 Cleator Moor, par., Cumb., Eng.; coal; p. 6,382; 54 32N 3 30W
107 Cleburne, tn., Tex., U.S.A.; rly. works, flour; p. 11,539; 32 11N 97 11W
18 Clee Hills, Salop, Eng.; 52 27N 2 37W
16 Cleethorpes, mun. bor., Lindsey, Eng.; seaside resort; p. 29,294; 53 35N 0 02W
19 Cleeve Cloud, hill, Gloucs., Eng.; 51 56N 1 43W
18 Cleobury Mortimer, par., Salop, Eng.; p. 1,487; 52 23N 2 29W
38 Clerf, tn., Luxemburg, 50 4N 6 03E
123 Clermont, tn., Queens., Austral.; 22 49S 147 38E
35 Clermont Ferrand, tn., France; cath.; chemicals, rubber goods; p. 103,143; 45 46N 3 04E
19 Clevedon, urb. dist., Somerset, Eng.; p. 7,033; 51 26N 2 52W
121 Cleveland, tn., Queens., Austral.; 27 33S 153 8E
102 Cleveland, tn., Ohio, U.S.A.; on L. Erie; rly. centre; iron foundries, machinery, lumber, coal, petroleum refining, meat canning; p. 900,429; 41 30N 81 30W
20 Cleveland Hills, N. Riding, Eng.; iron ore, blast furnaces; 54 25N 1 10W
16 Cley, par., Norfolk, England; p. 685; 52 57N 1 02E
30 Clifden, spt., Galway, I.F.S.; p. 809; 53 29N 10 1W
121 Clifton, tn., Queens., Austral.; 27 38S 147 7E
103 Clinch Mts., U.S.A.; 36 30N 82 30W
96 Clinton, tn., Ont., Canada; p. 1,789; 43 37N 81 37W
127 Clinton, tn., S.I., New Zealand; p. 370; 46 12S 169 23E
102 Clinton, tn., Iowa, U.S.A.; on Mississippi R.; iron and steel; p. 25,720; 41 48N 90 16W
105 Clinton, tn., Mass., U.S.A.; machinery, carpets; p. 12,817; 42 23N 71 43W
18 Clitheroe, mun. bor., Lancs., Eng.; cotton, brewing, paper; p. 12,008; 53 53N 2 23W
33 Clogheen, tn., Tipperary, I.F.S.; p. 735; 52 16N 800W
31 Clogher, vil., Tyrone, N. Ire.; p. 613; 54 24N 7 10W
32 Clonakilty, urb. dist., Cork, I.F.S.; corn, farming; p. 2,771; 51 37N 8 54W
123 Cloncurry, tn., Queens., Austral.; 20 40S 140 28E
31 Clones, urb. dist., Monaghan, I.F.S.; rly. centre; p. 2,358; 54 11N 7 15W
33 Clonmel, urb. dist. co. tn., Tipperary, I.F.S.; dairying; p. 7,989; 52 21N 7 42W
33 Clontarf, par., Dublin, I.F.S.; p. 4,613; 53 22N 6 12W
27 Closeburn, par., Dumfries, Scot.; p. 1,074; 55 13N 3 49W
20 Cloughton, vil., N. Riding, England; p. 746; 54 20N 0 26W
19 Clovelly, vil., Devon, Eng.; seaside resort; p. 634; 51 0N 4 24W
33 Cloyne, tn., Cork, I.F.S.; p. 756; 51 52N 8 08W
52 Cluj, tn., Rumania; formerly Klausenburg; textiles, paper, sugar, earthenware; p. 98,350; 46 47N 23 40E
18 Clun, par., Salop, Eng.; p. 1,774; 52 26N 3 01W
24 Clunie, par., Ross and Crom., Scot.; p. 543; 57 10N 5 10W
35 Cluny, tn., France; abbey ruins; 46 28N 4 42E
127 Clutha, R., New Zealand; 45 40S 169 24E
26 Clyde, F. of, Scotland; 55 25N 4 53W
26 Clyde, R., Scotland; navigable to Glasgow; greatest shipbuilding centre in world; "Clydesdale horses"; coal in basin; 55 52N 4 35W
27 Clydebank, bor., Dumbarton, Scot.; shipbuilding, distilling, chemicals; p. 45,963; 55 55N 4 24W
18 Clydey, vil., Pembroke, Wales; p. 835; 51 53N 4 34W
25 Clyne, par., Sutherland, Scot.; p. 1,723; 58 2N 3 57W
31 Coagh, vil., Tyrone, N. Ire.; p. 330; 54 32N 6 37W
108 Coalcoman, Mexico; 18 43N 103 14W
108 Coahuila, st., Mexico; a. 63,786 sq. m.; agriculture, cotton, maize; mining, silver, copper, coal, gold; cap. Saltillo; p. 434,313; 27 0N 102 0W
121 Coast Ra., N.S.W., Austral.; 36 0S 149 30E
106 Coast Range, mts., U.S.A.; 8,190 ft.; 44 0 to 40 0N 123 0W
27 Coatbridge, bor., Lanark, Scot.; iron, tinplates, furnaces; p. 43,056; 55 52N 4 01W
97 Coaticook, tn., Que., Canada; textiles; p. 4,044; 45 5N 71 53W
4 Coats Land, Antarctica; 73 0S 20 0W
109 Coatzacoalcos. See Puerto Mexico.
93 Cobalt, tn., Ont., Canada; silver, cobalt, arsenic, nickel; p. 3,885; 47 25N 79 50W
110 Coban, tn., Guatemala; coffee; p. 27,000; 15 30N 90 22W
121 Cobar, tn., N.S.W., Austral.; copper; 31 29S 145 50E
121 Cobargo, tn., N.S.W., Austral.; 36 26S 149 56E
32 Cobh, spt., Cork, I.F.S.; p. 7,070; 51 51N 8 17W
112 Cobija, tn., Bolivia; 11 0S 68 50W
113 Cobija, spt., Chile; 22 30S 70 20W
40 Coblence, tn., Germany; at junc. of R. Rhine and Moselle; fine buildings, wine, pianos, paper, machinery; p. 65,257; 50 20N 7 35E
96 Cobourg, tn., Ont., Canada; dairying, fruit; woollens; p. 5,834; 43 58N 78 15W

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40 **Coburg**, tn., Germany; cattle, machinery; p. 24,701; 50 18N 11 0E
68 **Cocanada**, tn., spt., Madras, India; exp. cotton, oil-seeds; p. 53,348; 17 0N 82 15E
113 **Cochabamba**, tn., Bolivia; cottons, woollens; p. 36,000; 17 10S 66 30W
68 **Cochin**, st., India; a. 1,418 sq. m.; rice, coconuts; teak; cap. Ernakulam; p. 1,205,016; 10 30N 76 20E
58 **Cochin**, spt., Madras, India; exp. coconut oil, tea; p. 20,637; 9 55N 76 18E
70 **Cochin China**, co., Fr. Indo-China; a. 26,476 sq. m.; mountainous in N., largely plain; agriculture, rice, rubber, maize, cotton, fruits; cap. Saigon; p. 4,392,886; 10 0N 107 0E
93 **Cochrane**, tn., Ont., Canada; p. 3,963; 49 2N 81 50W
120 **Cockburn**, tn., S. Austral.; 32 3S 140 57E
27 **Cockburnspath**, par., Berwick, Scot.; p. 876; 55 57N 2 22W
27 **Cockenzie**, bor., E. Lothian, Scot.; coal, salt, fishing; p. 2,526; 55 58N 2 57W
20 **Cockermouth**, urb. dist., Cumberland, Eng.; coal; p. 4,789; 54 40N 3 22W
5 **Cocos Is.**, Ind. Oc., Br.; copra, coconuts; p. 800; 12 0S 96 0E
102 **Cod, C.**, Mass., U.S.A.; 42 0N 70 10W
122 **Coen**, tn., Queens., Austral.; 13 53S 143 2E
17 **Coggeshall**, par., Essex, Eng.; silk, isinglass; p. 2,300; 51 52N 0 40E
35 **Cognac**, tn., France; on R. Charente; cognac, bottles; p. 17,404; 45 42N 0 18W
105 **Cohoes**, tn., N.Y., U.S.A.; paper, foundries; p. 23,226; 42 50N 73 42W
68 **Coimbatore**, tn., Madras, India; coffee, sugar; cotton spinning; p. 65,788; 11 2N 77 0E
48 **Coimbra**, tn., Portugal; on R. Mondego; cath., univ.; p. 20,841; 40 13N 8 27W
120 **Colac**, tn., Vic., Austral.; 38 19S 143 38E
112 **Colamar**, tn., Colombia; p. 10,000; 10 4N 74 58W
96 **Colborne**, tn., Ont., Canada; p. 1,015; 44 0N 77 55W
17 **Colchester**, mun. bor., Essex, Eng.; on R. Colne; oysters, boots; p. 48,607; 51 53N 0 53E
20 **Cold Fell**, Cumberland, Eng.; 54 53N 2 40W
27 **Coldingham**, par., Berwick, Scot.; p. 2,830; 55 54N 2 10W
27 **Coldstream**, bor., Berwick, Scot.; first regiment of Coldstream Guards recruited here 1659 by General Monk; p. 1,233; 55 40N 2 15W
19 **Coleford**, par., Gloucs., Eng.; coal; p. 2,777; 51 48N 2 36W
83 **Colenso**, vil., Natal, S. Afr.; battle, 1899; 28 45S 29 50E
120 **Coleraine**, tn., Vic., Austral.; 37 33S 141 44E
31 **Coleraine**, urb. dist., Londonderry, N. Ire.; linen, distilling; p. 8,080; 55 8N 6 40W
83 **Colesberg**, tn., C. of Good Hope, S. Afr.; 30 46S 25 3E
16 **Coleshill**, par., Warwick, Eng.; p. 3,177; 52 30N 1 42W
106 **Colfax**, tn., Wash., U.S.A.; 46 52N 117 15W
86 **Coligny**, Trans., S. Afr.; 26 20S 26 35E
108 **Colima**, prov., Mexico; a. 2,272 sq. m.; mountainous; sugar, rice, maize, coffee; copper; p. 60,845; 19 0N 104 0W
108 **Colima**, tn., Mexico; cotton; p. 30,000; 19 12N 103 45W
108 **Colima Vol.**, Mexico; 12,750 ft.; 19 30N 103 45W
27 **Collessie**, par., Fife, Scot.; p. 1,955; 56 19N 3 10W
125 **Collie**, tn., W. Austral.; p. 3,500; 33 21S 116 15E
123 **Collingwood**, tn., Queens., Austral.; 22 22S 143 37E
96 **Collingwood**, tn., Ont., Canada; shipbuilding, steel; p. 5,900; 44 28N 80 13W
30 **Collooney**, vil., Sligo, I.F.S.; p. 330; 54 11N 8 30W
34 **Colmar**, tn., France; vines, textiles, brewing; p. 46,518; 48 7N 7 20E
26 **Colmonell**, par., Ayr, Scot.; p. 1,713; 55 8N 4 54W
18 **Colne**, mun. bor., Lancs., Eng.; cottons; p. 23,790; 53 52N 2 10W
17 **Colne, R.**, Essex, Eng.; oysters; 51 33N 0 36W
40 **Cologne**, tn., Germany; on R. Rhine; cath.; cottons, woollens, eau-de-Cologne, machinery, porcelain; p. 756,605; 50 56N 6 57E
112 **Colombia**, rep., S. America; a. 447,536 sq. m.; greatest length 1,050 m., breadth 850 m.; in W. mountainous, Cordilleras, drained by Magdalena, Cauca to N., Guaviare, Caqueta to E.; in E. swampy llanos; agriculture, coffee, tobacco, cotton, cocoa, sugar, bananas; cattle rearing; minerals, gold, platinum, petroleum, emeralds; cap. Bogota; p. 7,851,000; 3 45N 73 0W
68 **Colombo**, tn., spt., cap. Ceylon; good harbour; exp. rubber, tea, coconuts; p. 244,163; 6 58N 79 58E
110 **Colon**, spt., Panama; Atlantic terminus of Panama Canal; p. 33,000; 9 22N 79 51W
113 **Colonia**, tn., Uruguay; p. 3,000; 34 15S 57 50W
26 **Colonsay, L.**, Argyll, Scot.; 56 3N 6 12W
106 **Colorado Plat.**, Arizona, U.S.A.; 35 0N 111 30W
113 **Colorado, R.**, Argentina; 500 m. long; 39 0S 64 0W
106 **Colorado, R.**, U.S.A.; 2,000 m. long; tribs. Grand, Green; Grand Cañon, 6,000 ft. deep; 32 0N 115 7W
107 **Colorado R.**, Tex., U.S.A.; 900 m. long; 30 30N 98 0W
107 **Colorado**, st., U.S.A.; a. 103,948 sq. m.; agriculture with irrigation, wheat, maize, alfalfa; sheep, cattle, pigs; minerals, gold, copper, silver, coal; mnfs. smelting, machinery, flour milling; cap. Denver; p. 1,035,791; 37 0 to 41 0N 106 0 to 109 0W
107 **Colorado Springs**, tn., Col., U.S.A.; smelting; p. 33,237; 38 50N 104 50W
114 **Colquechaca**, tn., Bolivia; 18 32S 65 35W
104 **Columbia**, dist., U.S.A.; federal territory; 38 52N 77 0W
102 **Columbia**, tn., Mo., U.S.A.; flour, lumber; p. 14,967; 39 0N 92 20W
104 **Columbia**, tn., Pa., U.S.A.; p. 11,349; 40 2N 76 23W
103 **Columbia**, tn., cap., S.C., U.S.A.; univ.; cotton mills, ironworks; p. 50,211; 33 58N 81 0W
90 **Columbia, C.**, N. America; 83 0N 70 0W
100 **Columbia, R.**, N. America; 1,400 m. long; rises in Br. Columbia, and passes through Wash., U.S.A.; salmon fishing; 46 10N 123 0W
103 **Columbus**, tn., Ga., U.S.A.; cotton goods, machinery; p. 43,131; 32 30N 84 57W

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102 **Columbus**, tn., Ind., U.S.A.; farm implements, tanneries; p. 2,935; 39 15N 85 27W
103 **Columbus**, tn., Miss., U.S.A.; cotton, dairying; p. 10,743; 33 30N 88 30W
107 **Columbus**, tn., Neb., U.S.A.; p. 6,898; 41 29N 97 29W
102 **Columbus**, tn., cap., Ohio, U.S.A.; machinery, shoes, soap; p. 290,564; 39 57N 83 0W
121 **Colusa**, tn., Vic., Austral.; 35 52S 144 12E
18 **Colwyn Bay**, mun. bor., Denbigh, Wales; seaside resort; p. 20,885; 53 17N 3 42W
19 **Colyton**, par., Devon, Eng.; p. 1,886; 50 45N 3 05W
50 **Comacchio**, tn., Italy; p. 10,900; 44 40N 12 20E
110 **Comayagua**, tn., Honduras; p. 8,000; 14 30N 87 32W
114 **Combarbalia**, tn., Chile; 31 13S 71 0W
19 **Combe Martin**, par., Devon, Eng.; p. 2,004; 51 12N 4 00W
31 **Comber**, tn., Down, N. Ire.; distilleries, linen; p. 2,500; 54 33N 5 45W
123 **Comet**, tn., Queens., Austral.; 23 37S 148 42E
69 **Comilla**, tn., Bengal, India; p. 25,914; 23 27N 91 20E
51 **Comiso**, tn., Italy; p. 26,230; 36 59N 14 33E
109 **Comitan**, tn., Mexico; 16 14N 92 14W
50 **Como**, tn., Italy; oranges, olives; silk, satin; p. 48,699; 45 47N 9 09E
50 **Como, L.**, Italy; 30 m. long; tourist resort; 46 0N 9 20E
68 **Comorin, C.**, India; southernmost point; 8 00N 77 35E
77 **Comoro Is.**, Indian Ocean; turtle fishing; p. 119,305; 12 0S 44 0E
34 **Compiègne**, tn., France; ropes; p. 17,852; 49 26N 2 53E
108 **Compostela**, tn., Mexico; 21 17N 105 0W
27 **Comrie**, par., Perth, Scot.; p. 1,775; 56 23N 3 58W
89 **Conceicão, Mozambique**; 19 0S 43 30W
113 **Concepcion**, tn., Argentina; p. 10,250; 32 20S 61 57W
114 **Concepcion**, tn., Bolivia; 16 0S 62 0W
113 **Concepcion**, tn., Chile; flour, distilling, brewing; p. 77,589; 36 40S 72 50W
113 **Concepcion**, tn., Paraguay; on R. Paraguay; p. 11,000; 23 20S 57 30W
108 **Concepcion del Oro**, tn., Mexico; 24 37N 101 30W
105 **Concord**, tn., Mass., U.S.A.; textiles; p. 7,477; 42 11N 71 23W
102 **Concord**, tn., cap., N.H., U.S.A.; granite, machinery, textiles; p. 25,228; 43 8N 71 35W
103 **Concord**, tn., N.C., U.S.A.; cotton, textiles; p. 11,820; 35 27N 80 33W
113 **Concordia**, tn., Argentina; on Uruguay R.; meat, hides; p. 20,100; 31 15S 58 0W
108 **Concordia**, tn., Mexico; 23 20N 106 7W
121 **Condamine**, tn., Queens., Austral.; 26 59S 150 15E
34 **Condé**, tn., France; textiles; p. 6,620; 48 51N 0 31W
121 **Condobolin**, tn., N.S.W., Austral.; 33 2S 147 13E
105 **Coney I.**, N.Y., U.S.A.; seaside resort; 5 m. long; 40 18N 73 50W
74 **Cong**, tn., I.F.S.; 53 33N 9 17W
18 **Congleton**, mun. bor., Cheshire, Eng.; dairying; silk; p. 12,885; 53 10N 2 13W
80 **Congo, R.**, Belg. Congo; largest river in Africa, about 2,800 m.; formed by union of R. Lukuga and R. Luapula, afterwards called Lualaba and Congo beyond Stanley Falls; navigable for ocean steamers to Matadi; 2 00N 21 0E
80 **Congo, St.** See Belgian Congo.
21 **Conisbrough**, urb. dist., W. Riding, Eng.; limestone, bricks, tiles; p. 18,179; 53 28N 1 14W
20 **Coniston**, par., Lancs., Eng.; slate; p. 1,098; 54 23N 3 04W
20 **Coniston**, lake, Lancs., Eng.; 5½ m. long; tourist resort; 54 20N 3 04W
68 **Conjeeveram**, tn., Madras, India; silk, cotton weaving; p. 61,376; 12 55N 79 44E
30 **Connacht**. See Connaught.
30 **Connaught**, prov., I.F.S.; a. 6,863 sq. m.; mountainous in W., drained by R. Shannon; farming, fishing; p. 552,737; 53 45N 9 15W
104 **Conneautville**, tn., Pa., U.S.A.; 41 43N 80 16W
102 **Connecticut**, st., U.S.A.; a. 4,965 sq. m.; agriculture, cereals, tobacco, hay; dairying, fishing, iron ore, tungsten; mnfs. textiles, machinery, rubber goods, watches; cap. Hartford; p. 1,606,903; 41 45N 73 0W
102 **Connecticut R.**, U.S.A.; 400 m. long; 43 0N 72 30W
104 **Connellsville**, tn., Pa., U.S.A.; coke, machinery, motor-cars; p. 13,290; 40 2N 79 36W
32 **Connemara**, dist.; Galway, I.F.S.; tourist resort; 53 28N 9 45W
24 **Conon**, vil., Ross and Crom., Scot.; p. 346; 57 34N 4 27W
20 **Consett**, urb. dist., Durham, Eng.; coal, ironworks; p. 12,251; 54 50N 1 50W
40 **Constance**, tn., Germany; on L. Constance; cath.; textiles, machinery, chemicals; p. 31,252; 47 39N 9 11E
40 **Constance, L.**, Switzerland; a. 207 sq. m.; 46 m. long, 8½ m. wide; 47 37N 9 25E
52 **Constanta**, spt., Rumania; exp. petroleum, wheat; p. 58,258; 44 12N 28 41E
10 **Constantine**, tn., Algeria; wheat; woollens, leather; p. 104,902; 36 30N 6 30E
53 **Constantinople**. See Istanbul.
113 **Constitucion**, tn., Chile; p. 8,379; 35 25S 72 25W
51 **Conversano**, tn., Italy; cath.; olives, citrus fruits; p. 13,950; 41 0N 17 7E
18 **Conway**, mun. bor., Caer., Wales; cas.; p. 8,769; 53 17N 3 50W
18 **Conway, R.**, Denbigh, Wales; 53 13N 3 50W
69 **Cooch Behar**, tn., cap. of Cooch Behar, India; p. 11,400; 26 18N 89 35E
69 **Cooch Behar**, st., Bengal, India; rice, jute, tobacco; p. 590,866; 26 18N 89 35E
117 **Cook Is.**, Pac. Oc., N.Z.; largest is. Rarotonga; bananas, oranges, copra; p. 13,877; 8 00 to 23 0S 156 0 to 170 0W
127 **Cook, Mt.**, New Zealand; 12,342 ft.; 43 36S 170 7E
126 **Cook Str.**, New Zealand; separates N. and S. islands; 41 20S 174 30E
122 **Cooktown**, spt., Queens., Australia; 15 22S 145 15E
31 **Cookstown**, urb. dist., Tyrone, N. Ire.; linen; p. 3,554; 54 39N 6 45W
121 **Coolabah**, tn., N.S.W., Austral.; 31 1S 146 44E

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121 **Coolah**, tn., N.S.W., Austral.; 31 48S 149 44E
125 **Coolgardie**, tn., W. Austral.; 30 55S 121 13E
121 **Cooma**, tn., N.S.W., Austral.; 36 17S 149 6E
121 **Coonabarabran**, tn., N.S.W., Austral.; 31 17S 149 15E
120 **Coonalpyn**, tn., S. Austral.; 35 42S 139 52E
121 **Coonamble**, tn., N.S.W., Austral.; 30 58S 148 24E
120 **Coondambo**, tn., S. Austral.; 31 2S 135 52E
68 **Coorg**, prov., India; a. 1,582 sq. m.; mountainous, forests; coffee, rice, rubber, tea; cap. Mercara; p. 163,089; 12 20N 75 40E
121 **Cootamundra**, tn., N.S.W., Austral.; 34 37S 148 2E
31 **Cootehill**, urb. dist., Cavan, I.F.S.; p. 1,534; 54 4N 7 05W
121 **Cooyar**, tn., Queens., Austral.; 26 58S 151 48E
39 **Copenhagen**, tn., spt., cap., Denmark; royal palace, univ., library; fine harbour; naval stn.; shipbuilding, textiles, chemicals, machinery; p. 617,069; 55 43N 12 38E
113 **Coplapo**, tn., Chile; copper smelting; p. 10,747; 27 15S 70 15W
114 **Copiapo**, vol., Chile; 27 18S 69 20W
123 **Copperfield**, tn., Queens., Austral.; 22 47S 147 42E
20 **Coquet, I.**, Northumb., Eng.; 55 20N 1 32W
20 **Coquet, R.**, Northumb., Eng.; 55 17N 1 43W
80 **Coquilhatville**, tn., Belg. Congo; 0 00 18 12E
113 **Coquimbo**, spt., Chile; cath.; copper; p. 17,121; 30 1S 71 20W
121 **Coraki**, tn., N.S.W., Austral.; 29 4S 153 21W
116 **Coral Sea**, Pac. Oc.; 10 0 to 20 0S 150 0 to 165 0E
51 **Corato**, tn., Italy; farming centre; p. 49,000; 41 12N 16 23E
34 **Corbeil**, tn., France; on R. Seine; flour mills, printing, paper; p. 11,000; 48 37N 2 26E
20 **Corbridge**, par., Northumb., Eng.; p. 2,415; 54 59N 2 01W
16 **Corby**, vil., Kest., England; p. 664; 52 50N 0 30W
16 **Corby**, par., Northants, Eng.; iron ore; p. 1,449; 52 50N 0 30W
113 **Cordoba**, tn., Argentina; wheat, flour, wool; shoes; p. 253,182; 31 10S 64 25W
109 **Cordoba**, tn., Mexico; cottons, woollens; p. 10,300; 18 51N 97 0W
48 **Cordova**, tn., Spain; on R. Guadalquivir; cath.; textiles, distilling, brewing; p. 103,100; 37 52N 4 48W
112 **Corentyne, R.**, Du. Guiana; 6 00N 57 0W
19 **Corfe Cas.**, par., Dorset, Eng.; cas. ruins; marble quarries, potter's clay; p. 1,402; 50 40N 2 3W
53 **Corfu**, spt., Greece; wine, citrus fruits, olives; p. 22,220; 39 39N 19 57E
48 **Coria**, tn., Spain; 40 0N 6 32W
51 **Corigliano**, tn., Italy; p. 15,650; 39 38N 16 32E
53 **Corinth**, tn., Greece; currants, olive oil, silk; 37 58N 23 0E
103 **Corinth**, tn., Miss., U.S.A.; p. 6,220; 34 57N 88 36W
53 **Corinth, G. of**, Greece; 75 miles long; connected by canal with Ægean Sea; 38 10N 22 40E
32 **Cork**, co., Irish Free St.; a. 2,890 sq. m.; mountainous, chief rivers, Blackwater, Lee, Bandon; dairying, brewing, distilling; p. 365,722; 51 30 to 52 22N 8 00 to 10 0W
32 **Cork**, co. bor., spt., co. tn., Cork, I.F.S.; on R. Lee; cath.; woollens, butter, cattle; p. 78,468; 52 54N 8 28W
51 **Corleone**, tn., Italy; mineral springs; p. 15,300; 37 48N 13 18E
102 **Corning**, tn., N.Y., U.S.A.; dairying, tobacco; p. 15,777; 42 8N 77 15W
97 **Cornwall**, tn., Ont., Canada; cottons, woollens, pulp, paper, flour; p. 11,126; 45 3N 74 45W
19 **Cornwall**, co., England; a. 1,356 sq. in.; farming, oats, cattle; market gardening; minerals, kaolin, granite, tin; fishing; p. 317,951; 50 to 51N 4 12 to 5 42W
112 **Coro**, tn., Venezuela; p. 11,000; 11 21N 69 42W
113 **Corocoro**, tn., Bolivia; 16 50S 68 30W
126 **Coromandel**, tn., N.I., New Zealand; p. 619; 36 46S 175 31E
113 **Coronel**, tn., Chile; p. 9,019; 37 1S 73 0W
121 **Corowa**, tn., N.S.W., Austral.; 35 59S 146 53E
106 **Corpus Christi**, tn., Tex., U.S.A.; cotton; p. 27,741; 27 50N 97 32W
113 **Corral**, tn., Chile; 40 0S 73 35W
50 **Correggio**, tn., Italy; p. 14,750; 44 48N 10 48E
35 **Corrèze**, dept., France; a. 2,272 sq. m.; cereals, wines, cattle rearing; timber; coal, iron, granite; p. 264,129; 45 16N 1 55E
30 **Corrib, L.**, Galway, I.F.S.; 53 25N 9 15W
113 **Corrientes**, tn., Argentina; on R. Parana; exp. cattle, sugar, rice, cotton; p. 28,600; 27 40S 58 30W
113 **Corrientes, C.**, Argentina; 38 10S 57 30W
112 **Corrientes, C.**, Colombia; 5 40N 77 30W
83 **Corrientes, C.**, Mozambique; 24 5S 35 30E
125 **Corrigin**, tn., W. Austral.; 32 15S 117 53E
35 **Corsica (Corse)**, L., dept., France; a. 3,367 sq. m., length 110 m., breadth 53 m.; mountainous, forested; agriculture, olives, wines, lemons; chestnuts; fishing; cap. Ajaccio; p. 297,235; 42 11N 9 10E
107 **Corsicana**, tn., Tex., U.S.A.; p. 15,202; 32 30N 96 25W
27 **Corstorphine**, tn., Midlothian, Scot.; p. 3,119; 55 57N 3 17W
104 **Cortland**, tn., N.Y., U.S.A.; stoves, wire; p. 15,043; 42 40N 76 0W
50 **Cortona**, tn., Italy; p. 29,750; 43 19N 12 0E
48 **Coruche**, tn., Portugal; 38 58N 8 30W
113 **Corumba**, tn., Brazil; p. 10,000; 19 0S 57 40W
48 **Corunna**, tn., spt., Spain; cigars, vegetables, sardines; p. 74,132; 43 20N 8 25W
18 **Corwen**, par., Mer., Wales; on R. Dee; p. 2,690; 52 58N 3 22W
108 **Cosala**, tn., Mexico; 24 25N 106 49W
51 **Cosenza**, tn., Italy; cath.; iron, steel; p. 32,604; 39 20N 16 17E
110 **Costa Rica**, rep., Cent. America; a. 23,000 sq. m.; mountainous, volcanic; coffee, bananas, rubber, gold; cap. San José; p. 565,427; 10 0N 84 0W
114 **Cotagaita**, tn., Bolivia; 20 53S 65 40W
34 **Côte d'Or**, dept., France; a. 3,391 sq. m.; hilly, fertile valleys, plains; wines; livestock; iron, steel; cap. Dijon; p. 333,800; 47 10N 4 50E

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34 Côte d' Or, Mts., France; 2,085 ft.; 47 15n 4 50e
34 Côtes du Nord, dept., France; a. 2,786 sq. m.; wheat, flax; iron, slate; fishing; linen; cap. St. Brieuc; p. 539,531: 48 23n 2 47w
61 Costermansville, tn., Belgian Congo; 2 30s 29 0e
112 Cotopaxi, vol., Ecuador; 19,550 ft.; 0 40s 78 45w
51 Cotrone, spt., Italy; p. 10,000; 39 4n 17 8e
19 Cotswold Hills, Glouc., Eng.; 1,134 ft. oolitic limestone ridge separating bas'ns of upper Thames and lower Severn; sheep grazing; 51 50n 2 00w
16 Cottenham, par., Cambridge, Eng.; fruit; p. 2,470; 52 17n 0 07e
44 Cottian Alps, Cent. Europe; 12,609 ft.; 44 45n 6 45e
21 Cottingham, par., E. Riding, Eng.; p. 6,182; 53 47n 0 25w
102 Council Bluffs, tn., Iowa, U.S.A.; on R. Missouri; rly. centre; farm implements, paper, machinery; p. 42,048; 41 15n 95 58w
27 Coupar Angus, bor., Perth, Scot.; p. 1,883; 56 33n 3 16w
32 Courtmacsherry, vil., Cork, I.F.S.; p. 330; 51 37n 8 43w
38 Courtrai, tn., Belgium; linens, lace; p. 38,569; 50 49n 3 15e
26 Cove, bor., Dumbarton, Scot.; p. 954; 55 59n 4 50w
25 Cove, vil., Kincardine, Scot.; p. 457; 57 6n 2 05w
16 Coventry, co. bor., Warwick, Eng.; artificial silk, motor cars, cycles; p. 167,046; 52 25n 1 30w
48 Covilhã, tn., Portugal; coarse cloth; p. 14,049; 40 17n 7 32w
102 Covington, tn., Ky., U.S.A.; on R. Ohio; machinery, leather, furniture; p. 65,652; 39 0n 84 35w
19 Cowbridge, mun. bor., Glamorgan, Wales; p. 1,063; 51 28n 3 25w
27 Cowdenbeath, bor., Fife, Scot.; coal; p. 12,731; 56 7n 3 20w
17 Cowes, urb. dist., I. of W., Eng.; regattas; p. 10,179; 50 45n 1 18w
121 Cowra, tn., N.S.W., Australia; 33 48s 148 41e
43 Cracow, tn., Poland; cath., univ.; machinery, chemicals, farm implements; p. 221,300; 50 5n 19 59e
83 Cradock, tn., C. of Good Hope, S. Afr.; p. 3,609 (Eur.); 32 10s 25 36e
25 Craigellachie, vil., Banff., Scot.; p. 449; 57 29n 3 12w
27 Crail, bor., Fife, Scot.; p. 1,058; 56 16n 2 38w
27 Crailing, par., Roxburgh, Scot.; p. 475; 55 31n 2 30w
40 Crailsheim, tn., Germany; 49 8n 10 5e
52 Craiova, tn., Rumania; cereals, cattle, fish, lumber, salt; p. 63,663; 44 20n 23 49e
20 Cramlington, par., Northumb., Eng.; coal; p. 8,238; 55 5n 1 35w
27 Cramond, par., Midlothian, Scot.; coal; p. 3,583; 55 58n 3 18w
19 Cranborne, par., Dorset, Eng.; p. 675; 50 55n 1 55w
19 Cranborne Chase, Dorset, Eng.; 51 0n 1 56w
17 Cranbrook, par., Kent, Eng.; hops, corn; p. 3,829; 51 6n 0 53e
21 Cranswick, vil., E. Riding, England; 53 57n 0 25w
26 Crarae, in., Argyll, Scot.; 56 8n 5 13w
24 Crask, The, Sutherland, Scot.; mt. pass; 58 12n 4 30w
25 Crathie, par., Aberdeen, Scot.; p. 1,245; 57 3n 3 12w
112 Crato, tn., Brazil; 7 00s 39 45w
18 Craven Arms, Salop, Eng.; 52 28n 2 50w
27 Crawford, par., Lanark, Scot.; lead; p. 1,572; 55 28n 3 39w
34 Crécy, vil., France; 50 17n 1 52e
19 Crediton, urb. dist., Devon, Eng.; shoes, farming; p. 3,490; 50 47n 3 40w
27 Creetown, spt., Kirk., Scot.; p. 757; 54 54n 4 22w
25 Creich, par., Sutherland, Scot.; p. 1,515; 57 52n 4 16w
50 Cremona, tn., Italy; silk, cotton, musical instruments; p. 60,634; 45 7n 10 1e
120 Cressy, tn., Vic., Austral.; 38 1s 143 42e
102 Creston, tn., Iowa, U.S.A.; p. 8,613; 41 2n 94 28w
63 Creta I., Greece; a. 3,300 sq. m., length 160 m., breadth 7 to 30 m.; olive oil, fruits; chief town, Candia; p. 386,427; 35 15n 25 0e
35 Creuse, dept., France; a. 2,163 sq. m.; livestock, coal, fruit; p. 207,882; 46 8n 2 06e
18 Crewe, mun. bor., Cheshire, Eng.; rly. centre; p. 46,061; 53 5n 2 28w
19 Crewkerne, urb. dist., Somerset, Eng.; p. 3,509; 50 53n 2 48w
18 Criccieth, urb. dist., Caer., Wales; p. 1,449; 52 55n 4 08w
19 Crickhowell, par., Brec., Wales; paper; p. 1,307; 51 51n 3 08w
19 Cricklade, par., Wilts, Eng.; p. 1,425; 51 39n 1 51w
27 Crieff, bor., Perth, Scot.; cotton, woollens; p. 5,544; 56 17n 3 49w
27 Crieff Jun., Perth, Scot.; 56 23n 3 51w
57 Crimea, reg., Russia; a. 9,900 sq. m.; pen., jutting into Black S.; Crimean War 1854–1856; wheat, tobacco, fruit; cap. Simferopol; p. 700,000; 45 15n 34 30e
25 Crimond, par., Aberdeen, Scot.; p. 535; 57 36n 1 55w
115 Crixas, tn., Brazil; 14 30s 50 6w
47 Croatia-Slavonia, prov., Yugoslavia; a. 16,418 sq. m.; mountainous; agriculture, cereals, potatoes, tobacco; timber; pigs, sheep, cattle; cap. Zagreb; p. 2,750,000; 45 30n 18 0e
20 Croft, par., N. Riding, England; p. 509; 54 28n 1 35w
25 Cromarty, bor., Ross and Crom., Scot.; p. 837; 57 41n 4 02w
25 Cromdale, par., Moray, Scot.; p. 2,948; 57 20n 3 32w
16 Cromer, urb. dist., Norfolk, Eng.; resort; fishing; p. 4,177; 52 56n 1 18e
127 Cromwell, bor., S.I., New Zealand; p. 600; 45 2s 169 12e
111 Crooked I., Bahama Is., W. Indies; p. 1,400; 23 3n 73 50w
102 Crookston, tn., Minn., U.S.A.; p. 6,437; 47 50n 96 40w
121 Crookwell, tn., N.S.W., Austral.; 34 28s 149 28e
32 Croom, tn., Limerick, I.F.S.; p. 501; 52 31n 8 43w
20 Crosby, tn., I. of Man, Eng.; 54 11n 4 32w
20 Cross Fell, mt., Cumb., Eng.; 2,930 ft.; 54 43n 2 27w
32 Crosshaven, vil., Cork, I.F.S.; p. 376; 51 47n 8 18w

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26 Crosshill, par., Ayr, Scot.; p. 1,043; 55 19n 4 37w
31 Crossmaglen, tn., Armagh, N. Ire.; p. 822, 54 5n 6 37w
27 Crossmichael, par., Kirk., Scot.; p. 1,160; 54 59n 3 58w
30 Crossmolina, par., Mayo, I.F.S.; p. 4,054; 54 6n 9 20w
18 Crosston, par., Lancs, Eng.; p. 1,935; 53 38n 2 38w
17 Crouch, R., Essex, Eng.; 50 37n 1 00e
120 Crowes, tn., Vic., Austral.; 38 42s 143 19e
16 Crowland, par., Holland, Eng.; old abbey; dairying, farming; p. 2,707; 52d2m 0 10w
16 Crowle, par., Lindsey, Eng.; farming; p. 2,833; 53 37n 0 50w
103 Crowley, tn., La., U.S.A.; p. 7,656 30 13n 92 17w
105 Crown Point, tn., N.Y., U.S.A.; 43 59n 73 29w
128 Crown Princess Martha Ld., Antarctica; 71 0s 10 0w
121 Crows Nest, tn., Queens., Austral.; 27 17s 154 2e
98 Crows Nest Pass, B.C., Canada; rly. pass, 5,500 ft.; 49 30n 114 30w
25 Croy, par., Inverness, Scot.; p. 519; 57 32n 4 00w
122 Croydon, tn., Queens., Austral.; 18 11s 142 22e
17 Croydon, co. bor., Surrey, Eng.; aerodrome; p. 233,115; 51 22n 0 06w
128 Crozet Is., Indian Oc., Br.; 47 0s 51 0e
25 Cruden Bay, par., Aberdeen, Scot.; p. 2,554; 57 24n 1 52w
31 Crumlin, vil., Antrim, N. Ire.; p. 639; 54 38n 6 13w
20 Crummock Water, lake, Cumb., Eng.; 2¼ m. long; 54 34n 3 19w
113 Cruz Alta, tn., Brazil; 28 30s 53 30w
112 Cruzeiro do Sul, tn., Brazil; 7 00s 71 50w
120 Crystal Brook, vil., S. Austral.; 33 20s 138 15e
62 Ctesiphon, vil., Iraq; 35 7n 44 37e
108 Cuatro Cienegas, tn., Mexico; 26 59n 102 7w
109 Cuatula, Mexico; 18 43n 99 9w
110 Cuba, rep., W. Indies; a. 44,164 sq. m., length 750 m., breadth 26 to 90 m.; Sierra Maestra 8,397 ft.; agriculture, sugar-cane, tobacco, maize, fruits; forests, hardwoods; iron; cap. Havana; p. 3,961,725: 20 0 to 23 0n 75 0 to 85 0w
17 Cuckfield, urb. dist., Sussex, Eng.; p. 2,114; 51 0n 0 09w
112 Cucuhy, tn., Venezuela; 1 30n 66 55w
112 Cucuta, tn., Colombia; p. 49,000; 8 00n 72 45w
90 Cudaay, tn., Yukon, Canada; 64 30n 140 32w
68 Cuddalore, tn., Madras, India; exp.—oil-seeds, cottons; p. 50,527; 11 45n 79 45e
68 Cuddapah, tn., Madras, India; millet, rice, cotton; p. 19,500; 14 29n 78 50e
125 Cue, tn., W. Austral.; 27 23s 117 58e
48 Cuellar, tn., Spain; 41 22n 4 18w
112 Cuenca, tn., Ecuador; cath., univ.; sugar, pottery; p. 40,000; 2 55s 79 15w
49 Cuenca, tn., Spain; cath.; furniture, leather, paper; p. 15,599; 40 5n 2 07w
108 Cuencame, tn., Mexico; 24 51n 103 41w
109 Cuernavaca, tn., Mexico; p. 7,000; 18 54n 99 23w
121 Culcairn, N.S.W., Austral.; 35 42s 14 75e
38 Culemborg, tn., Neth.; 51 58n 5 12e
108 Culiacan, tn., Mexico; p. 10,500; 24 50n 107 30w
25 Cullen, bor., spt., Banff, Scot.; linen, fisheries; p. 1,688; 57 41n 2 50w
49 Cullera, spt., Spain; p. 12,200; 39 9n 0 13w
20 Cullercoats, par., Northumb., Eng.; fishing; p. 4,389; 55 1n 1 25w
86 Cullinan, tn., Transvaal; centre of diamond mining industry; p. 11,800; 25 42s 29 0e
25 Culloden Moor, Inverness, Scot.; 57 30n 4 00w
19 Cullompton, par., Devon, Eng.; p. 2,737; 50 52n 3 23w
35 Culoz, tn., France; 45 52n 5 50e
27 Culross, bor., Fife, Scot.; p. 493; 56 4n 3 34w
27 Culter, par., Lanark, Scot.; p. 335; 55 36n 3 32w
25 Culter, vil., Aberdeen, Scot.; p. 1,716; 57 6n 2 15w
25 Cults, par., Aberdeen, Scot.; p. 562, 57 8n 2 10w
112 Cumana, tn., Venezuela; coffee, sugar, tobacco; p. 19,000; 10 25n 64 25w
20 Cumberland, co., England; a. 1,516 sq. m.; S.E. part of Lake Dist.; chief mts.—Scafell, Helvellyn, Skiddaw; chief lakes—Ullswater, Derwentwater, Thirlmere; agriculture, oats, sheep rearing, dairying; coal, iron ore; fishing; mnfs.—iron and steel, shipbuilding; p. 262,897; 54 45n 3 05w
102 Cumberland, tn., Md., U.S.A.; on Potomac R.; iron, steel; p. 37,747; 39 45n 78 45w
103 Cumberland Mts., U.S.A.; W. range of Appalachians; 36 0n 85 0w
27 Cumbernauld, par., Dumbarton, Scot.; quarries, mines, weaving; p. 4,829; 55 57n 3 58w
20 Cumbrian Mts., Cumb., Eng.; Lake Dist. mts., chief mts.—Scafell, Helvellyn, Skiddaw; 54 32n 3 05w
27 Cummertrees, par., Dumfries, Scot.; p. 970; 54 59n 3 20w
27 Cumnock, bor., Ayr, Scot.; coal; p. 3,553; 55 28n 4 14w
112 Cunani, tn., Brazil; 2 55n 50 55w
80 Cunene, R., Angola; 14 0s 15 40e
50 Cuneo, tn., Italy; cath.; cotton, paper; p. 32,512; 44 24n 7 31e
121 Cunnamulla, tn., Queens., Austral.; 28 6s 145 37e
26 Cunninghame, vil., Ayr, Scot.; 55 43n 4 35w
27 Cupar, bor. co. tn., Fife, Scot.; linen; p. 4,596; 56 19n 3 00w
111 Curaçao, I., W. Indies, in Caribbean S., Dutch; a. 210 sq. m.; 40 m. long, 10 m. broad; phosphates, salt; cap. Willemstad; p. 43,000; 12 15n 69 0w
48 Curia, tn., Portugal; 40 25n 8 30w
113 Curico, tn., Chile; p. 19,094; 34 59s 71 10w
113 Curitiba, tn., Brazil; yerba maté; matches, porcelain; p. 100,000; 25 30s 49 30w
27 Currie, par., Midlothian, Scot.; paper; p. 3,281; 55 54n 3 18w
31 Cushendall, vil., Antrim, N. Ire.; p. 306; 55 5n 6 04w
31 Cushendun, vil., Antrim, N. Ire.; 55 8n 6 03w
66 Cutch, Gt. Rann of, India; 24 0n 70 0e
66 Cutch, G. of, India; 22 35n 69 0e
66 Cutch, st., India; a. 7,616 sq. m.; chief town—Bhuj; p. 513,829; 23 20n 69 30e
67 Cuttack, tn., Orissa, India; rice, gold and silver filigree; p. 51,007; 20 24n 85 59e

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39 Cuxhaven, tn. spt., Germany; on R. Elbe; harb., docks, fishing; p. 17,648; 53 52n 8 41e
112 Cuyaba, tn., Brazil; cattle; p. 41,000; 15 0s 56 0w
112 Cuyani, R., Br. Guiana; 6 45n 59 45w
112 Cuzco, tn., Peru; cath., univ.; anc. cap. of Incas; cottons, woollens; p. 40,000; 13 30s 72 0w
19 Cwmamman, urb. dist., Carmarthen, Wales; p. 5,214; 51 49n 3 53w
53 Cyclades, Is., Greece; 37 0n 25 0e
18 Cymmeran B., Anglesey, Wales; 53 15n 4 33w
92 Cypress Hs., Sask., Canada; 49 30n 110 0w
62 Cyprus, I., Med. S., Br.; a. 3,584 sq. m.; mountainous; cereals, wine; sponge fishing; cap. Nicosia; p. 347,959; 35 0n 33 0e
46 Czechoslovakia, rep., Cent. Eur.; a. 54,244 sq. m.; new state comprising Bohemia, Moravia and Silesia, Slovakia, Ruthenia; mountainous; R. Elbe, R. March; fertile valleys; chief industries—agriculture, potatoes, sugar-beet, cereals; forest, lumbering, minerals, coal, iron, graphite; beer (Pilsener), distilling, sugar; textiles, glass and stoneware, machinery, chemicals; cap. Praha (Prague); p. 14,729,536; 48 51n 12 24e
46 Czegléd, tn., Hungary; p. 37,344; 47 10n 19 50e
52 Czernowitz. See Cernauti.
43 Czestochowa, tn., Poland; cottons, paper; p. 117,300; 50 49n 19 3e
43 Czortkow, tn., Poland; 49 1n 25 47e

79 Dabod, Egypt; 23 50n 32 49e
88 Daboya, Gold Coast; 9 30n 1 00w
67 Dacca, tn., Bengal, India; jute; muslin; p. 138,518; 23 46n 90 30e
53 Dadion, tn., Greece; 38 38n 22 40e
71 Daet, tn., Philippine Is.; 14 15n 123 0e
17 Dagenham, urb. dist., Essex, Eng. motor cars; p. 89,385; recorded the largest inter-censal increase of population in England, 879 %. See Greater London.
57 Dagestan, rep., Russia; a. 22,000 sq. m.; tobacco, cotton, fruit; cattle, sheep; copper, sulphur. cap. Makhach-Kala; p. 788,000; 42 0n 47 30e
42 Dagö I., Estonia; a. 367 sq. m.; cattle; fishing; p. 15,000; 57 50n 22 40e
88 Dagomba, tn., Gold Coast; 9 10n 0 10w
71 Dagupan, Philippine Is.; wooden shoes; p. 22,500; 15 59n 120 18e
88 Dahomey, col., Fr. W. Africa; a. 41,302 sq. m.; forested, swampy; cereals, palm oil; cap. Porto Novo; p. 1,080,447; 8 30n 2 20e
33 Daingean. See Philipstown.
73 Dairen, spt., Manchuria; fishing, soya beans; p. 220,588; 39 0n 121 35e
123 Dajarra, Queens., Austral.; 21 36s 140 39e
88 Dakar, spt., Senegal, Fr. W. Afr.; p. 36,946; 14 40n 17 28w
79 Dakhla Oasis, Egypt; 25 40n 29 0e
79 Dakkeh, tn., Egypt; 23 10n 32 27e
73 Dalai Nor, L., Manchuria; 49 0n 117 30e
27 Dalbeattie, bor., Kirk., Scot.; paper, granite; p. 3,011; 54 56n 3 50w
20 Dalby, I. of Man., Eng.; 54 10n 4 43w
181 Dalby, tn., Queens., Austral.; 27 14s 151 18e
121 Dalgety, N.S.W., Austral.; 36 30s 148 51e
94 Dalhousie, spt., N.B., Canada; p. 3,974; 48 4n 66 26w
27 Dalkeith, bor., Midlothian, Scot.; coal, iron; p. 7,502; 55 53n 3 04w
33 Dalkey, urb. dist., Dublin, I.F.S.; stone; p. 4,135 53 16n 6 07w
123 Dallarnil, tn., Queens., Austral.; 25 23s 151 53e
25 Dallas, par., Moray, Scot.; p. 541; 57 33n 3 28w
107 Dallas, cy., Tex., U.S.A.; rly. cent.; cotton, maize; p. 260,475; 32 50n 96 50w
47 Dalmatia, dist., Yugoslavia; a. 4,916 sq. m.; on N.E. of Adriatic S., mountainous, karst plateaus; olive oil, wine; cattle; timber; iron, lignite; p. 622,000; 43 50n 16 10e
27 Dalmellington, par., Ayr, Scot.; iron, coal; p. 6,151; 55 19n 4 24w
27 Dalmeny, par., W. Lothian, Scot.; oil shale; p. 3,237; 55 59n 3 22w
73 Dalny. See Dairen.
26 Dalry, par., Ayr, Scot.; iron, woollens; p. 6,827; 55 43n 4 43w
27 Dalry, par., Kirk., Scot.; p. 843; 55 7n 4 09w
26 Dalrymple, par., Ayr, Scot.; p. 1,366; 55 24n 4 35w
27 Dalton, par., Dumfries, Scot.; p. 570; 55 3n 3 23w
20 Dalton, urb. dist., Lancs, Eng.; abbey ruins; iron, stone, malting; p. 10,333; 54 10n 3 12w
103 Dalton, tn., Ga., U.S.A.; textiles; lumber; canning; p. 8,160; 34 45n 84 55w
105 Dalton, tn., Mass., U.S.A.; p. 12,957; 42 30n 73 8w
67 Daltonganj, tn., Bihar, India; coal; 24 5n 83 52e
25 Dalwinnie, vil., Inverness, Scot.; 56 56n 4 14w
118 Daly, R., N. Terr., Austral.; 13 57s 131 0e
118 Daly Waters, N. Terr., Austral.; 16 10s 133 35e
66 Daman, spt., cap. Port, India; a. 150 sq. m.; textiles; teak; fishing; p. 49,000; 20 25n 73 57e
78 Damanhur, tn., Egypt; textiles; p. 51,709; 30 59n 30 30e
82 Damara Land, dist., S.W. Africa; mountainous; cattle raising; copper; 21 0s 17 0e
61 Damascus, cy., cap. Syria; rail and caravan centre; cereals; fruit; cotton, silk; metal work; p. 193,912; 33 30n 36 20e
78 Damietta, tn., Egypt; on R. Nile; cotton; p. 34,907; 31 22n 31 46e
124 Dampier Arch., W. Austral.; 20 28s 116 50e
105 Danbury, cy., Conn., U.S.A.; paper, silk; p. 22,261; 41 23n 73 30w
55 Dannemora, tn., Sweden; iron ore; 60 10n 17 50e
47 Danube R., 2nd largest river in Europe; 1,800 m. long; rises Black Forest and flows mainly E. to Black Sea; chief tribs.—Inn, Drave, Save, Tisza; rapids—"Iron Gates"; 45 0n 20 0e
102 Danville, cy., Ill., U.S.A.; lumber, textiles, coal; p. 36,765; 40 6n 87 45w
102 Danville, cy., Ky., U.S.A.; p. 6,729, 37 40n 84 48w
104 Danville, bor., Pa., U.S.A.; p. 7,185, 40 54n 76 33w
103 Danville, tn., Va., U.S.A.; cotton, tobacco; p. 22,247; 36 35n 79 29w

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41 Danzig, Free Cy. and Terr., Germany; a. 754 sq. m.; co R. Vistula; shipbuilding, distilling, brewing, iron, machinery; p. 407,517; 54 20n 18 40e
41 Danzig B., Germ.; 54 30n 19 20e
67 Darbhanga, tn., Bihar, India; rice, oil seeds, grain, sugar, tobacco; p. 53,700; 26 11n 85 0e
72 Darchendo. See Ta-chien-lu.
53 Dardanelles (Hellespont), Turkey; length 45 m., width 1 to 5 m.; demilitarised; 40 0n 26 10e
81 Dar-es-Salaam, spt.; cap. of Tang. Terr.; p. 25,000; 6 50s 39 40e
76 Dar Fertit, A.-E. Sudan; 8 10n 24 40e
80 Darfur, W. prov., A.-E. Sudan; sandy plateau, fertile valleys; gum arabic, cotton; p. 1,000,000; 13 0n 24 40e
126 Dargaville, bor., N.I., New Zealand; p. 1,980; 35 33s 173 53e
110 Darien, G., Cent. America; 9 00n 77 0w
67 Darjeeling, tn., India; alt. 7,200 ft. on Himalayas; sanatorium; p. 22,258; 27 3n 88 18e
84 Darling, C. of Good Hope, S. Afr.; 33 20s 18 22e
121 Darling, R., N.S.W., Austral.; 1,160 m. long; trib. of Murray R.; 31 0s 144 15e
20 Darlington, co. bor., Durham, Eng.; breweries, ironworks, locomotive works, textiles; p. 72,093; 54 32n 1 32w
40 Darmstadt, tn., Germany; iron, machinery, chemicals; p. 93,222; 49 54n 8 38e
80 Darra, vil., A.-E. Sudan; 12 15n 25 23e
19 Dart, R., Devon, Eng.; 50 30n 3 45w
19 Dartmoor, Devon, Eng.; plateau, 1,500 ft. high, Yes Tor 2,028 ft.; beautiful scenery in wooded river valleys of Dart, Teign, Taw, Tavy; convict prison; quarries; 50 35n 4 00w
93 Dartmouth, tn., N.S., Canada; sugar refineries, foundries; p. 9,100; 44 40n 63 40w
19 Dartmouth, mun. bor., spt., Devon, Eng.; Royal Naval Coll.; p. 7,000; 50 21n 3 35w
21 Darton, urb. dist., W. Riding, Eng.; coal; p. 12,595; 53 35n 1 32w
27 Darvel, bor., Ayr, Scot.; carpets; p. 3,232; 55 37n 4 17w
18 Darwen, mun. bor., Lancs, Eng.; coal, cotton; p. 36,010; 53 45n 2 28w
118 Darwin, tn., spt., N. Terr., Austral.; cattle; pearl shell fishery; p. 1,000; 12 20s 131 0e
63 Dasht-i-Lut, des., Cent. Persia; 31 30n 58 0e
67 Datia, tn., India; 25 37n 78 38e
42 Daugavpils, tn., Latvia; formerly Dvinsk; timber; p. 43,226; 55 52n 26 33e
68 Daulatabad, Hyd., India; 19 58n 75 15e
63 Daulatabad, tn., Persia; 34 18n 48 40e
99 Dauphin, tn., Man., Canada; p. 3,971; 51 13n 100 2w
35 Dauphiné, prov., France; 45 0n 5 30e
71 Davao, tn., Philippine Is., 7 00n 125 35e
102 Davenport, cy., Iowa, U.S.A.; lumber, agricultural implements; p. 60,751; 41 30n 90 33w
16 Daventry, mun. bor., Northants, Eng.; boots, shoes; wireless stn.; p. 3,608; 52 15n 1 10w
110 David, tn., Panama; 8 22n 82 30w
25 Daviot, par., Inverness, Scot.; p. 789; 57 26n 4 07w
45 Davos Platz, vil., Switzerland; health resort; sanatorium; p. 13,402; 46 48n 9 50e
19 Dawlish, urb. dist., Devon, Eng.; p. 4,578; 50 35n 3 28w
98 Dawson, tn., cap. Yukon, Canada; gold, sawmills; p. 1,000; 64 8n 139 20w
120 Daylesford, tn., Vic., Austral.; wheat; p. 5,000; 37 20s 144 9e
102 Dayton, cy., Ohio, U.S.A.; aeroplanes, electrical machinery; p. 200,982; 39 42n 84 12w
106 Dayton, tn., Wash., U.S.A.; 46 21n 117 48w
121 D'Entrecasteaux Chan., Tas., Austral.; 43 26s 147 3e
122 D'Entrecasteaux Is., Papua; copra; 8 00 to 10 0s 150 0 to 153 0e
83 De Aar, tn., C. of Good Hope, S. Afr.; p. 5,000; 30 38s 24 5e
87 De Beers, vil., C. of Good Hope, S. Afr.; diamonds; 28 43s 24 47e
102 De Soto, tn., Mo., U.S.A.; p. 5,069; 38 7n 90 30w
61 Dead Sea, Palestine; depressed to 1,292 ft., 46 m. long; bituminous; 31 30n 35 30e
125 Deakin, vil., W. Austral.; 30 52s 129 0e
17 Deal, mun. bor., Kent, Eng.; seaside resort; p. 19,683; 51 13n 1 23e
19 Dean, For. of, Glouc, Eng.; coal; 51 47n 2 33w
106 Death Valley, Cal., U.S.A.; desert tract; 36 15n 116 47w
47 Debar, tn., Yugoslavia; maize; p. 7,500; 41 30n 20 32e
16 Debenham par., Suffolk, England; p. 1,085; 52 14n 1 10e
43 Deblin, tn., Poland; p. 27,000; 51 33n 21 50e
81 Debra Tabor, dist., Abyssinia; p. 3,500; 11 50n 38 5e
40 Debrecen, tn., Hung.; univ.; cattle, grain; p. 110,410; 47 33n 21 40e
103 Decatur, cy., Ala., U.S.A.; steel, lumber, textiles; p. 15,593; 34 34n 87 5w
102 Decatur, cy., Ill., U.S.A.; iron; rly. works; coal; p. 57,510; 39 53n 89 0w
65 Deccan, dist., India; plateau, pen. S. of Vindhya Mts.; 14 0n 77 0e
16 Deddington, par., Oxford, England; p. 1,339; 51 59n 1 20w
53 Dede Agach. See Alexandroupolis.
56 Dedinchin, vil., Russia; 59 36n 36 34e
18 Dee R., England; 90 m. long, flows through L. Bala and Vale of Llangollen; 53 17n 3 08w
25 Dee, R., Aberdeen, Scot.; salmon; 57 3n 2 35w
54 Degerfors, vil., Sweden; 64 10n 19 45e
67 Dehra Dun, dist., Un. Provs., India; a. 1,193 sq. m.; p. 215,000; 30 20n 78 8e
62 Deir, Syria; 35 20n 40 7e
52 Déj, tn., Rumania; wine; p. 15,311; 47 10n 23 52e
83 Delagoa B., Mozambique; natural harbour; 26 10s 32 45e
83 Delarey, vil., Trans., S. Afr.; 26 45s 25 30e
102 Delaware, st., U.S.A.; a. 2,370 sq. m.; farming; dairying; cotton, leather, paper; cap. Dover; p. 223,000; 39 0n 75 30w
102 Delaware B., U.S.A.; 39 0n 75 0w
104 Delaware City, tn., Del., U.S.A.; p. 9,000; 39 6n 75 30w

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104 Delaware R., U.S.A.; 375 m. long; 39 30n 75 10w
121 Delegete, vil., N.S.W., Austral.; 37 3s 148 57e
45 Delemont, comm., Switzerland; 47 24n 7 20e
38 Delfshaven, tn., Neth.; suburb of Rotterdam; 51 55n 4 25e
38 Delft, tn., Neth.; "Delft" ware; tobacco, chemicals; p. 50,609; 52 0n 4 20e
38 Delfzijl, tn., Neth.; 53 20n 6 55e
81 Delgado, C., Is. Somaliland; 9 56n 51 6e
81 Delgado, C., Mozambique; 10 21s 40 40e
90 Delhi, tn., Ont., Canada; p. 1,121; 42 51n 80 33w
67 Delhi, prov., India; a. 593 sq. m.; p. 636,246; 28 45n 77 20e
67 Delhi, tn., cap. India; wheat, cotton, gold and silver ware; p. 447,442; 28 35n 77 18e
45 Delle, tn., France; 47 28n 6 59e
10 Delles, tn., Algeria; p. 18,864; 36 50n 4 00e
40 Delmenhorst, tn., Germany; jute, woollens, linoleum; 53 2n 8 35e
121 Deloraine, vil., Tas., Austral.; 41 30s 147 0e
53 Delphi, vil., Greece; ancient oracle of Apollo on Mt. Parnassus; 38 45n 22 34e
53 Delvinaki, tn., Greece; 39 57n 20 30e
47 Delvino, vil., Albania; 39 57n 20 9e
112 Demerara R., Br. Guiana; 200 m. long; 5 40n 58 30w
107 Deming, tn., N. Mex., U.S.A.; 32 15n 107 50w
53 Demirhissar, vil., Greece; 41 13n 23 28e
41 Demmin, tn., Germany; iron, textiles; p. 12,787; 53 55n 13 0e
53 Demotika, tn., Greece; 41 20n 26 34e
34 Denain, tn., France; coal, iron, glass; p. 27,767; 50 20n 3 25e
18 Denbigh, mun. bor., co. tn., Denb., Wales; dairying, slate; p. 7,249; 53 11n 3 26w
18 Denbigh, co., Wales; a. 665 sq. m.; sheep, pasture; dairying; coal, iron, slate; p. 157,645; 53 10n 3 30w
79 Dendera, vil., Egypt; 26 9n 32 40e
38 Dendermonde, tn., Belgium; 51 2n 4 06e
79 Dendur, vil., Egypt; 23 12n 32 55e
49 Denia, spt., Spain; textiles; fishing; p. 13,000; 38 50n 0 06e
121 Deniliquin, tn., N.S.W., Austral.; sheep; p. 3,000; 35 30s 144 58e
107 Denison Cy., Tex., U.S.A.; cotton, lumber; p. 13,850; 33 45n 96 35w
62 Denizli, tn., Turkey; leather, cotton; p. 15,787; 37 46n 29 8e
121 Denman, vil., N.S.W., Austral.; 32 25s 150 42e
125 Denmark, vil., W. Austral.; 35 1s 117 30e
39 Denmark, king., Europe; a. 16,576 sq. m.; between North and Baltic Seas; low, flat; agriculture—cereals, dairying, butter, cheese, milk, pigs, bacon, pork, eggs, mnfs.—machinery, porcelain; cap. Copenhagen; p. 3,550,656; 56 0n 10 0e
90 Denmark Str., N. America; 66 0n 29 0w
127 Dennistoun, tn., S.I., New Zealand; p. 910; 41 43s 171 45e
27 Denny, bor., Stirling, Scot.; ironworks, coal; p. 5,512; 56 1n 3 54w
41 Dent Blanche, mt., Switzerland; 13,415 ft.; 46 3n 7 31e
107 Denton, tn., Tex., U.S.A.; p. 13,850; 33 10n 97 0w
107 Denver, cy. cap., Col., U.S.A.; stockyards; coal, silver, lead, copper smelting; p. 287,861; 39 43n 104 59w
17 Deptford, met. bor.; p. 106,886. See London.
66 Dera Ghazi Khan, tn., India; grain, cotton; p. 20,731; 30 0n 70 46e
66 Dera Ismail Khan, tn., India; inlaid furniture; p. 39,341; 31 52n 70 52e
57 Derbent, tn., Russia; textiles; 42 5n 48 8e
121 Derby, Tas., Austral.; 41 8s 147 50e
124 Derby, W. Austral.; 17 23s 123 40e
16 Derby, co., England; a. 1,041 sq. m.; N. hilly, moorland, S. flat; wheat, barley, dairying; coal, limestone; mnfs., silks, porcelain, machinery; p. 757,332; 53 0n 1 30w
16 Derby, co. bor., co. tn., Derby, Eng.; locomotive works, ironworks, silk, porcelain; p. 142,406; 52 56n 1 28w
32 Derg, L., Irish Free St.; 52 58n 8 17w
10 Derj, vil., Libya; 30 10n 10 20e
79 Derr., vil., Egypt; 22 40n 32 10e
20 Derrygonnelly, vil., Fermanagh, N. Ire.; p. 254; 54 26n 7 50w
47 Dervent, Y.-slav.; 45 0n 17 58e
121 Derwent R., Tas., Austral.; 42 30s 146 45e
20 Derwent, R., Cumb., Eng.; 54 40n 3 26w
16 Derwent, R., Derby, Eng.; 53 11n 1 37w
21 Derwent, R., E. Riding, Eng.; 54 12n 0 35w
20 Derwent Water, L., Cumberland, Eng.; 54 35n 3 10w
102 Des Moines, tn., Iowa, U.S.A.; rly. centre, machinery, printing; p. 142,559; 41 33n 93 35w
97 Deseronto, tn., Ont., Canada; p. 1,476. 44 10n 77 22w
59 Desher, C. See East C.
25 Deskford, par., Banff, Scot.; p. 541; 57 38n 2 51w
53 Despoto Dagh, Mts., Bulgaria; 41 40n 24 20e
40 Dessau, tn., cap. Anhalt, Germany; on R. Mulde; sugar, chemicals, textiles; p. 78,593; 51 50n 12 16e
113 Desterro, tn., Brazil; p. 46,000; 27 30s 48 30w
40 Detmold, tn., cap. Lippe, Germany; linen, tanning, brewing; p. 16,051; 51 56n 8 50e
102 Detroit, tn., cap. Mich., U.S.A.; good harbour, docks; motor cars, aircraft, shipbuilding, grain, lumber p. 1,568,662; 42 20n 83 5w
89 Deuka, vil., Mozambique; 14 55s 34 18e
41 Deutsch Eylau, tn., Germany; p. 11,242; 53 36n 19 36e
41 Deutsch Krons, tn., Germany; p. 10,579; 53 17n 16 26e
35 Deux Sevres, dept., France; a. 2,337 sq. m.; farming, vines; coal, granite; textiles; cap. Niort; p. 308,481; 46 43n 0 20w
52 Deva, tn., Rumania; p. 10,593; 45 52n 22 58e
38 Deventer, tn., Netherlands; carpets; p. 36,227; 52 14n 6 09e
18 Devils Bridge, Cardigan, Wales; 53 0n 4 07w
19 Devizes, mun. bor., Wilts, Eng.; dairying; p. 6,058; 51 21n 1 58w

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93 Devon I., Franklin, Canada; 75 0n 86 0w
121 Devonport, tn., Tas., Austral.; p. 5,300; 41 9s 146 21e
19 Devonport, spt., Devon, Eng.; included in Plymouth since 1914; naval dockyard; p. 81,678; 50 23n 4 11w
19 Devonshire, co., England; a. 2,611 sq. m.; inland moorland, fertile valleys, grand coastal and inland scenery; dairying, sheep, cider, p. 732,869; 50 12 to 51 15n 3 00 to 4 32w
83 De Wet's Dorp, tn., O.F.S., S. Afr.; 29 30s 26 18e
21 Dewsbury, co. bor., W. Riding, Eng.; heavy woollens, glass, iron founding, dyeworks; p. 54,303; 53 42n 1 37w
68 Dharwar, tn., Bom., India; textiles; p. 34,750; 15 29n 75 5e
61 Dhufar, Arabia; 17 10n 54 0e
68 Dhulia, tn., Bom., India; cotton, linseed; textiles; p. 30,805; 20 53n 74 50e
88 Diala, tn., Fr. W. Africa; 14 15n 10 30w
60 Diala, tn., Iraq; 33 20n 44 25e
114 Diamante, tn., Argentina; 32 1s 60 30w
113 Diamantina, tn., Brazil; diamonds; p. 15,000; 18 20s 43 31w
119 Diamantina, R., Queens., Austral.; 24 30s 140 40e
115 Diamantino, tn., Brazil; 14 22s 56 22w
69 Diamond Harb., India; 22 10n 88 17e
69 Dibrugarh, tn., Assam, India; coal; p. 16,000; 27 29n 95 0e
104 Dickson, tn., Pa., U.S.A.; p. 12,395; 41 25n 75 35w
17 Didcot, par., Berks, Eng.; rly. jn.; p. 2,164; 51 37n 1 15w
34 Diedenhofen. See Thionville.
38 Diekirch, tn., Luxemburg; 49 53n 6 11e
34 Dieppe, spt., France; cross-Channel traffic; fisheries; machinery, shipbuilding; p. 25,117; 49 56n 1 04e
93 Digby, tn., spt., N.S., Canada; p. 1,412; 44 36n 65 43w
34 Dijon, tn., France; cath., univ.; wines, tobacco, brewing, textiles; p. 90,863; 47 19n 5 04e
88 Dikoa, tn., Nigeria; 12 0n 13 38e
60 Dillingen, tn., Germany; 48 34n 10 28e
106 Dillon, tn., Mont., U.S.A.; 45 13n 112 38w
62 Dilman, tn., Persia; 38 5n 44 45e
69 Dimapur, tn., Assam, India; p. 30,877; 25 55n 93 45e
120 Dimboola, vil., Vic., Austral.; 36 26s 142 3e
61 Dimeshk esh Sham. See Damascus.
62 Dinair, vil., Turkey; 38 10n 30 15e
69 Dinajpur, tn., Bengal, India; 25 32n 88 47e
34 Dinan, tn., France; tourist centre; leather; 48 28n 2 04w
38 Dinant, tn., Belgium; summer resort; p. 7,000; 50 15n 4 55e
34 Dinard, tn., France; watering-pl., p. 8,000; 48 38n 2 06w
47 Dinaric Alps, Yugoslavia; 44 0n 16 40e
18 Dinas Mawddwy, vil., Merioneth, Wales; 52 43n 3 41w
68 Dindigul, tn., Madras, India; coffee; cigars, cotton; p. 30,922; 10 23n 78 0e
70 Dindings, The, P rak, Malay Pen.; 4 19n 100 37e
32 Dingle, tn., Kerry, I.F.S.; p. 1,834; 52 8n 10 16w
32 Dingle, B., Kerry, I.F.S.; 52 5n 10 10w
24 Dingwall, bor., co. tn., Ross and Crom., Scot.; p. 2,554; 57 35n 4 26w
66 Diu, tn., India; 20 45n 71 47e
81 Dire Dawa, tn., Abyssinia; rly. works; p. 30,000; 9 59n 42 25e
125 Dirk Hartog I., W. Austral.; 25 40s 113 0e
27 Dirleton, par., E. Lothian, Scot.; coal, stone; p. 2,824; 56 4s 2 47w
121 Dirranbandi, tn., Queens., Austral.; 28 29s 148 26e
53 Diskata, tn., Greece; 39 52n 21 43e
93 Disko I., Greenland; 69 45n 54 0w
42 Disna, tn., Poland; 55 32n 28 8e
18 Diss, urb. dist., Norfolk, Eng.; brewing, brushes; p. 3,422; 52 22n 1 06e
18 Ditton Priors, par., Salop., England; p. 650. 52 30n 2 34w
66 Diu I., and tn., India, Port.; a. 20 sq. m.; salt works; p. 14,000; 20 43n 70 48e
82 Diu, vil., Mozambique; 16 47s 32 10e
60 Divrigui, vil., Turkey; 39 15n 37 50e
62 Diwanieh, tn., Iraq; 31 59n 45 0e
88 Dixcove, tn., Gold Coast; 4 49n 2 00w
38 Dixmude, vil., Belgium; 51 2n 2 52e
102 Dixon, tn., Ill., U.S.A.; p. 9,908; 41 50n 89 31w
62 Diyarbekir, tn., Turkey; leather, cotton, silk; p. 94,709; 37 50n 39 51e
63 Dizek, tn., Persia; 27 30n 62 15e
63 Dizful, tn., Persia; indigo; p. 15,000; 32 26n 48 29e
60 Djabrin, vil., Arabia; 23 2n 49 0e
57 Dnieprostroy, tn., Russia; largest Russian hydro-electric stn.; p. 192,400; 47 45n 35 2e
57 Dnepropetrovsk, tn., Russia; formerly Yekaterinoslav; manganese, coal, iron; p. 379,200; 48 30n 35 0e
57 Dnieper R., Russia; length 1,400 m.; drains 200,000 sq. m.; fisheries; 48 0n 33 0e
52 Dniester, R., Russia; drains 30,000 sq. m.; 46 15n 30 0e
64 Doab, dist., India, land between 2 rivers, e.g. Ravi and Sutlej; 30 30n 73 0e
52 Dobrich, tn., Rumania; p. 29,938; 43 33n 27 49e
52 Dobruja, dist., Rumania; a. 9,000 sq. m.; alluvial plain; cap. Constanza; p. 700,000; 44 40n 28 30e
53 Dodecanese, Is., Ægean S., It.; 12 islands, a. 455 sq. m.; p. 77,000; 37 0n 27 0e
107 Dodge City, Kan., U.S.A.; p. 10,059; 37 47n 100 0w
19 Dodman Pt., Cornwall, Eng.; 50 13n 4 49w
81 Dodoma, tn., Tang. Ter.; 6 11s 35 45e
47 Dojran, tn., Yugoslavia; 41 10n 22 45e
60 Doka, vil., Arabia; 19 50n 41 0e
73 Doka, tn., Siberia; 49 15n 136 30e
73 Doian-nor, tn., China; Buddhist temples, brass idols; p. 30,000; 42 28n 116 12e
34 Dôle, tn., France; on R. Doubs; wines; copper, iron, farm implements; p. 18,066; 47 7n 5 31e
18 Dolgelley, urb. dist., tourist resort; Merioneth, Wales; p. 2,261; 52 45n 3 53w
43 Dolina, tn., Poland; 49 0n 24 0e
27 Dollar, bor., Clack., Scot.; coal, iron; p. 1,485; 56 10n 3 40w

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44 Dolomite Alps, mts., Italy; famous limestone scenery; 46 30n 11 40e
109 Dolores, tn., Mexico; 20 59n 101 0w
98 Dolphin and Union Sts., Canada; 69 0n 115 0w
27 Dolphinton, par., Lanark, Scotland; p. 252; 55 42n 3 25w
88 Doma, tn., Nigeria; 8 22n 8 25e
43 Dombrovitsa, tn., Poland; 51 28n 26 25n
111 Dominica, L., Leeward Is., W. Indies; a. 305 sq. m.; "Boiling Lake," mountainous; limes, coconuts; cap. Roseau; p. 42,000; 15 30n 61 50w
111 Dominican Rep. See Santo Domingo.
50 Domo d' Ossola, tn., Italy; tourist centre; p. 6,000; 46 8n 8 17e
53 Domoko, tn., Greece; 39 8n 22 19e
34 Domrémy, vil., France; on R. Meuse; birthplace of Joan of Arc; 48 28n 5 52e
21 Don, R., W. Riding, Eng.; 53 27n 1 34w
57 Don, R., Russia; length 1,325 m.; fishing; 50 0n 40 0e
26 Don, R., Aberdeen, Scot.; salmon; 57 16n 2 25w
31 Donaghadee, urb. dist., Down, N. Ire.; cattle, farming; p. 2,535; 54 39n 5 33w
33 Donard, par., Wicklow, I.F.S.; p. 420; 53 2n 6 37w
40 Donauwörth, tn., Germany; machinery, brewing; p. 5,000; 48 43n 10 44e
21 Doncaster, co. bor., W. Riding, Eng.; on R. Don; locomotives, farming implements, market tn.; p. 63,308; 53 31n 1 08w
42 Dondanga, tn., Latvia; 57 31n 22 22e
80 Dondo, vil., Angola; 9 41s 14 25e
89 Dondo, vil., Mozambique; 19 52s 35 0e
68 Dondra Hd., Ceylon; 5 58n 80 30e
30 Donegal, co. I.F.S.; a. 1,865 sq. m.; mountainous, boggy; fishing; granite; woollens, linen; p. 152,511; 54 54n 8 00w
30 Donegal, co. tn., spt., Donegal, I.F.S.; p. 1,104; 54 39n 8 06w
30 Donegal B., I.F.S., 54 33n 8 26w
57 Donets B., Russia; coal basin; 48 45n 39 30e
120 Dongarra, vil., W. Austral.; 29 14s 115 0e
70 Dong-hoi, tn., Fr. Indo-China; 17 30n 106 30e
16 Donington, par., Holland, Eng.; p. 1,804; 52 54n 0 12w
125 Donnybrook, tn., W. Austral.; 33 30s 115 52e
32 Donoughmore, vil., Cork, I.F.S.; 52 0n 8 45w
125 Doodlakine, tn., W. Australia; 31 30s 117 48e
19 Dorchester, mun. bor., co. tn. Dorset, Eng.; brewing; p. 10,630; 50 43n 2 25w
35 Dordogne, dept., France; a. 3,550 sq. m.; in N. barren, in S. forests; farming, fruits, wines; live-stock; cap. Périgueux; p. 383,720; 45 7n 0 40e
35 Dordogne, R., France; 260 m. long; 45 15n 2 10e
38 Dordrecht, tn., Netherlands; sugar, shipbuilding; p. 55,888; 51 49n 4 40e
83 Dordrecht, tn., C. of Good Hope, S. Afr.; 31 23s 27 7e
25 Dores, par., Inverness, Scot.; 572; 57 23n 4 20w
17 Dorking, urb. dist., Surrey, Eng.; lime; p. 10,109; 51 14n 0 20w
52 Dorna Watra, tn., Rumania; p. 9,878; 47 21n 25 20e
25 Dornach, bor., co. tn., Sutherland, Scot.; p. 725; 57 53n 4 01w
27 Dornock, par., Dumfries, Scot.; p. 1,688; 54 59n 3 11w
52 Dorohoiu, tn., Rumania; farming; timber; p. 15,375; 47 59n 26 23e
73 Doroinskoe, tn., Siberia; 51 15n 112 30e
42 Dorpat. See Tartu.
121 Dorrigo, vil., N.S.W., Austral.; 30 15s 152 35e
19 Dorset, co., England; a. 988 sq. m.; chalk downs; sheep, dairying, fruit; Purbeck marble, Portland stone; p. 239,347; 50 30 to 51 0n 2 00 to 0 03w
19 Dorset Heights, Dorset, Eng.; 50 50n 2 40w
40 Dortmund, tn., Germany; coal, iron, steel; p. 540,875; 51 32n 7 26e
103 Dothan, Ala., U.S.A.; p. 16,046; 31 13n 85 23w
34 Douai, tn., France; Eng. R.C. Coll.; coal, engineering, glass, sugar, brewing; p. 41,898; 50 21n 3 06e
35 Doubs, dept., France; a. 2,062 sq. m.; Jura Mts.; dairying, grain, watches, iron, distilling; cap. Besançon; p. 305,500; 47 10n 6 32e
98 Douglas, tn., Alaska; 59 7n 134 25w
27 Douglas, par., Lanark, Scot.; coal, stone; p. 2,948; 55 33n 3 50w
83 Douglas, tn., C. of Good Hope, S. Afr.; 29 7s 23 50e
107 Douglas, tn., Wyo., U.S.A.; 42 55n 105 20w
20 Douglas, tn., co. tn., I. of Man, Eng.; seaside resort; p. 19,329; 54 9n 4 29w
22 Douglas, vil., Cork, I.F.S.; p. 685; 51 57n 8 27w
27 Doune, bor., Perth, Scot.; p. 822; 56 11n 4 03w
48 Douro, R., Portugal; 485 m. long; wine; 41 15n 6 40w
18 Dove Dale, England; borders of Staffs and Derby, fine scenery; 53 8n 1 50w
18 Dove R., Derby, England; trib. of R. Trent; 52 58n 1 50w
17 Dover, mun. bor., Kent, Eng.; cattle; docks; cross-channel traffic; p. 41,095; 51 7n 1 19e
102 Dover, tn., N.H., U.S.A.; textiles, machinery; p. 13,573; 43 10n 70 55w
18 Dover Str., England, connecting North S. and English Ch.; 50 50n 1 20e
18 Dovey, R., Mer., Wales; 52 33n 4 05w
53 Dovlen, tn., Bulgaria; 41 46n 24 26e
54 Dovre Fjell, mts., Norway; high plateau; 62 25n 9 40e
55 Dovre Snahetta, Mt., Norway; 62 20n 10 0e
31 Down, co., N. Ire.; a. 957 sq. m.; linen, farming; p. 209,179; 54 0 to 54 40n 5 30 to 6 20w
16 Downham Mkt., urb. dist., Norfolk, Eng.; bell foundry, farming; p. 2,463; 52 37n 0 23e
31 Downpatrick, urb. dist., co. tn. Down, N. Ire.; soap, muslin, leather; p. 3,147; 54 20n 5 44w
17 Downs, North, Kent, Eng.; 51 15n 0 to 01e
17 Downs, South, Sussex, Eng.; 50 55n 0 to 01w
19 Downton, par., Wilts., Eng.; p. 1,906; 51 0n 1 44w
52 Draganesti, tn., Rumania; p. 6,923; 44 7n 25 28e
52 Drăgăshani, tn., Rumania; 44 39n 24 19e
7 Drake, Str., Atlantic Oc.; 58 0s 7 00w
83 Drakensberg Mts., O.F.S., S. Afr.; highest pk.—Mt-aux-Sources (10,763 ft.); 24 0s 30 30e
53 Drama, tn., Greece; p. 29,340; 41 9n 24 10e
55 Drammen, tn., Norway; sawmills, shipbuilding; p. 28,399; 59 45n 10 10e
31 Draperstown, vil., Londonderry, N. Ire.; p. 501; 54 47n 6 47w

MAP
46 Drave, R., Hungary; trib. of R. Danube; 45 40n 18 28e
38 Drenthe, prov., Netherlands; a. 1,030 sq. m.; cereals, pigs; cap. Assen; p. 222,463; 52 50n 6 30e
96 Dresden, tn., Ont., Canada; p. 1,529; 42 37n 82 13w
41 Dresden, tn., cap. Saxony, Germany; on R. Elbe; educational and tourist centre; china, pianos, sewing machines, leather and chemicals; p. 642,143; 51 3n 13 40e
85 Driefontein, tn., O.F.S., S. Afr.; 29 7s 25 22e
21 Driffield, urb. dist., E. Riding, England; flour, brewing; p. 5,916; 54 1n 0 26w
47 Drin, R., Albania; 42 18n 20 0e
55 Drøbak, tn., Norway; 50 40n 10 40e
31 Drogheda, mun. bor., spt., Louth, I.F.S.; linen, cotton, fishing; p. 12,688; 53 43n 6 17w
43 Drogichin, tn., Poland; 52 12n 25 9e
43 Drohobycz, tn., Poland; petroleum; p. 27,000; 49 21n 23 31e
33 Droichead Nua. See Newbridge.
18 Droitwich, mun. bor., mkt. tn., Worcs, Eng.; saline baths, salt; broadcasting sta.; p. 4,553; 52 16n 2 08w
35 Drôme, dept., France; a. 2,532 sq. m.; mountainous; wheat, olives, fruit, wines, textiles; cap. Valence; p. 267,080; 44 38n 5 15e
31 Dromore, urb. dist., Down, N. Ire.; cath.; linen; p. 2,229; 54 25n 6 09w
16 Dronfield, urb. dist., Derby, Eng.; iron, coal; p. 4,530; 53 18n 1 29w
25 Drumblade, par., Aberdeen, Scot.; p. 828; 57 27n 2 29w
92 Drumheller, tn., Alta., Canada; coal; p. 2,987; 51 30n 113 0w
27 Drumlanrig Castle, Dumfries, Scot.; 55 17n 3 49w
31 Drumlish, vil., Longford, I.F.S.; p. 301; 53 49n 7 47w
27 Drummond Castle, Perth, Scot.; 56 21n 3 52w
97 Drummondville, tn., Que., Canada; woollens; p. 6,609; 45 53n 72 32w
26 Drummore, vil., Wigtown, Scot.; p. 446; 54 41n 4 53w
25 Drumoak, par., Aberdeen, Scot.; p. 798; 2 22n 2 22w
30 Drumshambo, vil., Leitrim, I.F.S.; p. 475; 54 3n 8 03w
20 Druridge B., Northumb., Eng.; 55 17n 135 0w
43 Druskeniki, tn., Poland; 54 0n 23 58e
42 Druya, tn., Poland; 55 44n 27 33e
27 Dryburgh Abbey, Berwick, Scot.; ruin near Melrose; 55 35n 2 38w
27 Drymen, par., Stirling, Scot.; p. 1,128; 56 4n 4 27w
88 Duala, spt., Fr. Cameroons; p. 32,000; 4 00n 9 40e
67 Duars, dist., India; 26 30n 90 0e
121 Dubbo, tn., N.S.W., Austral.; 32 14s 148 10e
33 Dublin, co., Irish Free St.; a. 342 sq. m.; oats, potatoes, livestock; p. 505,719; 53 24n 6 15w
33 Dublin (Baile Atha Cliath), co. bor.; cap. Irish Free St.; on R. Liffey; caths.; brewing, poplin; p. 318,471; 53 21n 6 15w
43 Dubno, tn., Poland; 50 24n 25 45e
104 Dubois, tn., Pa., U.S.A.; iron foundries, leather, flour; p. 14,000; 41 6n 78 50w
67 Dubovka, tn., Russia; p. 17,000; 49 0n 44 36e
47 Dubrovnik. See Ragusa.
102 Dubuque, cy., Iowa, U.S.A.; machinery, canning; p. 41,679; 42 25n 90 41w
123 Duchess, tn., Queens., Austral.; 21 30s 140 30e
117 Ducie I., Pac. Oc.; Br.; 24 47s 124 50w
99 Duck Mt., Man., Canada; 51 40n 101 0w
20 Duddon, R., England; 54 18n 3 15w
59 Dudinsk, tn., U.S.S.R.; 69 0n 86 0e
18 Dudley, co. bor., Worc., Eng.; coal, iron, brewing; p. 55,908; 52 31n 2 05w
48 Duero, R., Spain and Port.; wine region; 41 37n 4 20w
25 Dufftown, bor., Banff, Scot.; distilling; p. 1,454; 57 27n 3 07w
81 Dugga, tn., A.-E. Sudan; 6 45n 28 58e
40 Duisburg-Hamborn, tn., Germany; junc. of R. Rhine and Ruhr; coal, chemicals, textiles; p. 440,419; 51 26n 6 45e
88 Duke Town, tn., Nigeria; 4 40n 7 30e
16 Dukeries, The, dist., Notts, Eng.; 53 12n 1 12w
88 Duki, tn., Fr. W. Africa; 12 10n 4 0e
47 Dulcigno, tn., Y-slav.; 41 48n 19 14e
31 Duleek, par., Meath, I.F.S.; p. 1,810; 53 40n 6 25w
27 Dull, par., Perth, Scot.; p. 2,354; 56 37n 3 56w
102 Duluth, tn., Minn., U.S.A.; mnfs.—iron, steel, grain trade; p. 101,463; 46 47n 92 10w
71 Dumaguete, tn., Philippine Is.; p. 16,500; 9 15n 123 10e
26 Dumbarton, bor., co. tn., Dumbarton, Scot.; shipbuilding; p. 21,546; 55 57n 4 33w
26 Dumbarton, co., Scotland; a. 246 sq. m.; sheep; shipbuilding, textiles, coal; p. 147,751; 56 5n 4 40w
125 Dumbleyung, tn., W. Austral.; 33 14s 117 32e
69 Dum Dum, tn., Bengal, India; 22 35n 88 35e
27 Dumfries, co., Scotland; a. 1,078 sq. m.; hilly; cats, cattle, sheep; p. 81,060; 55 0 to 55 24n 3 00 to 4 00w
27 Dumfries, and Maxwelltown, bor., co. tn., Dumfries, Scot.; leather, tweeds, hats, hosiery; p. 22,795; 55 4n 3 38w
25 Dun, par., Angus, Scot.; p. 419; 56 43n 2 33w
46 Dunaföldvár, tn., Hungary; 46 50n 18 57e
27 Dunbar, bor., spt., E. Lothian, Scot.; ropes, brewing; p. 3,751; 56 0n 2 31w
27 Dunblane, bor., Perth, Scot.; cath.; p. 2,692; 56 11n 3 57w
31 Dunboyne, par., Meath, I.F.S.; p. 301; 53 25n 6 29w
25 Duncansby Hd., Caithness, Scot.; 58 38n 3 00w
31 Dundalk, urb. dist., co. tn., Louth, I.F.S.; cath.; tobacco, salt; p. 14,007; 54 0n 6 24w
96 Dundas, tn., Ont., Canada; leather, paper; p. 5,026; 43 17n 80 0w
27 Dundee, bor., Angus, Scot.; 3rd largest Scottish city; harbour, docks; jute weaving, linen, shipbuilding, preserves; p. 175,583; 56 28n 2 58w
83 Dundee, tn., Natal, S. Afr.; coal; p. 4,000; 28 7s 30 15e

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26 Dundonald, par., Ayr, Scot.; coal, sandstone; p. 16,459; 55 33n 4 35w
33 Dundrum, vil., Dublin, I.F.S.; p. 535; 53 17n 6 14w
31 Dundrum, tn., Down, N. Ire.; p. 474; 54 14n 5 51w
127 Dunedin, cy., S.I., New Zealand; founded by Scottish settlers and named after Edinburgh; wool and dairy prod.; cap. of Otago; p. 67,350; 45 51s 170 30e
121 Dunedoo, tn., N.S.W., Austral.; 32 1s 149 20e
27 Dunfermline, bor., co. tn., Fife, Scot.; iron, linen; p. 34,954; 56 6n 3 27w
31 Dungannon, urb. dist., Tyrone, N. Ire.; linen; p. 3,760; 54 30n 6 47w
33 Dungarvan, spt., Waterford, I.F.S.; woollens; brewing; p. 5,200; 52 6n 7 38w
17 Dungeness, Kent, Eng.; 50 55n 0 58e
31 Dungiven, tn., Londonderry, N. Ire.; p. 638; 54 55n 6 56w
121 Dungog, tn., N.S.W., Austral.; 32 28s 151 40e
120 Dunkeld, Vic., Austral.; 37 40s 142 20e
27 Dunkeld, par., Perth, Scot.; cath.; p. 946; 56 35n 3 35w
19 Dunkery Beacon, Somerset, Eng.; 1,707 ft.; 51 8n 3 36w
24 Dunkirk, spt., France; fisheries, shipbuilding; p. 31,000; 51 3n 2 24e
104 Dunkirk, tn., N.Y., U.S.A.; iron, wood; p. 20,000; 42 27n 79 20w
33 Dunlavin, tn., Wicklow, I.F.S.; p. 450; 53 4n 6 44w
33 Dun Laoghaire. See Kingstown.
31 Dunleer, par., Louth, I.F.S.; p. 741; 53 50n 6 24w
26 Dunlop, par., Ayr, Scot.; p. 1,224; 55 43n 4 30w
32 Dunmanway, tn., Cork, I.F.S.; tweeds, blankets; p. 1,619; 51 43n 9 07w
30 Dunmore, tn., Galway, I.F.S.; p. 577; 53 33n 8 45w
104 Dunmore, tn., Pa., U.S.A.; anthracite; p. 25,000; 41 24n 75 37w
33 Dunmore East, vil., Waterford, I.F.S.; p. 422; 52 10n 7 00w
25 Dunnet, par., Caithness, Scot.; p. 1,050; 58 38n 3 20w
25 Dunnet Hd., Caithness, Scot.; 58 40n 3 21w
27 Dunning, par., Perth, Scot.; p. 1,056; 56 18n 3 35w
25 Dunnottar Castle, Kincardine, Scot.; 56 57n 2 12w
26 Dunollie Castle, Argyll, Scot.; 56 25n 5 27w
120 Dunolly, tn., Vic., Austral.; 36 52s 143 42e
26 Dunoon, bor., Argyll, Scot.; wat.-pl.; p. 8,780; 55 57n 4 55w
25 Dunrobin Castle, Sutherland, Scot.; 57 59n 3 55w
27 Duns, bor., co. tn., Berwick, Scot.; p. 1,783; 55 47n 2 21w
27 Dunscore, par., Dumfries, Scot.; p. 962; 55 8n 3 48w
31 Dunshaughlin, par., Meath, I.F.S.; p. 757; 53 31n 6 32w
17 Dunstable, mun. bor., Beds, Eng.; printing, brewing, straw-goods; p. 10,218; 51 53n 0 31w
20 Dunstanburgh Cas., Northumb., Eng.; 55 30n 1 35w
19 Dunster, par., Somerset, Eng.; Norman cas; p. 703; 51 12n 3 25w
98 Dunvegan, tn., Alta., Canada; 55 54n 118 35w
24 Dunvegan Castle, Inverness, Scot.; 57 27n 6 34w
96 Dunville, tn., Ont., Canada; p. 3,405; 42 55n 79 39w
16 Dunwich, par., Suffolk, England; p. 189; 52 17n 1 33e
52 Dupnitza, tn., Bulgaria; p. 15,044; 42 17n 23 8e
108 Durango, st., Mexico; a. 42,272 sq. m.; wheat, tobacco, sugar; gold, silver, copper; p. 337,000; 24 0n 104 36w
108 Durango, tn., cap. Mexico; iron ore; p. 32,000; 24 12n 105 13w
106 Durango, tn., Col., U.S.A.; p. 5,400; 37 18n 107 57w
113 Durazno, tn., Uruguay; p. 10,000; 33 15s 56 50w
47 Durazzo. See Durrës.
83 Durban, spt., Natal, S. Afr.; exp., maize, wool, hides; p. 200,000 est. (83,228 Eur.); 29 53s 31 2e
38 Durbuy, tn., Belgium; 50 21n 5 27e
40 Düren, tn., Germany; textiles, sugar, paper; p. 37,176; 50 48n 6 28e
96 Durham, tn., Ont., Canada; p. 1,750; 44 13n 80 52w
20 Durham, co., England; a. 1,014 sq. m.; fertile valleys, moorland; chief rivers, Derwent, Tees, Wear; in W. is Pennine Chain; cattle; coal, limestone; shipbuilding, iron and steel, chemicals, glass; p. 1,435,978; 54 47n 1 34w
20 Durham, mun. bor., co. tn., Durham, Eng.; cath., univ.; coal, carpets; p. 16,223; 54 47n 1 35w
103 Durham, tn., N.C., U.S.A.; cotton, hosiery; tobacco; p. 52,037; 36 0n 78 45w
24 Durness, par., Suther., Scot.; p. 529; 58 24n 4 45w
47 Durres, spt., Albania; 8,739; 41 19n 19 28e
25 Durris, par., Kincardine, Scot.; p. 731; 57 3n 2 23w
33 Durrow, vil., Leix, I.F.S.; p. 548; 52 50n 7 25w
63 Durush, Persia; 32 13n 60 30e
127 Dusky Bd., New Zealand; 45 48s 166 32e
40 Düsseldorf, tn., port, Germany; on R. Rhine; iron, chemicals, paper, glass; p. 498,600; 51 13n 6 46e
70 Dutch East Indies, Is. Malay Arch.; a. 735,297 sq. m.; mountainous, tropical islands, including Java, Sumatra, Borneo, Celebes, etc.; agriculture, rice, maize, sweet potatoes, sugar cane, coffee, tea, tobacco, oil palms, cinchona, spices, rubber; petroleum; tin; cap. Batavia; p. 60,727,233; 5 00n to 10 0s 95 0 to 135 0e
112 Dutch Guiana (Surinam), col., S. America; a. 54,291 sq. m.; forested; sugar, coffee, rice, bananas; hardwoods; cap. Paramaribo; p. 153,305; 5 0n 55 0w
25 Duthil, par., Inverness, Scot.; p. 2,126; 57 18n 3 46w
66 Duzlab. See Zahidan.
66 Dvina R., Russia; length 750 m.; 63 0n 43 0e
42 Dvinsk. See Daugavpils.
125 Dwarda, spt., W. Austral.; p. 5,200; 33 10s 116 42e
93 Dyea, vil., Alaska; 59 35n 135 25w
103 Dyersburg, tn., Tenn., U.S.A.; p. 8,733; 36 0n 89 25w
25 Dyce, par., Aberdeen, Scot.; granite; p. 1,256; 57 12n 2 11w
17 Dymchurch, par., Kent, Eng.; p. 891; 51 2n 1 00e
27 Dysart, mun. bor., Fife, Scot.; linen, coal; p. 4,993; 56 7n 3 07w
84 Dysseldorp, tn., C. of Good Hope, S. Afr.; 33 32s 22 28e
72 Dzhargalantu. See Kobdo.
72 Dzhibkhalantu. See Uliastai.

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27 Eaglesham, par., Renfrew, Scot.; p. 1,671; 55 45n 4 16w
17 Ealing, mun. bor., Middx., Eng.; p. 117,688; 51 33n 0 16w
27 Earlsferry. See Elie.
27 Earlston, par., Berwick, Scot.; p. 1,639; 55 38n 2 40w
20 Earsdon, par., Northumb., Eng.; p. 13,086; 55 3n 1 30w
20 Easingwold, par., N. Riding, Eng.; rope, steel; p. 2,045; 54 8n 1 12w
16 East Anglian Riz., England; 52 53n 00 to 01n
126 East C., New Zealand; 37 41s 178 33e
59 East, C., U.S.S.R.; 66 0n 170 0w
73 East China S., Pacific Oc.; 30 0n 125 0e
16 East Dereham, urb. dist., Norfolk, Eng.; p. 5,641; 52 41n 0 57e
113 East Falkland, I., Falkland Is.; 51 40s 58 30w
17 East Grinstead, urb. dist., Sussex, Eng.; p. 7,901; 51 8n 0 01w
17 East Ham, co. bor., Essex, England; p. 142,394. See Greater London.
27 East Kilbride, par., Lanark, Scot.; p. 5,300; 55 47n 4 11w
27 East Linton, bor., E. Lothian, Scot.; p. 882; 55 59n 2 40w
70 East Indies, Asia. See Br. N. Borneo, Dutch E. Indies, Philippine Is., New Guinea.
83 East London, tn., spt.; C. of Good Hope, S. Afr.; resort; wool, mohair; p. 27,801 (Eur.); 33 2s 27 55e
19 East Looe, par., Cornwall, Eng.; fishing; p. 1,350; 50 22n 4 27w
27 East Lothian, co., Scot.; a. 267 sq. m.; cereals, potatoes; sheep; coal; p. 47,369; 55 57n 2 47w
41 East Prussia, prov., Germany; a. 14,401 sq. m.; agriculture, oats, rye, potatoes; horse and cattle breeding; amber; cap. Königsberg; p. 2,256,349; 53 0 to 55 0n 19 0 to 23 0e
16 East Retford, mun. bor., Notts., Eng.; corn, iron; p. 13,412; 53 18n 0 54w
21 East Riding, co., Yorks., Eng.; p. 483,058; 53 50n 0 45w
17 Eastbourne, co. bor., Sussex, Eng.; resort; p. 57,435; 50 46n 0 17e
117 Easter I., Pac. Oc.; Chile; 26 55s 109 30w
73 Eastern Gobi, des., Manchuria; 44 30n 122 0e
52 Eastern Rumelia, dist., Bulgaria; 42 20n 26 0e
74 Eastern S. See Tung-hai.
72 Eastern Turkistan, dist., Sin Kiang; 38 0n 80 0e
105 Easthampton, tn., Mass., U.S.A.; p. 11,323; 42 10n 73 0w
17 Eastleigh, mun. bor., Hants., Eng.; locomotives; p. 18,333; 50 59n 1 19w
102 Easton, tn., Pa., U.S.A.; coal, steel, machinery, furniture; p. 34,468; 40 48n 75 10w
102 Eau Claire, cy., Wis., U.S.A.; on Chippewa R.; lumber, paper, furniture; p. 26,287; 44 49n 91 28w
19 Ebbw Vale, urb. dist., Mon., Eng.; iron, coal; p. 31,095; 51 47n 3 10w
41 Eberswalde, tn., Germany; ironworks, bricks, paper; p. 29,571; 52 48n 13 46e
83 Ebenezer, tn., C. of Good Hope, S. Afr.; 31 33s 18 15e
51 Eboli, tn., Italy; 40 39n 15 2e
49 Ebro, R., Spain; rises in Cantabrians and flows into Medit. S.; length 470 m.; 42 50n 3 50w
27 Eccleschan, vil., Dumfries, Scot.; p. 680; 55 4n 3 15w
18 Eccles, mun. bor., Lancs, Eng.; cotton, silk; p. 44,415; 53 28n 2 21w
18 Eccleshall, par., Staffs, Eng.; p. 3,630; 52 52n 2 14w
45 Echallens, vil., Switzerland; 46 38n 6 38e
25 Echt, par., Aberdeen, Scot.; cattle; p. 1,111; 57 8n 2 27w
38 Echternach, vil., Luxemburg; 49 49n 6 25e
121 Echuca, tn., port, Vic., Austral.; on R. Murray; wine, sheep; p. 5,000; 36 9s 144 15e
48 Ecija, tn., Spain; olive oil, wine, pottery; p. 30,000; 37 29n 5 09w
39 Eckernförde, tn., Germany; 54 28n 9 52e
112 Ecuador, rep., S. America; a. 275,936 sq. m.; on Pacific Coast, Andes Mts.; Chimborazo (20,500 ft.); cocoa, sugar, coffee, cereals, fruits; gold, copper, silver; woollens; cap. Quito; p. 2,646,641; 0 00 to 5 00s 74 0 to 81 0w
38 Edam, tn., Netherlands; cheese; 52 30n 5 04e
88 Edea, tn., G. Cameroons; 3 47n 10 10e
25 Edderton, par., Ross and Crom., Scot.; p. 485; 57 50n 4 10w
27 Eddleston, par., Peebles, Scot.; p. 452; 55 42n 3 12w
24 Eddrachilis, par., Sutherland, Scot.; p. 967; 58 20n 5 08w
19 Eddystone Lighthouse, Eng. Chan., Eng.; 50 11n 4 16w
121 Eden, tn., N.S.W., Austral.; 37 5s 149 51e
20 Eden, R., Cumb., Eng.; 65 m. long; 54 51n 2 50w
87 Edenburg, tn., O.F.S., S. Afr.; 29 40s 25 55e
33 Edenderry, tn., Offaly, I.F.S.; p. 2,209; 53 21n 7 03w
79 Edfu, tn., Egypt; on R. Nile; earthenware; 24 59n 32 50e
16 Edge Hill, Warwick, Eng.; 52 4n 1 30w
31 Edgeworthstown, tn., Longford, I.F.S.; p. 654; 53 42n 7 37w
88 Edina, tn., Liberia; 6 00n 10 5w
27 Edinburgh, royal burgh, cy., cap. Midlothian, Scotland; on F. of Forth, including Leith, Granton, Portobello, and Newhaven; rich in historical and literary associations; educational centre, cas., univ., Holyrood Pal., Arthur's Seat (822 ft.), Scottish Nat. War Memorial; printing and publishing, brewing; p. 438,988; 55 57n 3 12w
27 Edinburgh, co. See Midlothian.
25 Edinkillie, par., Moray, Scot.; p. 731; 57 30n 3 38w
53 Edirne (Adrianople), tn., Turkey; wine, tobacco; silk, perfume; p. 34,528; 41 41n 26 33e
120 Edithburgh, tn., S. Austral.; 35 6s 137 38e
98 Edmonton, cty., cap., Alta., Canada; univ. coll., parliament buildings; farming, dairying, coal; p. 79,197; 53 35n 113 24w
17 Edmonton, urb. dist., Middx., England; p. 77,652. See Greater London.

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93 Edmundston, tn., N.B., Canada; pulp; p. 6,430; 47 27n 68 14w
27 Ednam, par., Roxburgh, Scot.; p. 394; 55 38n 2 25w
62 Edremid, tn., Turkey; p. 12,161; 39 30n 26 58e
27 Edrom, par., Berwick, Scot.; p. 1,015; 55 48n 2 18w
81 Edward, L., Uganda; 0 20s 29 40e
25 Edsell, par., Angus, Scot.; p. 891; 56 48n 2 40w
38 Eeeloo, tn., Belgium; textiles; p. 14,672; 51 12n 3 34e
97 Eganville, tn., Ont., Canada; p. 1,020; 45 35n 77 8w
46 Eger, tn., Hungary; wine, soap; p. 30,328; 47 52n 20 27e
46 Eger. See Cheb.
55 Egersund, tn., Norway; 58 30n 6 00e
88 Egga, tn., Nigeria; p. 10,000; 8 40n 6 15e
62 Egin, tn., Turkey; fruit, wine, cotton; p. 23,000; 39 17n 38 17e
31 Eglinton, vil., Londonderry, N. Ire.; 55 2n 7 11w
126 Egmont, C., New Zealand; 39 18s 173 45e
126 Egmont, Mt., New Zealand; 8,260 ft.; 39 18s 174 7e
39 Egremont, par., Cumb., Eng.; limestone, iron ore; p. 6,015; 54 29n 3 32w
20 Egton, par., N. Riding, Eng.; p. 993; 54 27n 0 45w
78 Egypt, king., N.E. Africa; 383,000 sq. m.; desert except fertile valley of R. Nile (nav. throughout Egypt), Pyramids; agriculture, wheat, barley, maize, onions, cotton; phosphates; cap. Cairo; p. 14,217,864; 22 0 to 31 0n 27 30 to 35 40e
80 Egypto, tn., Angola; 12 2s 13 40e
55 Eide, tn., Norway; 60 30n 6 40e
123 Eidsvold, tn., Queens., Austral.; 25 22s 151 3e
24 Eigg I., Scotland; 56 55n 6 09w
40 Eilenburg, tn., Germany; p. 18,172; 51 27n 12 37e
122 Einasleigh, tn., Queens., Austral.; 18 32s 144 10e
38 Eindhoven, tn., Netherlands; tobacco, textiles, electrical machinery; p. 94,731; 51 27n 5 29e
45 Einsiedeln, tn., Switzerland; 47 8n 8 43e
46 Eisenerz, tn., Austria; iron ore; p. 6,570; 47 30n 14 55e
40 Eisleben, tn., Germany; machinery; p. 23,694; 51 35n 11 34e
39 Ejby, tn., Denmark; 55 20n 9 54e
109 Ejutla, tn., Mexico; 16 31n 96 48w
126 Eketahuna, bor., N.I., New Zealand; p. 785; 40 36s 175 42e
55 Eksjö, tn., Sweden; 57 40n 15 0e
60 El Akhaf, des., Arabia; 16 0 to 18 0n 45 0 to 48 0e
60 El Ala, tn., Arabia; 26 41n 38 40e
10 El Araish, tn., spt., Morocco; 35 5n 6 02w
62 El Arish, tn., Egypt; 31 8n 33 50e
62 El Auja, vil., Palestine; 30 55n 34 52e
78 El Ayat, tn., Egypt; 29 36n 31 16e
10 El Baharíat, vil., Morocco; 31 30n 2 40w
49 El Bonillo, tn., Spain; 38 56n 2 33w
114 El Descabezado, vol., Chile; 35 0s 70 40w
10 El Erg or Areg, des., Algeria; 31 0n 0 30e
48 El Escorial, tn., Spain; 40 30n 4 10w
60 El Hamed (Syrian Des.), Arabia; 32 0n 40 0e
10 El Hammada, des., Algeria; 32 0n 0 00e
61 El Kaisarieh, tn., Palestine; 32 30n 34 50e
78 El Kantara, tn., Egypt; on Suez Canal; 30 50n 32 19e
10 El Kef, tn., Tunis; 36 0n 9 00e
61 El Khulil, tn. (Hebron), Palestine; glass, leather; p. 16,577; 31 32n 35 8e
61 El Kuds. See Jerusalem.
78 El Kusiyeh, tn., Egypt; 27 28n 30 43e
61 El Leijjun, dist., Palestine; 32 35n 35 10e
60 El Lith, tn., Arabia; 20 14n 40 18e
10 El Mengub, tn., Algeria; 32 8n 0 15e
79 El Menshiyeh, tn., Egypt; 26 26n 31 50e
81 El Obeid, tn., A.-E. Sudan; ivory, gums, ostrich feathers; p. 17,250; 13 10n 30 14e
108 El Oro, tn., Mexico; 25 59n 105 13w
107 El Paso, cy., Tex., U.S.A.; on Rio Grande; cotton; cattle; copper, lead; p. 102,421; 31 52n 106 29w
79 El Ramadi, tn., Egypt; 24 50n 32 51e
10 El Wad, tn., Algeria; 32 40n 7 20e
60 El Wej, tn., Arabia; 26 20n 36 25e
87 Elandslaagte, Natal, S. Afr.; 28 25s 30 0e
53 Elassona, tn., Greece; 39 54n 22 10e
60 Elba I., Italy; in Medit. Sea, Napoleon exiled here; wine, marble; p. 26,000; 42 45n 10 10e
47 Elbasan, tn., Albania; p. 13,796; 41 8n 20 7e
40 Elbe, R., Germany; rises in Giant Mts., flows into North S., 725 m. long; 54 0n 8 40e
40 Elberfeld-Barmen, tn., Germany; cotton, wool, silk, velvet, leather, rubber goods; p. 354,676; 51 15n, 7 15e
34 Elbeuf, tn., France; on R. Seine; woollens; p. 18,379; 49 18n 0 59e
41 Elbing, tn., spt., Germany; shipbuilding, textiles, leather, iron; p. 72,409; 54 10n 19 22e
57 Elbruz, Mt., Russia; highest pk. Caucasus Mts. (18,465 ft.); 43 26n 42 28e
63 Elburz Mts., Persia; highest pk., Demavend (13,500 ft.); 36 0n 52 0e
49 Elche, tn., Spain; palms, olive oil, soap; p. 33,000; 38 15n 0 42w
81 Eldoret, tn., Kenya; 0 01n 34 50e
52 Elena, tn., Bulgaria; 42 54n 25 53e
110 Eleuthera I., Bahama Is., W. Indies; p. 6,000; 25 0n 76 15w
25 Elgin, bor., co. tn.; Moray, Scot.; woollens; p. 8,810; 57 39n 3 18w
25 Elgin, co. See Moray.
102 Elgin, tn., Ill., U.S.A.; watches, dairying; p. 35,929; 42 3n 88 20w
81 Elgon, mt., Uganda; 14,000 ft. high; 1 15n 34 25e
17 Elham, par., Kent, Eng.; p. 1,242; 51 10n 1 12e
98 Elias Ra., mts., B.C., Canada; 60 0n 138 0w
27 Elie and Earlsferry, bor., Fife, Scot.; p. 1,098; 56 11n 2 50w
84 Elim, tn., C. of Good Hope, S. Afr.; 34 35s 19 42e
83 Elim, tn., Natal, S. Afr.; 31 0s 30 15e
55 Elisenvaara, tn., Finland; 61 15n 30 0e
105 Elizabeth, cy., N.J., U.S.A.; Princeton Univ.; sewing machines, iron goods, oil refining; p. 114,589; 40 40n 74 17w
59 Elizabeth, C., U.S.S.R.; 54 0n 144 0e
103 Elizabeth City, N.C., U.S.A.; p. 10,037; 36 20n 76 15w
80 Elizabethville, tn., Belg. Congo; 11 30s 27 0e

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102 Elkhart, tn., Ind., U.S.A.; paper, machinery; p. 32,949; 41 40n 85 58w
104 Elkins, tn., W. Va., U.S.A.; p. 7,345; 38 50n 79 48w
18 Ellesmere, urb. dist., Salop, Eng.; malting; p. 1,873; 52 54n 2 55w
93 Ellesmere I., Franklin, Can.; 79 30n 80 0w
18 Ellesmere Port., urb. dist., Cheshire, Eng.; p. 18,893; 53 20n 2 50w
116 Ellice Is., Pac. Oc.; Br. Prot. with Gilbert Is.; copra; p. 3,741; 5 00 to 11 0s 176 0 to 180 0e
67 Ellichpur, tn., India; cotton; p. 23,899; 21 20n 77 32e
120 Elliston, tn., S. Austral.; 33 10s 135 0e
25 Ellon, bor., Aberdeen, Scot.; p. 1,303; 57 22n 2 05w
68 Ellora, tn., Hyd., India; rock temples and caves; 20 3n 75 12e
68 Ellore, tn., Madras, India; carpets, hosiery, cotton; p. 45,893; 16 48n 81 8e
40 Ellwangen, tn., Germany; 49 0n 10 8e
45 Elm, tn., Switzerland; 46 55n 9 10e
62 Elmali, tn., Turkey; 36 46n 30 1e
102 Elmira, tn., N.Y., U.S.A.; rly. plant, farm implements; p. 47,397; 42 5n 76 58w
39 Elmshorn, tn., Germany; p. 15,392; 53 43n 9 40e
30 Elphin, tn., Roscommon, I.F.S.; p. 649; 53 51n 8 12w
107 Elreno, tn., Okla., U.S.A.; p. 9,384; 35 45n 98 0w
83 Elsburg, tn., Trans., S. Afr.; 26 20s 28 10e
126 Eltham, bor., N.I., New Zealand; p. 2,040; 39 26s 174 16e
48 Elvas, tn., Portugal; plums, olives; p. 11,747; 38 50n 7 14w
55 Elverum, tn., Norway; 60 55n 11 30e
102 Elwood, tn., Ind., U.S.A.; grain, tinplate; p. 10,695; 40 16n 85 55w
16 Ely, mun. bor., I. of Ely, Eng.; cath.; p. 8,382; 52 24n 0 15e
16 Ely, I. of, co., England; part of Cambridgeshire; stronghold of Hereward the Wake against William the Conqueror; fruit, beet sugar; p. 77,705; 52 24 to 52 45n 0 00 to 0 26e
20 Embleton, par., Northumb., Eng.; p. 639; 55 31n 1 38w
40 Emden, tn., spt., Germany; on R. Ems; rope, cement, shipbuilding; p. 27,770; 53 24n 7 12e
123 Emerald, tn., Queens., Austral.; 23 32s 148 17e
50 Emilia, dept., Italy; a. 8,537 sq. m.; grain, wine, fruits; p. 3,214,940; 44 35n 10 40e
121 Emmaville, tn., N.S.W., Austral.; 29 37s 151 33e
50 Empoli, tn., Italy; cotton, pottery; p. 21,250; 43 42n 10 58e
107 Emporia, tn., Kan., U.S.A.; stock raising; p. 14,057; 38 26n 96 14w
40 Ems, tn., Germany; spa; silver, lead; p. 7,000; 50 20n 7 45e
40 Ems, R., Germany; 53 20n 7 00e
17 Emsworth, vil., Hants., Eng.; p. 2,320; 50 51n 0 56w
118 Emungalan, tn., N. Terr., Austral.; 14 32s 132 28e
61 En Nasirah. See Nazareth.
108 Encarnacion, tn., Mexico; 21 30n 102 20w
113 Encarnacion, tn., Paraguay; p. 7,500; 27 15s 56 10w
120 Encounter B., S. Australia; 36 15s 139 0e
128 Enderby Ld., Antarctica; 67 0s 50 0e
17 Enfield, urb. dist., Middx., Eng.; small arms; p. 67,869; 51 40n 0 05w
45 Engadin, Switzerland; upper valley of R. Inn; resort; chief tn., St. Moritz; 46 47n 10 20e
38 Enghien, tn., Belgium; lace, cotton; 50 42n 4 02e
15 England (with Wales), Europe; a. 50,875 sq. m., length 420 m., greatest breadth 369 m.; forms S. and largest div. of Gt. Britain; coastline deeply indented; chief mts., Cheviot Hills, Pennine Chain, Cambrian Mts., Dartmoor, Exmoor; chief rivers, Thames, Severn, Trent, Mersey, Gt. Ouse, Yorkshire Ouse; there are 19,336 miles of railway track in Gt. Britain, owned by 4 railways, namely Southern, Great Western, London, Midland and Scottish, and London and North Eastern; there are 3,641 miles of canals and canalized rivers; chief industries, agriculture, arable and pastoral, dairying; mining, coal, iron, kaolin, stone; fishing; mnfs., iron and steel, machinery, textiles, shipbuilding, pottery, etc.; commerce; comprises 40 ancient counties and 50 administrative counties; the ancient counties are Northumberland, Durham, Cumberland, Westmorland, Lancashire, Yorkshire, Lincolnshire, Nottinghamshire, Derbyshire, Cheshire, Staffordshire, Shropshire, Herefordshire, Monmouthshire, Gloucestershire, Worcestershire, Warwickshire, Leicestershire, Northamptonshire, Rutland, Huntingdonshire, Cambridgeshire, Bedfordshire, Norfolk, Suffolk, Essex, Middlesex, Hertfordshire, Buckinghamshire, Oxfordshire, Kent, Surrey, Sussex, Hampshire, Berkshire, Wiltshire, Dorsetshire, Somerset, Devonshire, Cornwall; there are 3 administrative counties in Yorkshire, namely North Riding, East Riding, West Riding; 3 administrative counties in Lincolnshire, namely Lindsey, Kesteven, Holland; 2 administrative counties in Suffolk, namely East and West Suffolk; 2 administrative counties in Cambridgeshire, namely Cambridgeshire and I. of Ely; 2 administrative counties in Northamptonshire, namely Northamptonshire and the Soke of Peterborough; 2 administrative counties in Sussex, namely East and West Sussex; 2 administrative counties in Hampshire, namely Hampshire and Isle of Wight; the administrative county of London was formed from the counties of Middlesex, Essex, Kent, and Surrey; cap. London p. 37,794,003; 50 to 56n 2 00e to 6 00w
15 English Channel, separates England and France; greatest breadth 100 m.; 50 0n 2 00w
107 Enid, tn., Okla., U.S.A.; ironworks, farm implements; p. 26,399; 36 30n 98 0w
89 Enkeldoorn, tn., S. Rhodesia; 18 50s 30 50e
38 Enkhuizen, tn., Netherlands; 52 42n 5 18e
76 Ennedi, dist., Fr. Eq. Afr.; 17 0n 23 0e
32 Ennis, urb. dist., co. tn., Clare, I.F.S.; farming, flour; p. 5,517; 52 51n 8 59w
33 Enniscorthy, urb. dist., Wexford, I.F.S.; brewing, tanning; p. 5,545; 52 29n 6 35w

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31 Enniskillen, urb. dist., co. tn., Fermanagh, N. Ire.; brewing; p. 4,883; 54 20n 7 39w
32 Ennistymon, tn., Clare, I.F.S.; p. 1,205; 52 57n 9 17w
83 Enon, tn., C. of Good Hope, S. Afr.; 33 22s 25 22e
83 Enos, tn., Turkey; 40 41n 26 7e
38 Enschede, tn., Netherlands; cotton spinning, weaving; p. 51,793; 52 12n 6 55e
108 Ensenada, tn., Mexico; 31 59n 116 45w
81 Entebbe, cap. Uganda; on L. Victoria; 0 04n 32 26e
48 Entre Minho e Douro, prov. Portugal; a. 2,790 sq. m.; farming, cattle; textiles; cap. Oporto; p. 1,418,672; 41 30n 8 20w
13 Entre Rios, prov., Argentina; a. 29,241 sq. m.; plain; wheat, linseed; stock raising; cap. Parana; p. 614,505; 30 0s 58 0w
113 Entre Rios, tn., Brazil; 22 0s 43 25w
63 Enzeli. See Pahlewi.
34 Epernay, tn., France; on R. Marne; champagne; p. 20,381; 49 2n 3 56e
34 Epinal, tn., France; on R. Moselle; cotton, printing; p. 27,350; 48 11n 6 30e
53 Epirus, dist., Greece; 39 30n 20 30e
17 Epping, urb. dist., Essex, Eng.; dairying; p. 4,956; 51 42n 0 06e
17 Epsom and Ewell, urb. dist., Surrey, Eng.; race course; p. 35,500; 51 20n 0 17w
16 Epworth, vil., Linc., Eng.; p. 1,822; 53 32n 0 48w
10 Er Riff, dist., Morocco; 35 0n 4 00w
62 Erbil, tn., Iraq; 36 10n 43 19e
128 Erebus, Mt., Antarctica; 77 30s 166 0e
62 Eregli, tn., Turkey; 37 37n 34 5e
40 Erfurt, tn., Germany; cath.; flower seeds, dress stuffs, machinery, brewing; p. 144,879; 51 0n 11 0e
104 Erie Canal, N.Y., U.S.A.; connects L. Erie with Hudson R., length 340 m.; 43 10n 77 0w
91 Erie, L., N. America; a. 9,940 sq. m., 240 long, 40 m. broad; 42 10n 80 50w
61 Erina, tn., Palestine; 31 51n 35 27e
17 Erith, urb. dist., Kent, Eng.; engineering, oil refining; p. 32,780; 51 28n 0 12e
81 Eritrea, It. col., N.E. Africa; a. 45,754 sq. m.; cereals, pearl fishing, tobacco; cap. Asmara; p. 407,500; 15 0n 39 0w
57 Erivan, tn., Armenia, Russia; wine, brandy; machinery; p. 111,500; 40 10n 44 31e
46 Erlau. See Eger.
83 Ermelo, tn., Trans., S. Afr.; p. 2,534 (Eur.); 26 31s 30 2e
62 Ermenek, tn., Turkey; 36 40n 32 47e
79 Erment, tn., Egypt; 25 36n 32 30e
68 Ernakulam, tn., India; p. 23,192; 10n 76 18e
31 Erne, L., Irish Free St., 54 28n 7 50w
68 Erode, tn., Madras, India; on R. Cauvery; cotton; p. 22,911; 11 20n 77 45e
120 Eromanga, tn., Queens., Austral.; 26 39s 143 12e
27 Errol, par., Perth, Scot.; p. 1,891; 56 58n 3 31w
41 Erz Gebirge (Ore Mts.), mts., Germ.; 50 40n 13 40e
62 Erzerum, tn., Turkey; brasswork, salt, tanning; p. 31,457; 39 57n 41 27e
62 Erzingan, tn., Turkey; silk, cotton; p. 16,092; 39 33n 39 51e
78 Es Salihiya, tn., Egypt; 30 48n 32 1e
61 Es Sur, tn., Syria; ancient Tyre; 33 16n 35 15e
39 Esbjerg, tn., spt., Denmark; dairying, cattle; p. 27,405; 55 28n 8 30e
102 Escanaba, tn., Mich., U.S.A.; iron, shipping, lumber, chemicals; p. 14,524; 45 45n 87 10w
38 Escaut, R., Belgium; 51 8n 4 15e
38 Esch, tn., Luxemburg; 49 33n 1 59e
40 Eschwege, tn., Germany; textiles, tobacco, tanning; p. 12,723; 51 0n 10 4e
37 Eschweiler, tn., Germany; coal, iron, zinc; p. 26,107; 50 50n 6 16e
108 Escuinapa, tn., Mexico; 22 50n 105 50w
61 Esdud, tn., Palestine; 31 45n 34 40e
61 Esh Sheriah, R., Palestine; 30 40n 34 20e
83 Eshowe, tn., Natal, S. Afr.; asbestos; 28 55s 31 30e
121 Esk, tn., Queens., Austral.; 27 5s 152 20e
20 Esk, R., Cumb., Eng.; 55 10n 3 01w
20 Esk, R., N. Riding, Eng.; 54 30n 0 38w
27 Eskdalemuir, par., Dumfries, Scot.; p. 378; 55 17n 3 11w
53 Eskije. See Xanthi.
52 Eski Jumaya, tn., Bulgaria; 43 16n 26 37e
55 Eskilstuna, tn., Sweden; iron and steel; p. 32,674; 59 25n 16 30e
62 Eskisehir, tn., Turkey; grain, wool, meerschaum; p. 32,341; 39 40n 30 27e
112 Esmeraldas, tn., Ecuador; cacao, tobacco; p. 4,000; 0 50n 79 30w
112 Esmeraldas, tn., Venezuela; 3 10n 66 3w
79 Esneh, tn., Egypt; on R. Nile; caravan centre; p. 16,000; 25 18n 32 30e
125 Esperance, tn., W. Australia; 33 47s 121 50e
125 Esperance B., W. Australia; 34 0s 122 0e
48 Espinho, tn., Portugal; 41 0n 8 40w
112 Espirito Santo, st., Brazil; a. 19,308 sq. m.; sugar, cotton, coffee, fruits; forests; cap. Victoria; p. 661,416 (est.); 20 0s 41 0w
98 Esquimalt, tn., B.C., Canada; salmon; 48 23n 123 22w
40 Essen, tn., Germany; rly. centre, Ruhr coalfields, iron, steel (Krupps'), machinery, textiles, brewing, cigars; p. 654,461; 51 26n 6 45e
17 Essex, co., England; a. 1,542 sq. m., flat, wooded; agriculture, wheat, barley; oyster beds; mnfs., farming implements, engineering, brewing, silk, gunpowder; largest towns are part of Greater London, East Ham, West Ham, Leyton, Walthamstow; p. 1,755,240; 51 27 to 52n 0 to 1 15e
112 Essiquibo, R., Br. Guiana; length 600 m.; 7 00n 58 0w
46 Essling, tn., Austria; 48 13n 16 36e
40 Esslingen, tn., Germany; wines, fruit, cottons, machinery; p. 40,562; 48 46n 9 17e
45 Estavayer, tn., Switzerland; 46 50n 6 50e
87 Estcourt, tn., Natal, S. Afr.; 29 1s 29 51e
50 Este, tn., Italy; 45 18n 11 40e
99 Estevan, tn., Sask., Canada; coal; p. 2,936; 49 10n 102 59w
20 Easton, urb. dist., N. Riding, Eng.; iron and steel; p. 31,142; 54 34n 1 07w

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42 Estonia, rep., Europe; on Baltic Sea; a. 18,353 sq. m.; farming and dairying, textiles, matches, leather; cap. Tallinn; p. 1,126,413; 57 20 to 59 20n 22 to 28e
48 Estremadura, prov., Portugal; a. 6,937 sq. m.; fruit, wine, fish, lace; p. 1,804,614; 39 0n 8 10w
48 Estremadura, old prov., Spain; 38 to 40n 8 to 9 30w
48 Estremoz, tn., Portugal; 38 52n 7 37w
46 Esztergom, tn., Hungary; formerly Gran; cath.; weaving, mineral springs; p. 17,360; 47 47n 18 44e
34 Etaples, tn., France; seaside resort; 50 33n 1 41e
67 Etawah, tn., India; p. 41,558; 26 45n 79 8e
27 Ettrick, par., Selkirk, Scot.; p. 308; 55 25n 3 12w
79 Etbai, dist., Egypt.; 22 25n 33 40 to 36e
81 Ethiopia. See Abyssinia.
51 Etna, Mt., vol., Sicily, Italy; 37 44n 15 0e
17 Eton, urb. dist., Bucks, Eng.; coll. founded by Henry VI, 1440; England's most famous public school; p. 2,005; 51 30n 0 37w
82 Etosha Salt Pan, S.W. Afr.; 18 45s 16 45e
52 Etropole, tn., Bulgaria; 42 50n 24 0e
121 Euabalong, tn., N.S.W., Austral.; 33 2s 146 29e
53 Euboea I., dept., Greece; a. 1,460 sq. m.; wheat, olive oil, wine; marble; p. 154,449; 38 30n 24 0e
118 Eucla, tn., W. Australia; 32 0s 126 0e
120 Eudunda, vil., S. Australia; 34 9s 139 5e
106 Eugene, cy., Ore., U.S.A.; ironworks; p. 18,901; 44 1n 123 1w
57 Eupatoria, tn., spt., Crimea, Russia; chemicals, dried fish; p. 23,000; 45 13n 33 16e
38 Eupen, tn., Belgium; cloth, woollens, dyes; p. 13,500; 50 38n 6 03e
38 Eupen, prov., Belgium; a. 382 sq. m.; ceded by Germany by Treaty of Versailles, 1919; wool; p. 60,000; 50 40n 6 02e
62 Euphrates, R., Iraq; largest R. in W. Asia, enters Persian G. as Shatt-el-Arab after receiving R. Tigris; length 1,800 m.; 34 30n 41 30e
34 Eure, dept., France; a. 2,330 sq. m.; farming, fruit, live-stock; textiles; cap. Evreux; p. 305,788; 48 56n 0 58e
34 Eure-et-Loir, dept., France; a. 2,291 sq. m.; wheat; textiles, iron, cotton; cap. Chartres; p. 254,790; 48 20n 1 25e
106 Eureka, tn., Cal., U.S.A.; lumber; p. 15,752; 40 50n 124 12w
106 Eureka, tn., Nev., U.S.A.; 39 30n 115 58w
120 Eurelia, tn., S. Australia; 32 32s 138 31e
121 Euroa, tn., Vic., Austral.; 36 45s 145 34e
48 Europa Pt., Spain; 36 5n 5 22w
8 Europe, 2nd smallest of continents, a. 3,900,000 sq. m., greatest length N. to S. 2,400 m., greatest breadth E. to W. 3,000 m.; bounded on N. by Arctic Oc., on S. by Med. S., on E. by Ural Mts., on W. by Atlantic Oc.; chief mt. ranges, Alps, Pyrenees, Carpathians, Balkans, Apennines, Sierra Nevada, Scandinavian Mts., Ural Mts., Caucasus Mts., chief rivers, Volga, Danube, Rhine, Dnieper, Dniester, Ural, Don; chief lakes, Ladoga, Onega, Peipus, Wener, Wetter; chief industries, agriculture, cereals, fruits, flax, hemp; pastoral, cattle rearing, dairying, sheep, pigs, horses; fishing; timber; mining, iron, coal, petroleum, metals; varied manufactures; commerce; p. 500,000,000; 36 to 71n 9 30w to 66e
40 Euskirchen, tn., Germany; cloth, tanning, sugar; p. 14,603; 50 38n 6 46e
120 Euston, tn., N.S.W., Austral.; 34 31s 142 45e
121 Evandale, tn., Tas., Austral.; 41 27s 147 20e
102 Evanston, cy., Ill., U.S.A.; suburb of Chicago; p. 63,338; 42 0n 87 47w
106 Evanston, tn., Wyo., U.S.A.; 41 12n 111 0w
102 Evansville, cy., Ind., U.S.A.; on Ohio R.; hardwood mkt., farm. implements; p. 102,249; 37 0n 87 33w
67 Everest, Mt., Tibet; in Himalayas, world's highest mt., 29,002 ft.; 28 0n 87 0e
106 Everett, cy., Wash., U.S.A.; sawmills, salmon canning, fruit; p. 30,567; 47 55n 122 7w
18 Evesham, mun. bor., Worcs, Eng.; fruit; p. 10,600; 52 5n 1 56w
45 Evian, tn., Switzerland; on L. Geneva; 46 24n 6 35e
48 Evora, tn., Portugal; iron; p. 16,148; 38 34n 7 55w
34 Evreux, tn., France; iron, glass; p. 19,315; 49 2n 1 07e
19 Exe, R., Devon, Eng.; 51 5n 3 32w
96 Exeter, tn., Ont., Canada; p. 1,666; 43 23n 81 33w
19 Exeter, co. bor., co. tn., Devon, Eng.; cath.; iron-founding, brewing; p. 66,022; 50 44n 3 32w
19 Exmoor, Devon, Eng.; moorland, Dunkery Beacon 1,707 ft.; scene of Blackmore's novel, "Lorna Doone"; 51 9n 3 45w
19 Exmouth, urb. dist., spt., Devon, Eng.; lace; fishing; p. 14,584; 50 37n 3 23w
124 Exmouth G., W. Australia; 22 0s 114 15e
16 Eye, mun. bor., Suffolk, Eng.; brewing; p. 1,732; 52 19n 1 09e
27 Eyemouth, bor., Berwick, Scot.; fishing; p. 2,231; 55 52n 2 05w
118 Eyre, tn., W. Australia; 32 20s 126 30e
120 Eyre, L., S. Australia; salt lake, practically dried up; 28 30s 137 15e
120 Eyre, L. (South), S. Australia; 29 15s 137 30e
127 Eyre Mts., New Zealand; 45 24s 168 24e
120 Eyre's Pen., S. Australia; 33 30s 136 0e
33 Eyrecourt, tn., Galway, I.F.S.; p. 407; 53 13n 8 08w
61 Ez Zib, tn., Palestine; 33 3n 35 8e

50 Faenza, tn., Italy; pottery (faience), silk; p. 22,400; 44 18n 11 52e
52 Fagaras, tn., Rumania; p. 7,928; 45 46n 24 54e
90 Fairbanks, tn., Alas., N. America; p. 2,101; 64 59n 148 10w
127 Fairlie, tn., S.I., New Zealand; p. 800; 44 4s 170 52e
26 Fairlie, par., Ayr, Scot.; p. 1,392; 55 56n 4 50w
104 Fairmont, tn., W. Va., U.S.A.; p. 23,159; 39 30n 80 5w
98 Fairweather, Mt., Alaska; 59 0n 137 58w
61 Faizabad, tn., Afghanistan; 38 30n 69 20e
16 Fakenham, par., Norfolk, Eng.; p. 2,965; 52 51n 0 51e
39 Fakse, tn., Denmark; 55 16n 12 9e

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39 Fakse, B., Denmark; 55 12n 12 15e
52 Falcaatu, tn., Rumania; 47 30n 27 17e
41 Falkenberg, tn., Germany; 53 28n 13 0e
55 Falkenberg, tn., Sweden; p. 5,527; 56 55n 12 29e
27 Falkirk, bor., Stirling, Scot.; coal, iron, distilleries; p. 36,555; 56 0n 3 47w
27 Falkland, bor., Fife, Scot.; p. 791; 56 15n 3 13w
113 Falkland Is., S. America; Br. cr. col.; a. 4,618 sq. m.; sheep rearing; whaling centre; cap. Stanley; p. 2,437; 51 0s 57 0w
55 Falköping, tn., Sweden; p. 6,736; 58 10n 13 40e
102 Fall River, cy., Mass., U.S.A.; cottons, dyeing, brewing, iron; p. 115,274; 41 45n 71 0w
19 Falmouth, mun. bor., spt., Cornwall, Eng.; resort; fishing; p. 13,332; 50 10n 5 05w
110 Falmouth, tn., Jamaica; p. 2,000; 18 30n 77 33w
83 False B., C. of Good Hope, S. Afr.; 34 15s 18 45e
39 Falsterbo, tn., Sweden; 55 20n 12 50e
55 Falun, tn., Sweden; copper, iron, wood pulp; p. 13,370; 60 35n 15 40e
62 Famagusta, tn., spt., Cyprus; wines, fruit, cotton; p. 6,980; 35 3n 33 59e
117 Fanning I., Pac. Oc.; Br.; 3 50n 159 21w
50 Fano, tn., Italy; resort; 43 52n 13 0e
59 Far Eastern Area, U.S.S.R.; a. 1,138,259 sq. m.; in N.E. Asia extending from Manchuria to Kamchatka; forested; timber, furs; cap. Khabarovsk; p. 1,900,000 (est.); 43 0 to 70 0n 130 0 to 180 0e
79 Farafra O., Egypt; 26 48n 28 30e
66 Farah, tn., Afghanistan; 32 23n 62 8e
17 Fareham, urb. dist., Hants, Eng.; flour, pottery; p. 11,075; 50 52n 1 10w
79 Fares, tn., Egypt; 24 34n 22 50e
93 Farewell, C., Greenland; 60 0n 43 40w
126 Farewell, C., New Zealand; 40 30s 172 46e
107 Fargo, cy., N.D., U.S.A.; on Red R.; grain, farm machinery; p. 28,619; 46 51n 96 55w
102 Faribault, tn., Minn., U.S.A.; p. 12,767; 44 20n 93 10w
66 Faridkot, tn., India; grain; 30 44n 74 42e
69 Faridpur, tn., Bengal, India; cloth, carpets; p. 14,500; 23 30n 89 58e
17 Faringdon, par., Berks, Eng.; p. 2,758; 51 40n 1 35w
17 Farnborough, urb. dist., Hants, Eng.; military camp; p. 16,359; 51 17n 0 43w
20 Farne Is., Northumb., Eng.; famous rescue made by Grace Darling and her father; 55 39n 1 36w
97 Farnham, tn., Que., Canada; p. 4,205; 45 13n 72 59w
17 Farnham, urb. dist., Surrey, Eng.; hops; p. 18,294; 51 13n 0 48w
48 Faro, tn., spt., Portugal; wine, fruit, corks; p. 12,925; 37 2n 7 55w
8 Faroe Is., Atlantic Oc., Denmark; a. 540 sq. m.; sheep, fishing; p. 24,200; 62 0n 7 00w
25 Farr, par., Sutherland, Scot.; p. 1,769; 58 32n 4 12w
67 Farrukhabad, tn., India; on R. Ganges; gold lace, brass work; p. 51,967; 27 20n 79 38e
55 Farsund, tn., Norway; 58 0n 6 40e
63 Fasa, tn., Persia; silk, wool; p. 10,000; 28 57n 53 38e
51 Fasano, tn., Italy; p. 17,180; 40 52n 17 11e
81 Fashoda. See Kodok.
66 Fatehpur, tn., Raj., India; p. 17,350; 28 0n 75 3e
67 Fatehpur, tn., U. Provs., India; hides, grain; p. 15,000; 25 52n 80 50e
54 Fatmomakke, tn., Sweden; 65 0n 15 10e
83 Fauresmith, tn., O.F.S., S. Afr.; 29 45s 25 17e
51 Favara, tn., Italy; sulphur, marble; p. 21,500; 37 19n 13 30e
17 Faversham, mun. bor., Kent, Eng.; fruit, hops, bricks; p. 10,091; 51 19n 0 54e
113 Faxina, tn., Brazil; 24 0s 49 25w
103 Fayetteville, tn., Ark., U.S.A.; p. 7,394; 36 3n 94 15w
103 Fayetteville, tn., N.C., U.S.A.; p. 13,049; 35 1n 78 50w
25 Fearn, par., Ross and Crom., Scot.; p. 1,492; 57 47n 4 00w
127 Featherston, bor., N.I., New Zealand; p. 1,063; 41 5s 175 19e
34 Fécamp, spt., France; benedictine, shipbuilding, fishing; p. 17,262; 49 46n 0 24e
109 Federal District, Mexico; a. 431 sq. m.; p. 1,468,621 (est.); 19 15n 99 20w
121 Federal Territory, Australia; a. 940 sq. m.; p. 8,500 (est.); 35 30s 148 45e
39 Fejlsman Bell, chan., Denmark; 54 38n 11 15e
89 Feira, tn., N. Rhodesia; 15 35s 30 20e
49 Felanitx, tn., Spain; 39 27n 3 10e
16 Felixstowe, urb. dist., Suffolk, Eng.; seaside resort; p. 12,037; 51 58n 1 22e
42 Fellin, tn., Estonia; 58 21n 25 37e
20 Felton, vil., Northumberland, England; 55 18n 1 43w
50 Feltre, tn., Italy; cath.; silk, wine; p. 13,000; 46 1n 11 54e
74 Fen-chow, tn., China; 37 20n 111 45e
96 Fenelon Falls, Ont., Canada; 44 32n 78 45w
73 Fengtien, prov., Manchuria; 41 30n 124 0e
16 Fenny Stratford, par., Bucks, Eng.; straw-plaiting; p. 4,305; 52 0n 0 43w
16 Fens, The, England; formerly marshy district; now rich farming land; largely drained in 17th century by Earl of Bedford; 52 45n 0 02e
27 Fenwick, par., Ayr, Scot.; p. 1,209; 55 40n 4 26w
33 Ferbane, vil., Offaly, I.F.S.; p. 389; 53 17n 7 50w
52 Ferdinand, tn., Bulgaria; p. 5,547; 43 23n 23 14e
53 Ferejik, tn., Greece; 40 58n 26 12e
50 Ferentino, tn., Italy; cath.; wine, olive-oil; 41 40n 13 15e
Fergus Falls, tn., Minn., U.S.A.; p. 9,389; 46 16n 96 3w
31 Fermanagh, co., N. Ireland; a. 713 sq. m.; hilly, wooded; stock raising, dairying; stone; p. 57,985; 54 20n 7 35w
50 Fermo, tn., Italy; p. 20,000; 43 10n 13 40e
48 Fermosilla, tn., Spain; 41 19n 6 25w
33 Fermoy, urb. dist., Cork, I.F.S.; farming, salmon; p. 4,505; 52 8n 8 16w
112 Fernando-Noronha, I., S. America; 3 45s 32 15w
88 Fernando Po, I., Span. Guinea; cocoa, palm oil; cap. Santa Isabel; p. 20,873; 3 30n 8 45e
98 Fernie, tn., B.C., Canada; coal; p. 2,732; 49 29n 115 0w

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33 Ferns, par., Wexford, I.F.S.; p. 1,576; 52 36N 6 36W
66 Ferozepore, tn., India; wheat; p. 54,351; 30 52N 74 38E
50 Ferrara, cy., Italy; cath., univ.; fruit, grain, wine, cattle; silk, hemp; p. 114,337; 44 50N 11 38E
48 Ferrol, tn., Spain; arsenal, dockyards, coaling stn.; p. 30,500; 43 30N 8 15W
33 Fethard, tn., Tipperary, I.F.S.; p. 1,600; 52 27N 7 42W
25 Fettercairn, par., Kincardine, Scot.; p. 1,087; 56 51N 2 35W
25 Fetteresso, par., Kincardine, Scot.; p. 4,919; 56 58N 2 15W
10 Fez, cy., Fr. Morocco; holy city, univ., mosques, sultan's pal.; olive-oil; woollens, leather, silk, carpets; p. 107,843; 34 0N 5 00W
10 Fezzan, prov., Libya; salt lakes; dates; 27 0N 15 0E
18 Ffestiniog, urb. dist., Mer., Wales; slate; p. 9,072; 52 58N 3 55W
77 Fianarantsoa, tn., Madagascar; p. 11,156; 21 15S 47 0E
83 Ficksburg, tn., O.F.S., S. Afr.; p. 2,481 (Eur.); 28 50S 27 58E
47 Fieri, tn., Albania; 40 42N 19 36E
50 Fiesole, tn., Italy; cath.; straw-plaiting; p. 10,000; 43 50N 11 19E
82 Fife, vil., N. Rhodesia; 9 28S 32 45E
27 Fife, co., Scotland; a. 504 sq. m.; hilly; cereals, potatoes, flax; coal, limestone; linen, shipbuilding, engineering, oil-cake; p. 276,261; 56 15N 3 00W
27 Fife Ness, Fife, Scot.; 56 17N 2 35W
48 Figueira da Foz, tn., Portugal; 40 8N 8 52W
49 Figueras, tn., Spain; glass, cork, leather; p. 13,500; 42 17N 3 00E
126 Fiji Is., Pacific Oc., Br.; a. 7,083 sq. m.; volcanic group of about 250 islands, largest I. Viti Levu (a. 4,053 sq. m.), luxuriant veg.; fruit, sugar, cotton, maize, rubber; cap. Suva; p. 197,449; 17 20S 179 0E
20 Filey, urb. dist., E. Riding, Eng.; fishing; p. 3,730; 54 13N 0 17W
20 Filey B., E. Riding, Eng.; 54 11N 0 15W
57 Filinoskaya, tn., Russia; 50 33N 42 45E
55 Filipstad, tn., Sweden; 59 42N 14 5E
62 Filyas, tn., Turkey; 41 30N 32 10E
50 Finale, tn., Italy; silk; p. 13,000; 44 50N 11 19E
26 Fincharn, vil., Arcyll, Scot.; 56 11N 5 22W
17 Finchley, mun. bor., Middx., England; p. 58,961; see Greater London
25 Findhorn, R., Scotland; salmon, trout; 57 37N 3 40W
102 Findlay, cy., Ohio, U.S.A.; petroleum, nat. gas, glass; p. 19,363; 41 0N 83 45W
25 Findochtie, bor., Banff, Scot.; fishing; p. 1,675; 57 42N 2 54W
16 Finedon, par., Northants., Eng.; ironstone; p. 4,100; 52 22N 0 40W
26 Fingal's Cave, basaltic; on I. of Staffa, Inner Hebrides, Scotland; 56 25N 6 13W
48 Finisterre, C., Spain; 42 50N 9 17W
34 Finistère, dept., France; a. 2,720 sq. m.; cereals, fruit, livestock; coal, granite; fishing; cap. Quimper; p. 744,295; 48 20N 4 05W
118 Finke, R., N. Terr., Austral.; 24 50S 133 0E
54 Finland, rep., Europe; a. 134,357 sq. m.; low-lying inland, glaciated; innumerable lakes, forested; agriculture, oats, rye, barley, potatoes; timber, wood-pulp, textiles; cap. Helsinki (Helsingfors); p. 3,667,067; 60 0 to 70 0N 21 0 to 32 0E
55 Finland, G., Finland; arm of Baltic S., 260 m. long; 59 50N 25 0E
121 Finley, tn., N.S.W., Austral.; 35 38S 145 33E
54 Finnmark, co., Norway; a. 18,573 sq. m.; inhabited by Lapps; whale fisheries; p. 53,639; 69 50N 25 20E
17 Finsbury, met. bor., London, England; p. 69,888. See London.
45 Finsteraarhorn, mt., Switzerland; highest pk. Bernese Oberland, 14,025 ft.; 46 30N 8 05E
45 Finsterminz, tn., Switzerland; 46 57N 10 30E
41 Finsterwalde, tn., Germany; 51 40N 13 40E
31 Fintona, tn., Tyrone, N. Ire.; p. 1,101; 54 30N 7 20W
63 Firuzabad, tn., Persia; 28 47N 52 28E
18 Fishguard & Goodwick, urb. dist., spt., Pembroke, Wales; harbour; p. 2,963; 51 59N 4 58W
18 Fishguard Hr., Pem., Wales; harbour for Irish boats; 52 1N 5 00W
105 Fitchburg, cy., Mass., U.S.A.; woollens, paper, machinery; p. 40,692; 42 40N 71 45W
124 Fitzroy, tn., W. Australia; 18 11S 125 44E
123 Fitzroy Downs, Queens., Austral.; 26 30S 148 30E
97 Fitzroy Harb., Ont., Canada; 45 29N 76 12W
124 Fitzroy R., W. Australia; 17 30S 126 30E
50 Fiume, tn., spt., Italy; cath., pal.; petrol refining, tobacco, chemicals; p. 49,000; 45 21N 14 26E
106 Flagstaff, tn., Ariz, U.S.A.; 35 15N 111 42W
54 Flakstadö, tn., Norway; 68 3N 13 20E
20 Flamborough Hd., E. Riding, Eng.; prominent chalk cliff, sheltering Bridlington B.; 54 8N 0 05W
38 Flanders, E. prov., Belgium; a. 1,158 sq. m.; p. 1,149,199; 51 0N 3 04E
38 Flanders, W. prov., Belgium; a. 1,249 sq. m.; p. 901,588; 51 0N 3 00E
45 Flawyl, tn., Switzerland; 47 25N 9 10E
18 Fleetwood, mun. bor., spt., Lancs, Eng.; seaside resort; fishing; p. 22,983; 53 56N 3 01W
55 Flekkefiord, tn., Norway; 58 20N 6 40E
39 Flensburg, tn., spt., Germany; shipbuilding, coal; paper, sugar; p. 66,580; 54 47N 9 30E
120 Flinders Ra., S. Australia; 31 30S 138 20E
92 Flinton, tn., Sask., Canada; gold; 55 0N 101 45W
18 Flint, co., Wales; a. 257 sq. m.; stock raising; coal, iron; p. 112,849; 53 12N 3 08W
18 Flint, mun. bor., spt., Flint, Wales; chemicals, bricks; p. 7,635; 53 15N 3 08W
102 Flint, cy., Mich., U.S.A., motor cars, lumber, woollens; p. 156,492; 42 58N 83 40W
20 Flodden, vil., Northumb., Eng.; scene of English victory when James IV of Scotland was killed 1513; 55 37N 2 07W
50 Florence, cy., Italy; on R. Arno; tourist and art centre, cath., art gall., univ., pal.; silk, woollens, straw-plaiting; p. 317,000; 43 46N 11 17E

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103 Florence, tn., Ala., U.S.A.; p. 11,729; 34 52N 87 47W
103 Florence, tn., S.C., U.S.A.; p. 14,774; 34 10N 79 45W
71 Flores, S., Dutch E. Indies; 6 30S 121 0E
113 Florianopolis. See Desterro.
115 Florida, tn., Uruguay; p. 10,000; 34 10S 56 15W
103 Florida, st., U.S.A.; a. 58,666 sq. m.; winter resort, fruit farming, cotton, sugar, tobacco, turpentine, resin; cap. Tallahassee; p. 1,263,549; 34 0N 86 0W
103 Florida Bay, Fla., U.S.A.; 24 50N 81 0W
110 Florida Str., connecting G. of Mexico with Atlantic Oc.; 25 0N 80 0W
53 Florina, tn., Greece; p. 10,380; 40 47N 21 27E
38 Flushing, tn., spt., Netherlands; at mth. of R. Schelde; steam-packet stn.; p. 22,000; 51 27N 3 35E
122 Fly R., Papua; 8 00S 141 38E
47 Foca, tn., Yugoslavia; 43 33N 18 48E
25 Fochabers, vil., Moray, Scot.; 57 31N 3 05W
52 Focsani, tn., Rumania; soap, petroleum; p. 32,799; 45 42N 27 5E
50 Foggia, tn., Italy; cath.; wool; p. 72,306; 41 26N 15 33E
35 Foix, tn., France; 42 54N 1 40E
35 Foix, old prov., France; 43 0N 1 20E
50 Foligno, tn., Italy; 42 58N 12 40E
17 Folkestone, mun. bor., spt., Kent, Eng.; tourist resort; cross-channel service; fishing; p. 46,170; 51 5N 1 11E
98 Fond du Lac, vil., Sask., Canada; 59 30N 107 40W
102 Fond du Lac, tn., Wis., U.S.A.; dairying; rly. works; p. 26,449; 43 48N 88 30W
110 Fonseca, G., Nicaragua; 13 0N 87 45W
34 Fontainbleau, tn., France; palace; p. 17,075; 48 23N 2 42E
38 Fontenoy, tn., Belgium; 50 34N 3 30E
89 Fontesvilla, tn., Mozambique; 19 30S 34 33E
74 Foochow, tn., treaty port, cap. of Fukien, China; tea, paper, foodstuffs, cotton silk; p. 388,164; 26 0N, 119 20E
121 Forbes, tn., N.S.W., Austral.; p. 5,000; 33 24S 148 1E
83 Forbesriff, tn., Swaziland, S. Afr.; 26 15S 31 8E
88 Forcados, R., Nigeria; 5 20N 5 27E
20 Ford, vil., Northumberland, England; p. 950; 55 38N 2 05W
55 Förde, tn., Norway; 61 30N 5 40E
17 Fordingbridge, par., Hants, Eng.; sailcloth; p. 3,394; 50 57N 1 46W
25 Fordyce, par., Banff, Scot.; p. 3,462; 57 40N 2 45W
27 Forfar, bor., co. tn., Angus, Scot.; linen, jute; p. 9,660; 56 39N 2 53W
25 Forfar. See Angus.
27 Forgandenny, par., Perth, Scot.; p. 507; 56 21N 3 28W
50 Forli, tn., Italy; palaces; felt; p. 52,000; 44 13N 21 1E
18 Formby, urb. dist., Lancs., Eng.; p. 7,957; 53 34N 3 03W
18 Formby Pt., Lancs, Eng.; 53 34N 3 06W
113 Formosa, tn., Argentina; timber; p. 10,000; 26 10S 58 10W
112 Formosa, tn., Brazil; 15 25S 47 15W
74 Formosa or Taiwan, I., Japan, Asia; a. 13,890 sq. m.; fishing; rice, tea, sugar, camphor; coal, gold; cap. Taihoku; p. 4,592,537; 23 30N 121 0E
74 Formosa, Str., China; 25 0N 120 0E
50 Fornovo, tn., Italy; 44 40N 10 10E
25 Forres, bor., Moray, Scot.; distilling, chemicals, woollens; p. 4,169; 57 37N 3 36W
120 Forrest, tn., Vic., Austral.; 38 30S 143 42E
96 Forrest, tn., Ont., Canada; p. 1,480; 43 10N 82 0W
122 Forsayth, tn., Queens., Austral.; 18 40S 143 30E
55 Forssa, tn., Finland; p. 7,822; 60 50N 23 30E
41 Forst, tn., Germany; cloth, spinning, dyeing; p. 35,962; 51 45N 14 38E
121 Forster, tn., N.S.W., Austral.; 32 15S 152 30E
24 Fort Augustus, tn., Inverness, Scot.; 57 59N 4 42W
83 Fort Beaufort, tn., C. of Good Hope, S. Afr.; 32 50S 26 38E
98 Fort Chipewyan, tn., Alta, Canada; 58 51N 110 57W
107 Fort Collins, tn., Col., U.S.A.; p. 11,489; 40 33N 105 32W
97 Ft. Coulonge, tn., Que., Canada; p. 1,130; 45 50N 76 45W
111 Fort de France, tn., cap., Martinique; formerly Fort Royal; exp. rum, sugar; p. 43,000; 14 36N 61 2W
70 Fort de Kock, tn., Sumatra; p. 14,704; 0 20S 100 15E
102 Fort Dodge, cy., Iowa, U.S.A.; on R. Des Moines; grain, pottery, coal; p. 21,859; 42 27N 94 7W
98 Fort Enterprise, Mackenzie, Can.; 64 50N 112 58W
99 Fort Frances, tn., Ont., Canada; pulp, lumbering; p. 5,470; 48 50N 94 0W
98 Fort Fraser, tn., B.C., Canada; 44 0N 124 45W
93 Fort George, Que., Canada; 53 40N 79 0W
89 Fort Jameson, tn., N. Rhodesia; cotton; 13 30S 31 45E
89 Fort Johnston, tn., Nyasaland; 14 25S 13 35E
80 Fort Lami, tn., Fr. Eq. Africa; 12 10N 15 5E
98 Fort McKay, Alta., Canada; 57 10N 111 43W
102 Fort Madison, cy., Iowa, U.S.A., p. 13,779; 40 35N 91 20W
83 Fort Newdigate, tn., Natal, S. Afr.; 28 10S 30 50E
99 Fort Pelly, Sask., Canada; 51 49N 102 3W
82 Fort Rosebery, tn., N. Rhodesia; 10 30S 28 50E
66 Fort Sandeman, tn., India; 31 20N 69 30E
102 Fort Scott, tn., Kan., U.S.A.; maize, wheat, cattle; p. 10,763; 37 50N 94 38W
103 Fort Smith, cy., Ark., U.S.A.; on Arkansas R.; cotton, maize; wagons, furniture; p. 31,429; 35 25N 94 28W
98 Fort Smith, Mackenzie, Can.; 60 0N 112 15W
102 Fort Wayne, cy., Ind., U.S.A.; machinery; p. 114,946; 41 0N 85 2W
99 Fort William, cy., Ont., Canada; on L. Superior; grain port; p. 26,277; 48 26N 89 15W
24 Fort William, bor., Inverness, Scot.; tourist resort; aluminium; p. 2,527; 56 48N 5 06W
107 Fort Worth, cy., Tex., U.S.A.; cotton, maize; rly centre, petroleum, meat packing; p. 163,447; 32 45N 97 20W
98 Fort Wrangell, Alaska; p. 948; 56 22N 132 20W

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98 Fort Yukon, Alaska; 66 35N 145 3W
112 Fortaleza. See Ceará.
27 Forth Bridge, Fife, Scot.; 56 1N 3 23W
27 Forth, F., Scotland; 56 5N 2 55W
27 Forth, R., Scotland; 116 m. long; 56 8N 4 10W
27 Forth and Clyde Canal, Scotland; links Firths of Forth and Clyde, 38 m. long; 56 0N 4 23W
27 Fortingal, par., Perth, Scot.; p. 1,716; 56 36N 4 03W
25 Fortrose, bor., Ross and Crom., Scot.; p. 875; 57 33N 4 10W
50 Fossano, tn., Italy; cath.; paper, silk; p. 13,250; 44 34N 7 41E
16 Fossdyke, Holland, Eng.; 52 54N 0 04W
121 Foster, tn., Vic., Austral.; 38 38S 146 14E
16 Fotheringhay, par., Northants., Eng.; Mary Qn. of Scots beheaded 1587; 52 32N 0 27W
17 Foulness I., Essex, Eng.; 51 36N 0 53E
16 Foulsham, par., Norfolk, England; p. 869; 52 48N 1 02E
20 Fountains Abbey, W. Riding, Eng.; Cistercian ruins, founded 1132; 54 6N 1 35W
127 Foveaux Str., New Zealand; 46 30S 168 0E
19 Fowey, mun. bor., Cornwall, Eng.; fishing; p. 2,382; 50 21N 4 48W
20 Foxdale, tn., I. of Man, Eng.; 54 10N 4 40W
93 Foxe Basin, Franklin, Can.; 68 0N 77 0W
99 Foxe Chan., Franklin, Can.; 65 0N 80 0W
30 Foxford, vil., Mayo, I.F.S.; p. 620; 53 59N 9 07W
126 Foxton, bor., N.I., New Zealand; p. 1,775; 40 27S 175 16E
24 Foyers, vil., Inverness, Scotland; 57 16N 3 29W
31 Foyle, L., Londonderry, N. Ire.; 55 8N 7 05W
16 Framlingham, par., Suffolk, Eng.; p. 2,397; 52 14N 118E
51 Francavilla, tn., Italy; wine, oil, leather; p. 20,000; 40 37N 17 35E
34 France, rep., Europe; a. 212,659 sq. m.; greatest length N. to S. 600 m., greatest breadth E. to W. 560 m.; chief mts.—Cevennes, Jura, Vosges, Pyrenees; chief rivers—Seine, Loire, Rhône, Garonne; chief industries—agriculture, wheat, oats, potatoes, sugar-beet, vine, fruits; silk; cattle, sheep, dairying; minerals—coal, iron, bauxite, potash. fishing; mnfs.—iron and steel, machinery textiles, etc.; commerce; cap. Paris; p. 41,834,923; 43 0 to 51 0N 4 50 to 8 00E
80 Francheville, tn., Fr. Eq. Africa; 1 38S 13 32E
34 Franche Comte, old prov., France; 47 0N 6 00E
89 Francistown, tn., Bechuanaland; 21 7S 27 33E
115 Franco, tn., Brazil; 20 5S 47 30W
40 Franconia, dist., Germany; a. 9,093 sq. m.; p. 2,518,645; 49 50N 11 0E
38 Franeker, tn., Netherlands; 53 12N 5 32E
37 Frankenthal, tn., Germany; engineering, agric. implements; p. 24,647; 49 32N 8 21E
33 Frankford, tn., Offaly, I.F.S.; p. 518; 53 11N 7 45W
83 Frankfort, tn., O.F.S., S. Afr.; 27 15S 28 42E
102 Frankfort, tn., Ky., U.S.A.; mining, horse-breeding; p. 11,626; 38 14N 84 50W
40 Frankfurt-on-Main, cy., Germ.; cath., univ.; banking, jewellery, perfumery, machinery; p. 555,857; 50 7N 8 40E
41 Frankfurt-on-Oder, tn., Germ.; annual fairs, machinery, chemicals; p. 75,831; 52 20N 14 34E
99 Franklin, terr., Canada; a. 554,032 sq. m.; comprising the islands from Banks I. to Baffin I.; sparsely populated; furs; 67 30N 90 0W
87 Franklin, tn., C. of Good Hope, S. Afr.; 30 16S 29 32E
104 Franklin, tn., Pa., U.S.A.; p. 10,254; 41 32N 79 55W
127 Franklyn Mts., New Zealand; 42 2S 172 41E
82 Franzfontein, tn., S.W. Afr.; 20 6S 15 15E
50 Frascati, tn., Italy; resort; p. 11,000; 41 49N 12 40E
83 Frasersburg, tn., C. of Good Hope, S. Afr.; 31 58S 21 30E
25 Fraserburgh, bor., spt., Aberdeen, Scot.; granite, fishing; p. 9,720; 57 41N 2 00W
45 Frauenfeld, tn., Switzerland; 47 34N 8 54E
113 Fray Bentos, tn., Uruguay; meat; p. 7,000; 33 15S 58 10W
39 Fredensborg, vil., Denmark; 55 59N 12 27E
39 Frederikia, tn., spt., Denmark; rly. works, tobacco, cottons; p. 19,389; 55 35N 9 43E
104 Frederick, cy., Md., U.S.A.; canning, tanning; p. 14,434; 39 23N 77 25W
102 Fredericksburg, tn., Va., U.S.A.; p. 6,819; 38 23N 77 36W
93 Frederickshaab, vil., Greenland; 62 0N 49 10W
39 Fredericksnavn, tn., spt., Denmark; dairying, fishing; p. 9,882; 57 28N 10 33E
94 Fredericton, cap., N.B., Canada; univ., cath., parliament bldgs.; lumbering; p. 8,330; 45 57N 66 43W
55 Fredrikstad, spt., Norway; timber, rly. workshops, shipbuilding; p. 14,101; 59 10N 10 55E
102 Freeport, cy., Ill., U.S.A.; p. 22,045; 42 13N 89 43W
104 Freeport, tn., Pa., U.S.A.; p. 7,998; 40 20N 79 40W
88 Freetown, tn., cap. Sierra Leone; coaling stn.; exp. palm oil; p. 44,142; 8 30N 13 14W
41 Freiberg, Saxony; silver-lead mines; woollens, ironware; p. 35,000; 50 55N 13 20E
40 Freiburg, tn., Baden, Germ.; resort in Black Forest; cath., univ., pal.; silk thread, glass; p. 99,122; 48 0N 7 49E
40 Freising, tn., Germany; iron, farming, machinery, porcelain; p. 14,974; 48 25N 11 44E
125 Fremantle, tn., spt., W. Australia; on R. Swan; 32 1S 115 47E
107 Fremont, tn., Neb., U.S.A.; p. 11,407; 41 28N 96 30W
80 French Equatorial Africa, terr., N. Africa; a. 912,049 sq. m.; forests, valuable timber, ivory; cap. Brazzaville; p. 3,127,707; 20 0N to 5 0S 10 0E to 25 0E
112 French Guiana, col., S. America; a. 34,740 sq. m.; forests; cocoa, gold, phosphates; Fr. penal settlement; cap. Cayenne; p. 48,000; 4 0N 52 40W
88 French Guinea, col., W. Africa; a. 89,436 sq. m.; rubber, nuts, palm oil; cattle; cap. Konakri; p. 2,220,267; 11 0N 11 30W
70 French Indo-China, col., Asia; a. 285,000 sq. m.; rice, rubber, pepper, hides; coal, zinc, tin; cap. Hanoi; p. 21,632,000; 25 0N to 10 0N 100 0E to 109 0E
81 French Somaliland, col., N.E. Africa; a. 5,790 sq. m.; salt, fishing, coffee, hides, ivory; cap. Jibuti; p. 85,778; 12 0N 42 30E

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76 French Sudan, col., Fr. W. Africa; a. 360,331 sq. m.; cattle, farming; cap. Bamako; p. 2,632,618; 15 0w 5 00w
88 French West Africa, fed. of cols.; a. 604,159 sq. m.; fruit, rubber, timber, oils, cotton; cap. Dakar; p. 14,576,000; 25 0n to 5 00n 15 0w to 20 0n
111 French West Indies, comprising Martinique, Guadeloupe, and dep.; 15 0n 62 0w
83 Freshford, par., Kilkenny, I.F.S.; p. 445; 52 44n 7 25w
17 Freshwater, par., I. of W., Eng.; tourist resort; p. 3,439; 50 42n 1 30w
108 Fresnillo, tn., Mexico; 23 6n 102 58w
106 Fresno, tn., Cal., U.S.A.; fruit, dairying, copper, petroleum; p. 52,513; 36 42n 119 42w
45 Fribourg, can., Switzerland; farming, dairying; paper, watches; p. 143,381; 46 48n 7 08n
45 Fribourg, tn., Switzerland; p. 21,800; 46 48n 7 08n
128 Fridtjof Nansen, Ld., Arctic Oc.; 82 0n 60 0w
40 Friedberg, tn., Germany; p. 11,048; 50 22n 8 45n
41 Friedland, tn., Germany; 53 38n 13 28n
40 Friedrichshafen, tn., Germany; resort on L. Constance; machinery, boat-building; zeppelin works; p. 11,289; 47 40n 9 28n
116 Friendly Is. See Tonga Is.
38 Friesland, prov., Netherlands; dairying, horses, cattle; p. 399,529; 53 2n 5 50n
17 Frinton & Walton, urb. dist., Essex, Eng.; resort; p. 2,196; 51 49n 1 15n
27 Frockheim, par., Angus, Scot.; p. 890; 56 40n 2 40w
41 Frische Nehrung, Germany; 54 20n 19 30n
41 Frisches Haff, Germany; 54 25n 19 40n
39 Frisian Is., N., Germany; 54 50n 8 20n
16 Fritton, par., Suffolk, England; p. 213; 52 32n 1 39n
93 Frobisher B., Franklin, Can.; 63 0n 67 0w
18 Frodsham, par., Cheshire, Eng.; chemicals; p. 3,025; 53 17n 2 45w
19 Frome, urb. dist., Somerset, Eng.; woollens, silk, printing; p. 10,738; 51 14n 2 18w
120 Froms, L., S. Australia; 30 45s 139 45e
109 Frontera, tn., Mexico; 18 31n 92 44w
50 Frosinone, tn., Italy; 41 38n 13 20n
104 Frostburg, tn., Md., U.S.A.; p. 5,588; 39 35n 79 0w
113 Fructal, tn., Brazil; 48 50s 19 55w
45 Frutigen, tn., Switzerland; 46 35n 7 42n
48 Fuente, tn., Spain; 38 17n 6 17w
48 Fuente de Onoro, tn., Spain; 40 35n 6 50w
108 Fuerte, tn., Mexico; 26 30n 108 38w
108 Fuerte, R., Mexico; 26 30n 109 38w
76 Fuerteventura I., Canary Is., Africa; 28 15n 14 0w
75 Fuji Yama, mt., Japan; 12,395 ft.; 35 26n 138 45e
79 Fukara, dist., Egypt; 23 0n 34 0e
74 Fu-kien, prov., China; a. 46,332 sq. m.; tea, rice, cotton, sugar, tobacco; coal, gold, silver; cap. Foochow; p. 14,329,594; 26 30n 118 0e
75 Fukui, tn., Japan; silk, paper; p. 75,273; 36 6n 136 30e
75 Fuknoka, tn., Japan; silk; p. 291,157; 33 32n 130 26e
75 Fukushima, tn., Japan; silk; p. 48,463; 37 41n 140 30e
75 Fukuyama, tn., spt., Japan; p. 58,186; 41 37n 140 8e
75 Fuku-yama, tn., Japan; 34 11n 133 30e
40 Fulda, tn., Germany; on R. Fulda; palace, abbey; textiles, iron ware; p. 26,057; 50 34n 9 40e
40 Fulda, R., Germany; 51 0n 9 30e
17 Fulham, met. bor., London, England; p. 150,940. See London.
104 Fulton, cy., N.Y., U.S.A.; woollens, cutlery, paper; p. 12,462; 43 40n 76 50w
76 Funchal, tn., spt., cap. Madeira, Afr.; winter resort 32 45n 17 0w
95 Fundy, B., Canada; strong tides; 45 0n 66 0w
46 Fünfkirchen. See Pecs.
74 Fu-ning, tn., spt., China; 26 45n 120 0e
44 Furka Pass, Switzerland; 46 35n 8 40e
121 Furneaux Group, Tas., Austral.; 40 10s 147 50e
38 Furnes, tn., Belgium; p. 8,000; 51 4n 2 39e
20 Furness, dist., Lancs., Eng.; separated from larger part of Lancashire; hematite iron ore; 54 18n 3 07w
20 Furness Abbey, Lancs, Eng.; ruins; 54 8n 3 13w
41 Fürstenwalde, tn., Germany; coal, brewing, cloth, glass, chemicals; p. 23,168; 52 22n 14 4e
40 Fürth, tn., Germany; printing, toys; p. 77,135; 49 32n 11 0e
55 Furusund, tn., Sweden; 57 40n 19 0e
75 Fusan, tn., spt., Korea; rice, silk, hides; p. 113,000; 35 15n 129 10e
75 Fushiki, tn., spt., Japan; 36 45n 137 25e
40 Fussen, tn., Germany; 47 37n 10 40e
26 Fyne, L., Argyll, Scot.; 56 9n 5 10w
25 Fyvie, par., Aberdeen, Scot.; p. 3,180; 57 26n 2 24w
67 Fyzabad, tn., India; sugar; p. 36,620; 26 44n 82 13e

10 Gabes, spt., Tunis; dates, henna, wool; p. 20,000; 34 0n 10 0e
10 Gabes, G., Tunis; 34 0n 11 0e
46 Gablons, tn., Cz.-Slov.; textiles, glass; p. 33,855; 50 42n 15 10e
80 Gabon, Fr. Eq. Africa; a. 104,320 sq. m.; p. 388,900; 0 15s 9 20e
80 Gaboon R., Fr. Eq. Africa; 0 25s 9 15e
103 Gadsden, tn., Ala., U.S.A.; cotton, cars, coal, iron, steel; p. 24,042; 34 0n 86 0w
52 Gaesti, tn., Rumania; p. 6,540; 44 44n 25 20e
51 Gaeta, tn., Italy; p. 6,000; 41 13n 13 32e
113 Gaiman, tn., Argentina; p. 2,000; 43 25s 65 55w
103 Gainesville, tn., Fla., U.S.A.; p. 10,455; 29 40n 82 20w
103 Gainesville, tn., Ga., U.S.A.; p. 8,624; 34 20n 83 45w
107 Gainesville, tn., Tex., U.S.A.; p. 8,915; 33 35n 97 10w
16 Gainsborough, urb. dist., Lind., Eng.; engineering, farm implements; p. 13,884; 53 23n 0 46w
120 Gairdner, L., S. Australia; 31 30s 136 0e
24 Gairloch, par., Ross and Crom., Scot.; tourist resort; p. 2,781; 57 43n 5 45w
53 Galaidition, tn., Greece; 38 21n 22 23e
112 Galapagos Is., Ecuador; a. 2,868 sq. m.; guano p. c. 600; 0 30s 90 30w

MAP
27 Galashiels, bor., Selkirk, Scot.; woollens; p. 13,102; 55 37n 2 48w
53 Galatchista, tn., Greece; 40 32n 23 19e
52 Galati, tn., Rumania; on R. Danube; iron, soap, oil refining; exp., wheat, timber; p. 101,143; 45 28n 28 2e
51 Galatina, tn., Italy; 40 12n 18 6e
108 Galeana, tn., Mexico; 30 6n 107 35w
102 Galena, tn., Kan., U.S.A.; lead; 37 1n 94 40w
102 Galesburg, cy., Ill., U.S.A.; rly. workshops, motor-cars; p. 28,330; 40 57n 90 20w
56 Galich, tn., Russia; 58 23n 42 15e
43 Galicia, dist., Poland; a. 30,321 sq. m.; mountainous; chief rivers, Vistula, Dniester; agriculture, cereals, potatoes, hemp, flax, tobacco; mnfs., paper, pottery, leather; p. 8,200,000; 49 40n 22 20e
48 Galicia, old prov., Spain; a. 11,250 sq. m.; mountainous; exp., cattle, lead, copper, iron; p. 2,125,000; 42 45n 8 00w
61 Galilee, S. See Bahr Tubariya.
68 Galle, spt., Ceylon; tea, coconut oil; p. 38,424; 6 05n 80 10e
113 Gallegos, tn., Argentina; p. 2,500; 51 40s 69 25w
112 Gallinas, Pt., Colombia; 12 15n 71 45w
61 Gallipoli, tn., spt., Italy; 40 2n 18 0e
53 Gallipoli, spt., Dardanelles, Turkey; campaign Feb. 1915 to Jan. 1916; 40 25n 26 35e
54 Gillivare, tn., Sweden; iron ore; p. 12,000; 67 5n 20 40e
27 Galloway Dist., Kirk. and Wig., Scot.; 54 58n 4 20w
106 Gallup, tn., N. Mex., U.S.A.; p. 5,992; 35 30n 108 45w
27 Galston, bor., Ayr, Scot.; coal; p. 4,601; 55 36n 4 22w
96 Galt, tn., Ont., Canada; flour, iron; p. 14,006; 43 23n 80 22w
33 Galty Mts., Tipperary, I.F.S.; 52 22n 8 10w
107 Galveston, spt., cy., Tex., U.S.A.; univ.; mills, foundries; exp., cotton; p. 52,938; 29 17n 94 50w
32 Galway, urb. dist., co. tn., Galway, I.F.S.; granite, fishing; p. 14,223; 53 17n 9 04w
30 Galway, co., I.F.S.; a. 2,375 sq. m.; in W. lonely, wild dist. of Connemara Mts.; L. Corrib, part of L. Mask; cattle, fishing, marble; p. 168,311; 53 20n 9 00w
32 Galway Bay, I.F.S.; 53 12n 9 20w
88 Gambaga, Gold Coast; 10 33n 0 25w
88 Gambia, Br. cr. col., W. Africa, on Gambia R.; a. 4,134 sq. m.; ground nuts, palm kernels, hides; cap. Bathurst; p. 200,000; 13 30n 16 0w
88 Gambia, R., W. Africa; length 1,000 m.; 13 0n 13 0w
83 Gamtoos, R., C. of Good Hope, S. Afr.; 33 55s 25 0e
97 Gananoque, tn., Ont., Canada; p. 3,592; 44 20n 76 10w
88 Gando, dist., Nigeria and Fr. W. Africa; a. 78,500 sq. m.; p. 5,500,000; 12 30n 2 30e
62 Gandzha, tn., Russia; p. 84,000; 40 38n 46 26e
116 Ganges Is., Pac. Oc.; 50 50n 154 15e
67 Ganges, R., India; chief and most holy river of India; rises in Himalayas and ends Bay of Bengal, 1,540 m. long, drains 400,000 sq. m. of most fertile and populated country; 25 40n 81 50e
69 Gangtok, vil., Sikkim, India; 27 20n 88 40e
67 Ganjam, tn., Orissa, India; p. 5,100; 19 27n 85 8e
76 Gao, tn., Fr. W. Africa; p. 4,920; 16 15n 0 15e
121 Garah, tn., N.S.W., Austral.; 29 2s 149 37e
35 Gard, dept., France; a. 2,270 sq. m.; vines, olives, silkworm; cap. Nimes; p. 406,815; 44 0n 4 20e
26 Garelochhead, par., Dumbarton, Scot.; summer resort; p. 1,322; 56 5n 4 49w
53 Gargaliani, tn., Greece; 37 4n 21 40e
67 Garhwal, Un. Provs., India; a. 5,612 sq. m.; on S. slope of Himalayas; forested; tea, grain, coarse cloth; p. 485,000; 30 48n 78 30e
72 Garida, vil., Mongolia; 46 0n 102 0e
25 Garioch, dist., Aberdeen, Scot.; 57 22n 2 30w
27 Garliestown, spt., Wigtown, Scot.; p. 480; 54 47n 4 25w
25 Garmouth, spt., Moray, Scot.; p. 702; 57 40n 3 06w
67 Garo Hills, dist., Assam, India; a. 3,140 sq. m.; dense forests; p. 180,000; 25 30n 90 30e
35 Garonne, R., France; length 430 m.; 44 45n 0 30w
18 Garstang, par., Lancs, Eng.; p. 837; 53 54n 2 47w
18 Garston, spt., Lancs, Eng.; docks; p. 28,729; 53 21n 2 55w
25 Gartly, par. Aberdeen, Scot.; p. 684; 57 23n 2 47w
27 Gartness, vil., Stirling, Scot.; 56 3n 4 25w
27 Gartsherrie, par., Lanark, Scot.; coal, iron; p. 15,674; 55 53n 4 02w
31 Garvagh, tn., Londonderry, N. Ire.; p. 494; 54 59n 6 42w
27 Garvald, par., E. Lothian, Scot.; p. 488; 55 56n 2 40w
24 Garve, vil., Ross and Crom., Scot.; 57 37n 4 42w
102 Gary, cy., Ind., U.S.A.; steel, tinplate; p. 100,426; 41 35n 87 20w
35 Gascony, old prov., France; 43 40n 0 20e
125 Gascoyne R., W. Australia; 24 40s 116 30e
88 Gashka, tn., Nigeria; 7 20n 11 25e
35 Gaspe, C., Que., Canada; 48 53n 65 30w
46 Gastein, tn., Austria; 47 9n 13 7e
53 Gastuni, tn., Greece; 37 50n 21 19e
56 Gatchina, tn., Russia; p. 14,880; 59 33n 30 6e
27 Gatehouse of Fleet, bor., Kirk., Scot.; p. 888; 54 53n 4 10w
20 Gateshead, co. bor., spt., Durham, Eng.; coal, shipbuilding, iron, chemicals; p. 125,022; 54 58n 1 36w
97 Gatineau R., Que., Canada; 45 50n 75 50w
89 Gatooma, tn., S. Rhodesia; gold; p. 650; 18 12s 30 0e
11 Gatrun, O., Libya; 25 0n 15 0e
69 Gauhati, tn., Assam, India; silk, cotton, lac; p. 16,500; 26 4n 91 54e
55 Gävle, spt., Sweden; textiles, sailcloth; exp., woodpulp; p. 38,868; 60 50n 17 20e
55 Gävleborg, co., Sweden; a. 7,616 sq. m.; p. 279,780; 61 30n 16 0e
120 Gawler, tn., S. Australia; flour, iron foundries; p. 2,000; 34 7s 138 12e
120 Gawler Ra., S. Australia; 32 30s 136 0e

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67 Gaya, tn., Bihar, India; cottons, silks; p. 67,582; 24 45n 85 5e
123 Gayndah, tn., Queens., Austral.; 25 38s 151 36e
80 Gaza, tn., Fr. Eq. Africa; 23 28s 33 54e
61 Gaza. See Ghuzzeh.
89 Gazu Ld., Mozambique; maize, sugar-cane; 22 30s 34 30e
42 Gdynia, spt., Poland; exp., butter, cheese, sugar, timber; p. 30,210; 54 28n 18 20e
33 Geashill, par., Offaly, I.F.S.; p. 3,473; 53 14n 7 21w
53 Gediz, tn., Turkey; 38 30n 28 30e
121 Geelong, spt., Vic., Austral.; flour, woollens, tanning; p. 43,400; 38 11s 144 20e
39 Geestemünde, tn., spt., Germany; on R. Weser; fishing; 53 30n 8 34e
121 Geeveston, tn., Tas., Austral.; 43 11s 146 44e
51 Gela, tn., Italy; 37 6n 14 15e
38 Gelderland, prov., Neth.; a. 1,941 sq. m.; cereals, tobacco; cattle rearing; cap. Arnhem; p. 812,000; 52 5n 6 00e
53 Gelibolu, tn., Turkey; 40 25n 26 35e
40 Gelsenkirchen, tn., Germ.; coal, steel, glass, chemicals; p. 332,545; 51 32n 7 08e
38 Gembloux, tn., Belgium; p. 4,300; 50 34n 4 40e
121 Gembrook, tn., Vic., Austral.; 37 58s 145 31e
53 Gemlik, tn., Turkey; 40 29n 29 9e
44 Gemmi, P., Switzerland; 46 25n 7 32e
50 Gemona, tn., Italy; p. 9,242; 46 16n 13 10e
84 Genadendal, tn., C. of Good Hope, S. Afr.; 34 2s 19 32e
45 Geneva, cy. tn., Switz.; headquarters of League of Nations; cath., univ.; watches, jewellery, electrical apparatus; p. 128,500; 46 12n 6 9e
104 Geneva, tn., N.Y., U.S.A.; engineering; p. 16,053; 42 52n 77 4w
45 Geneva, L. of, Switz.; length 40 m., greatest breadth 8½ m.; 46 13n 6 08e
83 Genisdal, tn., C. of Good Hope, S. Afr.; 30 31s 18 0e
50 Genoa, spt., Italy; palaces, cath., univ., library; shipbuilding, engineering, tanning, sugar, textiles; p. 316,500; 44 24n 9 00e
50 Genoa, G. of, Italy; 43 50n 9 00e
45 Genoni P., Switzerland; 46 20n 7 32e
73 Gensan, tn., Korea; 39 0n 127 35e
125 Geographe B., W. Australia; 33 25s 115 15e
125 Geographe Chan., W. Australia; 24 32s 113 30e
83 George, tn., C. of Good Hope, S. Afr.; p. 4,249 (Eur.); 33 58s 22 30e
121 George, L., N.S.W., Austral.; 35 7s 149 55e
120 George, L., S. Australia; 37 28s 140 0e
81 George, L., Uganda; 4 30n 3 30e
105 George, L., N.Y., U.S.A.; 43 40n 73 50w
127 George Sd., New Zealand; 44 50s 167 22e
122 Georgetown, tn., Queens. Austral.; 18 20s 143 40e
112 Georgetown, spt., cap., Br. Guiana; exp., sugar, cocoa, coffee, timber; gold, diamonds; p. 57,900; 6 46n 58 8w
70 Georgetown, tn., cap. Penang I., Malay Pen.; p. 27,000; 0 30n 100 0e
103 Georgetown, S.C., U.S.A.; p. 5,082; 33 20n 79 18w
57 Georgia, rep., Transcaucasia; U.S.S.R.; a. 26,380 sq. m.; S. of Caucasus Mts.; agriculture, wheat, maize, cotton, tobacco, silk; forests, timber; manganese; cap. Tiflis; p. 2,883,200; 41 0n 45 0e
103 Georgia, st., U.S.A.; a. 59,265 sq. m.; lowlands, Appalachian Mts. in W.; forested; agriculture, cotton, sugar-cane, tobacco, fruits; timber; fishing; mnfs., cottons, woollens, iron and steel, flour; cap. Atlanta; p. 2,908,506; 32 45n 83 0w
98 Georgia, Str. of, B.C., Canada; 49 30n 124 0w
57 Georgievsk, tn., Russia; 44 28n 43 28e
40 Gera, tn., Germ.; lignite; woollens, printing; p. 83,775; 50 55n 12 6e
125 Geraldton, spt., W. Australia; exp., gold, copper, wool; p. 4,627; 28 44s 114 37e
57 German Labour Commune, Russia; a. 10,327 sq. m.; barley, maize, sunflowers, tobacco; timber; cap. Pokrovsk; p. 570,000; 50 50n 46 0e
121 Germantown, tn., N.S.W., Austral.; p. 1,350; 35 42s 147 19e
40 Germany, fed. rep., Europe; a. 181,723 sq. m. (including Saar Basin); in N. plain, in S. mts.; chief mts., Harz, Black For., Bavarian Alps; chief rivers, Rhine, Elbe, Oder, Vistula; chief industries, agriculture, rye, oats, wheat, potatoes, sugar-beet, wines; pastoral, cattle, pigs, sheep; forests, timber; minerals, coal, lignite, iron, potash, copper, zinc, salt; mnfs., machinery, shipbuilding, textiles, chemicals, dyes, printing, etc.; commerce; cap. Berlin; p. 66,030,491; 47 0 to 56 0n 6 00 to 23 0e
86 Germiston, tn., Trans., S. Afr.; gold; p. 23,956 (Eur.), total 50,000; 26 13s 28 6e
49 Gerona, tn., Spain; cath.; textiles, paper; p. 21,345; 41 57n 2 46e
10 Gerrard, tn., Algeria; 32 45n 4 40e
35 Gers, dept., France; a. 2,428 sq. m.; hilly; grain, vines, brandy; livestock; cap. Auch; p. 193,134; 43 46n 0 32e
38 Gertruidenberg, tn., Netherlands; 51 42n 4 51e
10 Geryville, tn., Algeria; 33 40n 1 00e
104 Gettysburg, bor., Pa., U.S.A.; battle, American Civil War, 1863; granite; p. 4,500; 39 47n 77 18w
10 Ghadames, tn., oasis, Libya; dates, figs; p. 7,000; 30 0n 9 00e
10 Ghardaya, tn., oasis, Algeria; caravan trade; dates, olive oil; p. 11,000; 32 30n 4 00e
10 Ghat, tn., oasis, Libya; dates; 25 0n 10 15e
68 Ghats, Eastern, mts., India; 15 0n 79 0e
68 Ghats, Western, mts., India; 15 30n 74 30e
67 Ghazipur, tn., Un. Provs., India; p. 24,708; 25 32n 83 40e
66 Ghazni, fort. tn., Afghan.; wool, skins; p. 8,000; 33 37n 68 25e
38 Gheel, tn., Belgium; p. 18,545; 51 11n 4 59e
38 Ghent, cy., Belg.; at confluence of Schelde and Lys; docks; textiles; p. 169,322; 51 4n 3 43e
61 Ghuzzeh, tn., spt., Palestine; cloth; exp. cereals, wool; p. 17,480; 31 30n 34 30e
83 Giant's Castle, Mt., Natal, S. Afr.; 9,650 ft.; 29 30s 29 30e
31 Giant's Causeway, Antrim, N. Ire.; basaltic rocks; 55 14n 6 31w

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83 Gibeon, tn., S.W. Africa; 25 7s 17 50w
48 Gibraltar, tn., fort, Spain, Br.: 1,400 ft., commands Mediterranean Gateway; p. 21,372; 36 10n 5 22w
16 Gibraltar Pt., Lindsey, Eng.: 53 6n 0 20e
48 Gibraltar, Str., Spain; 36 m. long, 8½ m. wide; 35 50n 5 50w
40 Giessen, tn., Germ.: machinery, rubber, chemicals, leather; p. 33,680; 50 36n 8 40e
27 Gifford, vill., E. Lothian, Scot.: 55 54n 2 46w
73 Gifu, tn., Japan; silk, paper; p. 128,714; 35 26n 136 49e
48 Gijon, tn., spt., Spain; tobacco, coal; earthenware; oil refining; p. 58,000; 43 32n 5 40w
52 Gigen, tn., Bulgaria; 43 39n 44 29e
106 Gila R., Ariz., U.S.A.; 33 2n 113 0w
47 Gilan, tn., Yugoslavia; 42 27n 21 28e
116 Gilbert Is., Pac. Oc.: Br. prot. with Ellice Is.; phosphate, copra; p. 23,586; 1 00s 176 0e
122 Gilberton, tn., Queens., Austral.; 19 18s 143 46e
31 Gilford, tn., Down, N. Ire.; linen; p. 1,117; 54 23n 6 22w
61 Gilgal, tn., Palestine; 31 52n 35 30e
121 Gilgandra, tn., N.S.W., Austral.; 31 41s 148 11e
66 Gilgit, Kashmir, India; a. 25,000 sq. m.; mountainous dist.; farming; p. 60,000; 35 55n 74 15e
39 Gilleleje, tn., Denmark; 56 8n 12 20e
17 Gillingham, mun. bor., Kent, Eng.; cherry orchards; cement; p. 60,983; 51 24n 0 33e
19 Gillingham, par., Dorset, Eng.; dairying; p. 3,294; 51 3n 2 15w
71 Gilolo I. See Halmahera I.
71 Gilolo, tn., Halmahera I., D.E.I.; 1 10n 127 30e
71 Gilolo Str., Dutch E. Indies; 0 00 130 0e
125 Gingin, tn., W. Australia; p. 200; 31 19s 116 0e
48 Ginzo, tn., Spain; 42 3n 7 45w
51 Gioja, cy., Italy; olive oil, wine, wool; p. 22,000; 40 49n 16 54e
121 Gippsland, dist., Vic., Austral.; a. 13,900 sq. m.; mountainous; farming and grazing; coal; 37 30s 0 147e
62 Gireson, tn., Turkey; p. 11,814; 40 50n 38 45e
79 Girgeh, tn., Egypt; 26 18n 31 53e
51 Girgenti. See Agrigento.
35 Gironde, dept., France; a. 4,140 sq. m.; flat, coastal sand dunes; vineyards, grain, fruit, wines; cap. Bordeaux; p. 852,768; 44 45n 0 42w
35 Gironde, est., France; formed by junction of R. Garonne and R. Dordogne; 45 25n 0 50w
26 Girvan, bor., spt., Ayr, Scot.; fishing; p. 5,292; 55 14s 4 51w
126 Gisborne, spt., bor., N.I., New Zealand; farming, grazing; p. 13,810; 38 41s 178 1e
21 Gisburn, par., W. Riding, Eng.; p. 416; 53 56n 2 17w
59 Gishiginsk, tn., U.S.S.R.; 62 0n 160 2e
34 Gisors, tn., France; cloth, linen; 49 19n 1 45e
50 Giulianova, tn., Italy; grain, fruit; p. 19,000; 42 47n 13 55e
52 Giurgevo. See Giurgiu.
52 Giurgiu, riv. port, Rumania; timber; p. 30,343; 43 51n 25 57e
39 Give, tn., Denmark; 55 50n 8 17e
36 Givet, tn., France; tanneries; p. 6,000; 50 9n 4 49e
78 Gizeh, tn., Egypt; 5 m. w. are Pyramids and Sphinx; p. 26,921; 30 1n 31 11e
47 Gjevgjelija, tn., Yugoslavia; 41 8n 22 33e
55 Gjövik, tn., Norway; 60 50n 10 35e
40 Gladbach, tn., Germ.; cotton, calico printing, silk, boots; p. 133,929; 51 12n 6 27e
121 Gladstone, tn., N.S.W., Australia; 31 2s 152 58e
123 Gladstone, tn., Queens., Australia; p. 1,350; 23 47s 151 16e
120 Gladstone, tn., S. Australia; 33 16s 138 20e
121 Gladstone, tn., Tas., Australia; 40 58s 148 0e
27 Glamis, par., Angus, Scot.; cms.; p. 1,099; 56 37n 3 00w
19 Glamorgan, co., Wales; a. 792 sq. m.; mountainous; sheep rearing, dairying; coal, iron, lime; copper and tin smelting; machinery, chemicals; p. 1,225,713; 51 35n 3 25w
45 Glarus, tn., Switzerland; p. 5,000; 47 4n 9 04e
45 Glarus, can., Switz.; a. 264 sq. m.; mountainous; sheep, cheese, cottons; p. 35,724; 46 59n 9 05e
27 Glasgow, spt., cy., roy. burgh, Scot.; largest city in Scotland and second city of Gr. Britain, includes Govan, Partick, Pollokshaws, Shettleston, Tollcross, Cathcart, and Newlands; on R. Clyde; cath., univ., art gallery, People's Palace; quays and docks; shipbuilding, iron founding, boilers, locomotives; textiles, chemicals, paper; coal, ironstone; p. 1,088,417; 55 52n 4 15w
56 Glasov, tn., Russia; 58 9n 52 32e
25 Glass, par., Aberdeen, Scot.; p. 620; 57 27n 2 57w
21 Glasson, vil., Lancashire, England; 54 0n 2 52w
19 Glastonbury, mun. bor., Somerset, Eng.; 8th cent. abbey ruins; associated with Dunstan, and by legend with Joseph of Arimathea; floors; p. 4,515; 51 9n 2 43w
41 Glatz, tn., Germ.; machinery, textiles; p. 16,563; 50 27n 16 40e
40 Glauchau, tn., Germ.; woollens, calicoes, dyes; p. 27,318; 50 50n 12 34e
41 Gleiwitz, tn., Germ.; iron, glass; p. 111,062; 50 20n 18 40e
16 Glemsford, par., Suffolk, Eng.; p. 1,262; 52 7n 0 39e
23 Glen Coe, Scotland; massacre, 1692; 56 40n 5 00w
121 Glen Innes, N.S.W., Austral.; 29 41s 151 42e
25 Glen Isla, vil., Angus, Scot.; 56 44n 3 17w
24 Glen More, Inverness, Scot.; 57 10n 4 40w
31 Glenarm, tn., Antrim, N. Ire.; p. 901; 54 58n 5 57w
27 Glenbeck, par., Ayr, Scot.; p. 713; 55 33n 3 59w
25 Glenbucket, par., Aberdeen, Scot.; p. 260; 57 14n 3 02w
87 Glencoe., tn., Natal, S. Afr.; p. 1,000 (Eur.); 42 47s 81 42w
33 Glenealy, par., Wicklow, I.F.S.; p. 749; 52 58n 6 09w
24 Gleneig, par., Inverness, Scot.; p. 1,643; 57 13n 5 37w
120 Gleneig, tn., S. Australia; 34 58s 138 30e
120 Gleneig, R., Vic., Austral.; 38 6s 140 58e
32 Glengariff, vil., Cork, I.F.S.; 51 45n 9 33w

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25 Glenlivet, par., Banff, Scot.; whisky; p. 1,104; 57 21n 3 20w
26 Glenluce, vil., Wigtown, Scot.; p. 2,171; 54 53n 4 48w
120 Glenorchy, tn., Vic., Austral.; 36 52s 142 40e
105 Glens Falls, tn., N.Y., U.S.A.; lumber, paper; p. 18,531; 43 18n 73 34w
30 Glenties, vil., Tirconaill, I.F.S.; p. 425; 54 48n 8 18w
32 Glin, spt., Limerick, I.F.S.; p. 666; 52 34n 9 17w
89 Globe and Phoenix, vil., S. Rhodesia; gold; 19 0s 29 40e
41 Glogau, tn., Germ.; on R. Oder; wool market; p. 26,098; 51 38n 16 8e
16 Glossop, mun. bor., Derby, Eng.; cottons, woollens; p. 19,701; 53 27n 1 55w
121 Gloucester, tn., N.S.W., Austral.; 32 1s 151 57e
19 Gloucester, co. bor., co. tn., Glouc., Eng.; on R. Severn; cath.; shipbuilding, engineering; p. 52,937; 51 52n 2 14w
19 Gloucester, co., England; a. 1,258 sq. m.; fertile valleys, Cotswold Hs.; dairying, cheese; sheep; coal; nufs., machinery, textiles, glass; p. 735,656; 51 52n 2 15w
105 Gloucester, tn., Mass., U.S.A.; fishing; granite; p. 24,204; 42 34n 70 40w
105 Gloversville, tn., N.Y., U.S.A.; leather; p. 23,009; 43 2n 74 20w
39 Glückstadt, tn., port, Germ.; on R. Elbe; 53 47n 9 25e
39 Glucksburg, tn., Germany; 54 48n 9 27e
57 Glukhov tn., Russia; 51 46n 33 56e
19 Glyncorrwg, urb. dist., Glamorgan, Wales; farming, coal, iron; p. 12,208; 51 41n 3 35w
40 Gmünd, tn., Germ.; jewellery; p. 20,406; 48 50n 9 48e
43 Gnesen, tn., Poland; woollens, linens; p. 26,000; 52 34n 17 38e
68 Goa, terr., India, Port.; a. 1,461 sq. m.; hills, forests; copra, coconuts, spices, manganese; cap. Nova Goa; p. 532,000; 15 27n 74 2e
69 Goalands, tn., India; 23 45n 89 45e
69 Goalpara, tn., India; p. 5,500; 26 3n 90 40e
29 Goatisland, par., N. Riding, Eng.; p. 712; 54 25n 0 44w
72 Gobi or Shamo, des., Mongolia; a. 300,000 sq. m., 1,500 m. long; sandy desert; 43 30n 105 0e
17 Godalming, mun. bor., Surrey, Eng.; Charterhouse School; moved here from London; paper, hosiery; p. 10,660; 51 10n 0 37w
68 Godavari, R., India; length 900 m.; a sacred river; 18 50n 80 0e
96 Goderich, port, Ont., Canada; p. 4,491; 43 47n 81 48w
66 Godhra, tn., Bom., India; timber; p. 26,979; 22 48n 73 40e
16 Godmanchester, mun. bor., Hunts, Eng.; on R. Ouse; cheese; p. 1,991; 52 18n 0 12w
48 Gödöllö, tn., Hungary; p. 11,034; 47 38n 19 21e
93 Godthaab, vil., Greenland; p. 1,000; 64 15n 51 10w
67 Godwin Austen, mt., India; 28,250 ft.; 36 0n 77 0e
48 Goes, comm., Portugal; p. 7,000; 50 12n 8 06w
67 Gogra R., U. Provs., India; 570 m. long; 24 45n 84 30e
68 Gokak, tn., Bom., India; p. 12,350; 16 11n 74 52e
62 Gokcha, L. See Sevan L.
59 Gokcicha, tn., U.S.S.R.; 71 50n 84 0e
68 Golconda, tn., Hyd., India; 17 27n 78 23e
88 Gold Coast, Br. cr. col. and prot., W. Africa; a. 78,802 sq. m.; coastal plain rising to plateau; forested; agriculture, cocoa, palm oil, groundnuts; mahogany; minerals—manganese, gold, diamonds; cap. Accra; p. 3,121,214; 5 40n 1 20w
106 Golden Gate, Cal., U.S.A.; entrance to San Francisco B.; 37 50n 122 30w
32 Golden Vale, Limerick, I.F.S.; 52 33n 8 17w
103 Goldsboro, tn., N.C., U.S.A.; cotton, tobacco; p. 14,985; 35 20n 77 58w
41 Gollnow, tn., Germany; p. 11,642; 53 35n 14 50e
25 Golspie, par., Sutherland, Scot.; p. 1,518; 57 59n 3 58w
57 Gomel, tn., Russia; agric. implements, lumber; p. 121,200; 52 26n 31 3e
108 Gomez Palacio, tn., Mexico; 25 31n 103 42w
111 Gonaives St. Marc, spt., Haiti; p. 10,000; 19 29n 72 30w
81 Gondar, tn., Abyssinia; cotton; p. 3,000; 12 36n 37 30e
50 Gonzago, tn., Italy; p. 8,130; 44 58n 10 50e
98 Good Hope, vil., Mackenzie, Can.; 66 15n 128 55w
83 Good Hope, Cape of. See Cape of Good Hope.
17 Goodwood, vil., Sussex, Eng.; 50 52n 0 44w
21 Goole, mun. bor., W. Riding, Eng.; iron, shipbuilding; p. 20,238; 53 42n 0 53w
125 Goomalling, tn., W. Australia; 31 12s 117 14e
121 Goondiwindi, tn., Queens., Austral.; 28 32s 150 22e
125 Goongarrie, tn., W. Australia; 30 0s 121 15e
68 Gooty, tn., Mad., India; 15 2n 77 40e
40 Göppingen, tn., Germ.; textiles, leather, machinery; p. 22,017; 48 44n 9 38e
67 Gorakhpur, cy., India; grain, timber; p. 57,985; 26 42n 83 30e
73 Gorbisa, tn., Siberia; 53 0n 119 0e
83 Gordonia, tn., C. of Good Hope, S. Afr.; 28 30s 21 0e
127 Gore, bor., S.I., New Zealand; p. 4,090; 46 4s 168 58e
16 Gore Pt., Norfolk, Eng.; 52 59n 0 33e
27 Gorebridge, vil., Midlothian, Scot.; 55 51n 3 04w
88 Goree I., Fr. W. Africa; p. 1,000; 14 40n 17 20w
59 Gorelovsk, tn., U.S.S.R.; 67 1n 85 15e
33 Gorey, par., Wexford, I.F.S.; p. 2,869; 52 40n 6 17w
57 Gori, tn., Georgia, U.S.S.R.; grain, timber; p. 10,000; 42 2n 44 12e
17 Goring, par., Oxford, Eng.; on R. Thames; p. 1,989; 51 32n 1 08w
38 Gorkum, port, Netherlands; p. 12,000; 51 50n 5 00e
16 Gorleston, par., Norfolk, Eng.; p. 20,391; 52 35n 1 42e
43 Gorlice, tn., Poland; p. 6,570; 4915n 21 14e
41 Görlitz, tn., Germ.; on R. Neisse; textiles, machinery, glass; p. 94,182; 51 30n 15 0e
47 Gornji Milanovac, tn., Yugoslavia; 44 3n 20 28e
42 Gorodishche, tn., U.S.S.R.; 53 22n 27 40e
71 Gorontalo, tn., Celebes, D.E.I.; 0 28n 123 5e

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45 Göschenen, vil., Switzerland; p. 830; 46 41n 8 35e
121 Gosford, tn., N.S.W., Austral.; 33 28s 151 18e
20 Gosforth, par., Cumb., Eng.; p. 922; 54 25n 3 25w
85 Goshen, dist., C. of Good Hope, S. Afr.; 32 15s 27 3e
40 Goslar, tn., Germ.; silver, copper, lead; p. 20,854; 51 54n 10 15e
47 Gospic, tn., Yugoslavia; 44 33n 15 21e
17 Gosport, mun. bor., spt., Hants, Eng.; p. 37,923; 50 48n 1 08w
55 Göteborg. See Gothenburg.
55 Göteborg and Bohus, co., Sweden; a. 1,931 sq. m.; p. 457,067; 58 30n 11 30e
40 Gotha, tn., Germ.; palace; toys, sugar; p. 45,780; 50 59n 10 40e
16 Gotham, par., Notts, Eng.; p. 1,066; 52 52n 1 12w
55 Gothenburg, cy., spt., Sweden; on R. Gota; cath.; shipbuilding, machinery, wood pulp, textiles; p. 243,690; 57 40n 12 0e
55 Gotland, dist., Sweden; 58 16n 15 15e
55 Gotland, I., and co., Sweden; a. 1,200 sq. m.; p. 57,448; 57 30n 19 20e
40 Göttingen, tn., Germ.; univ.; scientific instruments, textiles, chemicals; p. 41,514; 51 35n 9 57e
38 Gouda, tn., Netherlands; p. 29,162; 52 0n 4 42e
17 Goudhurst, par., Kent, Eng.; fruit, hops; p. 2,957; 51 7n 0 28e
7 Gough I., Atlantic Oc.; 40 1s 10 0w
121 Goulburn, tn., N.S.W., Austral.; tanning; p. 12,560; 34 46s 149 42e
121 Goulburn R., Vic., Austral.; length 230 m.; 36 8s 145 0e
25 Gourdon, spt., Kincardine, Scot.; p. 1,183; 56 50n 2 17w
83 Gouritz R., C. of Good Hope, S. Afr.; 34 25s 23 35e
26 Gourock, bor., Renfrew, Scot.; yachting; p. 8,844; 55 58n 4 50w
26 Govan. See Glasgow.
19 Gower, pen., Glamorgan, Wales; 51 38n 4 05w
96 Gowganda, vil., Ont., Canada; 47 9n 81 2w
33 Gowran, tn., Kilkenny, I.F.S.; p. 380; 52 37n 7 05w
113 Goya, tn., Argentina; on R. Parana; cattle; p. 16,000; 29 20s 59 10w
113 Goyaz, cy., cap. Goyaz, Brazil; coffee; cattle; p. 21,500; 16 20s 49 55w
112 Goyaz, st., Brazil; a. 234,834 sq. m.; mountainous, forested; stock raising; tobacco; gold, diamonds; p. 640,500; 13 50n 48 20w
83 Graaff Reinet, tn., C. of Good Hope, S. Afr.; fruit growing, wool; p. 4,447 (Eur.); 32 15s 24 35e
83 Graafwater, tn., C. of Good Hope, S. Afr.; 32 3s 18 35e
110 Gracias á Dios, C., Nicaragua; 15 0n 83 15w
121 Grafton, cy., N.S.W., Austral.; on Clarence R.; sugar; p. 6,500; 29 43s 152 57e
128 Graham Ld., Is., Antarctica; 67 0s 64 0w
83 Grahamstown, cy., C. of Good Hope, S. Afr.; ostrich feathers, wool; p. 7,602 (Eur.); 33 13s 26 12e
127 Grahamstown. See Thames.
44 Graian Alps, mts., France; 45 25n 7 00e
88 Grain Coast, Guinea; 6 00n 10 0w
38 Grammont, tn., Belgium; p. 12,664; 50 47n 3 52e
25 Grampian Mts., Scotland; divide Highlands from Lowlands; chief peaks—Ben Nevis 4,406 ft., Ben Macdhui 4,296 ft.; 56 55n 4 00w
120 Grampians, mts., Vic., Austral.; 37 10s 142 30e
46 Gran. See Esztergom.
113 Gran Chaco, dist., S. America; a. 300,000 sq. m.; flat, swampy, forests; quebracho; inhabited by savage tribes; 25 0s 61 0w
110 Granada, cy., Nicaragua; on L. Nicaragua; cocoa, coffee; p. 15,000; 11 58n 85 58w
48 Granada, cy., Spain; anc. Moorish city, Alhambra pal., univ., cath.; wheat, olives; textiles, liqueurs, paper; p. 118,179; 37 10n 3 35w
31 Granard, urb. dist., Longford, I.F.S.; p. 1,270; 53 47n 7 30w
97 Granby, tn., Que., Canada; sawmills, leather; p. 10,587; 45 23n 72 45w
88 Grand Bassa, tn., Liberia; 6 00n 10 2w
88 Grand Bassam, tn., Fr. W. Africa; 5 12n 3 42w
74 Grand Canal, China; length 850 m.; 35 0n 117 30e
106 Grand Cañon, Ariz., U.S.A.; narrow gorge, 3,000 ft. to 1 m. deep on Colorado R.; 35 50n 112 30w
110 Grand Cayman, I., W. Indies; a. 85 sq. m.; coconuts; cap. Georgetown; p. 3,000; 19 15n 81 20w
94 Grand Falls, tn., N.B., Canada; p. 1,556; 47 0n 67 54w
98 Grand Forks, tn., B.C., Canada; sawmills, copper and gold smelting; p. 1,298; 49 1n 118 21w
96 Grand I., N.Y., U.S.A.; on Niagara R.; 43 0n 79 0w
106 Grand Junction, tn., Col., U.S.A.; p. 10,247; 39 6n 108 41w
97 Grand Mere, tn., Que., Canada; hydro-electric power; pulp and paper mills; p. 6,461; 46 40n 72 45w
88 Grand Popo, tn., Fr. W. Africa; 6 18n 1 50e
102 Grand Rapids, cy., Mich., U.S.A.; fruit, flour, iron and steel; p. 168,592; 42 58n 85 41w
110 Grande R., Nicaragua; 13 0n 34 0w
98 Grande Prairie, tn., Alta., Canada; wheat; p. 1,464; 55 10n 119 0w
50 Grandisca, tn., Italy; 45 57n 13 38e
48 Grandola, tn., Portugal; 38 10n 8 35w
25 Grange, par., Banff, Scot.; p. 1,287; 57 32n 2 57w
20 Grange, urb. dist., Lancs, Eng.; seaside resort; p. 2,648; 54 12n 2 56w
27 Grangemouth, bor., spt., Stirling, Scot.; docks, coal, iron, shipbuilding; p. 11,798; 56 0n 3 44w
55 Granna, tn., Sweden; p. 1,260; 58 0n 14 25e
49 Granollers, tn., Spain; p. 6,900; 41 38n 2 12e
45 Granson, Switzerland; 46 48n 6 38e
16 Grantham, mun. bor., Kesteven, Eng.; tanning, iron goods; p. 19,709; 52 56n 0 39w
27 Granton, spt., Midlothian, Scot.; p. 957; 55 38n 3 13w
25 Grantown, bor., Moray, Scot.; distilling; p. 1,977; 57 20n 3 36w
83 Graskop, tn., Trans., S. Afr.; 25 0s 31 0e
20 Grasmere, par., Westmor., Eng.; p. 983; 54 28n 3 00w
20 Grasmere, L., Westmor., England; 54 28n 3 00w
35 Grasse, tn., France; winter resort; perfumes; p. 12,000; 43 39n 6 55e

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43 Graudenz, tn., Poland; on R. Vistula; flour; p. 35,000; 53 28N 18 46E
38 s'Gravenhage. See Hague.
96 Gravenhurst, tn., Ont., Canada; p. 1,864; 44 52N 79 20W
17 Gravesend, mun. bor., Kent, Eng.; shipping, paper; p. 35,490; 51 27N 0 22E
51 Gravina, cr., Italy; p. 18,950; 40 52N 16 27E
17 Grays in Thurrock, urb. dist., Essex, Eng.; bricks, lime, cement; p. 18,172; 51 29N 0 19E
46 Graz, cap., Styria, Austria; on R. Mur; machinery, iron and steel, rly. works; p. 152,706; 47 4N 15 26E
110 Great Abaco I., Bahama Is., W. Indies; p. 4,000; 26 15N 77 16W
113 Great Acha, tn., Argentina; 37 40S 65 0W
10 Great Atlas, Mts., N.E. Africa; 7,000 ft.; 34 0N 2 0W
118 Great Australian Bight, Australia; 33 30S 128 0E
126 Gt. Barrier I., New Zealand; 36 12S 175 27E
122 Great Barrier Reef, Australia; length 1,000 m., series of reefs 15 to 100 m. from coast; 17 0S 147 0E
98 Great Bear L., Mackenzie, Can.; a. 12,200 sq. m.; 66 0N 120 0W
39 Great Belt, Denmark; strait between Fyen and Zealand; 55 30N 11 0E
12 Great Britain, largest island of Br. Isles; a. 88,745 sq. m., greatest length 610 m., greatest breadth 324 m.; see under England, Scotland, Wales; p. 44,790,485; 50 to 58N 1 45E to 6 15W
121 Great Dividing Ra., mts., Queens., Australia; 26 0S 150 0E
17 Great Dunmow, par., Essex, Eng.; p. 2,506; 51 52N 0 22E
110 Great Exuma I., Bahama Is., W. Indies; 23 30N 76 0W
106 Great Falls, cy., Mont., U.S.A.; wool; gold, silver, copper; p. 28,822; 47 29N 111 15W
83 Gt. Fish, R., C. of Good Hope, S. Afr.; 33 0S 26 15E
111 Gt. Inagua, I., Bahama Is., W. Indies; p. 937; 21 0N 73 30W
83 Great Karroo, C. of Good Hope, S. Afr.; high plateau; ostrich farming; 32 40S 23 0E
83 Great Kei, R., C. of Good Hope, S. Afr.; 32 10S 27 30E
101 Great Lakes, N. America; a. 96,000 sq. m.; comprising lakes Superior, Michigan, Huron, Erie and Ontario; frozen 4 or 5 months in winter; enormous lake trade in cereals, iron, coal, etc.
45 Great Laufenburg, tn., Switz.; 47 34N 8 03E
89 Great Makarikari L., S. Africa; salt pan; 20 45S 26 0E
83 Great Namaqualand, des., S.W. Africa 26 15S 18 0E
70 Great Nicobar I., B. of Bengal; 7 00N 94 0E
44 Great St. Bernard P., Switzerland; 8,111 ft.; over Pennine Alps; hospice with St. Bernard dogs; 45 53N 7 10E
106 Great Salt L., Utah, U.S.A.; a. 15,000 sq. m. (variable); 41 0N 112 30W
98 Great Slave L., Mackenzie, Can.; a. 11,170 sq. m.; 300 m. long, 60 m. wide; 62 0N 114 0W
72 Great Wall, China; separating China Proper from Manchuria and Mongolia; 38 30N 109 0E
93 Great Whale R., Canada; 55 0N 75 0W
16 Great Yarmouth, spt., Norfolk, Eng.; seaside resort; fishing, curing; p. 60,710; 52 36N 1 43E
83 Great Zwarte Berge, mts., C. of Good Hope, S. Afr.; 33 15S 22 30E
110 Greater Antilles, Is., W. Indies; 20 0N 75 0W
17 Greater London, dist.; includes area of Metropolitan and City Police, and covers the co. of London, Middlesex, and parts of Kent, Surrey, Hertfordshire, and Essex; in the last ten years has occurred considerable outward flow of population from London; among the suburbs abnormal increases of population occurred in Dagenham (879%), Hendon (101%), Mitcham (61%), Heston and Isleworth (61%), Ilford (53%); many more suburbs registered an increase of more than 10%; the suburbs in Middlesex include Acton, Brentford and Chiswick, Ealing, Edmonton, Enfield, Finchley, Hampton, Harrow, Hayes and Harlington, Hendon, Heston and Isleworth, Hornsey, Southall, Norwood, Southgate, Teddington, Tottenham, Twickenham, Wembley, Willesden, Wood Green; the suburbs in Kent include Beckenham, Bromley, Erith, Penge; the suburbs in Surrey include Barnes, Croydon, Kingston-on-Thames, Merton and Morden, Mitcham, Richmond, Surbiton, Sutton and Cheam, Wimbledon; Barnet, in Hertfordshire; the suburbs in Essex include Barking, Dagenham, East Ham, Ilford, Leyton, Walthamstow, West Ham; a. 692 sq. m.; p. 8,202,818. See also London.
53 Greece, rep., Europe; a. 50,257 sq. m.; comprising Balkan Pen. and Ægean Arch., indented coast, mountainous, Pindus Mts. (Mt. Olympus 9,800 ft.), fertile valleys; agriculture, cereals, tobacco, currants, vines, fruit; sheep, goats, cattle; minerals—iron, lead, magnesite, lignite; mnfs.—olive-oil, wine, textiles, chemicals; cap. Athens; p. 6,204,684; 41 0 to 36 0N 20 0 to 26 0E
107 Greeley, cy., Col., U.S.A.; lumber, flour; p. 12,203; 40 23N 104 44W
102 Green Bay, tn., Wis., U.S.A.; paper, coal; p. 37,415; 44 30N 88 0W
102 Green, Mts., U.S.A.; part of Appalachian Mts.; 44 30N 73 0W
103 Greensboro, tn., N.C., U.S.A.; cotton, tobacco; p. 53,569; 36 0N 80 0W
104 Greensburg, tn., Pa., U.S.A.; p. 16,808; 39 50N 79 55W
105 Greenfield, tn., Mass., U.S.A.; p. 15,500; 4 35N 72 36W
53 Greenland, I., Arctic Oc.; a. 838,000 sq. m.; lofty ice-capped plateau; peopled by coastal settlements of Eskimos; col. of Denmark, part of E. coast claimed by Norway; exp.—whale oil, seal skins; p. 16,630 (408 Danes); 60 0 to 80 0N 20 0 to 70 0W
27 Greenlaw, vil., Berwick, Scot.; p. 909; 55 43N 2 27W
26 Greenock, bor., spt., Renfrew, Scot.; on R. Clyde; docks; shipbuilding, sugar refining; p. 78,948; 55 57N 4 45W
31 Greenore, tn., spt., Louth, I.F.S.; packet stn. for Holyhead; 54 2N 6 06W

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103 Greenville, tn., Miss., U.S.A.; p. 14,807; 33 25N 91 0W
104 Greenville, tn., Pa., U.S.A.; p. 8,028; 41 25N 80 20W
103 Greenville, tn., S.C., U.S.A.; textiles; p. 29,154; 34 22N 82 13W
107 Greenville, tn., Tex., U.S.A.; p. 12,407; 33 7N 95 55W
17 Greenwich, met. bor., London, Eng.; Royal Observatory, R.N. Coll.; longitudes are conventionally calculated from the meridian of Greenwich either E. or W.; chemicals; p. 100,493; 51 29N 0 0E
103 Greenwood, tn., Miss., U.S.A.; p. 11,123; 33 28N 90 3W
41 Greifenberg, tn., Germany; 53 54N 15 10E
41 Greifswald, tn., Germ.; agric. machinery; p. 26,695; 54 6N 13 20E
40 Greiz, tn., Germ.; fabrics, dyeing, tanning; p. 37,490; 50 40N 12 10E
39 Grenaa, tn., Denmark; p. 4,651; 56 25N 10 55E
111 Grenada, L., Br. W. Indies; a. 133 sq. m.; fruit, cocoa, spices; cap. St. George; p. 76,000; 12 5N 61 45W
111 Grenadines, Is., Br. W. Indies; sea island cotton; p. 7,500; 12 45N 61 15W
39 Grenen, Denmark; 57 38N 10 36E
121 Grenfell, tn., N.S.W., Austral.; 33 52S 148 10E
35 Grenoble, tn., France; tourist centre; gloves, liqueurs, cement, silk; p. 90,748; 45 11N 5 46E
121 Greta, tn., N.S.W., Austral.; 32 42S 151 20E
27 Gretna Green, vil., Dumfries, Scot.; formerly noted for runaway marriages; p. 3,000; 55 0N 3 05W
53 Grevena, tn., Greece; 40 3N 21 32E
38 Grevenmacher, tn., Luxemburg 49 41N 6 26E
31 Grey Abbey, vil., Down, N. Ire.; p. 572; 54 32N 5 34W
83 Greylingstadt, tn., Trans., S. Afr.; 26 53S 28 47E
127 Greymouth, bor. spt., S.I., New Zealand; coal; p. 6,100; 42 28S 171 12E
120 Grey R., mts., Queens., Austral.; 28 0S 143 0E
110 Greytown, See S. Juan del Norte.
127 Greytown, bor., N.I., New Zealand; p. 1,105; 41 2S 175 25E
85 Greytown, tn., C. of Good Hope, S. Afr.; 34 5S 19 38E
83 Greytown, tn., Natal, S. Afr.; wattle bark; p. 3,500; 29 5S 30 37E
103 Griffin, cy., Ga., U.S.A.; p. 10,321; 33 15N 84 13W
109 Grijalva, R., Mexico; length 370 m.; 17 45N 93 33W
45 Grimmialp, mt., Switzerland; 46 32N 7 30E
96 Grimsby, tn., Ont., Canada; p. 2,198; 43 13N 79 37W
16 Grimsby, co. bor., spt., Lind., Eng.; docks; greatest fishing centre in England; shipbuilding; p. 92,463; 53 34N 0 04W
44 Grimsel, P., Switz.; 7,100 ft.; 46 40N 8 25E
55 Grimstad, spt., Norway; p. 3,100; 58 22N 8 25E
45 Grindelwald, vil., Switz.; resort; 46 38N 8 03E
39 Grindsted, tn., Denmark; 55 46N 8 57E
83 Griqualand East, dist., C. of Good Hope, S. Afr.; a. 6,502 sq. m.; pastures, wool; cap. Kokstad; p. 265,000; 30 30S 29 0E
83 Griqualand West, dist., C. of Good Hope, S. Afr.; a. 15,197 sq. m.; diamonds; cap. Kimberley; 28 45S 23 30E
83 Griquatown, tn., C. of Good Hope, S. Afr.; 28 53S 23 15E
34 Gris Nez, C., France; 50 52N 1 36E
45 Grisons, can., Switz.; a. 2,746 sq. m.; mountains, forest; tourist centre; cattle; p. 123,000; 46 40N 9 35E
43 Grodek, tn., Poland; 49 48N 23 58E
43 Grodna, tn., Poland; rly. junc.; timber, tobacco; p. 62,000; 53 41N 23 53E
38 Gröningen, tn., Neth.; woollens, sugar, tobacco; p. 105,500; 53 10N 6 50E
38 Gröningen, prov., Neth.; a. 883 sq. m.; farming, dairying; fishing; p. 392,168; 53 10N 6 35E
82 Grootfontein, tn., S.W. Africa; 25 1S 16 35E
57 Groznyi, tn., Transcaucasia, U.S.S.R.; petroleum; p. 201,000; 43 27N 45 39E
41 Grossenhain, tn., Germany; p. 12,893; 51 20N 13 30E
50 Grosseto, tn., Italy; p. 22,000; 42 44N 11 7E
45 Grozny. See Grosnyi.
43 Grubeshov, tn., Poland; 50 50N 23 52E
51 Grumo, tn., Italy; 41 1N 16 42E
41 Grünberg, tn., Germ.; textiles, machinery; p. 24,898; 51 46N 15 30E
108 Guadalajara, cy., Mexico; textiles; p. 150,000; 21 0N 102 30W
48 Guadalajara, tn., Spain; woollens, leather; p. 16,053; 40 38N 3 10W
109 Guadalcazar, tn., Mexico; 22 32N 100 31W
48 Guadalquivir, R., Spain; length 360 m.; 38 0N 4 00W
111 Guadeloupe, I., Fr. W. Indies; a. 1,380 sq. m.; mountainous; rum, sugar, coffee, bananas; cap. Basse-Terre; p. 244,000; 16 12N 61 30W
48 Guadiana, R., Sp. and Port.; length 510 m.; 39 5N 3 50W
48 Guadix, tn., Spain; silk, wool; p. 16,500; 37 57N 3 10W
112 Guajara Mirim, tn., Brazil; 11 0S 65 10W
115 Gualeguaychú, tn., Arg.; meat; p. 23,000; 33 2S 58 34W
116 Guam I., Mariana Arch., Pac. Oc., U.S.; rice, maize, copra; p. 18,509; 13 30N 144 45E
109 Guanajuato St., Mex.; 10,950 sq. m.; N. mountainous, S. fertile; cattle; silver, lead, gold; p. 860,500; 21 0N 100 40W
109 Guanajuato, tn., Mexico; cotton; silver, lead; p. 35,000; 21 0N 100 42W
112 Guanare, tn., Venezuela; 8 40N 69 35W
111 Guantánamo, tn., Cuba; bananas, sugar; p. 20,000; 20 12N 75 15W
112 Guapore, R., Brazil; length 800 m.; 13 30S 63 0W
81 Guardafui, C., It. Somaliland; 11 50N 51 20E
48 Guareña, tn., Spain; p. 6,500; 38 51N 6 02W
50 Guastalla, comm., Italy; p. 11,500; 44 47N 10 39E
110 Guatemala, rep., Cent. America; a. 45,452 sq. m.; mountainous, active vols., notably Fuego (12,080 ft.); agriculture, cereals, coffee, sugar, tobacco; minerals—gold, silver, copper, lead; cap. Guatemala; p. 2,245,593; 16 0N 91 0W
110 Guatemala, tn., cap., Guatemala; cath., pal.; coffee market; p. 166,600; 14 41N 90 35W
112 Guaviare, R., Colombia; 2 30N 71 0W
112 Guayaquil, cy., spt., Ecuador; univ.; shipbuilding; rubber, Panama hats; p. 120,000; 2 15S 79 55W
112 Guayaquil, G., Ecuador; 3 15S 8 20W
108 Guaymas, spt., Mexico; p. 15,000; 27 58N 111 2W

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50 Gubbio, comm., Italy; majolica; p. 30,500; 43 21N 13 32E
41 Guben, tn., Germ.; cloth, yarn, pottery, paper; p. 40,636; 51 57N 14 44E
68 Gudur, tn., Mad., India; 14 8N 79 52E
10 Guelma, tn., Algeria; p. 5,250; 26 27N 7 22E
96 Guelph, tn., Ont., Canada; linen, flour mills; p. 21,075; 43 35N 80 19W
49 Guernica, tn., Spain; 43 20N 2 45W
34 Guernsey, I., Chan. Is., Br.; a. 25 sq. m.; resort; vegetables; cattle; fruit, flowers, granite; cap. St. Peter Port; p. 40,000; 49 28N 2 35W
109 Guerrero, st., Mexico; a. 25,379 sq. m.; mountainous; cereals, cotton, coffee, tobacco; cap. Chilpancingo; p. 637,530; 17 51N 99 18W
112 Guiana, region, S. America; a. 179,000 sq. m.; comprising Br., Fr. and Du. Guiana; 4 00N 55 0W
112 Guiana, Br., S. America. See British Guiana.
112 Guiana, Dutch, S. America. See Dutch Guiana.
112 Guiana, French, S. America. See French Guiana.
17 Guildford, mun. bor., co. tn., Surrey, Eng.; cereals, cattle; p. 30,754; 51 14N 0 34W
125 Guildford, tn., W. Australia; p. 3,400; 31 55S 116 5E
48 Guimarães, tn., Portugal; p. 8,050; 41 28N 8 11W
88 Guinea, W. Africa; maritime region from Sierra Leone to Cameroons; 5 00 to 15 0N 15 0W to 15 0E
88 Guinea, G., W. Africa; 2 00N 5 0W to 10 0E
110 Güines, tn., Cuba; 22 48N 82 3W
20 Guisboro', urb. dist., N. Riding, Eng.; iron ore; p. 6,306; 54 32N 1 03W
34 Guise, tn., France; p. 7,370; 49 54N 3 39E
66 Gujarat, prov., Bom., India; a. 13,579 sq. m.; includes Kathiawar and Cutch; millet, cotton, wheat; p. 3,718,000; 22 55N 72 30E
66 Gujranwala, tn., India; grain, cotton; p. 37,887; 32 12N 74 12E
68 Gulbarga, tn., Hyd., India; cotton; p. 35,320; 17 22N 76 50E
121 Gulgong, tn., N.S.W., Austral.; 32 22S 149 30E
27 Gullane, par., E. Lothian, Scot.; p. 1,441; 56 3N 2 49W
63 Gulpaigan, tn., Persia; 33 21N 50 17E
41 Gumbinnen, tn., Germany; p. 19,002; 54 35N 22 12E
37 Gummersbach, tn., Germany; p. 17,338; 51 2N 7 35W
53 Gumuljina, tn., Greece; 41 7N 25 27E
62 Gumushkhane, tn., Turkey; 40 29N 39 28E
121 Gundagai, tn., N.S.W., Austral.; p. 2,000; 35 1S 148 5E
121 Gunnedah, tn., N.S.W., Austral.; 30 59S 150 15E
68 Guntakal, tn., Mad., India; 15 8N 77 22E
68 Guntur, tn., Mad., India; cotton ginning; p. 48,184; 16 25N 80 27E
57 Gurjev, tn., U.S.S.R.; 47 4N 51 47E
27 Guthrie, par., Angus, Scot.; p. 249; 56 39N 2 43W
107 Guthrie, tn., Okla., U.S.A.; p. 9,582; 35 52N 97 25W
35 Guyenne, old prov., France; 44 40N 1 00E
121 Guyra, tn., N.S.W., Austral.; 30 13S 151 30E
108 Guzman, tn., Mexico; 19 41N 103 38W
66 Gwadar, Baluch., terr. belonging to Oman; 25 0N 62 19E
66 Gwadar, tn., Baluch.; p. 4,450; 25 8N 62 19E
67 Gwalior, cy., cap. Gwalior, India; cotton ginning, carpets; Maharajah's pal.; p. 83,000; 26 16N 78 13E
67 Gwalior, st., India; a. 26,357 sq. m.; cereals, sugar-cane, cotton, muslins, carpets; p. 3,523,070; 26 25N 78 0E
89 Gwanda, tn., S. Rhodesia; 21 0S 29 20E
72 Gyang-tse, tn., Tibet; caravan centre; 28 50N 89 30E
121 Gympie, tn., Queens., Austral.; p. 9,588; 26 13S 152 42E
46 Gyoma, tn., Hungary; p. 12,229; 46 54N 20 54E
46 Gyöngyös, tn., Hungary; wine; p. 21,281; 47 8N 20 12E
46 Győr, tn., Hungary; horses, textiles; p. 50,977; 47 41N 17 40E
99 Gypsumville, tn., Man., Canada; gypsum; 52 0N 98 20W
53 Gythion, tn., Greece; 36 43N 22 37E
46 Gyula, tn., Hungary; cattle, corn; p. 25,221; 46 40N 21 20E
52 Gyulafehérvár. See Alba Iulia.

55 Hå, tn., Norway; 58 35N 5 40E
38 Haarlem, tn., cap. of N. Holland, Neth.; textiles, printing, brewing; p. 119,159; 52 21N 4 39E
127 Haast R., New Zealand; 43 59S 169 20E
42 Haapsalu, tn., Estonia; 58 55N 23 32E
105 Hackensack, tn., N.J., U.S.A.; iron foundries, silk, jewellery, paper; p. 24,568; 40 53N 74 7W
33 Hackestown, par., Carlow, I.F.S.; p. 1,541; 52 52N 6 34W
17 Hackney, met. bor., London, England; p. 215,380. See London.
85 Hackney, tn., C. of Good Hope, S. Afr.; 32 19S 26 38E
27 Haddington. See East Lothian.
27 Haddington, bor., co. tn., E. Lothian, Scot.; grain mkt., corn mills; p. 4,405; 55 57N 2 47W
39 Hadersley, tn., Den.; gloves, tobacco, ironworks, tanning; p. 14,487; 55 15N 9 35W
16 Hadleigh, urb. dist., Suffolk, Eng.; p. 2,952; 52 3N 0 57E
60 Hadramant, Brit. Prot., Arabia; fertile coastal valleys; frankincense, aloes, tobacco, shawls, carpets; p. 150,000; 16 0N 50 0E
39 Hadsund, tn., Denmark; 56 44N 10 7E
83 Haenertsberg, tn., Trans., S. Afr.; 23 45S 29 31E
40 Hagen, tn., Germ.; iron and steel works, textiles, tanning, brewing; p. 148,314; 51 20N 7 28E
102 Hagerstown, tn., Md., U.S.A.; machinery, furniture, chemicals; p. 30,861; 39 40N 77 43W
38 Hague, The, cap., Netherlands; numerous canals, cas., Pal. of Peace, art gall.; copper, lead and iron works, printing, distilling; p. 436,068; 52 5N 4 18E
34 Hagunau, tn., France; textiles, porcelain, soap, beer; p. 19,514; 48 50N 7 47E
61 Haifa, tn., spt., Palestine; at foot of Mt. Carmel; soap, cement; p. 24,634; 32 44N 35 1E
60 Hail, tn., Arabia; p. 10,000; 27 35N 42 30E
17 Hailsham, par., Sussex, Eng.; mats, rope and twine; p. 4,907; 50 52N 0 16E
74 Hai-ning, tn., China; 30 30N 120 21E

MAP

73 **Hainan, I.**, China; densely wooded; camphor, mahogany, rosewood; 19 30s 110 0e
38 **Hainaut, prov.**, Belgium; a. 1,437 sq. m.; coal and iron; cap. Mons; p. 1,270,231; 50 30n 4 00e
70 **Hai-phong, tn.-spt.**, Fr. Indo-China; cotton, thread, soap; 20 50n 106 30e
111 **Haiti I. (Hispaniola)**, W. Indies; a. 29,536 sq. m.; mountainous; various timbers, cotton, cocoa, sugar, coffee, tobacco; p. 3,198,000; 17 35 to 20 0n 68 15 to 74 30w
111 **Haiti Republic**, W. Indies; a. 10,204 sq. m.; cotton, coffee, tobacco, cocoa; p. 2,550,000; cap. Port au Prince; 19 0n 72 32w
46 **Hajdúböszörmény**, tn., Hungary; p. 28,861; 47 40n 21 52e
75 **Hakodate**, tn., spt., Jap.; fishing centre; sulphur, dried fish, timber, furs, etc.; p. 207,488; 41 50n 140 36e
40 **Halberstadt**, tn., Germ.; sugar, cigars, paper; p. 50,372; 51 55n 11 3e
55 **Halden**, tn., Nor.; formerly Fredrikshald; wood pulp and paper; p. 10,278; 59 8n 11 25e
62 **Haleb**, See Aleppo.
18 **Halesowen**, mun. bor., Worcs., Eng.; farming, nails; p. 31,058; 52 27n 2 3w
16 **Halesworth**, urb. dist., Suffolk, Eng.; farming, corn mills, malting; p. 2,024; 52 20n 1 30e
96 **Haliburton**, vil., Ont., Can.; p. 500; 45 10n 78 30w
95 **Halifax**, cap. N.S., Can.; fortified naval stn. and dockyard, parliament bldgs. and Government House, Dalhousie Univ., cath.; machinery, iron foundries, boots and shoes; p. 59,275; 44 38n 63 33w
21 **Halifax**, co. bor., W. Riding, Eng.; woollens and worsted, iron, chemicals; p. 98,125; 53 43n 1 52w
122 **Halifax Bay**, Queens., Austral.; 19 0s 146 30e
25 **Halkirk**, par., Caith., Scot.; p. 1,725; 58 31n 3 29w
55 **Halland**, co., Sweden; a. 1,901 sq. m.; p. 150,128; 57 0n 12 35e
40 **Halle**, tn., Germany; on R. Saale; univ.; salt, paraffin and sugar refining; p. 209,169; 51 30n 12 0e
71 **Halmahera I.**, Dutch E. Indies; p. 140,322; 1 00n 128 0e
55 **Halmstad**, spt., Sweden; cloth mnfs., brewing, salmon, granite, timber; p. 23,866; 56 40n 12 45e
39 **Hals**, tn., Denmark; 57 0n 10 19e
54 **Halsa**, tn., Norway; 63 8n 8 15e
16 **Halstead**, urb. dist., Essex, Eng.; stoneware, farming; p. 5,578; 51 57n 0 38e
20 **Haltwhistle**, tn., Northumb., Eng.; coal, baize; p. 4,500; 54 59n 2 27w
62 **Hama**, tn., Syria; p. 39,960; 35 13n 36 40e
75 **Hamada**, tn., Japan; 35 13n 132 12e
63 **Hamadan**, tn., Persia; rugs, shellac; p. 30,000; 34 50n 48 18e
75 **Hamamatsu**, tn., Japan; p. 109,475; 34 41n 137 50e
55 **Hamar**, tn., Norway; p. 6,100; 60 50n 11 5e
68 **Hambantota**, tn., Ceylon; 6 08n 81 8e
40 **Hamburg**, cy., cap. of state, port, Germ.; on R. Elbe, second cy. of Germany; town hall, art. gal., fine promenades, docks and harb.; engineering, shipbuilding; foodstuffs, brewing and distilling, sugar refining, cigars; p. 1,129,307; 53 34n 10 2e
40 **Hamburg**, tn., Germany; a. 160 sq. m.; cereals, veg. and fruits, etc.; p. 1,226,111; 53 33n 10 0e
85 **Hamburne**, tn., C. of Good Hope, S. Afr.; 33 20s 27 23e
55 **Hämeenlinna**, tn., Finland; 61 0n 24 25e
40 **Hameln**, tn., Germ.; "Legend of Pied Piper"; mediæval bldgs.; sugar refining, paper; p. 29,649; 52 6n 9 20e
120 **Hamilton**, tn., Vic., Australia; farming, dairying; 37 45s 142 1e
27 **Hamilton**, burgh, Lanark, Scot.; coal, ironstone, ironworks, cottons; p. 37,863; 55 47n 4 02w
126 **Hamilton**, bor., N.I., New Zealand; p. 15,065; 37 48s 175 18e
96 **Hamilton**, tn., Ont., Canada; fruit, farm implements; p. 155,547; 43 16n 79 54w
93 **Hamilton Inlet**, Labrador; 54 0n 59 0w
40 **Hamm**, tn., Germ.; on R. Lippe; thermal baths; iron foundries, brushes, oil and varnish; p. 53,532; 51 40n 7 46e
10 **Hammamet**, tn., Tunis; 36 26n 10 39e
39 **Hammel**, tn., Denmark; 56 10n 9 50e
54 **Hammerdal**, tn., Sweden; 63 30n 15 15e
54 **Hammerfest**, spt., Norway; most northerly tn. in Europe; fish, oil, hides; 70 40n 23 40e
124 **Hammersley Range**, W. Australia; 22 10s 117 30e
17 **Hammersmith**, met. bor., London, England; p. 135,921. See London.
38 **Hamoin**, tn., Belgium; 50 26n 5 31e
127 **Hampden**, bor., S.I., New Zealand; p. 260; 45 20s 170 50e
17 **Hampshire**, co., England; also known as co. of Southampton; a. 1,999 sq. m.; New Forest; fertile valleys; farming, sheep, cattle; mnfs., shipbuilding, brewing, tanning; p. 1,014,115; 51 0n 1 14w
17 **Hampstead**, met. bor., London, England; noted for its famous heath; p. 88,914. See London.
17 **Hampton**, urb. dist., Middx., England; p. 13,053; includes Hampton Court Palace, built for Cardinal Wolsey and presented by him to Henry VIII, 1526; the palace was extended by Sir Christopher Wren for William III, when grounds and gardens were laid out. See Greater London.
40 **Hanau**, tn., Germ.; on R. Main; gold and silver work, diamond cutting, brewing, chemicals, paper, etc.; p. 38,670; 50 7n 8 56e
74 **Hangchow**, spt., China; univ.; silk, rice; p. 426,916; 30 10n 120 0e
83 **Hankey**, tn., C. of Good Hope, S. Afr.; 33 47s 24 55e
55 **Hanko**, spt., Finland; resort; p. 6,674; 59 50n 23 3e
74 **hankow**, riv. port, China; iron and steel works, textiles, oil, rice, flour; p. 777,993; 30 50n 114 15e
127 **Hanmer Plains**, New Zealand; 42 32s 172 50e
102 **Hannibal, cy., Mo., U.S.A.**; on Mississippi R.; lumber, farm produce, tobacco; p. 22,761; 39 40n 91 25w
70 **Hanoi**, tn., cap. of Tong-king, Fr. Indo-China; cottons, silks, tobacco, pottery; p. 103,235; 21 0n 105 45e

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96 **Hanover**, tn., Ont., Can.; p. 3,077; 44 10n 81 2w
40 **Hanover**, cy., cap. of prov., Germ.; on R. Leine; palaces, mus., art gal.; hardware, chemicals, machinery; p. 443,920; 52 23n 9 53e
40 **Hanover**, prov., Germ.; a. 14,997 sq. m.; rivers, Elbe, Weser and Ems; Harz Mts.; flax, potatoes, hops, tobacco and beet; cattle breeding; coal, salt; p. 3,190,548; 52 20n 9 40e
85 **Hanover**, tn., C. of Good Hope, S. Afr.; 31 5s 24 28e
104 **Hanover**, tn., Pa., U.S.A.; p. 11,805; 39 48n 77 0w
74 **Han-yang**, tn., China; 30 35n 114 5e
16 **Happisburgh**, Norfolk, England; p. 574; 52 50n 1 32e
81 **Harar**, tn., Abys.; hides and skins, ivory, cattle; p. 40,000; 9 19n 42 18e
73 **Harbin**, tn., Manchuria; on R. Sungari; rly. junc.; soya beans, flour, tanning, distilling; p. 252,988; 45 50n 126 30e
93 **Harbour Grace**, Newf., Can.; p. 3,825; 47 40n 53 35w
39 **Harburg-Wilhelmsburg**, tn., spt., Germ.; on R. Elbe; palm oil, rubber goods, brewing; p. 112,593; 53 28n 10 0e
55 **Hardanger Fiord**, Norway; 60 0n 6 00e
55 **Hardanger Field**, Norway; 60 20n 7 20e
38 **Hardenberg**, tn., Netherlands; p. 13,126; 52 34n 6 37e
38 **Harderwijk**, tn., Netherlands; 52 20n 5 39e
67 **Hardwar**, tn., India; on R. Ganges; pilgrimages and sacred festivals; p. 30,764; 29 58n 78 16e
34 **Harfleur**, tn., France; on R. Seine; potteries, distilling, chemicals; 49 31n 0 13e
66 **Hari Rud**, riv., Afghanistan; 34 35n 64 30e
52 **Hatlăn**, tn., Rumania; p. 9,066; 47 22n 27 1e
18 **Harlech**, tn., Mer., Wales; farming; p. 1,100; 52 51n 4 06w
16 **Harleston**, par., Norfolk, Eng.; hosiery; p. 2,014; 52 23n 1 18e
38 **Harlingen**, spt., Neth.; mixed farming, fish; p. 10,443; 53 10n 5 26e
17 **Harlow**, par., Essex, Eng.; p. 2,962; 51 47n 0 08e
53 **Harmanli**, tn., Bulgaria; p. 7,130; 41 55n 25 58e
54 **Harparanda**, tn., Sweden; 65 52n 24 4e
17 **Harpenden**, urb. dist., Herts, Eng.; farming, brewing, bricks, hats; p. 8,349; 51 50n 0 23w
62 **Harran**, tn., Turkey; 36 55n 39 4e
24 **Harris (Lewis-with-Harris)**, Hebrides, Scot.; fishing, Harris tweeds; 57 52n 6 50w
102 **Harrisburg**, cy., Pa., U.S.A.; on R. Susquehanna; machinery, cigarettes, cotton goods; p. 80,339; 40 20n 76 58w
83 **Harrismith**, tn., O.F.S., S. Afr.; health resort; hides and wool; p. 2,722 (Eur.); 28 15s 29 13e
96 **Harriston**, tn., Ont., Canada; p. 1,296; 43 57n 80 55w
21 **Harrogate**, mun. bor., W. Riding, Eng.; fashionable spa and health resort, sulphur and chalybeate springs; p. 39,785; 53 59n 1 33w
120 **Harrow**, tn., Vic., Australia; 37 7s 141 33e
15 **Harrow**, urb. dist., Middx., Eng.; famous public school; p. 26,990; 51 34n 0 20w
52 **Harsova**, tn., Rumania; p. 3,603; 44 41n 27 59e
102 **Hartford**, cy., cap. of Conn., U.S.A.; port of entry on Connecticut R.; capitol, coll.; small arms, machines, typewriters, electrical machinery, tobacco mart; p. 164,072; 41 15n 72 47w
19 **Hartland**, par., Devon, Eng.; farming, malting, fisheries; p. 1,483; 50 59n 4 27w
19 **Hartland Pt.**, Devon, Eng.; 51 2n 4 31w
20 **Hartlepool**, mun. bor., spt., Durham, Eng.; shipbuilding and engineering; p. 20,545; 54 42n 1 10w
89 **Hartley**, tn., S. Rhodesia; 18 5s 30 12e
83 **Harts R.**, C. of Good Hope, S. Afr.; 27 0s 25 30e
16 **Harwich**, mun. bor., spt., Essex, Eng.; packet station for Belgium, Netherlands, Denmark; docks; cement works, fertilizers, fisheries; p. 12,700; 51 56n 1 17e
40 **Harz Mts.**, Germany; forested slopes rich in minerals, length 57m.; highest pk., Brocken 3,745 ft.; 51 40n, 10 40e
60 **Hasa**, dist., Arabia; 27 0n 48 30e
61 **Hasbeiya**, tn., Syria; 33 20n 35 45e
53 **Haskovo**, tn., Bulgaria; woollens, carpets, silk, tobacco; p. 26,256; 41 55n 25 34e
39 **Hasle**, tn., Bornholm, Den.; 55 12n 14 42e
17 **Haslemere**, urb. dist., Surrey, Eng.; tourist centre; farming; p. 4,340; 51 5n 0 42w
39 **Haslev**, tn., Denmark; 55 18n 11 56e
68 **Hassan**, tn., Mysore, Indore; 13 0n 76 5e
38 **Hasselt**, tn., Belgium; distilling and brewing; p. 22,602; 50 56n 5 20e
126 **Hastings**, bor., N.I., New Zealand; p. 11,260; 39 39s 176 50e
107 **Hastings**, tn., Neb., U.S.A.; p. 15,490; 40 30n 98 30w
17 **Hastings**, co. bor., Sussex, Eng.; resort, cas., one of the Cinque Ports; p. 65,207; 50 51n 0 34e
54 **Hasvik**, tn., Norway; 70 30n 22 0e
17 **Hatfield**, mkt. tn., Herts, Eng.; on R. Lea; Hatfield House, seat of Marquess of Salisbury and Cecil family; p. 9,072; 51 46n 0 12w
67 **Hathras**, tn., India; sugar, grain, oil-seeds; p. 38,763; 27 30n 78 8e
19 **Hatherleigh**, par., Devon, Eng.; p. 1,206; 50 49n 4 5w
70 **Ha-tinh**, tn., Fr. Indo-China; 18 30n 105 50e
103 **Hatteras, C.**, N.C., U.S.A.; 35 15n 75 30w
25 **Hatton**, par., Aberdeen, Scotland; p. 1,504; 57 25n 1 56w
55 **Haugesund**, spt., Norway; fishing, woollens; p. 17,217; 59 25n 5 20e
16 **Haugsley**, par., Suffolk, England; p. 814; 52 14n 0 58e
60 **Haura**, tn., Arabia; 13 59n 47 40e
126 **Hauraki Gulf**, New Zealand; 36 40s 175 10e
60 **Hauran, Jebel**, mts., Transjordan; 32 10n 37 30e
35 **Haut-Rhin**, dept., France; a. 1,354 sq. m.; cereals, potatoes, flax, fruit, wine; p. 516,726; 47 50n 7 00e
35 **Haute-Garonne**, dept., France; a. 2,457 sq. m.; mineral springs, cereals, wine, dairying, white marble; p. 441,799; 43 20n 1 18e
35 **Haute-Loire**, dept., France; a. 1,930 sq. m.; coal, cereals, lace, silk, granite; p. 251,608; 45 8n 3 48e
34 **Haute-Marne**, dept., France; a. 2,420 sq. m.; forests, iron, wine, p. 189,791; 48 3n 5 20e

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34 **Haute-Saône**, dept., France; a. 2,074 sq. m.; cereals, fruit, iron, steel, cotton, coal; p. 219,257; 47 44n 6 24e
35 **Haute-Savoie**, dept., France; a. 1,774 sq. m.; mountainous; farming, wine, cheese; p. 252,794; 46 2n 6 27e
35 **Haute-Vienne**, dept., France; a. 2,119 sq. m.; fruits, cereals, porcelain, live-stock; p. 335,873; 45 54n 1 15e
35 **Hautes-Alpes**, dept., France; a. 2,178 sq. m.; live-stock; p. 87,566; 44 43n 6 27e
35 **Hautes-Pyrénées**, dept., France; a. 1,750 sq. m.; mineral springs, lead, zinc, marble, live-stock, fruit, wine; p. 189,993; 43 5n 0 12e
101 **Havana**, spt., cap., Cuba; chief city of W. Indies; fine harbour, cath., univ.; cigars, tobacco, sugar, rum, coffee, woollens, straw hats; p. 589,000; 23 0n 82 30w
17 **Havant**, urb. dist., Hants, Eng.; malting, brewing, tanning; p. 4,264; 50 51n 1 00w
127 **Havelock**, tn. dist., S.I., New Zealand; p. 240; 41 15s 173 45e
19 **Haverfordwest**, mun. bor., co. tn., Pem., Wales; coal, paper; p. 6,113; 51 47n 4 58w
16 **Haverhill**, urb. dist., Suffolk, Eng.; silk, textiles; p. 3,827; 52 5n 0 27e
105 **Haverhill**, cy., Mass., U.S.A.; bricks, boots and shoes, woollens; p. 48,710; 42 44n 71 8w
53 **Havsa**, tn., Turkey; 41 31n 26 50e
18 **Hawarden**, par., Flint, Wales; bricks, earthenware, coal; p. 8,016; 53 11n 2 03w
117 **Hawaii**, Pac. Oc., chief island of Hawaii Is.; has Mauna Loa, largest active volcano in world; p. 73,325; 20 0n 155 0w
117 **Hawaii Is.**, Pac. Oc.; a. 6,449 sq. m.; U.S. terr.; discovered Capt. Cook; cane sugar, pine-apples, coffee, hides, bananas, forested; cap. Honolulu; p. 368,336; 19 0 to 22 0n 155 0 to 160 0w
126 **Hawera**, bor., N.I., New Zealand; p. 4,630; 39 37s 174 18e
20 **Hawes**, par., N. Riding, Eng.; p. 1,430; 54 18n 2 11w
20 **Hawes Water**, lake, Westmor., Eng.; 2½ m. long; 54 32n 2 48w
27 **Hawick**, burgh, Rox., Scot.; tweeds, hosiery, dyeworks, tanneries; p. 17,059; 55 26n 2 46w
62 **Hawizeh**, ruins, Persia; 31 20n 47 40e
126 **Hawke Bay**, New Zealand; 39 20s 177 30e
120 **Hawker**, tn., S. Australia; 31 52s 138 28e
126 **Hawke's Bay**, prov., New Zealand; a. 4,260 sq. m.; p. 70,700; 39 40s 176 40e
121 **Hawkesbury R.**, N.S.W., Australia; 33 35s 151 15e
17 **Hawkhurst**, par., Kent., Eng.; farming, hops; p. 3,120; 51 3n 0 30e
20 **Hawkshead**, vil., Lancs., Eng.; 54 24n 3 00w
121 **Hay**, tn., N.S.W., Australia; 34 29s 144 48e
18 **Hay**, urb. dist.; Brecon, Wales; farming; p. 1,309; 52 5n 3 06w
17 **Hayes and Harlington**, urb. dist., Middx., England; p. 23,646. See Greater London.
19 **Hayle**, par., spt., Corn., Eng.; fishing, engineering; p. 915; 50 11n 5 24w
17 **Hayling I.**, Hants, Eng.; resort; 50 48n 0 58w
17 **Hayward's Heath**, par., Sussex, Eng.; county lunatic asylum; farming, cattle sales; p. 5,382; 51 1n 0 09w
67 **Hazaribrauch**, tn., Bihar, India; coal, mica; 23 58n 85 25e
36 **Hazebrouck**, tn., France; textiles, grain, live-stock; 50 44n 2 31e
98 **Hazelton**, tn., B.C., Canada; 55 18n 127 56w
104 **Hazelton**, cy., Pa., U.S.A.; coal, iron, textiles, iron and steel mnfs.; p. 36,765; 40 58n 75 59w
16 **Heacham**, par., Norfolk, Eng.; stone, corn; p. 2,248; 52 56n 0 31e
17 **Headcorn**, par., Kent, Eng.; farming, hops; p. 1,492; 51 10n 0 37e
30 **Headford**, vil., Galway, I.F.S.; p. 431; 53 28n 9 20w
16 **Heanor**, urb. dist., Derby, Eng.; coal, ironstone, lace; p. 22,381; 53 1n 1 20w
89 **Heany Junc.**, S. Rhodesia; 19 58s 28 48e
99 **Hearst**, tn., Ont., Can.; 49 40n 83 30w
121 **Hebel**, tn., Queens., Australia; 28 58s 147 17e
12 **Hebrides (Western Isles)**, Scotland; a. 2,350 sq. m.; p. 75,000; 57 0n 7 00w
116 **Hebrides, New**. See New Hebrides.
93 **Hebron**, tn., Labrador; 58 10n 62 40w
61 **Hebron**, Palestine, glass. See el Khulil.
86 **Hebron**, tn., Trans., S. Afr.; 28 20s 24 42e
98 **Hecate Strait**, B.C., Can.; 53 0n 121 0w
109 **Hecelchakan**, tn., Mexico; 20 15n 90 14w
55 **Hede**, tn., Sweden; 62 25n 13 40e
55 **Hedemora**, tn., Sweden; 60 20n 16 0e
16 **Hedingham**, vil., Essex, Eng.; 51 59n 0 37e
55 **Hedmark**, co., Norway; a. 10,621 sq. m.; p. 157,595; 61 0n 12 0e
21 **Hedon**, mun. bor., E. Riding, Eng.; farming, bricks; p. 1,508; 53 44n 0 11w
38 **Heerde**, tn., Netherlands; 52 23n 6 02w
39 **Heide**, tn., Germany; p. 10,621; 54 12n 9 05e
40 **Heidelberg**, cy., Germany; on R. Neckar; cas., univ.; beer, wine, books, scientific instruments; p. 84,641; 49 25n 8 40e
83 **Heidelberg**, tn., Trans. S. Afr.; 26 32s 28 24e
83 **Heilbron**, tn., O.F.S., S. Afr.; 27 22s 28 20e
40 **Heilbronn**, tn., Germany; on R. Neckar; metal work, machinery, chemicals, beer; p. 60,308; 49 8n 9 10e
73 **Hei-lung-kiang**, prov., Manchuria; a. 203,000 sq. m.; p. 2,500,000; 48 0n 117 40 to 130 0e
41 **Heilsberg**, tn., Germany; 54 9n 20 40e
55 **Heinola**, tn., Finland; 61 15n 26 12e
60 **Hejaz, kingdom**, Arabia; a. 150,000 sq. m. (est.); incorporated with Saudi Arabia; mainly desert; cap. Mecca; p. 1,000,000 (est.); 23 0n 40 0e
8 **Hekla**, volcano, Iceland; 5,095 ft.; 63 30n 19 0w
38 **Helder**, tn., spt., Netherlands; p. 29,339; 52 58n 4 45e
103 **Helena**, tn., Ark., U.S.A.; p. 8,316; 34 32n 90 33w
106 **Helena**, cap., Mont., U.S.A.; gold, silver, iron; smelting; p. 11,803; 46 37n 112 1w
26 **Helensburgh**, burgh, Dumb., Scot.; resort; p. 8,893; 56 1n 4 43w

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126 Helensville, tn., dist., N.I., New Zealand; p. 990; 36 42s 174 29s
78 Heliopolis, ruins, Egypt; 30 7s 31 17s
39 Hellerup, tn., Denmark; 55 42s 12 36s
21 Hellifield, par., W. Riding, Eng.; p. 966; 54 0s 2 13w
66 Helmand, riv., Afghanistan; length about 650 m.; 30 10s 62 30s
38 Helmond, tn., Netherlands; on R. Aa; textiles; p. 25,410; 51 30s 5 41s
25 Helmsdale, vil., Sutherland, Scotland; p. 750; 58 7s 3 38w
20 Helmsley, par., N. Riding, Eng.; linen, sheep; p. 1,303; 54 15s 1 03w
40 Helmstedt, tn., Germany; furniture, soap, earthenware; p. 17,166; 52 16s 11 0s
55 Helsingborg, spt., Sweden; pottery, brewing and sugar refining; p. 55,889; 56 0s 12 45s
55 Helsingfors. See Helsinki.
39 Helsingör, spt., Denmark; shipbuilding; p. 15,841; 56 2s 12 32s
55 Helsinki, spt., cap. Finland; on G. of Finland; harb., cath., univ., mus., observ.; sugar, beer, carpets; p. 241,100; 60 13s 24 58s
19 Helston, mun. bor., Corn., Eng.; copper, tin, iron, farming; p. 2,548; 50 57s 5 16w
78 Heluan, tn., Egypt; 29 51s 31 22s
20 Helvellyn, mt., Westmor., Eng.; 3,118 ft.; 54 32s 3 03w
83 Helvetia, tn., Trans. S. Afr.; 25 36s 30 24s
17 Hemel Hempstead, mun. bor., Herts, Eng.; paper, straw-plait, tanning; p. 15,122; 51 45s 0 29w
100 Hempstead, tn., N.Y., U.S.A.; p. 12,650; 40 18s 73 36w
35 Hemse, tn., Gotland, Sweden; 57 15s 18 20s
64 Hemsö, I., and tn., Sweden; 62 45s 18 20s
21 Hemsworth, urb. dist., W. Riding, Eng.; linen, cotton, coal, stone, bricks, corn; p. 13,001; 53 37s 1 21w
19 Hemyock, par., Devon, England; p. 882; 50 55s 3 13w
102 Henderson, tn., Ky., U.S.A.; cotton, tobacco, coal; p. 11,668; 37 15s 87 38w
17 Hendon, mun. bor., Middx., England; aviation centre, aeroplane works; p. 115,682. See Greater London.
17 Henley, mun. bor., Oxford, Eng.; resort on R. Thames, regatta; market gardening, brewing; p. 6,618; 51 33s 0 55w
69 Henrada, tn., Burma, India; p. 23,651; 17 25s 95 35s
63 Herat, cy., Afghanistan; p. 121,000; 34 21s 62 7s
122 Herberton, tn., Queens., Australia; copper, bismuth; 17 20s 145 12s
35 Hérault, dept., France; a. 2,402 sq. m.; wines, fruits, olives, cheese, sheep rearing; p. 514,819; 43 35s 3 35s
18 Hereford, co., England; a. 833 sq. m.; on Welsh border; one of the Marcher counties; rich in historical associations and mediæval buildings; fertile and well watered; cereals, fruit, cattle, sheep, cider, salmon, limestone; p. 111,755; 52 10s 2 45w
18 Hereford, mun. bor., co. tn., Here., Eng., on R. Wye; cath.; cider, tiles, leather; p. 24,169; 52 3s 2 41w
38 Herenthals, tn., Belgium; p. 12,086; 51 12s 4 50s
40 Herford, tn., Germany; cotton, flax, furniture, cigars; p. 35,940; 52 8s 8 20s
120 Hergott, tn., S. Australia; 29 34s 138 1s
27 Heriot, tn., Midlothian, Scot.; 55 47s 2 57w
45 Herisau, tn., Switz.; embroidery, dyeing; p. 13,719; 47 23s 9 17s
105 Herkimer, tn., N.Y., U.S.A.; p. 10,446; 43 2s 75 2w
118 Hermannsburg, tn., N. Terr., Australia; 24 0s 132 55s
34 Herm, I., Channel Is.; 49 29s 2 27w
121 Hermidale, tn., N.S.W., Australia; 31 30s 146 45s
61 Hermon, mt., Syria. See Jesh Sheikh
108 Hermosillo, cy., cap. Sonora, Mex.; distilling, silver; p. 25,000; 29 23s 110 58w
53 Hermupolis, tn., Syra, Greece; p. 21,150; 37 25s 24 58s
17 Herne Bay, urb. dist., Kent, Eng.; resort; p. 11,244; 51 22s 1 13s
39 Herning, tn., Denmark; p. 10,866; 56 8s 9 00s
54 Hernösand, tn., spt., Sweden; on G. of Bothnia; engines, saw mills; p. 11,787; 62 35s 18 0s
48 Herrera, tn., Spain; 39 10s 5 05w
83 Herschel, tn., C. of Good Hope, S. Afr.; 30 37s 27 14s
40 Hersfeld, tn., Germany; p. 11,297; 50 52s 9 40s
38 Herstal, tn., Belgium; iron and steel mnfs.; p. 24,283; 50 41s 5 38s
17 Hertford, co., England; a. 632 sq. m.; undulating, parks, woods; in N. spur of Chiltern Hills; wheat, fruit; p. 401,159; 51 45s 0 15w
17 Hertford, mun. bor., co. tn., Herts, Eng.; malting, brewing, gloves; p. 11,376; 51 48s 0 05w
117 Hervey Is., Cook Is., Pac. Oc., New Zealand; 19 30s 159 0s
47 Herzegovina, prov., Yugoslavia; 43 20s 18 0s
45 Herzogenbuchsee, tn., Switz.; 47 11s 7 41s
61 Hesban, tn., Transjordan; 31 50s 35 45s
61 Heshbon, Transjordan. See Hesban.
40 Hessen, st., Germany; a. 2,968 sq. m.; cereals, potatoes and fruit; coal, iron, salt; leather goods, chemicals, hardware, machinery, tobacco; cap. Darmstadt; p. 1,347,279; 50 20s 8 50s
40 Hessen-Nassau, prov., Germany; a. 6,472 sq. m.; forested; rivers, Rhine, Weser, Main and Lahn; cereals, tobacco, flax, potatoes; numerous mineral spas.; iron, coal, copper; cap. Cassel; p. 2,452,788; 51 0s 9 00s
21 Hessle, parish, E. Riding, Eng.; p. 6,430; 53 44s 0 26w
55 Hessleholm, tn., Sweden; 56 10s 13 50s
17 Heston and Isleworth, mun. bor., Middx., England; market gardening; p. 75,440. See Greater London.
20 Hexham, urb. dist., Northumb., Eng.; coal, hats, gloves; p. 8,888; 54 58s 2 06w
21 Heysham, tn., spt. See Morecambe.
38 Heyst, tn., Belgium; seaside resort; 51 5s 4 43s
19 Heytesbury, par., Wilts., England; p. 496; 51 12s 2 06w
120 Heywood, tn., Vic., Australia; 53 35s 2 13w
109 Hidalgo, st., Mexico; a. 8,637 sq. m.; mixed farming, coffee, sugar, tobacco, mining; cap. Pachuca; p. 627,901; 26 10s 104 49w
127 High Snow Range, New Zealand; 42 46s 172 10s

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44 High Tauern, mts., Austria; 47 10s 12 50s
17 High Wycombe (Chepping Wycombe), mun. bor., Bucks, Eng.; famous girls' public school; chairs, paper; p. 27,987; 51 38s 0 45w
16 Higham Ferrers, mun. bor., Northants, Eng.; boots; p. 2,028; 53 19s 0 36w
19 Highbridge, par., Som., Eng.; bricks; p. 2,584; 51 13s 2 57w
17 Highclere, tn, Hants, Eng.; 51 19s 1 20w
19 Highworth, par., Wilts, Eng.; p. 2,072; 51 37s 1 43w
40 Hildburghausen, tn., Germany; 50 25s 10 43s
40 Hildesheim, tn., Germany; cath.; machinery, farm impl., bell foundry, sugar, cigars, brewing and tanning; p. 62,519; 52 10s 9 58s
62 Hills. tn., Iraq.; p. 30,000; 32 15s 44 35s
39 Hilleröd, tn., Denmark; p. 6,822; 55 56s 12 18s
121 Hillgrove, tn., N.S.W., Australia; 30 31s 151 54s
107 Hillsboro', tn., Texas, U.S.A.; p. 7,823; 32 0s 97 10w
31 Hillsborough, tn., Down, N. Ireland; p. 544; 54 28s 6 05w
25 Hillside, par., Angus, Scotland; p. 1,748; 56 44s 2 28w
121 Hillston, tn., N.S.W., Australia; 33 28s 145 51s
22 Hillswick, vil., Shetland Is., Scotland; 60 35s 1 35w
38 Hilversum, tn., Netherlands; summer resort; wireless broadcasting stn., carpets; p. 57,084; 52 13s 5 10s
67 Himalayas, India; extensive mountain system in N. India, about 1,600 m. in length, containing highest peaks in the world, Everest 29,002 ft., Godwin-Austen 28,250 ft., Karakoram Pass 18,687 ft.; numerous glaciers; on slopes, many hill-stations, Simla, Darjeeling, etc.; 30 0s 80 30s
16 Hinckley, urb. dist., Leics., Eng.; hosiery, boots; p. 16,030; 52 33s 1 22s
41 Hindenburg, tn., Germany; chemicals, beer, glass, coal; p. 130,433; 50 20s 18 50s
20 Hinderwell, par., N. Riding, Eng.; fisheries, ironstone; p. 2,147; 54 32s 0 45w
120 Hindmarsh, lake, Vic., Australia; 36 0s 141 5s
66 Hindu Kush, Asia; range of mts. 350 m. in length; highest peak, Tirach Mir 25,400 ft.; 36 0s 71 0s
68 Hindupur, tn., Mad., India; 13 45s 77 30s
16 Hingham, par., Norfolk, England; p. 1,413; 52 34s 0 59s
73 Hirosaki, tn., Japan; lacquer ware; p. 46,013; 40 28s 140 32s
75 Hiroshima, tn., Japan; bronze, lacquer work; p. 310,117; 34 28s 132 28s
41 Hirschberg, tn., Germany; lace, linen, cotton, paper, porcelain; p. 28,673; 50 55s 15 48s
111 Hispaniola. See Haiti.
66 Hissar, tn., India; p. 21,415; 29 14s 75 44s
62 Hit, tn., Iraq; 33 32s 42 51s
16 Hitchin, urb. dist., mkt. tn., Herts, Eng.; malting, chalk, straw-plait; p. 14,382; 51 57s 0 18w
74 Hiu-chow, tn., China; 34 3s 113 57s
55 Hjo, tn., Sweden; 58 20s 14 20s
39 Hjörring, tn., Denmark; textiles, engineering; p. 11,126; 57 20s 10 0s
87 Hlobane, tn., Natal, S. Afr.; 37 40s 30 45s
121 Hobart, spt., cap. Tas., Australia; government ho., univ.; fruit-growing centre; brewing, flour and saw mills, tanning; p. 57,800; 42 49s 147 17s
27 Hobkirk, par., Roxburgh, Scotland; p. 555; 55 23s 2 40w
105 Hoboken, cy., port, N.J., U.S.A.; on R. Hudson; iron foundries, lead pencils, silk; p. 59,261; 40 48s 74 0w
99 Hobon, tn., Ont., Can.; 48 30s 84 25w
39 Hobro, tn., Denmark; p. 6,425; 56 39s 9 50s
37 Höchst, tn., Germany; on R. Main; machinery, dyes, tanning, brewing; p. 31,534; 50 6s 8 34s
127 Hochstetter, mt., New Zealand; 42 32s 172 10s
17 Hoddesdon, urb. dist., Herts, Eng.; brewing; p. 6,811; 51 45s 0 01w
60 Hodeida, spt., in Red Sea; Arabia; 14 40s 42 57s
46 Hódmezö-Vásárhely, tn., Hungary; wheat, tobacco, fruit; horses, cattle, pigs; p. 60,176; 46 27s 20 21s
40 Hof, tn., Germany; on R. Saale; textiles, sugar, dyes, chemicals, hardware; p. 41,377; 50 20s 11 54s
69 Hofhuf, tn., Arabia; p. 30,000 (est.); 25 18s 49 36s
83 Hofmeyr, tn., C. of Good Hope, S. Afr.; 23 3s 29 35s
39 Höganäs, tn., Sweden; 56 14s 12 31s
17 Hog's Back, Surrey, Eng.; chalk ridge, 505 ft.; 51 14s 0 40w
40 Hohenlinden, vil., Germany; 48 10s 12 0s
40 Hohenzollern, prov., Germany; a. 441 sq. m.; p. 71,840; 48 20s 9 00s
39 Höjer, tn., Denmark; 54 58s 8 44s
74 Ho-kien, tn., China; 38 35s 116 0s
127 Hokitika, bor., S.I., New Zealand; tanning, sawmills; p. 2,485; 42 42s 171 1s
75 Hokkaido, I. (Yezo), Japan; a. 30,114 sq. m.; forested; timber, fishing; 43 30s 142 30s
39 Holboek, tn., Denmark; p. 12,473; 55 43s 11 46s
16 Holbeach, par., mkt. tn., Holl., Lincs., Eng.; agriculture, brewing; p. 6,111; 52 49s 0 01s
17 Holborn, met. bor., London, England; contains Bloomsbury, and Hatton Garden, centre of diamond trade; principal institutions, British Museum, Lincoln's Inn, Gray's Inn; p. 38,816. See London.
21 Holderness, dist., E. Riding, Eng.; 53 50s 0 10w
38 Holland. See Netherlands.
16 Holland, administrative co., Lincs., Eng.; p. 92,313; 52 50s 0 06w
102 Holland, tn., Mich., U.S.A.; p. 14,345; 42 48s 86 7w
38 Holland, North, prov., Neth.; dairying, cattle rearing, flower bulbs, fishing, shipbuilding; cap. Haarlem; p. 1,503,354; 52 30s 4 50s
38 Holland South, prov., Neth.; farming and dairying; chief tn. Rotterdam; p. 1,951,046; 52 0s 4 30s
21 Holmfirth, urb. dist., W. Riding, Eng.; woollen cloth, stone; p. 10,407; 53 35s 1 48w
55 Holmsbu, tn., Norway; 59 35s 10 30s
39 Holstebro, tn., Denmark; p. 10,015; 56 22s 8 39s
19 Holsworthy, urb. dist., Devon, Eng.; farm produce; p. 1,403; 50 48s 4 20w
18 Holt, par., Denb., Wales; p. 1,265; 53 5s 2 54w
16 Holt, par., Norf., Eng.; leather; p. 2,249; 52 56s 1 06s
54 Holtaalen, tn., Norway; 62 55s 11 15s
18 Holy I., Angl., Wales; 53 18s 4 38w

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20 Holy I., Northumb., Eng.; known also as Lindisfarne; here St. Aidan founded monastery in 7th century from which he preached the conversion of the Northumbrians; 55 42s 1 48w
18 Holyhead, urb. dist., spt., Angl., Wales; mail packet stn. for Ireland; p. 10,707; 53 20s 4 37w
18 Holyhead B., Angl., Wales; 53 25s 4 37w
102 Holyoke, cy., Mass., U.S.A.; on Connecticut R., water power stn.; paper, machinery; p. 56,537; 42 12s 72 45w
27 Holytown, par., Lanark, Scot.; coal mining, steelworks; p. 20,669; 55 49s 3 58w
18 Holywell, urb. dist., Flint, Wales; coal, lead, zinc, hardware; p. 3,423; 53 17s 3 13w
31 Holywood, urb. dist., Down, N. Ire.; resort; p. 4,827; 54 38s 5 51w
40 Holsminden, tn., Germany; on R. Weser; ironwork, chemicals, manures; p. 12,192; 51 48s 9 26s
40 Homburg, tn., Germany; spa; machinery, dyes, leather work, hats; p. 26,290; 50 15s 8 38s
62 Homs, tn., Syria; p. 52,792; 34 40s 36 43s
74 Honan, tn., China; 34 50s 113 0s
74 Honan, prov., China; a. 67,954 sq. m.; cereals, coal; cap. Kaifeng; p. 35,289,752; 32 0 to 37 0s 110 0 to 116 0s
36 Hondschoote, France; 50 58s 2 35s
110 Honduras, Rep., Cent. America; a. 44,275 sq. m.; mountainous, fertile valleys; bananas, coconuts, coffee; rich in minerals—gold, silver, copper, iron; cap. Tegucigalpa; p. 902,685; 13 0 to 17 0s 83 0 to 89 0w
110 Honduras, G. of, Cent. America; 16 30s 88 0w
55 Hönefoss, tn., Norway; 60 10s 10 10s
74 Hong Kong, I., Br. naval stn., China; the island and portion of mainland (Kowloon) forms a British cr. col.; univ., harb.; cap. Victoria; p. (civil) 840,473; 22 20s 113 55s
19 Honiton, mun. bor., Devon, Eng.; lace, thread; p. 3,003; 50 48s 3 12w
117 Honolulu, cap. and spt., Oahu I., Hawaii Is.; Pac. Oc.; fruit canning, sugar; p. 137,582; 21 25s 157 55w
75 Honshu, I. (Mainland). See Japan.
36 Hooge, vil., Belgium; 58 51s 2 56s
38 Hoogeveen, tn., Netherlands; p. 15,331; 52 43s 6 28s
69 Hooghly, tn., Bengal, India; mosque; 25 57s 88 30s
67 Hooghly, R., India; western mouth of R. Ganges; 21 45s 88 10s
36 Hooglede, tn., Belgium; 50 58s 3 05s
38 Hook of Holland, Netherlands; packet stn.; 51 57s 4 06s
98 Hooker Mt., B.C., Can.; 52 20s 119 0w
83 Hoopstad, tn., O.F.S., S. Afr.; 28 0s 26 18s
38 Hoorn, tn., spt., Netherlands; cheese and cattle mkts.; p. 12,026; 52 39s 5 04s
98 Hope, B.C., Canada; 49 19s 121 20w
93 Hopedale, tn., Labrador; 55 35s 60 30w
83 Hopefield, tn., C. of Good Hope, S. Afr.; 33 10s 18 20s
83 Hopetown, C. of Good Hope, S. Afr.; 29 36s 24 6s
120 Hopetoun, tn., Vic., Australia; 35 43s 142 12s
125 Hopetoun, W. Australia; 33 58s 120 2s
103 Hopkinsville, cy., Ky., U.S.A.; tobacco, live stock; p. 10,746; 36 55s 87 30w
55 Hordaland, co., Norway; a. 6,043 sq. m.; p. 154,268; 61 0s 6 50s
45 Horgen, tn., Switzerland; 47 16s 8 35s
63 Hormuz, Str. of, Persia; 26 30s 56 30s
113 Horn, C., Argentina; most S. point of S. America, navigation usually difficult; 55 0s 67 0w
16 Horncastle, urb. dist., mkt. tn., Lincs., Eng.; malting, coal, corn, horse fair; p. 3,496; 53 13s 0 06w
102 Hornell, cy., N.Y., U.S.A.; p. 18,250; 42 23s 77 41w
21 Hornsea, urb. dist., E. Riding, Eng.; resort; p. 4,450; 53 55s 0 11w
17 Hornsey, mun. bor., Middx., England; p. 95,324. See Greater London.
39 Horsens, spt., Denmark; weaving, tobacco, electrical goods; p. 28,363; 55 52s 9 51s
21 Horsforth, urb. dist., W. Riding, Eng.; stone quarries, cloth; p. 11,770; 53 50s 1 38w
17 Horsham, urb. dist., Sus., Eng.; Christ's Hospital (Bluecoat School); foundries, malting bricks; p. 13,579; 51 4s 0 20w
120 Horsham, tn., Vic., Australia; 36 40s 142 12s
55 Horten, spt., Norway; shipbuilding; p. 10,797; 59 30s 10 23s
18 Horwich, urb. dist., Lancs., Eng.; bleaching, calico printing, cotton, paper, coal, stone; p. 15,830; 53 36s 2 34w
32 Hospital, vil., Limerick, I.F.S.; p. 620; 52 28s 8 26w
127 Hot Springs, tn., New Zealand; 42 43s 172 45s
103 Hot Springs, tn., Ark., U.S.A.; resort; p. 20,233; 34 30s 93 6w
38 Houffalize, tn., Belgium; 50 8s 5 46s
20 Houghton-le-Spring, urb. dist.; Dur., Eng.; coal; p. 10,492; 54 51s 1 26w
107 Houston, cy., port, Tex., U.S.A.; rail. centre, canal to coast; oil refineries, machinery; p. 292,352; 29 49s 95 20w
17 Hove, mun. bor., Sus., Eng.; resort; p. 54,949; 50 50s 0 12w
20 Hovingham, vil., N. Riding, England; p. 411; 54 10s 0 58 w
123 Howard, tn., Queens., Australia; 25 16s 152 33s
67 Howrah, tn., India; cotton, jute; shipbuilding; p. 222,488; 22 37s 88 17s
121 Howe, C., N.S.W., Australia; 37 32s 149 58s
21 Howden, par., E. Riding, Eng.; farming; p. 2,032; 53 44s 0 50w
87 Howick, tn., Natal, S. Afr.; 29 28s 30 15s
33 Howth, urb. dist., Dublin, I.F.S.; resort, fishing; p. 4,032; 52 23s 6 04w
25 Hoy, Caithness, Scot., 58 32s 3 28w
22 Hoy, I., Orkney Is., Scotland; 58 50s 3 18w
18 Hoylake and West Kirby, urb. dist., Cheshire, Eng.; fishing; p. 15,628; 53 23s 3 11w
73 Hsinking, tn., cap. Manchukuo, formerly Changchun. See Changchun.
112 Huacho, tn., Peru; p. 20,000; 11 10s 77 30w
109 Huamantla, Mexico; 19 20s 98 8w
114 Huancavelica, tn., Peru; 12 52s 75 4w
112 Huanuco, tn., Peru; 9 40s 76 15w

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112 **Huaráz**, tn., Peru; mineral springs, copper, silver; p. 20,000; 9 30s 77 25w
112 **Huascan, Mt.**, Peru; 22,150 ft.; 9 00s 77 40w
68 **Hubli**, tn., Bom., India; cotton; p. 69,206; 15 25n 75 15e
74 **Hu-chow**, tn., China; 30 55n 120 0e
16 **Hucknall**, urb. dist.; Notts., Eng.; hosiery, coal; p. 17,338; 53 3n 1 12w
21 **Huddersfield**, co. bor.; W. Riding, Eng.; on R. Colne; woollens, worsteds, silk, steam engines, iron foundries, coal, quarries; p. 113,475; 53 39n 1 47w
55 **Hudiksvall**, spt., Sweden; p. 7,321; 61 45n 17 0e
105 **Hudson**, cy., N.Y., U.S.A.; on Hudson R.; hosiery, cement; p. 12,387; 42 12n 73 51w
99 **Hudson B.**, Canada; inland sea, connected by Hudson Strait with the Atlantic Ocean, 1,300 m. long, 600 m. wide; Churchill; a. 400,000 sq. m.; salmon, cod; 55 20 to 63 0n 78 0 to 94 20w
99 **Hudson Bay Jc.**, Sask., Canada; 53 0n 102 5w
102 **Hudson, R.**, U.S.A.; Hudson-Mohawk route connects with L. Erie; 41 40n 74 0w
93 **Hudson Str.**, Can.; connects Hudson Bay with Atlantic Ocean; open to navigation for 2 or 3 months annually; 63 0n 73 0w
70 **Hué**, tn., cap. of Annam, Fr. Indo-China; glass, ivory work; 16 30n 107 35e
109 **Huejutla**, tn., Mexico; 21 5n 98 35w
48 **Huelva**, tn., cap. of prov., Spain; fishing; valuable copper mines in prov.; wine, fruit, fishing; p. 44,872; 37 16n 6 55w
49 **Huércal Overa**, tn., Spain; silver, lead and copper; p. 16,000; 37 22n 2 02w
49 **Huesca**, tn., cap. of prov., Spain; cath., pottery, leather, wine, cereals; p. 14,632; 42 8n 0 25w
49 **Huete**, tn., Spain; 40 8n 2 42w
123 **Hughenden**, tn., Queens., Australia; 20 50s 143 40e
80 **Huilla**, tn., Angola; 15 0s 14 0e
97 **Hull**, tn., Que., Can.; lumbering, pulp and paper, matches; p. 29,433; 45 28n 75 43w
21 **Hull**, co. bor., spt.; E. Riding, Eng.; officially named Kingston-upon-Hull; univ., coll.; docks; fishing, shipbuilding, rope, machinery, chemicals, tanning, veg. oils; p. 313,366; 53 45n 0 20w
83 **Humansdorp**, tn., C. of Good Hope, S. Afr.; 34 2s 24 45e
112 **Humayta**, tn., Brazil; 7 40s 63 10w
80 **Humbe**, tn., Angola; 16 47s 15 6e
21 **Humber, R.**, England; estuary of Yorkshire Ouse and R. Trent between Yorkshire and Lincolnshire; 53 42n 0 33w
90 **Humboldt**, tn., Sask., Can.; farming; p. 1,899; 52 23n 105 20w
121 **Hume Reservoir**, Vic., Australia; 36 5s 147 10w
73 **Hunan**, prov., China; a. 83,398 sq. m.; coal, zinc; tea, wheat, rice; cap. Chang-sha; p. 40,529,988; 25 0 to 30 0n 109 0 to 113 45e
73 **Hunchun**, tn., Manchuria; p. 37,535; 43 0n 130 30e
46 **Hungary**, king., Cent. Eur.; a. 35,875 sq. m.; chief physical features, central plain of treeless steppes; R. Danube, R. Tisza, Carpathian Mts., L. Balaton; chief industries, agriculture, wheat, maize, potatoes, sugar-beet; pastoral, horse breeding, cattle, sheep, pigs; mineral, coal, lignite, bauxite; milling, brewing, sugar; cap. Budapest; p. 8,688,319; 46 0 to 49 0n 16 0 to 22 0e
121 **Hungerford**, tn., Queens., Australia; 29 0s 144 38e
17 **Hungerford**, par., Berks, Eng.; cattle; p. 2,784; 51 25n 1 31w
20 **Hunmanby**, par., E. Riding, Eng.; bricks, tiles; p. 1,501; 54 11n 0 20w
16 **Hunstanton**, urb. dist., Norf., Eng.; resort; p. 3,131; 52 58n 0 31e
121 **Hunter, R.**, N.S.W., Australia; 32 30s 151 2e
126 **Hunterville**, tn. dist., N.I., New Zealand; p. 635; 39 57s 175 36e
97 **Huntingdon**, tn., Que., Can.; p. 1,619; 45 8n 74 12w
16 **Huntingdon**, co., Eng.; a. 644 sq. m.; level country; farming, pastoral, fruit; paper; p. 56,204; 52 10 to 52 34n 0 05n to 0 25w
16 **Huntingdon**, mun. bor., co. tn., Hunts, Eng.; native town of Oliver Cromwell; breweries, nurseries, bricks; p. 4,106; 52 21n 0 11w
102 **Huntington**, tn., W. Va., U.S.A.; on R. Ohio; machinery; lumber; p. 75,572; 38 24n 82 30w
126 **Huntly**, tn., dist., N.I., New Zealand; p. 1,810; 37 33s 175 10e
25 **Huntly**, burgh, Aber., Scot.; farming, woollens; p. 3,778; 57 27n 2 47w
103 **Huntsville**, tn., Ala., U.S.A.; p. 11,554; 34 24n 86 32w
107 **Huntsville**, tn., Tex., U.S.A.; p. 5,028; 30 40n 95 24w
66 **Hunza**, tn., India; 36 22n 74 35e
74 **Hupeh**, prov., China; a. 71,428 sq. m.; tea, cotton, wheat, coal, paper; p. 28,616,576; 29 10 to 33 10n 108 0e to 116 15e
26 **Hurlford**, tn., Ayr, Scot.; iron, fire-clay, worsteds; p. 4,696; 55 36n 4 27w
107 **Huron**, tn., S.D., U.S.A.; meat products; p. 10,946; 44 30n 98 17w
91 **Huron, L., N. America**; one of Great Lakes; a. 23,010 sq. m.; 44 35n 82 20w
52 **Husi**, Rumania; tobacco, wine; p. 16,792; 46 45n 28 11e
107 **Hutchinson**, cy., Kan., U.S.A.; on Arkansas R.; flour mills, salt works; p. 27,085; 38 1n 98 0w
127 **Hutt**, bor., N.I., New Zealand; p. 12,580; 41 10s 175 5e
39 **Hvidbjerg**, tn., Denmark; 56 50n 8 20e
74 **Hweichow**, tn., China; 23 0n 114 30e
74 **Hwai-king**, tn., China; 35 0n 113 0e
74 **Hwang-chow**, tn., China; 30 40n 115 1e
74 **Hwang-Ho (Yellow River)**, China; length 2,600 m., one of chief rivers in China, rises in Tibet; subject to disastrous floods, one of which changed its course; 38 0n 119 0e
74 **Hwang-hai (Yellow Sea)**, China; between Korea and China, 400 m. wide; 34 0 to 37 20n 119 30 to 126 0e
18 **Hyde**, mun. bor., Ches., Eng.; cotton, iron foundries; p. 32,075; 53 27n 2 05w
125 **Hyden**, tn., West. Australia; 32 30s 118 58e
68 **Hyderabad**, st., India; also called Nizam's Dominions, lies between Bombay and Madras; rivers, Godavari

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and Kistna; rice, cotton, wheat; a. 82,698 sq. m.; cap. Hyderabad; p. 14,436,148; 15 0 to 20 30n 74 30 to 81 0e
68 **Hyderabad**, cy., cap. of st., Hyd., India; walled city, Nizam's pal.; commercial centre; precious metal work; p. 377,006; 17 16n 78 28e
66 **Hyderabad**, tn., Sind, India; silks, metal work; p. 81,838; 25 25n 68 22e
35 **Hyères**, tn., France; winter resort; vines, oranges, flowers, fruit; p. 22,955; 43 6n 6 07e
17 **Hythe**, mun. bor., Kent, Eng.; resort; one of the Cinque Ports; coal; p. 8,397; 51 5n 1 05e

71 **Iba**, Philippine Is.; 15 20n 120 0e
88 **Ibadan**, walled cy., Nigeria; tobacco, silk; p. 175,000; 7 22n 3 54e
114 **Ica**, tn., Peru; p. 9,200; 14 0s 75 30w
8 **Iceland**, king., Eur.; a. 39,709 sq. m.; ind. st. united with Denmark through common king.; tableland 1,500 to 2,000 ft. high; largely volcanic; highest vol. Oræjökull (6,430 ft.); geysers and hot springs; cattle, sheep, fishing; cap. Reykjavik; p. 108,861; 65 0s 18 0w
74 **I-chang**, treaty port, Hupeh, China; on Yang-tze kiang R.; cotton, rice, oil; p. 112,309; 31 0s 111 15e
74 **Ichow**, China; 35 5n 118 30e
53 **Ida, Crete**; p. 3,058 ft.; 35 15n 24 47e
106 **Idaho**, st., U.S.A.; a. 83,888 sq. m.; mainly mountainous; fertile valleys; wheat; lumbering; gold, silver, copper; sulphur, gypsum; cap. Boise; p. 432,000; 42 0 to 49 0n 111 0 to 117 0w
106 **Idaho Falls**, Idaho, U.S.A.; p. 9,429; 43 30n 112 5w
88 **Idda**, Nigeria; 7 0n 6 42e
16 **Idle, R.**, Notts, Eng.; 53 27n 0 54w
30 **Idria**, Italy; 46 0n 14 0e
75 **Idzuhara**, Japan; 34 12n 129 12e
76 **Ifni**, Span. col., N.W. Africa; a. 965 sq. m.; p. 20,000; 29 30n 10 0w
59 **Igarka**, port, U.S.S.R.; mth. of Yenisei R.; p. 13,000 (est.); 70 50n 84 0e
10 **Igidi**, Algeria; 28 30n 4 00w
46 **Iglau**. See Jihlava.
51 **Iglesias**, tn., Sardinia; cath., cas.; lead and zinc mines; p. 20,000; 39 20n 8 28e
10 **Ighil**, Algeria; 29 45n 1 40e
99 **Ignace, Ont., Can.**; 49 24n 91 43w
109 **Iguala**, Mexico; 18 17n 99 42w
115 **Iguape**, tn., Brazil; 24 32s 47 13w
112 **Iguatu**, Brazil; 6 00s 39 57w
116 **Iguazu Falls**, Brazil; 25 30s 54 30w
52 **Ihtiman**, Bulgaria; p. 5,401; 42 23n 23 47e
54 **Ii**, Finland; 65 20n 25 31e
56 **Ijevsk**, Russia; 56 50n 53 1e
38 **Ijmuiden**, harb., Neth.; 52 27n 4 36e
70 **Ilagan, Luzon, Phil. Is.**; tobacco; p. 23,000; 17 0n 121 45e
19 **Ilchester**, par., Som., Eng.; old Roman town; Roger Bacon, medizval scientist, born nearby; p. 449; 51 0n 2 40w
34 **Ile de France**, old prov., France; 49 10n 2 45e
35 **Ile de Ré**, fort, France; 46 13n 1 30w
35 **Ile d'Oleron**, France; grain and salt; 45 55n 1 20w
35 **Iles d'Hyéres**, France; 43 0n 6 25e
57 **Ilezk**, tn., Russia; 51 12n 54 59e
57 **Ilezki Gorodok**, Russia; salt mines, brine baths; p. 11,600; 51 29n 53 29e
17 **Ilford**, mun. bor., Essex, Eng.; paper; p. 131,046; 51 34n 0 05e
19 **Ilfracombe**, urb. dist., Dev., Eng. watering-pl.; fishing; p. 9,174; 51 13n 4 07w
48 **Ilhavo**, spt., Portugal; glass, porcelain; salt, fisheries; p. 13,000; 40 34n 8 40w
112 **Ilhéos**, Brazil; p. 8,000; 14 48s 39 2w
72 **Iliisk**, tn., Siberia; 43 57n 77 11e
61 **Ilijik**, tn., U.S.S.R.; 39 30n 63 0e
59 **Ilimsk**, fort, spt., U.S.S.R.; 56 20n 104 10e
54 **Ilinsalmi**, Finland; 63 38n 27 30e
43 **Ilja**, tn., Poland; 51 12n 21 15e
16 **Ilkeston**, mun. bor., Derby, Eng.; hosiery, coal; p. 32,809; 52 59n 1 19w
21 **Ilkley**, urb. dist., W. Riding, Eng.; mineral springs; p. 9,721; 53 55n 1 49w
113 **Illapel, Chile**; 31 30s 71 10w
114 **Illarapi, Mt., Bolivia**; 21,520 ft.; 15 40s 68 30w
34 **Ille-et-Vilaine**, dept., France; a. 2,697 sq. m.; grain, market gardens, flax, hemp, iron, lead, zinc, granite; cap. Rennes; p. 562,538; 48 4n 1 40w
114 **Illimani**, mt., Bolivia; pk. 21,192 ft.; 16 30s 67 45w
102 **Illinois R.**, U.S.A.; 40 20n 90 0w
102 **Illinois**, st., U.S.A.; a. 56,665 sq. m.; chief rivers, Mississippi, Ohio, Illinois; L. Michigan on N.E.; maize, wheat, oats; canning, ironfounding; coal, petroleum, zinc; largest cy. Chicago; cap. Springfield; p. 6,500,000; 37 0 to 42 30n 87 30 to 91 30w
56 **Ilmen L.**, Russia; 30 m. long; fisheries; 58 15n 31 20e
19 **Ilminster**, urb. dist., Som., Eng.; cloth, silk, flax; p. 2,232; 50 56n 2 53w
71 **Iloilo**, spt., Panay I., Phil. Is.; sugar, tobacco; p. 49,000; 10 50n 122 30e
80 **Ilorin**, tn., Nigeria; farming, forestry; p. 73,000; 8 30n 4 30e
62 **Imbros I.**, Turkey; a. 100 sq. m.; in Ægean Sea; cereals, olives; p. 9,000; 40 10n 25 50e
16 **Immingham**, par., port, Lincs., Eng.; large docks; p. 2,150; 53 38n 0 12w
50 **Imola**, tn., Italy; cath.; glass, pottery; p. 37,000; 44 20n 11 41e
69 **Imphal**, tn., cap. of Manipur; p. 80,000; 24 45n 94 0e
49 **Inca**, Spain; 39 43n 2 56e
26 **Inch**, par., Wig., Scot.; p. 3,761; 54 55n 4 57w
27 **Inchture**, par., Perth, Scot.; p. 490; 56 27n 3 10w
64 **India**, Asia; a. 1,805,322 sq. m.; greatest length 2,050 m., width 2,000 m.; physical features; chief rivers, Indus, Ganges, Irrawaddy, Godavari, etc.; mountains, Himalayas (Everest 29,002 ft.), E. and W. Ghats, Ganges Plain (densely populated), Deccan Plateau (black earth region—cotton growing); chief industries, agriculture (32,000,000 acres under irrign.), rice, wheat, millet, sugar-cane, cotton, jute,

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tea, rubber, etc.; cattle, sheep, goats; forests, timber; minerals, coal, petroleum, manganese, lead, zinc, silver, gold; mnfs., cotton and jute mills, railway workshops, rice mills, engineering and machinery, tea factories, etc.; good railway communication, important sea-borne trade; All India Federation comprises 16 provinces, including many native states; cap. Delhi, largest town Calcutta; p. 352,837,778; 8 00 to 37 0n 61 0 to 101 0e
102 **Indiana**, st., U.S.A.; a. 36,354 sq. m.; prairie country; chief rivers, Wabash, Ohio; L. Michigan N.W. corner; farming, wheat, maize, oats, potatoes, fruits and vegetables; iron and steel foundries, canning, woollens and agricultural implements; cap. Indianapolis; p. 2,930,400; 39 50n 85 0w
104 **Indiana, Pa., U.S.A.**; p. 9,569; 40 37n 79 11w
102 **Indianapolis**, Ind., U.S.A.; rly. centre; large farming trade; canning; cap. Indiana; p. 364,161; 39 45n 86 17w
99 **Indian Head**, tn., Sask., Can.; p. 1,438; 50 35n 103 40w
4 **Indian Ocean**, lies between Africa on W., Asia on N., Malay Archipelago and Australia on E., and Southern Ocean; mean depth 2,300 fathoms; receives rivers from Asia and Africa; a. 28,000,000 sq. m.; 10 0s 75 0e
66 **Indore**, tn., Cent. India; cotton; cap. of Indore St. p. 127,327; 22 44n 75 52e
70 **Indrapura, Mt., Sumatra**; height 12,482 ft.; 2 00s 101 0e
35 **Indre**, dept., France; a. 2,664 sq. m.; cereals, vines, sugar-beet, live-stock, lithographic stones; cap. Châteauroux; p. 247,912; 46 46n 1 30e
34 **Indre-et-Loire**, dept., France; a. 2,377 sq. m.; grain, wines, silk, pottery, bar iron; cap. Tours; p. 335,226; 47 12n 0 45e
66 **Indus, riv., India**; chief river of N.W. India, flows through Tibet, Kashmir, Punjab and Sind to the Arabian Sea; tribs. Jhelum, Chenab, Ravi and Sutlej; length 1,500 m.; drainage area 372,000 sq. m.; 28 40n 70 15e
62 **Ineboli**, tn., Turkey; 41 50n 33 52e
122 **Ingham**, vil., Queens., Australia; p. 950; 18 34s 146 15e
20 **Ingleboro', Mt., W. Riding, Eng.**; 2,373 ft. high; 54 12n 2 22w
20 **Ingleton**, par., W. Riding, Eng.; oatmeal, tanning, cloth, cotton; p. 2,464; 54 9n 2 29w
121 **Inglewood**, Queens., Australia; 28 27s 151 8e
120 **Inglewood**, mun. bor., Vic., Australia; p. 1,500; 36 32s 143 48e
126 **Inglewood**, bor., N.I., New Zealand; p. 1,265; 39 10s 174 12e
40 **Ingolstadt**, tn., Germany; on R. Danube; univ.; iron foundry, machinery; p. 26,630; 48 46n 11 25e
57 **Ingushetia**, div., Russia; 43 15n 44 55e
83 **Inhambane**, spt., Mozam.; sugar, copra, oil seeds; p. 20,000; 23 53s 35 27e
30 **Inishcrone**, vil., Sligo, I.F.S.; p. 359; 54 13n 9 05w
127 **Inland Kaikouras**, mts., New Zealand; 42 0s 171 36e
75 **Inland Sea, Japan**; length 250m., breadth 10 to 40 m.; 34 30n 133 30e
120 **Innamincka**, S. Australia; 27 45s 140 46e
27 **Innerleithen**, burgh, Peebles, Scot.; mineral springs, woollens; p. 2,359; 55 37n 3 03w
27 **Innerwick**, par., E. Lothian, Scot.; p. 633; 55 58n 2 27w
122 **Innisfail**, tn., Queens., Australia; 17 38s 146 0e
32 **Innishannon**, par., Cork, I.F.S.; p. 1,323; 51 46n 8 40w
31 **Innishkeen**, par., Monaghan, I.F.S.; p. 1,438; 54 0n 6 35w
46 **Innsbruck**, cap. Tyrol, Aust.; on R. Inn; univ.; cas.; textiles, glass; tourist centre; p. 56,401; 47 17n 11 24e
25 **Insch**, vil., Aberdeen, Scot.; p. 290; 57 21n 2 37w
45 **Interlaken**, tn., Switz.; tourist resort in Bernese Oberland from which magnificent views of Jungfrau obtainable; p. 3,000; 46 14n 7 50e
25 **Inverallochy**, par., Aber., Scot.; p. 1,804; 57 40n 1 56w
26 **Inveraray**, burgh, co. tn., Argyll, Scot.; herring fishing; p. 445; 56 14n 5 05w
27 **Inverarity**, par., Angus, Scot.; p. 809; 56 36n 2 53
127 **Invercargill**, cy., N.I., New Zealand; sawmills; meat-freezing plants; p. 20,045; 46 23s 168 21e
121 **Inverell**, tn., N.S.W., Australia; wheat and maize; silver; p. 5,000; 29 45s 151 3e
24 **Invergarry**, ham., Inver., Scot.; 57 4n 4 47w
25 **Invergordon**, burgh, spt., Ross and Crom., Scot.; bone crushing; p. 1,417; 57 40n 4 10w
25 **Invernairy**, par., Angus, Scotland; p. 809; 56 46n 3 19w
27 **Inverkeithing**, burgh, Fife, Scot.; shipbuilding, paper, leather; p. 3,153; 56 3n 3 24w
25 **Inverkeithing**, par. Banff, Scot.; p. 667; 57 31n 2 38w
26 **Inverkip**, par., Renfrew, Scot.; p. 12,901; 55 55n 4 52w
24 **Inverness**, co., Scot.; includes Skye, Harris, and southern islands of the Outer Hebrides; a. 4,211 sq. m.; surface mountainous and well wooded; Ben Nevis 4,406 ft.; chief rivers, Spey, Findhorn, Beauly; chief lochs, Ness, Lochy, Laggan, Ericht, Arkaig, Quoich, Garry, Affric; little cultivation; deer forests and grouse moors; fishing; sheep breeding, distilleries; p. 82,082; 56 40 to 58 0n 3 30 to 7 30w
25 **Inverness**, burgh, co. tn., Inverness, Scot., "capital of the Highlands"; cath., cas., academy; N.E. terminus of Caledonian Canal; shipbuilding, iron, woollens; p. 22,582; 57 29n 4 13w
25 **Inverurie**, burgh, Aber., Scot.; trade centre, railway works; p. 4,524; 57 17n 2 22w
120 **Investigator Group (Isles)**, S. Australia; 33 30s 134 17e
120 **Investigator Str.**, S. Australia; 35 15s 137 0e
89 **Inyanga**, S. Rhodesia; 18 30s 32 0e
89 **Inyati**, tn., S. Rhodesia; 19 33s 29 0e
89 **Inyungo**, S. Rhodesia; 18 10s 28 40e
26 **Iona, I., Argyll**, Scot.; early Scottish Christian centre; St. Columba's burial place; 56 19n 6 24w
53 **Ionian Is., Greece**; a. 740 sq. m.; comprise Corfu, Cephalonia, Paxos, Santa Maura, Ithaca, Cerigo,

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Zante; Monte Nero (5,310 ft.) highest pk.; wine, olives, fruit; coal, marble and sulphur; p. 265,000; 38 40n 20 40n

102 Iowa (St.), U.S.A.; a. 56,147 sq. m.; prairie country; watered by tribs. of Mississippi and Missouri; farming, dairying; wheat, maize, oats, potatoes; coal; gypsum, limestone; cap. Des Moines; p. 2,420,000; 40 40 to 43 30n 90 10 to 96 30w

102 Iowa City, Iowa, U.S.A.; farming, stock-breeding; p. 15,340 41 37n 91 30w

47 Ipek, Y-slav.; tobacco, fruit; p. 15,000; 42 39n 20 17n

70 Ipoh, tn., Malay Pen.; tin; p. 38,000; 4 35n 101 0n

53 Ipsala, tn., Turkey; p. 4,400; 40 57n 26 27n

105 Ipswich, tn., Mass., U.S.A.; p. 5,599; 42 39n 70 52w

121 Ipswich, tn., Queens., Australia; farming; coal; p. 26,233; 27 38s 152 38e

16 Ipswich, co. bor., co. tn., Suff., Eng.; agricultural implements, iron, boots, railway chairs, brewing; p. 87,557; 52 4n 1 10e

112 Ipu, Brazil; 4 30s 40 50w

113 Iquique, spt., Chile, S.A.; nitrate of soda; p. 46,458; 20 25s 70 10w

112 Iquitos, riv. port, Peru; on Marañon R.; shipyard and docks; rubber, cotton, tobacco; p. 10,000; 3 45s 73 25w

63 Irak Aimi Kobrud Mts., Persia; 32 40n 53 0e

63 Iran. See Persia.

81 Irangi, Tang. Ter.; 1 20s 34 5e

108 Irapuato, tn., Mexico; rly. junc.; farming, mining; p. 21,000; 20 37n 101 25w

62 Iraq, king., Asia; a. 116,600 sq. m.; old name Mesopotamia, "The Land between the Rivers"; contains ruins of Nineveh; chief crops—wheat, maize, barley, beans; important oilfields; cap. Bagdad; p. 2,857,077; 29 0 to 37 0n 39 30 to 47 50e

56 Irbit, tn., Russia; noted for great fair since 1643; p. 12,000; 57 43n 62 59e

28 Ireland, British Isles; a. 32,531 sq. m.; greatest length 280 m., width 180 m.; chief physical features—L. Neagh in N.E. and rivers Shannon, Boyne, Blackwater, Barrow, Noir, Suir, Liffey, etc.; chief mountain groups (near coast)—Mourne Mts., Wicklow Mts. (Lugnaquilla 3,039 ft.), Mts. of Kerry (Macgillicuddy's Reeks 3,414 ft.); peat bogs and marsh occupy considerable area, but greater part is grassland; for industries, etc., see Irish Free State and N. Ireland; p. 4,228,314; 51 30 to 55 30n 5 30 to 10 30w

28 Irish Free State (Saorstat Eireann), Ireland; a. 26,600 sq. m.; occupies all Ireland, except Northern Ireland (6 counties); industries; agriculture, potatoes, turnips and other root crops, oats, barley, hay, cattle, sheep, pigs, horses; fisheries; mnfs.; grain milling, flour, dairy products, bacon, brewing, tobacco, clothing, etc.; cap. Dublin; see Ireland; p. 2,971,992; 51 30 to 55 30n 6 00 to 10 30w

12 Irish Sea, Brit. Isles; lies between Gt. Britain and Ireland, and connects in N. and S. with Atlantic Ocean; 200 m. long, 50 to 140 m. wide, greatest depth 140 fathoms, a. 7,000 sq. m.; 53 0n 5 00w

72 Irkutsk, tn., Siberia; on R. Angara; on Trans-Siberian Rly.; furs; p. 158,500; 52 10n 104 15e

52 Iron Gate, Rum.; rapids on R. Danube; 44 42n 22 30e

120 Iron Knob, S. Australia; iron ore; 32 42s 137 8e

102 Iron Mountain, Mich., U.S.A.; p.11,652; 45 50n 88 6w

27 Irongray, par., Dumf., Scot.; p. 602; 55 6n 3 42w

102 Ironton, cy., Ohio, U.S.A.; machinery; coal, iron, fireclay; p. 16,621; 38 35n 82 45w

102 Ironwood, cy., Mich., U.S.A.; timber; iron; p. 16,000; 46 27n 90 5w

69 Irrawaddy, R., Burma, India; length 1,300 m., nav. for large steamers 900 m.; irrigation works; 23 0n 96 0e

20 Irthing, R., Cumb., Eng.; 55 0n 2 35w

72 Irtish, R., Siberia; trib. of R. Ob., length 2,600 m., of which two-thirds are navigable; crossed by Trans-Siberian Rly. at Omsk; 51 0n 78 30e

81 Irumu, Uganda; 1 25n 29 55e

49 Irun, tn., Spain; Roman remains; paper mills; iron; 43 19n 1 41w

26 Irvine, burgh, spt., Ayr, Scot.; shipbuilding, iron, chemicals; p. 12,032; 55 37n 4 39w

31 Irvinestown, tn., Fermanagh, N. Ireland; p. 785; 54 28n 7 38w

83 Isandhlwana, Natal, S. Afr.; 28 20s 30 38e

62 Isbarta, tn., Turkey; 37 39n 30 30e

46 Ischl, tn., Austria; watering-place, saline baths; p. 9,875; 47 44n 13 37e

36 Iseghem, tn., Belgium; textiles; p. 14,738; 50 55n 3 12e

50 Iseo, tn., Italy; on L. Iseo; 45 40n 10 3e

35 Isère, dept., France; a. 3,178 sq. m.; mountainous; cereals, wine, butter, cheese; iron, coal, lead, silver, copper; gloves, silk; cap. Grenoble; p. 584,017; 45 17n 5 45e

40 Iserlohn, tn., Germany; iron, steel, metal works, needles; p. 30,820; 51 22n 7 40e

63 Isfahan, tn., Persia; former cap. of Persia; gold and silver, carpets, leather goods; p. 100,000; 32 44n 51 36e

102 Ishpeming, cy., Mich., U.S.A.; machinery; gold, silver, iron, marble; p. 11,000; 46 29n 87 45w

81 Isiro, tn., Belgian Congo; 2 10n 28 10e

78 Iskanderieh. See Alexandria.

60 Iskilib, tn., Turkey; p. 10,303; 40 45n 34 0e

66 Islamabad, tn., Kash, India; shawls; 33 45n 75 12e

127 Islands, B. of, New Zealand; 35 15s 174 7e

26 Islay, I., Arg., Scot.; farming, dairying, distilleries; p. 5,743; 55 45n 6 15w

17 Islington, met. bor., London, England; p. 321,712. See London.

52 Ismail, port, Rumania; on R. Danube; cereals, wool, hides; p. 26,132; 45 21n 28 49e

78 Ismailia, tn., Egypt; headquarters Suez Can. Administration; p. 10,000; 30 36n 32 56e

34 Issoudun, tn., France; leather, parchment, woollens, farm implements; 46 57n 1 59e

72 Issyk Kul, L., Siberia; 42 30n 77 0e

53 Istanbul, Turkey; old cap. of Turkey, on Sea of Marmara; S. end of Bosporus; fine harbours; mosque of St. Sophia; Galata-Pera chief business centre; p. 690,857; 41 1n 28 58e

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47 Istip, tn., Yugoslavia; 41 40n 22 8e

53 Istranja, tn., Turkey; 41 25n 28 10e

50 Istria, pen., Italy; a. 1,800 sq. m.; mountainous; olive-oil, wine, fruits, cattle; 45 20n 14 0e

113 Itabira, tn., Brazil; 19 30s 43 15w

112 Itaituba, tn., Brazil; 4 20s 56 0w

113 Itajuba, tn., Brazil; 22 15s 45 40w

81 Itala, tn., It. Somaliland; 25 0n 45 5e

81 Italian East Africa comprises Abyssinia, Eritrea and Italian Somaliland (q.v.).

81 Italian Somaliland, prot., N.E. Africa; a. 190,000 sq. m.; cap. Magadoxo; cotton, gum, ivory, cattle and camel rearing; p. 1,200,000; 0 00 to 12 0n 42 30 to 51 0e

8 Italy, king., Europe; a. 119,714 sq. m.; pen. 750 m. long, and 100 to 200 m. broad; cont. portion in N. and many islands (chief Sardinia, Sicily); mountainous in N. (Alps) and in centre and S. (Apennines); chief river, Po; agriculture, wheat and other cereals; sugar-beet, vines, olives, fruits; minerals—sulphur, iron and iron pyrites, mercury, lead, zinc, Carrara marble; mnfs.—cottons, silks, sugar, glass, furniture, olive-oil; fisheries; cap. Rome; p. 1,176,671; 37 0 to 47 0n 7 00 to 18 0e

113 Itaúna, tn., Brazil; 20 15s 51 25w

113 Itatiaya, mt., Brazil; 22 25s 44 40w

102 Ithaca, cy., N.Y., U.S.A.; univ.; mnfs.—typewriters, clocks; p. 20,768; 42 27n 76 35w

53 Ithaca, I., Ionian Is., Greece; a. 44 sq. m.; exp. currants; p. 5,100; 38 22n 20 40e

39 Itzehoe, tn., Germany; metal-founding, shipbuilding; p. 19,637; 53 55n 9 31e

43 Ivangorod. See Deblin.

121 Ivanhoe tn., N.S.W., Australia; 32 49s 144 18e

56 Ivanovo Voznesensk, tn., Russia; textiles; iron and chemical works; p. 188,500; 57 3n 40 58e

17 Ivinghoe, par., Bucks, Eng.; p. 810; 51 50n 0 38w

49 Ivisa, tn., Iviza I., Spain; cath. and fortress; p. 7,000; 38 55n 1 30e

49 Ivisa I., Balearic Is., Spain; a. 230 sq. m.; cereals, fruit; p. 24,000; 39 0n 130 0e

88 Ivory Coast, Fr. W. Afr.; a. 121,590 sq. m.; maize, coffee, rubber, mahogany; dense forests; cap. Bingerville; p. 1,724,500; 5 00 to 7 30n 3 00 to 7 30w

50 Ivrea, tn., Italy; cath.; silk and cotton mnfs.; p. 12,000; 45 29n 7 50e

34 Ivry-sur-Seine, tn., France; organs, chemicals, iron, steel; p. 48,929; 48 50n 2 32e

19 Ivybridge, par., Dev., Eng.; tanning, paper; p. 1,609; 50 24n 3 55w

16 Ixworth, par., Suff., Eng.; p. 779; 52 18n 0 52e

62 Izmid, tn., Sea of Marmara, Turkey; cereals, tobacco; p. 55,000; 40 45n 30 0e

62 Izmir. See Smyrna.

55 Jaakkima, tn., Finland; 61 35n 30 18e

47 Jablanitza, tn., Yugoslavia; 42 50n 20 19e

113 Jaboticabal, tn., Brazil; 21 15s 48 0w

49 Jaca, comm., Huesca, Spain; p. 4,895; 42 35n 0 30w

115 Jacarehy, tn., Brazil; 23 18s 45 48w

102 Jackson, cy., Mich., U.S.A.; locomotives, motor-car machinery; p. 55,187; 42 15n 84 30w

103 Jackson, cy., Miss., U.S.A.; p. 48,282; 32 17n 90 13w

103 Jackson, cy., Tenn., U.S.A.; cotton, cotton-seed oil; engines, sewing machines; p. 22,172; 35 35n 88 57w

103 Jacksonville, cy., Fla., U.S.A.; on St. John's R.; exps.—lumber, fish, fruit; phosphates; p. 129,549; 30 20n 81 40w

102 Jacksonville, cy., Ill., U.S.A.; woollens; railway works; p. 17,747; 39 33n 89 30w

111 Jacmel, tn., Haiti; p. 12,000; 18 18n 52 40w

66 Jacobabad, tn., Sind, India; hottest place in India; p. 11,000; 28 17n 68 29e

83 Jacobsdal, tn., O.F.S., S. Afr.; p. 670; 29 38s 24 3e

93 Jacobshavn, vil., Greenland; 69 18n 51 0w

115 Jacuhy, tn., Brazil; 29 55s 51 30w

48 Jaën, cy., Spain; wine; leather, weaving; cap. of Jaën prov.; p. 39,787; 37 49n 3 40w

61 Jaffa, spt., Palestine; wine, olive-oil, oranges; p. 47,709; 32 5n 34 22e

68 Jaffna, tn., Mad., India; p. 42,436; 9 42n 80 2e

83 Jagersfontein, O.F.S., S. Afr.; diamonds; p. 4,000; 29 45s 25 29e

63 Jahrum, Persia; tobacco, dates; p. 15,000; 28 30n 53 27e

69 Jaintiapur, Assam, India; 25 4n 92 7e

66 Jaipur, st., Raj., India; 15,579 sq. m.; iron, copper, marble; p. 2,631,775; 26 58n 75 47e

66 Jaipur, tn., Raj., India; gold and metal work, carpets and muslin; p. 144,179; 26 58n 75 47e

66 Jaisalmer, st., Raj., India; p. 76,255; 34 27n 70 28e

63 Jajarm, tn., Persia; 36 52n 56 20e

47 Jajce, tn., Yugoslavia; 44 18n 17 14e

47 Jakova, tn., Yugoslavia; 42 23n 20 26e

66 Jalgaon, tn., Bom., India; p. 23,710; 21 0n 75 40e

108 Jalisco, st., Mexico; a. 33,492 sq. m.; cereals, cattle, mining; p. 1,200,000; 20 30n 103 30w

69 Jalpaiguri, tn., India; p. 15,000; 26 30n 88 50e

68 Jalna, tn., Hyd., India; p. 17,000; 19 48n 75 54e

110 Jamaica, I. Br. W. Indies; a. 4,450 sq. m., length 144 m., greatest breadth 50 m.; mountainous, highest peak (in Blue Mts.) 7,420 ft.; bananas, oranges, sugar, spices, coffee; cattle and horses reared; cap. Kingston; p. 1,122,000; 18 15n 77 30w

69 Jamalpur, tn., Bengal, India; p. 23,113; 24 55n 90 1e

99 James Bay, inlet, Canada; arm of Hudson Bay; 54 0n 80 30w

102 James R., Va., U.S.A.; length 500 m.; 37 20n 77 0w

87 Jamestown, C. of Good Hope, S. Afr.; 25 38s 31 10e

120 Jamestown, S. Australia; 33 8s 138 8e

107 Jamestown, N.D., U.S.A.; p. 8,187; 46 53n 98 45w

102 Jamestown, N.Y., U.S.A.; woollens, furniture; p. 43,155; 42 7n 79 20w

54 Jamtland, co., Sweden; a. 19,968 sq. m.; p. 134,800; 62 50n 14 10e

109 Jamiltepec, Mexico; 16 13n 97 58w

66 Jammu, tn., Kash., India; palace; p. 36,500; 32 46n 74 50e

66 Jamnagar, tn., Bombay, India; p. 42,495; 22 31n 70 9e

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128 Jan Mayen, I., Arctic; length 35 m.; whale fisheries; 70 40n 8 00w

102 Janesville, cy., Wis., U.S.A.; textiles, machinery; p. 21,628; 42 44n 89 0w

83 Jansenville, mun., C. of Good Hope, S. Afr.; p. 1,340; 32 55s 24 41e

75 Japan (Nippon, "Eastern Land"), E. Asia; a. Japan 147,593 sq. m.; a. of possessions 260,662 sq. m.; consists of 4 large islands and about 4,000 smaller; chief islands, Shikoku, Hokkaido, Honshu, Kiushiu; mountainous, largely volcanic, 18 active volcanoes; subject to disastrous earthquakes; fine harbours; chief industries; agriculture, cereals, rice, tobacco, rubber, tea, paper; shipbuilding; silks and cottons; forests; fisheries; good communications; cap. Tokio; p. Japan 84,000,000; p. of possessions 69,251,265; 30 0 to 43 0n 126 0 to 142 0e

71 Jappen I., Dutch E. Indies; p. 28,689; 1 40s 136 20e

115 Jaraguna, tn., Brazil; 15 29s 49 23e

43 Jaroslau, tn., Poland; on R. San; brandy, confectionery, pottery; p. 20,500; 50 1n 22 42e

20 Jarrow-on-Tyne, mun. bor., Dur., Eng.; on R. Tyne; ruins of monastery where Venerable Bede lived; shipbuilding, chemicals, engineering, collieries; p. 32,018; 54 58n 1 30w

63 Jask, tn., Persia; 25 46n 57 50e

52 Jassy. See Yasi, Rumania.

41 Jastrow, tn., Germany; 53 25n 16 50e

48 Jativa, tn., Spain; wine, oil, fruit; p. 14,500; 39 0n 0 30w

112 Jatoba, tn., Brazil; 9 00s 38 25w

114 Jauja, tn., Peru; 11 53s 75 22w

42 Jaunjelgava, tn., Latvia; 56 36n 25 3e

67 Jaunpur, tn., U. Provs., India; perfumes; cap. of Jaunpur dist.; p. 32,569; 25 46n 82 46e

70 Java I., D.E.I.; a. 50,811 sq. m., 654 m. long, breadth 40 to 130 m.; volcanic mts.; loftiest pk. 12,000 ft.; agriculture, rubber, tobacco, sugar, coffee, tea, oil palms, cinchona, spices; coal, tin, gold, silver; imp. teak forests; petroleum; densely populated; cap. Batavia; p. 37,434,000; 7 30s 110 0e

43 Jaworow, tn., Poland; coal, petroleum, zinc; p. 9,000; 49 55n 23 21e

58 Jaxartes, R. See Syr R., U.S.S.R.

88 Jebba, Nigeria; 9 05n 4 48e

11 Jebel-el-Akhdar, Libya; coast dist.; 32 40n 21 30e

60 Jebel Shammar, Arabia; 27 30n 42 0e

60 Jebel Tuwaik, Arabia; 23 30n 44 30e

27 Jedburgh, burgh, co. tn., Rox., Scot.; abbey ruins; woollens; p. 3,057; 55 29n 2 34w

102 Jefferson Cy., Mo., U.S.A.; shoes, tiles, agricultural implements; p. 21,500; 38 37n 92 16w

73 Jehol, prov., Manchukuo; 42 0n 120 0e

42 Jekabmeests, Latvia; 56 30n 25 5e

56 Jelabuga, Russia; 55 46n 51 58e

42 Jelgava, tn., Latvia; linen, soap; p. 33,048; 56 42n 23e

64 Jellalabad, tn., Afghan.; on R. Kabul; close to Khyber Pass; timber; p. 6,000; 34 25n 70 20e

38 Jemappes, tn., Belgium; coal, iron; p. 14,573; 50 27n 3 53e

40 Jena, tn., Germany; on R. Saale; univ.; books, pianos; p. 58,357; 50 58n 11 38e

61 Jenin, tn., Palestine; 32 27n 35 20e

108 Jerez, tn., Mexico; 22 32n 103 2w

48 Jerez, tn., Spain; sherry; p. 65,000; 36 40n 6 10w

61 Jericho. See Eriha.

123 Jericho, vil., Queens., Australia; 23 39s 146 2e

121 Jerilderie, tn., N.S.W., Australia; p. 1,000; 35 20s 145 46e

106 Jerome, Ariz., U.S.A.; 34 45n 112 12w

34 Jersey, Channel I.; holiday resort; tomatoes, cattle, dairying, fishing; 49 13n 2 10w

102 Jersey City, N.J., U.S.A.; on R. Hudson; canning; iron, steel, tobacco, chemicals; important rly. centre; p. 316,715; 40 50n 74 10w

61 Jerusalem, cy., cap. Palestine; famous in Biblical history, sacred city of Jews, Christians, Mohammedans; univ.; surrendered to Gen. Allenby Dec. 1917; p. 62,678; 31 48n 35 12e

50 Jesi, tn., Ancona, It.; cath.; p. 23,600; 43 31n 13 12e

71 Jesselton, spt., Br. N. Borneo; 6 00n 116 0e

69 Jessore, Beng., India; 23 6n 89 17e

68 Jeypore, Orissa, India; 18 53n 83 38e

67 Jhansi, tn., Cent. India; cap. of Jhansi prov.; p. 66,432; 25 25n 78 36e

66 Jhalum, riv., Pun., India; unites with Chenab R.; 33 0n 73 44e

81 Jibuti, spt., cap. Fr. Somal.; coffee, rubber, ivory; rly. to Abyssinia; p. 9,414; 11 34n 43 10e

60 Jidda, spt., Arabia; extensive harb.; coffee, carpets; mother-of-pearl; p. 25,000 (est.); 21 38n 39 17e

61 Jiddin, Palestine; 33 0n 35 20e

46 Jihlava, tn., Cz.-slov.; timber, grain, textiles; p. 31,031; 49 23n 15 35e

48 Jimena, tn., Spain; 36 26n 5 25w

108 Jimenez, tn., Mexico; 27 14n 105 0w

81 Jinja, tn., Uganda; 0 28s 33 12e

112 Jirandoé, tn., Colombia; 4 25n 75 0w

61 Jisak, tn., U.S.S.R.; 40 18n 67 55e

57 Jitomir, tn., Ukraine; iron works; p. 73,300; 50 16n 28 38e

112 Joazeiro, tn., Brazil; 9 25s 40 30w

66 Jodhpur, tn., Raj., India; walled fortress tn.; cap. of Jodhpur dist.; p. 73,430; 26 20n 73 5e

54 Joensuu, tn., Finland; p. 4,796; 63 25n 30 0e

11 Jofra Oasis, Libya; 29 20n 15 50e

83 Johannesburg, cy., Trans. S. Afr.; univ.; gold mining centre of Witwatersrand; tobacco, brewing, iron-founding, printing, bricks; p. 263,293 (Eur.); 26 15s 28 5e

25 John o' Groats, Caith., Scot.; or John o' Groat's Ho.; popularly signifies the most northerly point of Gt. Britain; 58 38n 3 02w

103 Johnson City, Tenn., U.S.A.; leather, furniture; tourist centre; p. 25,080; 36 20n 82 27w

26 Johnstone, burgh, Ren., Scot.; coal, flax, engineering; p. 12,837; 55 50n 4 30w

27 Jonnstone, par., Dumf., Scot.; p. 661; 53 12n 13 25w

33 Johnstown, vil., Kilkenny, I.F.S.; p. 329; 52 43n 7 34w

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83 Johnstown, par., Kildare, I.F.S.; p. 152; 53 24N 6 51W
105 Johnstown, cy., N.Y., U.S.A.; clothing; p. 10,801; 42 59N 74 25W
102 Johnstown, Pa., U.S.A.; works for iron and steel; p. 66,993; 40 23N 78 55W
70 Johore, st., Unf. Malay St.; a. 7,678 sq. m.; forested; coffee, rubber, pepper; timber; p. 343,000; 2 00N 103 0E
70 Johore Bahru, free port, Malay Pen.; cap. of Johore St.; p. 15,800; 1 42N 104 0E
102 Joliet, cy., Ill., U.S.A.; iron and steel; p. 42,000; 41 28N 88 8W
97 Jollette, tn., Que., Can.; woollens, paper, tobacco; p. 10,765; 46 5N 73 30W
103 Jonesboro', Ark., U.S.A.; p. 10,236; 35 53N 90 35W
55 Jönköping, tn., Sweden; paper, carpets, matches; p. 50,918; 57 50N 14 10E
55 Jönköping, co., Sweden; a. 4,449 sq. m.; p. 231,557; 57 0N 14 0E
102 Joplin, tn., Mo., U.S.A.; lead and zinc; p. 33,000; 37 6N 94 32W
61 Joppa, Palestine. See Jaffa.
61 Jordan R., Palestine; rises in Mt. Hermon, flows through S. of Galilee and rift valley to Dead S.; famous in Biblical history; 33 30N 35 35E
54 Jörn, tn., Sweden; 65 5N 20 10E
80 Jos, tn., Nigeria; tin mines; 10 0N 8 55E
98 Juan de Fuca, Str., B.C., Can.; 100 m. long, 15 m. wide; 48 30N 124 30W
113 Juan Fernandez Is., Chile; volcanic Is.; p. 300; 33 50S 80 0W
108 Juarez, tn., Mexico; 27 33N 100 47W
81 Juba, tn., A.-Eg. Sud.; on Bahr El Jebel; 4 45N 31 32E
67 Jubbulpore, tn., Cent. Provs., India; carpets, cottons; oil mills; p. 124,469; 23 20N 80 0E
49 Jucar, R., Spain; 40 0N 2 15E
108 Juchipila, tn., Mexico; 21 24N 103 11W
109 Juchitan, tn., Mexico; 16 29N 95 3W
46 Judenburg, tn., Austria; p. 4,970; 47 10N 14 41E
74 Juichowfu, tn., China; 28 30N 115 20E
115 Juiz da Fora, tn., Brazil; 21 55S 43 39W
113 Jujuy, tn., Argentina; p. 8,000; 24 0S 65 30W
54 Jukkasjärvi, tn., Sweden; p. 2,570; 67 50N 20 40E
62 Julamerk, tn., Turkey; 37 29N 43 53E
62 Julfa, tn., Persia; p. 3,050; 38 58N 45 32E
112 Juliaca, tn., Peru; p. 2,500; 16 45S 70 25W
44 Julian Alps, Trentino, Italy; 46 20N 13 40E
93 Julianshaab, tn., Greenland; maritime station; 60 40N 45 35W
37 Jülich, tn., Germany; p. 5,530; 50 56N 6 22E
66 Jullundur, tn., Pun., India; cotton and silk mnf.; p. 71,008; 31 18N 75 40E
53 Jumaa-i-Bala, tn., Bulgaria; 42 1N 23 10E
38 Jumet, tn., Belgium; p. 30,183; 50 24N 4 25E
49 Jumilla, tn., Murcia, Spain; esparto fabrics; p. 20,500; 38 30N 1 18W
66 Junagarh, tn., Bom., India; p. 33,221; 21 22N 70 30E
123 Jundah, Queens., Australia; 24 50S 143 9E
115 Jundiahy, Brazil; 23 0S 47 20W
98 Juneau, tn., Alas., N.A.; gold; fisheries; cap. of Alaska; p. 4,043; 58 8N 134 0W
121 Junee, bor. N.S.W., Australia; p. 3,750; 34 52S 147 32E
44 Jungfrau (Pk.), Valais, Switz.; height 13,669 ft.; has electric railway; 46 31N 7 56E
113 Junin, tn., Argentina; p. 21,200; 34 30S 61 0W
109 Juquila, tn., Mexico; 16 15N 97 29W
35 Jura, dept., France; a. 1,951 sq. m.; mountainous, forests, vines, cereals, watches, toys; cap. Lons-le-Saunier; p. 229,109; 46 33N 5 48E
44 Jura Mts., between France and Switzerland, 150 m. long; 47 0N 6 40E
26 Jura, Sd. of, Arg., Scot.; 56 0N 5 45W
72 Jussagach, tn., Siberia; 46 50N 79 30E
110 Jutigalpa, tn., Honduras; farming; mining; p. 10,000; 14 42N 85 49W
39 Jutland, continental part of Denmark; 56 30N 10 0E
54 Juuka, tn., Finland; 63 15N 28 30E
66 Juwain, tn., Afghanistan; 31 49N 61 35E
54 Jyväskylä, tn., Finland; p. 7,087; 62 15N 25 55E

86 Kaapmuiden, tn., Trans., S. Afr.; 25 32S 31 28E
81 Kabalo, tn., Belg. Congo; 6 02S 29 53E
80 Kabango, tn., Angola; 9 22S 21 2E
87 Kabardino-Balkar, Russia; aut. area; a. 3,600 sq. m.; mountainous, Mt. Elbrux 18,465 ft.; maize, sunflowers; sheep, cattle; cap. Nalchik; p. 200,000; 43 30N 43 23E
88 Kabba, tn., Nigeria; 7 55N 6 04E
80 Kabinda, tn., spt., Angola; p. 10,100; 6 08S 24 20E
64 Kabul, tn., cap., Afghan; on Kabul R.; carpets; p. 100,000; 34 33N 69 10E
47 Kachanik, tn., Yugoslavia; 42 17N 21 15E
69 Kachins, tr., Burma, India; 25 50N 97 0E
90 Kadiak I., Alas., N. America; 57 30N 153 0W
120 Kadina, tn., S. Australia; 33 55S 137 33E
68 Kadue, tn., Mysore, India; 13 31N 76 0E
88 Kaduna, tn., Nigeria; 10 27N 7 25E
61 Kafiristan, dist., Afghan.; a. 4,900 sq. m.; pastoral farming; p. 200,000; 35 17N 70 30E
89 Kafue, tn., N. Rhodesia; 15 48S 28 0E
89 Kafue, R., N. Rhodesia; 15 48S 26 45E
75 Kagoshima, tn., Japan; cottons, pottery, glass; p. 81,734; 31 37N 130 29E
62 Kagyeman, tn., Turkey; 40 4N 43 2E
127 Kaiapoi, bor., S.I., New Zealand; p. 1,700; 43 22S 172 40E
112 Kaieteur Fall, Br. Guiana; drop 741 ft.; 5 00N 59 15W
74 Kaifeng, cap. Honan, China; cottons; 34 50N 114 35E
127 Kaikoura, tn., S.I., New Zealand; p. 669; 42 26S 173 40E
53 Kailar, tn., Greece; 40 32N 21 43E
126 Kaimenawa Ra., New Zealand; 39 0S 176 0E
58 Kainsk, tn., U.S.S.R.; 55 50N 78 10E
66 Kaira, tn., India; p. 10,450; 22 47N 72 47E
76 Kairwan, cy., Tunis; sacred, mosques; carpets; p. 19,000; 35 31N 10 0E

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40 Kaiserslautern, tn., Germ.; iron, cottons, woollens, beer, tobacco; p. 62,619; 49 30N 7 45E
123 Kaiser Wilhelm II Land, Antarctica; 65 0S 90 0E
127 Kaitangata, bor., S.I., New Zealand; p. 1,425; 46 15S 169 54E
54 Kajaana, tn., Finland; p. 6,705; 64 12N 27 45E
81 Kaka, tn., Anglo-Eg. Sudan; 10 35N 32 30E
83 Kakamas, tn., C. of Good Hope, S. Afr.; 28 50S 20 35E
127 Kakanui, Mts., S.I., New Zealand; 45 10S 170 30E
55 Käkisalmi, tn., Finland; 61 2N 30 17E
60 Kalaat Bisha, tn., Arabia; 20 0N 43 30E
62 Kalaat Shergat, tn., Iraq; on R. Tigris; 35 30N 43 18E
53 Kalabaka, tn., Greece; 39 41N 21 39E
79 Kalabshah, tn., Egypt; 23 30N 32 51E
57 Kalach, tn., Russia; 50 20N 40 59E
83 Kalahari, des., S. Africa; a. 120,000 sq. m.; arid, sparse veg.; big game; cattle; 23 20S 21 0E
54 Kalajoki, tn., Finland; 64 20N 24 0E
53 Kalamata, tn., spt., Greece; figs, currants, olive oil; silk; p. 28,950; 37 2N 22 7E
102 Kalamazoo, tn., Mich., U.S.A.; rly. centre; engineering; p. 54,786; 42 17N 85 40W
66 Kalat, st., Baluch., India; a. 73,278 sq. m.; pastoral farming, salt; p. 342,101; 29 12N 66 40E
66 Kalat, tn., Baluch., India; p. 15,000; 29 12N 66 40E
66 Kalat-i-Ghilzai, tn., Afghanistan; 32 12N 66 55E
53 Kalavryta, tn., Greece; 38 1N 22 8E
69 Kalewa, tn., Burma, India; on R. Chindwin; 23 15N 94 20E
74 Kalgan or Chang-kia-kow, tn., China; wool, hides; 40 55N 115 0E
125 Kalgoorlie, tn., W. Austral.; gold; p. 5,400; 30 40S 121 30E
69 Kalimpong, tn., Bengal, India; health stn.; 27 1N 88 38E
43 Kalish, tn., Poland; sugar, brewing, tanning; p. 55,100; 51 44N 18 7E
47 Kalkandelen, tn., Yugoslavia; p. 14,710; 42 1N 21 1E
82 Kalkfeld, tn., S.W. Africa; 20 45S 16 25E
83 Kalkfontein, tn., S.W. Africa; 27 51S 18 36E
55 Kalmar, tn., spt., Sweden; cath.; lumber; p. 19,801; 56 40N 16 20E
55 Kalmar, co., Sweden; a. 4,456 sq. m.; p. 231,551; 57 12N 16 12E
57 Kalmuck, aut. area, U.S.S.R.; a. 27,850 sq. m.; stock raising; cap. Astrakhan; p. 153,000; 46 30N 45 30E
57 Kalmykookskaya, tn., Russia; 48 59N 51 57E
46 Kalocsa, tn., Hungary; cath., observatory; wheat, fruit, wine; p. 11,877; 46 34N 19 0E
56 Kalomna, tn., Russia; 55 11N 38 39E
82 Kalomo, tn., N. Rhodesia; 17 8S 26 28E
57 Kaluga, tn., Russia; leather; p. 57,000; 54 34N 36 12E
39 Kalundborg, tn., Denmark; p. 6,929; 55 42N 11 6E
43 Kalusz, tn., Poland; 49 1N 24 21E
68 Kalutara, tn., Ceylon; 6 30N 79 59E
42 Kalvariya, tn., Lithuania; p. 8,550; 54 26N 23 10E
53 Kalymnos I., and tn., Dodecanese; Ægean S.; 37 0N 27 0E
85 Kamastone, tn., C. of Good Hope, S. Afr., 32 4S 26 38E
59 Kamchatka, pen., E. Siberia, U.S.S.R.; hunting, fishing; 56 0N 158 0E
57 Kamenets Podolski, tn., Ukraine, U.S.S.R.; brewing, tobacco; p. 52,100; 48 41N 26 32E
57 Kamenskaya, tn., Russia; on R. Donets; p. 115,000; 48 18N 40 4E
67 Kamet, Mt., Tibet; alt., 25,447 ft.; 31 0N 79 45E
43 Kamionkastrumilowa, tn., Poland; 50 8N 24 20E
57 Kamishin, tn., Russia; 50 6N 45 26E
81 Kamlin, tn., A.-E., Sudan; 15 3N 33 10E
98 Kamloops, tn., B.C., Canada; lumbering, fruit, brewing; p. 6,107; 50 39N 119 20W
41 Kammin, tn., Germany; 53 58N 14 47E
81 Kampala, tn., Uganda; coffee, cotton; big game; 0 20N 32 34E
38 Kampen, tn., Netherlands; dairying; p. 19,838; 52 33N 5 55E
70 Kampot, tn., spt., Fr. Indo-China; 10 30N 104 5E
67 Kamptee, tn., India; cotton; p. 20,226; 21 8N 79 15E
79 Kamula, tn., Egypt; 25 47N 32 44E
56 Kamyshlov, tn., Russia; 56 49N 62 34E
78 Kanais, G. of, Med. S., Egypt; 31 10N 28 0E
75 Kanazawa, tn., Japan; silks, pottery; p. 163,733; 36 45N 136 52E
69 Kanbalu, tn., Burma, India; 23 20N 95 35E
69 Kanburi, tn., Siam; 14 1N 99 30E
72 Kanchow, tn., China; p. 20,000; 39 0N 100 40E
66 Kandahar, tn., Afghanistan; silks; p. 60,000; 31 42N 65 47E
56 Kandalaksha, tn., Karelia Rep., U.S.S.R.; 67 12N 32 28E
45 Kandersteg, tn., Switzerland; resort; 46 29N 7 40E
68 Kandy, tn., Ceylon; former cap., temples; tea, cocoa; p. 32,562; 7 20N 8 33E
80 Kanem, dist., Sudan, Fr. Eq. Afr.; 14 20N 15 0E
120 Kangaroo I., S. Australia; 35 45S 137 0E
63 Kangakar, tn., Persia; 34 28N 47 54E
93 Kangerdlugsuak, inlet, Greenland; 68 14N 30 0W
102 Kankakee, tn., Ill., U.S.A.; farm implements, machinery; p. 20,620; 41 7N 88 0W
68 Kankan, tn., Fr. W. Africa; 10 22N 9 12W
68 Kanker, tn., India; 20 18N 81 32E
54 Kannus, tn., Finland; 63 53N 23 58E
38 Kano, tn., Nigeria; cottons, leather; p. 67,000; 12 0N 8 31E
125 Kanowna, tn., W. Australia; gold; 30 31S 121 41E
107 Kansas, st., U.S.A.; a. 82,158 sq. m.; prairie; farming, maize, wheat; cattle, dairying, pigs, minerals, coal, petroleum, natural gas, lead; meat packing, flour milling; cap. Topeka; p. 1,880,999; 37 0 to 40 0N 95 0 to 102 0W
102 Kansas, tn., Kan., U.S.A.; adj. Kansas City, Mo.; meat canning, live-stock centre; p. 121,857; 38 30N 99 0W
102 Kansas City, Mo., U.S.A.; on R. Missouri; rly. comm. centre; grain, meat; p. 399,746; 39 0N 94 30W

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72 Kan-su, prov., China; a. 125,483 sq. m.; cereals, poppy; cap. Lanchow; p. 7,422,818; 37 0N 103 0E
74 Kan-tang, tn., China; 37 2N 116 15E
32 Kantark, tn., Cork, I.F.S.; p. 1,583; 52 10N 8 55W
89 Kanyemba, tn., Mozambique; 17 25S 31 38E
88 Kaolak, tn., Senegal, Fr. W. Afr.; 14 8N 16 5W
46 Kaposvar, tn., Hungary; p. 32,638; 46 25N 17 47E
120 Kapunda, tn., S. Australia; 34 18S 138 24E
66 Kapurthala, st. and tn., Punjab, India; wheat, sugar, cotton, tobacco; p. 316,757 (st.); 31 20N 75 20E
62 Kara, tn., Turkey; 18 0N 55 0E
58 Kara S., Arctic Oc.; 72 0N 63 0E
57 Karachaevo, aut. area, Rus. S.F.S. Rep.; 43 30N 41 25E
57 Karachev, tn., Russia; 53 12N 34 57E
66 Karachi, tn., spt., India; harbour, air port; exp., wheat, hides; p. 260,639; 24 52N 67 0E
53 Karaferria. See Verria.
75 Karafuto, S. half of Sakhalin I., Japan; 48 0N 142 30E
61 Kara Kalpak, A.S.S.R., U.S.S.R.; a. 42,560 sq. m.; arid except in valley of R. Oxus; cereals, fruits, cotton; p. 300,000; 42 50N 62 30E
67 Karakoram P., Tibet; 18,687 ft.; 35 28N 77 50E
67 Karakoram Ra., India; 450 m. long; highest Peak, Mt. Godwin-Austen 28,250 ft.; 36 0N 76 0E
67 Karakoram Ra., Tibet; 33 30N 80 0E
61 Kara Kum, des., U.S.S.R.; 39 20N 60 0E
62 Karaman, tn., Turkey; 37 9N 33 20E
127 Karamea Bight, S.I., New Zealand; 41 20S 171 50E
52 Karánsebes, tn., Rumania; p. 8,838; 45 28N 22 19E
72 Karasbahr, tn., Sin Kiang; 42 0N 87 0E
57 Karasubazar, tn., Crimea, U.S.S.R.; 45 5N 34 2E
75 Karatsu, tn., spt., Japan; 33 26N 130 1E
44 Karawanken, mts., Yugoslavia; 46 25N 14 40E
46 Karcsag, tn., Hungary; p. 24,269; 47 20N 21 0E
53 Karditza, tn., Greece; 39 21N 21 53E
85 Karee, tn., O.F.S., S. Afr.; 28 50S 26 20E
56 Karelia, rep., U.S.S.R.; a. 53,890 sq. m.; forested, timber; cap. Petrozavodsk; p. 267,000; 64 10N 32 30E
69 Karenni, prot. st., Burma, India; a. 4,280 sq. m.; rice, teak, lac; p. 58,761; 19 15N 97 30E
56 Kargopol, tn., Russia; 61 32N 38 58E
68 Karikal, Fr. Poss., Mad., India; a. 53 sq. m.; rice, ground-nuts; p. 58,000; 11 0N 79 50E
68 Karikal, tn., cap. Karikal, India; rice; p. 17,000; 11 0N 79 50E
73 Karimakaya, tn., Siberia, U.S.S.R.; 51 40N 115 0E
81 Karkoj, tn., A.-E. Sudan; 12 58N 34 2E
46 Karlovac, tn., Yugoslavia; chemicals, woollens; p. 17,000; 45 32N 15 35E
52 Karlovo, tn., Bulgaria; p. 7,211; 42 38N 24 52E
46 Karlovy Vary, tn. and spa, Cz.-slov.; mineral springs, salts exported; p. 24,029; 50 13N 12 50E
46 Karlsbad. See Karlovy Vary.
55 Karlsborg, tn., Sweden; 58 35N 14 25E
55 Karlshamn, spt., Sweden; p. 7,487; 56 10N 14 55E
55 Karlskrona, spt., Sweden; naval sta.; exp.—timber, fish; p. 25,492; 56 10N 15 40E
40 Karlsruhe, tn., cap. of Baden St., Germ.; palace, art gall.; machinery, hardware, chemicals, beer; p. 154,902; 49 3N 8 20E
55 Karlstad, tn., Sweden; matches, machinery; p. 20,911; 59 20N 13 25E
79 Karnak, tn., Egypt; anc. Thebes, temple ruins; 25 44N 32 43E
67 Karnal, tn., Pun., India; cottons, blankets; p. 22,845; 29 40N 77 0E
52 Karnobat, tn., Bulgaria; p. 8,944; 42 40N 27 0E
82 Karonga, tn., Nyasaland; 9 58S 33 50E
125 Karonie, tn., W. Australia; 30 42S 122 20E
53 Karpenisi, tn., Greece; 38 55N 21 46E
62 Kars, tn., Turkey; woollens, carpets; p. 13,901; 40 34N 43 3E
54 Karsamaki, tn., Finland; 64 0N 25 40E
122 Karumba, tn., Queens., Austral.; 17 29S 141 15E
53 Karyato, tn., Greece; 38 1N 24 29E
80 Kasai, R., Belg. Congo; 900 m. long; 7 00S 21 30E
63 Kasam. See Kishm.
81 Kasanga, tn., Tang. Ter.; formerly Bismarckburg; 7 49S 30 55E
89 Kasempa, tn., N. Rhodesia; 13 24S 25 40E
63 Kashan, tn., Persia; silks; p. 15,000; 33 58N 51 22E
72 Kashgar, tn., Sin Kiang; leather, textiles; cap. of Prov.; p. 80,000 (est.); 39 30N 76 0E
74 Kashing, tn., China; 30 46N 120 40E
67 Kashmir and Jammu, st., India; a. 84,516 sq. m.; mountainous; forested; pastoral farming, woollens, shawls; cap. Srinagar; p. 3,646,243; 34 30N 76 30E
54 Kaskinen, tn., spt., Finland; 62 20N 21 10E
92 Kaslo, tn., B.C., Can.; 49 56N 116 40W
81 Kasongo, dist., Belg. Congo; 4 30S 26 35E
79 Kasr Dakhla, Egypt; 25 42N 28 52E
78 Kasr Farafra, Egypt; 27 12N 28 10E
63 Kasrkand, vil., Persia; 26 14N 60 35E
53 Kassaba, tn., Turkey; p. 16,897; 38 30N 27 45E
81 Kassala, tn., A.-E. Sudan; ivory, hides; 15 26N 36 42E
62 Kastamouni, tn., Turkey; fruits, cotton, mohair; p. 14,590; 41 16N 33 59E
53 Kastoria, tn., Greece; 40 30N 21 19E
53 Kastro, tn., Chios, Gr.; p. 22,100; 38 22N 26 8E
53 Kastro, tn., Lemnos, Gr.; 39 55N 25 10E
88 Kasunga, tn., Nyasaland; 8 30S 31 10E
66 Kasur, tn., India; wheat, cotton; p. 31,018; 31 5N 74 29E
63 Kasvin, tn., Persia; silks, fruit; p. 30,000; 36 19N 49 59E
82 Katanga, prov., Belg. Congo; a. 180,000 sq. m.; cattle, copper, radium; p. 1,000,000 (est.); 10 0S 26 30E
125 Katanning, tn., W. Australia; 33 43S 117 42E
89 Katerere, tn., S. Rhodesia; 17 30S 32 57E
53 Katerina, tn., Greece; 40 18N 22 35E
69 Katha, tn., Burma, India; rice, coal; 24 12N 96 20E
54 Katherina Har. See Alexandrovsk.
66 Kathiawar, pen., India; cotton; 21 55N 71 0E
60 Katif, tn., Arabia; 26 30N 50 0W
83 Katkop, tn., C. of Good Hope, S. Afr.; 30 7S 20 5E

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67 Katmandu, tn., cap., Nepal; temples; p. 80,000; 27 42N 85 20E
121 Katoomba, tn., N.S.W., Austral.; p. 10,020; 33 42s 150 15E
42 Katowice, tn., Poland; formerly Kattowitz; coal, zinc, machinery; p. 127,800; 50 17N 19 3E
27 Katrine, L., Perth, Scot.; principal source of Glasgow's water supply; 56 15N 40 30W
55 Katrineholm, tn., Sweden; p. 7,805; 59 0N 16 10E
39 Kattegat, sd. between Den. and Swed.; 56 50N 11 30E
42 Kattowitz. See Katowice.
116 Kauai, I., Hawaii Is., Pacific Oc.; p. 35,806; 22 0N 159 40W
42 Kaunas, tn., cap. Lithuania; formerly Kovno; metal goods; p. 113,000; 54 52N 23 55E
54 Kantokeino, tn., Norway; 69 0N 23 0E
47 Kavaja, tn., Albania; 41 12N 19 33E
53 Kavakli, tn., Bulgaria; p. 5,818; 42 5N 26 21E
53 Kavala, tn., spt., Greece; exp. tobacco; p. 50,000; 40 58N 24 27E
63 Kavir, R., Persia; 31 0N 54 0E
81 Kavirondo, dist., Kenya; 0 00N 35 0E
57 Kavkaskaya, tn., Russia; on R. Kuban; 45 27N 40 30E
126 Kawakawa, tn., dist., N.I., New Zealand; p. 380; 35 22s 174 3E
126 Kaweka Rs., N.I., New Zealand; 39 17s 176 30E
70 Kawn Ken, tn., Siam; 16 40N 102 33E
88 Kayes, tn., Fr. W. Africa; p. 11,438; 14 22N 11 25W
62 Kayseri, tn., Turkey; p. 39,134; 38 42N 35 28E
58 Kazak, A.S.S. Rep., U.S.S.R.; a. 1,169,975 sq. m.; steppe; pastoral farming; cap. Kzyl-Orda; p. 6,531,000; 48 0N 55 0 to 75 0E
58 Kazalinsk, tn., Kazak, A.S.S.R., U.S.S.R.; 45 40N 62 0E
56 Kazan, tn., cap. Tartar Rep., Russia; on R. Volga; cath., univ.; cloth, leather, cottons; p. 258,700; 55 42N 49 6E
62 Kazanlik, tn., Bulgaria; attar of roses; p. 11,598; 42 39N 25 28E
63 Kazerun, tn., Persia; oranges, sheep; 29 38N 51 40E
31 Keady, urb. dist., Armagh, N. Ire.; linen; p. 1,343; 54 15N 6 42W
107 Kearney, tn., Neb., U.S.A.; p. 8,575; 40 35N 99 9W
11 Kebabo Oasis, Libya; 24 0N 23 0E
46 Kecskemet, tn., Hungary; tanning, milling, fruit; p. 79,500; 46 58N 19 42E
70 Kedah, st., Unf. Malay St.; a. 3,648 sq. m.; rice, rubber, tapioca; cap. Alor Star; p. 430,000; 6 00N 101 0E
105 Keene, tn., N.H., U.S.A.; lumber; p. 13,794; 42 53N 72 19W
83 Keetmanshoop, tn., S.W. Africa; 26 30s 18 3E
99 Keewatin, dist., Canada; a. 228,160 sq. m.; furs; 65 0N 95 0W
40 Kehl, tn., Germ.; on R. Rhine; 48 36N 7 50E
25 Keig, par., Aberdeen, Scot.; p. 492; 57 16N 2 40W
21 Keighley, mun. bor., W. Riding, Eng.; woollens, worsteds, weaving machinery; p. 40,441; 53 52N 1 54W
71 Kei Is. or Evar Is., Dutch E. Indies; rice; pearl fishing; p. 50,665; 5 30s 132 0E
73 Keijo. See Seoul.
83 Keimouth, tn., C. of Good Hope, S. Afr.; 32 40s 28 25E
25 Keiss, par., Caithness, Scot.; p. 857; 58 33N 3 05W
120 Keith, tn., S. Australia; 36 3s 140 20E
25 Keith, bor., Banff, Scot.; tweeds, blankets; p. 4,424; 57 33N 2 57W
70 Kelantan, st., Unf. Malay St.; a. 5,713 sq. m.; Br. Prot.; rice, coconuts, rubber; cap. Kota Bharu; p. 362,500; 6 00N 102 20E
63 Kelat-i-Nadiri, tn., Persia; 37 2N 59 53E
53 Kelid Bahr, tn., Turkey; 40 9N 26 22E
31 Kells, urb. dist., Meath, I.F.S.; p. 2,198; 53 44N 6 53W
27 Kelso, bor., Roxburgh, Scot.; abbey ruins; p. 3,855; 55 37N 2 25W
27 Kelty, tn., Fife, Scot.; coal; p. 7,400; 56 8N 3 22W
56 Kem, tn., spt., Karelia Rep., U.S.S.R.; 64 58N 34 30E
54 Kemass Osersk, tn., Karelia Rep., U.S.S.R.; 64 28N 31 12E
128 Kemp Land, Antarctica; 67 0s 60 0E
121 Kempsey, tn., N.S.W., Austral.; 31 5s 152 50E
40 Kempten, tn., Germ.; on R. Iller; textiles, machinery, brewing; p. 21,874; 47 45N 10 18E
79 Kena, tn., Egypt; pottery; p. 16,300; 26 9N 32 44E
20 Kendal, mun. bor., Westmorland, Eng.; woollens; p. 15,575; 54 20N 2 45W
71 Kendangan, tn., Borneo, D.E.I.; 2 35s 115 20E
69 Keng Tkam, tn., Burma, India; 21 0N 98 26E
69 Keng Tung, tn., China; 22 0N 100 50E
69 Kengtung, tn., Burma, India; rice, sugar, teak; 21 18N 99 42E
84 Kenhardt, tn., C. of Good Hope, S. Afr.; 29 22s 20 30E
16 Kenilworth, urb. dist., Warwick, Eng.; cas. ruins, famed through Sir Walter Scott's novel "Kenilworth," the scene of Queen Elizabeth's reception by Robert, Earl of Leicester; tanning; p. 7,592; 52 22N 1 35W
32 Kenmare, tn., Kerry, I.F.S.; p. 1,034; 51 53N 9 34W
32 Kenmare R., Kerry, I.F.S.; 51 43N 10 7W
18 Kenmayes Hd., Cardigan, Wales; 52 7N 4 44W
27 Kenmore, par., Perth, Scot.; p. 961; 56 35N 4 00W
19 Kennet, R., Wilts., Eng.; 51 20N 1 23W
25 Kennethmont, par., Aberdeen, Scot.; p. 818; 57 20N 2 48W
99 Kenora, tn., Ont. Can.; lumbering, flour; p. 6,766; 49 40N 94 30W
102 Kenosha, tn., Wis., U.S.A.; on L. Michigan; motor cars; p. 60,262; 42 33N 87 57W
17 Kensington, met. bor., London, England; rich in literary and historical associations; chief buildings, Kensington Palace, Brompton Oratory, Holland House, Victoria and Albert Museum, Natural History Museum; p. 180,681. See London.
17 Kent, co., England; a. 1,555 sq. m.; hilly, N. Downs, S. Downs; rivers, Medway, Stour; "Garden of England"; agriculture, cereals, hops, fruits, vegetables; sheep, cattle, dairying; coal; fishing, oysters; mnfs., beer, bricks, cement, gunpowder; many seaside resorts; cap. Maidstone; p. 1,218,563; 51 15N 0 45E

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102 Kentucky, st., U.S.A.; a. 40,598 sq. m.; "blue grass region"; agriculture; tobacco, cereals, hemp; horses, cattle, sheep, pigs; timber; minerals, coal, petroleum, natural gas; mnfs., flour, tanning, cotton-seed oil; cap. Frankfort; p. 2,614,589; 37 0 to 39 0N 82 0 to 89 0W
102 Kentucky, R., U.S.A.; length 250 m.; 37 15N 83 15W
95 Kentville, tn., N.S., Can.; fruit; p. 3,033; 45 6N 64 19W
81 Kenya, Br. col. and prot., formerly Br. E. Africa; a. 224,960 sq. m.; coastal strip flat, interior elevated and peopled by whites; agriculture, maize, sugar, coconuts, sisal, cotton, coffee, cattle, sheep; bamboo, pencil cedar, hardwoods; gold; cap. Nairobi; p. 3,094,279; 5 00N to 5 00s 35 0 to 41 0E
81 Kenya, mt., Kenya; 17,200 ft.; 0 10s 37 28E
102 Keokuk, tn., Iowa, U.S.A.; dairying; p. 15,106; 40 25N 91 30W
67 Keonjhar, tn., Orissa, India; 21 36N 85 42E
62 Kerak, tn., Transjordan; 31 10N 35 37E
120 Kerang, tn., Vic., Austral.; 35 40s 143 55E
52 Kerasovo, tn., Bulgaria; 43 6N 25 58E
62 Kerbela, tn., Iraq; Holy cy. cereals, dates; p. 65,000; 32 36N 44 12E
57 Kerch, tn. spt., Crimea Rep., U.S.S.R.; wheat, linseed; sturgeon; p. 34,000; 45 21N 36 14E
81 Keren, tn., Eritrea; 15 45N 38 28E
53 Keresen, tn., Turkey; 39 24N 27 45E
128 Kerguelen I., Fr., Indian Oc.; 48 30s 69 40E
63 Kerki, tn., U.S.S.R.; 37 50N 65 7E
54 Kerkkala, tn., Finland; 66 20N 30 0E
60 Kerkuk, tn., Iraq; hides, salt, silks, cottons; petroleum; p. 31,500; 35 20N 44 22E
126 Kermadec Is., Pacific Oc., Br.; 30 0s 178 0W
63 Kerman, tn., Persia; carpets; p. 40,000; 30 17N 57 0E
63 Kermanshah, tn., Persia; carpets, silks, hides; p. 40,000; 34 15N 47 2E
32 Kerry, co., I.F.S.; a. 1,859 sq. m.; mountainous, Macgillicuddy's Reeks, Lakes of Killarney; farming, dairying, fishing; p. 150,865; 51 42 to 52 35N 9 30 to 10 48W
18 Kerry, par., Montgomery, Wales; p. 1,794; 52 30N 3 12W
32 Kerry Hd., Kerry, I.F.S.; 52 25N 10 0W
10 Kersas, vil., Algeria; 29 16N 3 38W
39 Kerteminde, tn., Denmark; p. 3,171; 55 27N 10 40E
53 Keshan, tn., Turkey; 40 52N 26 39E
16 Kessingland, par., Suffolk, Eng.; p. 2,056; 52 25N 1 42E
16 Kesteven, adm. co., Lincoln, Eng.; p. 110,059; 52 55N 0 33W
20 Keswick, urb. dist., Cumb., Eng.; near L. Derwentwater and Skiddaw; tourist resort; woollens; p. 4,635; 54 36N 3 09W
46 Keszthely, comm., Hungary; p. 10,664; 46 48N 17 15E
16 Kettering, urb. dist., Northants., Eng.; iron, boots, shoes; p. 31,220; 52 25N 0 43W
20 Kettlewell, par., W. Riding, England; p. 374; 54 9N 2 03W
54 Keuruu, tn., Finland; 62 18N 24 48E
19 Keynsham, par., Somerset, Eng.; p. 3,837; 51 25N 2 28W
103 Key West, tn., spt., Fla., U.S.A.; naval stn., winter resort; cigars, sponges; p. 12,831; 24 30N 81 30W
56 Khabarova, tn., Russia; 69 38N 60 20E
73 Khabarovka, tn., Siberia; on R. Amur; sable furs; p. 51,400; 48 30N 135 10E
63 Khabis, tn., Persia; 30 26N 57 42E
63 Khaf, tn., Persia; 34 41N 59 56E
66 Khairpur, st., Punjab, India; a. 6,050 sq. m.; wheat, cotton; p. 193,000; 26 45N 69 0E
66 Khairpur, tn., Punjab, India; weaving, dyeing; p. 14,120; 27 23N 68 45E
72 Khami, tn., Sin-Kiang; 42 45N 93 35E
68 Khammamett, tn., Hyd., India; 17 15N 80 10E
66 Khandesh, dist., India; a. 10,952 sq. m.; cotton, oil seeds; p. 1,718,000; 21 10N 75 0E
67 Khandwa, tn., India; p. 26,862; 21 13N 76 24E
70 Khanh-hoa, tn., Fr. Indo-China; 12 15N 108 50E
62 Khanikin, tn., Iraq; 34 17N 45 19E
72 Khan Tengri, Mt., Sin Kiang; 24,000 ft.; 42 0N 80 0E
63 Khanu, tn., Persia; 27 58N 57 31E
66 Kharan, tn., India; 28 42N 65 25E
79 Kharga, tn., oasis, Egypt; 25 26N 30 34E
57 Kharkov, tn., Ukraine, U.S.S.R.; univ.; rly. centre; woollens, sugar, farm implements; p. 654,300; 49 59N 36 12E
81 Khartoum, tn., cap., A.-E. Sudan; confluence Blue and White Niles; Gordon coll., Gordon killed 1885; ivory, gum, ostrich feathers; p. 42,240; 15 37N 32 30E
63 Khash, tn., Afghanistan; 31 22N 62 50E
69 Khasi, st., Assam, India; a. 6,022 sq. m.; fruits; p. 180,000; 25 30N 91 30E
69 Khasi Hills, Assam, India; 25 30N 92 0E
59 Khatansk, tn., Siberia, U.S.S.R.; 71 40N 102 0E
83 Kheis, tn., C. of Good Hope, S. Afr.; 28 50s 22 2E
64 Khelat-i-Ghilzai, tn., Afghanistan; 32 10N 66 56E
57 Kherson, tn., port, Ukraine, U.S.S.R.; on R. Dnieper; flour, timber, wool; p. 82,900; 46 42N 32 32E
73 Khingan Mts., China; 8,000 ft., 45 0N 120 0E
63 Khisht, tn., Persia; 29 31N 51 20E
61 Khiva, dist., Uzbek Rep., U.S.S.R.; 41 15N 60 50E
61 Khiva, tn., Uzbek Rep., U.S.S.R.; silks, cottons, carpets; p. 20,000; 41 15N 60 25E
62 Khoi, tn., Persia; 38 28N 45 2E
62 Khotur, tn., Persia; 38 29N 44 20E
61 Khojent, tn., Uzbek Rep., U.S.S.R.; on R. Syr Daria; cottons, silks; p. 37,000; 40 15N 69 35E
61 Khokand, tn., Uzbek Rep., U.S.S.R.; flour, cottons, silks; p. 84,700; 40 42N 71 0E
43 Kholm, tn., Poland; 51 7N 23 28E
70 Khong, tn., Fr. Indo-China; 14 0N 105 45E
63 Khonsar, tn., Persia; 33 0N 50 18E
63 Khoramshah, spt., Persia; 30 22N 48 11E
63 Khorremabad, tn., Persia; 33 30N 48 10E
60 Khosat, tn., Turkey; 39 8N 39 30E
72 Khotan, tn., Sin Kiang; 37 0N 79 55E
67 Khurja, tn., India; cotton, pottery; p. 25,719; 28 8N 78 0E

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63 Khuzistan (Arabistan), prov., Persia; a. 25,700 sq. m.; rice, maize, wool; petroleum; p. 200,000; 31 30N 49 30E
66 Khyber P., India; northern military route from India to Afghanistan, 30 m. long; 34 15N 71 5E
57 Khvalynsk, tn., Russia; 52 30N 48 0E
43 Khymelnik, tn., Poland; 50 38N 20 46E
72 Kiakhta, tn., Siberia, U.S.S.R.; 50 20N 106 30E
121 Kiama, tn., spt., N.S.W., Austral.; 34 40s 150 50E
88 Kiama, tn., Nigeria; 9 40N 3 50E
74 Kianfu, tn., China; 27 10N 115 0E
74 Kiang-chow, tn., China; 34 39N 110 30E
60 Kiangri, tn., Turkey; 40 40N 33 40E
74 Kiang-si, prov., China; a. 69,498 sq. m.; rice, wheat, tea, silk, cotton; cap. Nanchang; p. 27,563,410; 27 40N 115 0E
74 Kiang-su, prov., China; a. 38,610 sq. m.; rice, wheat, cotton, silk; cap. Chinkiang; p. 34,624,433; 33 0N 119 0E
62 Kiankari, tn., Turkey; 40 43N 33 58E
74 Kiaochow, tn., treaty port, China; former Ger. col., ceded to China 1922; 36 20N 120 15E
72 Kia-ting, tn., China; 29 40N 104 0E
59 Kichiginsk, tn., Siberia, U.S.S.R.; 59 30N 164 0E
47 Kichova, tn., Yugoslavia; 41 32N 20 59E
98 Kicking Horse P., Alta., Can.; where Canadian Pacific Rly. crosses the Rocky Mts.; 5,320 ft.; 51 30N 115 0W
18 Kidderminster, mun. bor., Worcs., Eng.; carpets, worsteds; p. 28,917; 52 24N 2 13W
19 Kidwelly, mun. bor., Carm., Wales; coal; p. 3,143; 51 45N 4 18W
39 Kiel, tn., port, Germ.; at entrance of Kiel Canal, naval stn., harb., univ.; shipbuilding, brewing, chemicals; p. 218,335; 54 20N 10 10E
39 Kiel B., Germany; 54 30N 10 30E
43 Kielce, co., Poland; a. 9,937 sq. m.; cereals, iron, coal; 50 50N 20 45E
43 Kielce, tn., Poland; ropes, cottons; p. 58,400; 50 51N 20 43E
74 Kien-chang-fu, tn., China; 27 40N 115 35E
74 Kien-ning-fu., tn., China; 27 13N 118 27E
57 Kiev, tn., Ukraine, U.S.S.R.; on R. Dnieper; univ., cath.; machinery; flour; p. 513,789; 50 26N 30 31E
62 Kifri, tn., Iraq; 34 39N 44 59E
122 Kikeri, tn., Papua; 7 17s 144 15E
81 Kikoma, tn., Uganda; 0 07s 31 30E
122 Kikopo, tn., spt., New Guinea; 4 25s 152 4E
33 Kilbeggan, tn., Westmeath, I.F.S.; p. 665; 53 22N 7 30W
26 Kilbirnie, par., Ayr, Scot.; linen; p. 8,193; 55 45N 4 41W
26 Kilbride, par., Argyll, Scot.; p. 4,498; 56 23N 5 27W
26 Kilchattan, par., Argyll, Scot.; p. 823; 55 45N 5 02W
26 Kilchoman, par., Argyll, Scot.; p. 1,899; 55 47N 6 26W
32 Kilchreest, par., Galway, I.F.S.; p. 429; 53 10N 8 40W
26 Kilchrenan, par., Argyll, Scot.; p. 322; 56 22N 5 13W
33 Kilcock, par., Kildare, I.F.S.; p. 985; 53 24N 6 40W
30 Kilconnell, par., Galway, I.F.S.; p. 656; 53 21N 8 24W
27 Kilconquhar, par., Fife, Scot.; p. 1,211; 56 13N 2 50W
33 Kilcool, par., Wicklow, I.F.S.; p. 1,193; 53 7N 6 04W
121 Kilcoy, tn., Queens., Austral.; 26 50s 152 32E
33 Kilcullen, vil., Kildare, I.F.S.; p. 588; 53 8N 6 45W
33 Kildare, co., I.F.S.; a. 654 sq. m.; flat; potatoes, oats; cattle rearing; p. 58,035; 53 10N 6 48W
33 Kildare, co. tn., Kildare, I.F.S.; cath.; p. 2,639; 53 10N 6 55W
25 Kildonan, par., Sutherland, Scot.; p. 1,454; 58 10N 3 50W
25 Kildrummy, par., Aberdeen, Scot.; p. 364; 57 15N 2 53W
32 Kilfenora, par., Clare, I.F.S.; p. 1,278; 52 59N 9 13W
26 Kilfinan, par., Argyll, Scot.; p. 1,489; 55 58N 5 18W
32 Kilfinane, tn., Limerick, I.F.S.; p. 890; 52 22N 8 29W
26 Kilfinichen, par., Argyll, Scot.; p. 1,020; 56 23N 6 04W
32 Kilgarvan, par., Kerry, I.F.S.; p. 2,350; 51 54N 9 26W
52 Kilia, tn., port, Rumania; on R. Danube; p. 11,850; 45 28N 29 19E
81 Kilimanjaro, mt., Tang. Ter.; 19,720 ft.; 3 04s 37 21E
81 Kilimatinde, tn., Tang. Ter.; 5 51s 35 0E
81 Kilindini, tn., spt., Kenya; port for Mombasa; 4 04s 39 40E
75 Kil-ju, tn., Korea; 41 15N 129 28E
32 Kilkee, tn., Clare, I.F.S.; p. 1,688; 52 41N 9 39W
31 Kilkeel, tn., Down, N. Ire.; p. 1,620; 54 4N 6 00W
33 Kilkenny, co., I.F.S.; a. 800 sq. m.; pastoral farming; coal, black marble; p. 70,965; 52 30N 7 15W
33 Kilkenny, urb. dist., co. tn., Kilkenny, I.F.S.; cath.; dairying; p. 10,056; 52 39N 7 15W
26 Kilkenzie, par., Argyll, Scot.; p. 870; 55 28N 5 41W
19 Kilkhampton, vil., Cornwall, England; p. 849; 50 52N 4 28W
121 Killarney, tn., Queens., Austral.; 28 0s 152 12E
32 Killadysert, par., Clare, I.F.S.; p. 1,898; 52 41N 9 07W
30 Killala, spt. tn., Mayo, I.F.S.; p. 503; 54 13N 9 14W
32 Killaloe, par., Clare, I.F.S.; cath.; p. 821; 52 48N 8 27W
121 Killarney, tn., Queens., Austral.; 28 23s 152 14E
32 Killarney, urb. dist., Kerry, I.F.S.; resort; near Lakes of Killarney; p. 5,325; 52 4N 9 30W
33 Killeagh, par., Cork, I.F.S.; p. 757; 51 57N 8 00W
26 Killean, par., Argyll, Scot.; p. 870; 55 39N 5 40W
27 Killearn, par., Stirling, Scot.; p. 908; 56 2N 4 21W
33 Killenaule, tn., Tipperary, I.F.S.; p. 538; 53 34N 7 40W
25 Killiecrankie, P., Perth, Scot.; 1¼ m. long; 56 44N 3 47W
27 Killin, par., Perth, Scot.; p. 1,414; 56 28N 4 19W
33 Killiney, urb. dist., Dublin, I.F.S.; p. 2,069; 53 15N 6 07W
32 Killorglin, tn., Kerry, I.F.S.; p. 1,087; 52 6N 9 47W
30 Killybegs, tn., Tirconaill, I.F.S.; p. 634; 54 38N 8 27W
33 Kilmacthomas, tn., Waterford, I.F.S.; p. 416; 52 13N 7 25W
26 Kilmalcolm, par., Renfrew, Scot.; p. 5,303; 55 54N 4 37W

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32 Kilmallock, tn., Limerick, I.F.S.; p. 1,101; 52 24ᵴ 8 36w
27 Kilmany, par., Fife, Scot.; p. 514; 56 26N 3 00w
26 Kilmarnock, bor., Ayr, Scot.; carpets, shawls, woollens, engineering; p. 38,099; 55 37N 4 30w
26 Kilmartin, par., Argyll, Scot.; p. 455; 56 8N 5 28w
24 Kilmoracк, par., Inverness, Scot.; p. 1,741; 57 28N 4 32w
121 Kilmore, tn., Vic., Austral.; 37 17ᵴ 144 58E
33 Kilmore, par., Wexford, I.F.S.; p. 1,110; 52 12N 6 33w
26 Kilmorich, par., Argyll, Scot.; p. 716; 56 16N 4 55w
26 Kilmory, par., Argyll, Scot.; p. 1,874; 55 55N 5 40w
26 Kilmory, par., Bute, Scot.; p. 3,001; 55 27N 5 12w
24 Kilmuir, par., Inverness, Scot.; p. 1,748; 57 26N 6 24w
25 Kilmuir, par., Ross and Crom., Scot.; p. 705; 57 44N 4 07w
26 Kilninian, par., Argyll, Scot.; p. 1,737; 56 32N 6 12w
26 Kilninver, par., Argyll, Scot.; p. 298; 56 20N 5 30w
81 Kilo, tn., Uganda; 1 52N 30 5E
88 Kilonga, tn., N. Rhodesia; 11 50ᵴ 31 10E
27 Kilpatrick, par., Dumbarton, Scot.; p. 11,567; 55 56N 4 18w
31 Kilrea, par., Londonderry, N. Ire.; p. 1,986; 54 57N 6 33w
27 Kilrenny and Anstruther, W. and E., bor., Fife, Scot.; p. 3,325; 56 15N 2 40w
32 Kilrush, urb. dist., Clare, I.F.S.; p. 3,346; 52 38N 9 30w
16 Kilsby, par., Northants., England; p. 518; 52 19N 1 11w
27 Kilsfiendie, par., Perth, Scot.; p. 433; 56 25N 3 15w
27 Kilsyth, bor., Stirling, Scot.; cotton, coal, iron; p. 7,551; 55 59N 4 04w
33 Kiltleel, par., Kildare, I.F.S.; p. 228; 53 14N 6 32w
32 Kiltormer, par., Galway, I.F.S.; p. 529; 10 14N 8 16w
73 Kilung, tn., Taiwan, Japan; 25 5N 121 50E
26 Kilwinning, bor., Ayr, Scot.; engineering, woollens; p. 5,324; 55 40N 4 42w
83 Kimberley, tn., cap. Griqualand W., S. Afr.; world diamond centre; p. 18,618 (Eur.), 28 45ᵴ 24 45E
16 Kimbolton, par., Hunts, Eng.; p. 902; 52 19N 0 25w
74 Kimen, tn., China; 29 36N 117 47E
75 Kimje, tn., Korea; 36 4N 126 42E
19 Kimmeridge, par., Dorset, England; p. 138; 50 37N 2 07w
52 Kimpulung, tn., Rumania; p. 10,124; 45 16N 25 5E
96 Kincardine, tn., Ont., Canada; p. 2,465; 44 13N 81 43w
25 Kincardine, co., Scotland; a. 381 sq. m.; in W. Grampian Mts.; grouse moors, deer forests; farming, oats, barley; fishing; p. 39,864; 56 57N 2 25w
27 Kincardine, spt. tn., Fife, Scot.; p. 1,820; 56 4N 3 42w
25 Kincardine, par., Ross and Crom., Scot.; p. 962; 57 52N 4 21w
25 Kincardine O'Niel, par., Aberdeen, Scot.; p. 1,847; 57 5N 2 41w
67 Kinchinjunga, mt., India; 28,146 ft.; 27 30N 87 45E
77 Kindu, tn., Belg. Congo; 2 55ᵴ 25 55E
16 Kineton, par., Warwick, Eng.; p. 950; 52 10N 1 30w
27 Kinlauns Castle, Perth, Scot.; 56 24ᵴ 3 22w
124 King Sd., W. Australia; 16 45ᵴ 123 30E
128 King Edward VII Ld., Ross Dep., Antarctica; 77 0ᵴ 150 0w
5 King George V Ld., Antarctica; 70 0ᵴ 140 0E
125 King George Sd., W. Australia; 35 3ᵴ 118 0E
83 King Williams Town, C. of Good Hope, S. Afr.; wool, hides, grain; p. 6,533 (Eur.); 32 55ᵴ 27 28E
26 Kingairloch, vil., Argyll, Scot.; 56 38N 5 31w
27 Kinghorn, bor., Fife, Scot.; p. 2,001; 56 4N 3 10w
27 Kinglassie, par., Fife, Scot.; p. 2,427; 56 10N 3 14w
120 Kingoonya, tn., S. Australia; 31 58ᵴ 135 24E
33 Kings County. See Offaly.
16 King's Lynn, mun. bor., spt., Norfolk, Eng.; fishing, agricultural machinery; p. 20,583; 52 46N 0 25E
27 Kingsbarns, par., Fife, Scot.; p. 534; 56 18N 2 40w
19 Kingsbridge, urb. dist., Devon, Eng.; p. 2,978; 50 17N 3 47w
17 Kingsclere, par., Hants, Eng.; p. 2,243; 51 19N 1 14w
31 Kingscourt, tn., Cavan, I.F.S.; p. 788; 53 54N 6 48w
27 Kingsmuir, vil., Angus, Scot.; p. 3,326; 56 38N 2 52w
120 Kingston, tn., port, S. Australia; 36 50ᵴ 139 50E
97 Kingston, tn., Ont., Canada; shipbuilding, engineering; p. 23,439; 44 17N 76 32w
17 Kingston-upon-Thames, mun. bor., Surrey, Eng.; on R. Thames; riverside resort; mkt. gardening; p. 39,722; 51 25N 0 18w
102 Kingston, tn., N.Y., U.S.A.; on R. Hudson; rly. works, bricks; p. 28,088; 41 56N 74 10w
110 Kingston, tn., spt., cap. Jamaica, W. Indies; p. 62,707; 18 0N 76 52w
21 Kingston-upon-Hull. See Hull.
33 Kingstown (Dun Laoghaire), urb. dist., spt., Dublin, I.F.S.; harbour; p. 18,992; 53 17N 6 09w
111 Kingstown, tn., cap. and port, St. Vincent, W. Indies; p. 4,000; 13 10N 61 12w
18 Kington, urb. dist., Hereford, Eng.; p. 1,742; 52 12N 3 00w
25 Kingussie, bor., Inverness, Scot.; resort; p. 1,067; 57 5N 03w
25 Kinloch Rannoch, par., Perth, Scot.; p. 665; 57 42N 4 11w
24 Kinlochbervie, par., Sutherland, Scot.; p. 671; 58 27N 5 03w
25 Kinloss, par., Moray, Scot.; p. 778; 57 40N 3 36w
74 Kinmen, tn., China; 31 13N 112 6E
25 Kinneff, par., Kincardine, Scot.; p. 713; 46 52N 2 15w
31 Kinnegad, par., Westmeath, I.F.S.; p. 332; 53 28N 7 06w
27 Kinross, co., Scotland; a. 82 sq. m.; hilly; includes L. Leven; oats, potatoes; sheep, cattle; coal; p. 7,454; 56 12N 3 25w
27 Kinross, bor., co. tn., Kinross. Scot. woollens; p. 2,020 56 12N 3 25w
32 Kinsale, urb. dist., spt., Cork, I.F.S.; fishing; p. 2,881; 51 42N 8 32w
80 Kinshasa. See Leopoldville.
88 Kintampo, tn., Gold Coast; 8 05N 1 40w
25 Kintore, bor., Aberdeen, Scot.; p. 756; 57 14N 2 21w
26 Kintyre, Argyll, Scot.; 55 35N 3 35w

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26 Kintyre, Mull of, Argyll, Scot.; 55 18N 5 48w
32 Kinvarra, vil., Galway, I.F.S.; p. 347; 53 8N 8 57w
81 Kioga, L., Uganda; 1 30N 30 0E
27 Kippen, par., Stirling, Scot.; p. 1,356; 56 7N 4 09w
31 Kircubbin, vil., Down, N. Ire.; p. 501; 54 29N 5 32w
59 Kirensk, tn., Siberia, U.S.S.R.; 57 30N 108 0E
58 Kirghiz, A.S.S.R., U.S.S.R.; a. 98,400 sq. m.; sheep, cattle, goats; p. 1,000,000 (est.); 41 0N 75 0E
58 Kirgiz Steppe, Kazak, A.S.S.R., U.S.S.R.; 49 30N 54 0E
81 Kirin, tn., Abyssinia; 9 55N 39 55E
73 Kirin, prov., Manchuria; 105,000 sq. m.; maize, wheat, barley; p. 7,500,000; 42 0 to 47 30N 124 0 to 135 0E
73 Kirin, tn., Manchuria; on Sungari R.; p. 100,000; 43 50N 126 40E
53 Kirjali, tn., Bulgaria; p. 6,487; 41 38N 25 24E
53 Kirk Agach, tn., Turkey; 35 9N 27 42E
53 Kirk Kilisse. See Kirklareli.
27 Kirkbean, par., Kirk., Scot.; p. 560; 54 55N 3 36w
20 Kirkby Lonsdale, par., Westmor., Eng.; p. 1,370; 54 14N 2 36w
20 Kirkby Moorside, par., N. Riding, Eng.; p. 1,695; 54 16N 0 56w
20 Kirkby Stephen, par., Westmor., Eng.; p. 1,542; 54 27N 2 23w
27 Kirkcaldy, bor., Fife, Scot.; linoleum, potteries, bleaching; engineering; p. 43,874; 56 7N 3 09w
26 Kirkcolm, par., Wigtown, Scot.; p. 1,388; 54 58N 5 05w
27 Kirkconnel, par., Dumfries, Scot.; p. 3,962; 55 24N 4 00w
26 Kirkcowan, par., Wigtown, Scot.; p. 977; 54 55N 4 35w
27 Kirkcudbright, co., Scotland; a. 899 sq. m.; cattle, sheep; fishing; p. 30,341; 54 35N 4 40w
27 Kirkcudbright, bor., co. tn., Kirk., Scot.; p. 2,311; 54 50N 4 03w
66 Kirkee, tn., India; 18 32N 73 58E
27 Kirkgunzeon, par., Kirk., Scot.; p. 487; 54 59N 3 47w
18 Kirkham, urb. dist., Lancs., Eng.; textiles; p. 4,031; 54 46N 2 52w
26 Kirkinner, par., Wigtown, Scot.; p. 1,004; 54 50N 4 27w
27 Kirkintilloch, bor., Dumbarton, Scot.; iron, coal; p. 11,817; 55 57N 4 08w
53 Kirklareli, tn., Turkey; p. 16,100; 41 75N 27 30E
27 Kirkliston, par., W. Lothian, Scot.; p. 3,974; 55 57N 3 25w
26 Kirkmaiden, par., Wigtown, Scot.; p. 1,554; 54 42N 4 54w
20 Kirkmichael, vil., I. of Man, England; 54 17N 4 35w
26 Kirkmichael, par., Ayr, Scot.; p. 1,575; 55 21N 4 36w
25 Kirkmichael, par., Banff, Scot.; p. 792; 57 18N 3 25w
25 Kirkmichael, par., Perth, Scot.; p. 762; 56 46N 3 30w
26 Kirkoswald, par., Ayr, Scot.; p. 1,802; 55 20N 4 46w
20 Kirkoswold, par., Cumb., Eng.; p. 475; 54 46N 2 42w
27 Kirkpatrick, par., Dumfries, Scot.; p. 1,067; 55 2N 3 07w
102 Kirksville, tn., Mo., U.S.A.; p. 8,293; 40 12N 92 37w
22 Kirkwall, bor., co. tn., Pomona, Orkney Is., Scotland; fishing; p. 3,517; 58 59N 2 57w
26 Kirn, par., Argyll, Scot.; p. 3,347; 55 58N 4 55w
56 Kirov. See Vyatka.
57 Kirovabad. See Gandzha.
57 Kirovsk. See Zinovievsk.
27 Kirriemuir, bor., Angus, Scot.; linen; p. 3,326; 56 41N 3 00w
57 Kirsanov, tn., Russia; iron smelting; p. 25,000; 52 42N 42 33E
79 Kirsh, tn., Egypt; 23 14N 32 58E
62 Kirshehr, tn., Turkey; 39 3N 34 20E
16 Kirton, par., Lindsey, England; p. 1,651; 53 28N 0 36w
54 Kiruna, tn., Sweden; 67 50N 20 20E
52 Kishinev, tn., Rumania; grain, wool, hides; p. 190,000; 47 4N 28 41E
63 Kishm I., Persia; 26 45N 55 45E
46 Kiskorös, tn., Hungary; p. 13,135; 46 39N 19 19E
46 Kiskunhalas, tn., Hungary; p. 28,804; 46 27N 19 32E
46 Kiskunmajsa, com., Hungary; p. 17,893; 46 30N 19 48E
57 Kislyar, tn., Dagestan Rep., U.S.S.R.; 43 53N 46 41E
81 Kismayu, tn., spt., It. Somaliland; 0 20S 42 30E
81 Kissaki, tn., Tang. Terr.; 7 25S 37 42E
68 Kistna, R., Mad., India; 800 m. long; 16 5N 78 30E
54 Kistrand, tn., Norway; 70 25N 25 30E
46 Kisújszállás, tn., Hungary; p. 14,531; 47 14N 20 49E
81 Kisumu, port, tn., Kenya; formerly P. Florence; on L. Victoria; 0 07S 34 46E
96 Kitchener, tn., Ont., Canada; boots and shoes, motor-cars, sugar refining; p. 30,793; 43 28N 80 35w
54 Kittilä, tn., Finland; 67 34N 25 0E
81 Kitui, tn., Kenya; 1 05S 37 50E
44 Kitzbühel Alps, mts., Austria; 47 20N 12 10E
40 Kitzingen, tn., Germ.; on R. Main; brewing; p. 10,272; 49 44N 10 10E
81 Kivu, L., Belg. Congo; 2 00S 29 5E
62 Kizil Irmak, R., Turkey; 520 m. long; 41 36N 36 0E
58 Kizil Kum, des., U.S.S.R.; 43 0N 65 0E
62 Kizil Uzen, R., Persia; 450 m. long; 37 0N 48 45E
39 Kjellerup, tn., Denmark; 56 17N 9 32E
83 Klaarstroom, tn., C. of Good Hope, S. Afr.; 33 18ᵴ 22 52E
47 Kladovo, tn., Yugoslavia; 44 38N 22 38E
46 Klagenfurt, tn., cap. Carinthia, Austria; iron foundries, machinery; p. 27,423; 46 37N 14 19E
42 Klaipeda, tn., spt., Lithuania; formerly Memel; timber; shipbuilding, ironfounding, fishing; p. 36,988; 55 42N 21 10E
106 Klamath, R., Cal., U.S.A.; 41 15N 123 15w
70 Klang. See Port Swettenham.
83 Klaver, tn., C. of Good Hope, S. Afr.; 31 40ᵴ 18 40E
83 Klerksdorp, tn., Trans., S. Afr.; cattle; gold; p. 3,600 (Eur.); 26 55ᵴ 26 40E
40 Kleve, tn., Germany; boots, machinery; resort; 51 48N 6 08E
56 Klin, tn., Russia; 56 26N 36 34E
83 Klipdam, tn., Trans., S. Afr.; 23 45ᵴ 29 31E
85 Klipplaat, tn., C. of Good Hope, S. Afr.; 33 0ᵴ 24 25E

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92 Klondike, Yukon, Can.; gold; 64 0N 138 0w
46 Klosterneuburg, tn., Austria; on R. Danube; wines; p. 14,000; 48 19N 16 21E
45 Klosters, tn., Switzerland; 46 53N 9 54E
21 Knaresborough, urb. dist., W. Riding, Eng.; famed for petrifying well; farming produce, leather; p. 5,942; 54 0N 1 27w
47 Kniazhevatz, tn., Yugoslavia; 43 33N 22 17E
18 Knighton, urb. dist., Radnor, Wales; p. 1,836; 52 21N 3 02w
46 Knittelfeld, tn., Austria; 47 13N 14 49E
25 Knockando, par., Moray, Scot.; p. 1,334; 57 28N 3 21w
33 Knockmealdown Mts., Tipperary, I.F.S.; 52 15N 7 57w
33 Knocktopher, par., Kilkenny, I.F.S.; p. 653; 52 29N 7 14w
24 Knoidart, dist., Inverness, Scot.; 57 4ᵴ 5 30w
21 Knott End, vil., Lancs., England; 53 55N 3 00w
16 Knowle, par., Warwick, Eng.; p. 2,535; 52 24N 1 45w
103 Knoxville, tn., Tenn., U.S.A.; on Tennessee R.; marble, coal, iron, copper; textiles; p. 105,802; 35 59N 84 0w
18 Knutsford, urb. dist., Cheshire, Eng.; p. 5,878; 53 18N 2 22w
84 Knysna, tn., C. of Good Hope, S. Afr.; 34 0ᵴ 23 5E
81 Kobbo, tn., Abyssinia; 9 30N 37 29E
72 Kobdo, tn., Mongolia; 48 5N 91 35E
75 Kobe, tn., spt., Japan; silks; p. 912,140; 34 41ᵴ 135 4E
57 Kobelyaki, tn., Ukr., U.S.S.R.; 49 9N 34 4E
47 Kocane, tn., Yugoslavia; 41 55N 22 50E
47 Kochana. See Kocane.
75 Kochi, tn., Japan; paper; p. 103,414; 33 30N 133 35E
81 Kodok (Fashoda), tn., Anglo-Egyptian Sudan; on R. Nile; cotton; 9 54N 32 7E
38 Koevorden, tn., Netherlands; 52 40N 6 44E
83 Koffiefontein, tn., O.F.S., S. Afr.; diamonds; 29 20ᵴ 25 1E
73 Kofu, tn., Japan; silk; p. 82,663; 35 30N 139 0E
39 Köge, tn., Denmark; p. 6,097; 55 28N 12 11E
66 Kohat, tn., India; p. 27,853; 33 38N 71 28E
64 Koh-i-Baba, Ra., Afghanistan; 34 40N 67 0E
66 Kohistan, dist., India; 35 20N 73 0E
52 Koinare, tn., Bulgaria; 43 20N 24 10E
125 Kojonup, tn., W. Australia; 34 45ᵴ 117 15E
102 Kokomo, tn., Ind., U.S.A.; steel, glass; p. 32,843; 40 30N 86 15w
72 Koko Nor, L., Tsinghai; 65 m. long; 10,700 ft. high; 37 0N 100 0E
72 Koko Nor, Mts., Tsinghai; 38 0N 93 0E
83 Kokstad, tn., C. of Good Hope, S. Afr.; 30 32ᵴ 29 30E
43 Kola, tn., Poland; 52 11N 18 38E
56 Kola, tn., Russia; 68 60N 33 0E
56 Kola Pen., Russia; 67 30N 38 0E
61 Kolab, tn., Uzbek, U.S.S.R.; 37 50N 69 48E
68 Kolar, tn., Mysore, India; gold, blankets; p. 87,682 13 8N 78 10E
54 Kolari, tn., Finland; 67 20N 23 50E
41 Kolberg, tn., Germany; fishing; foundries, machinery, distilling; p. 30,115; 54 10N 15 35E
39 Kolding, tn., spt., Denmark; woollens; p. 22,959; 55 30N 9 30E
54 Kolen Mts., Scandinavia; 67 0N 16 40E
56 Kolguev I., Russia; 69 10N 49 0E
68 Kolhapur, st., Bom., India; a. 3,217 sq. m.; rice, sugar, cotton; p. 956,864; 16 40N 74 18E
68 Kolhapur, tn., Bombay, India; cottons, lace, pottery; p. 55,594; 16 40N 74 18E
38 Kollum, tn., Netherlands; 53 16N 6 08E
40 Köln. See Cologne.
43 Kolomyja, tn., Poland; farming products; p. 33,400 48 35N 25 5E
52 Kolozsvar. See Cluj.
63 Kom, tn., Persia; p. 35,900; 34 36N 50 52E
46 Komarno, tn., Czechoslovakia; on R. Danube; cereals, timber, dairying; p. 21,137; 47 45N 18 3E
83 Komati Poort, tn., Trans., S. Afr.; 25 32ᵴ 32 6E
83 Komati R., C. of Good Hope, S. Afr.; 26 5ᵴ 31 30E
75 Komatsu, tn., Japan; silk; p. 12,500; 36 30N 136 51E
79 Kom Ombo, tn., Egypt; 24 25N 32 52E
46 Komorn. See Komarno.
59 Kompakovo, tn., Siberia, U.S.S.R.; 54 0N 156 0E
73 Komsolomsk, tn., Siberia; 50 30N 137 50E
88 Konakri, tn., spt., cap. Fr. Guinea; rubber, coffee, ground-nuts; p. 8,500; 9 30N 13 46w
125 Kondinin, tn., W. Australia; 32 22ᵴ 118 10E
43 Konetspol, tn., Poland; 50 48N 19 42E
75 Kong-ju, tn., Korea; p. 37,000; 36 20N 127 35E
74 Kongmoon, tn., China; p. 94,598; 22 45N 113 0E
81 Kongolo, tn., Belg. Congo; 5 20S 27 0E
55 Kongsberg, tn., Norway; 59 40N 9 30E
55 Kongsvinger, tn., Norway; 60 50N 12 4E
41 Königsberg, tn., cap. of E. Prussia; Germany; on R. Pregel; univ., cath.; shipbuilding, machinery, wood pulp, chemicals, sugar, beer; tea centre; p. 316,072; 54 42N 20 32E
43 Königshutte. See Krolewska Huta.
43 Konin, tn., Poland; 52 10N 18 16E
43 Konitz, tn., Poland; p. 11,000; 53 40N 17 38E
53 Konitza, tn., Greece; 40 5N 20 45E
47 Konjica, tn., Yugoslavia; 43 43N 18 0E
57 Konotop, tn., Ukraine, U.S.S.R.; 51 44N 33 2E
43 Konsk, tn., Poland; 51 12N 20 24E
59 Konstantinov, tn., U.S.S.R.; 54 35N 169 0E
57 Konstantinovsk, tn., Russia; on R. Don; 47 33N 41 0E
62 Konya, cy., Turkey; fruit; carpets, silks; p. 47,495; 37 50N 32 30E
121 Koondrook, tn., N.S.W., Austral.; 35 38ᵴ 144 7E
120 Kooringa, tn., S. Australia; wheat; 33 37ᵴ 138 54E
121 Koorowatha, tn., N.S.W., Austral.; 34 1ᵴ 148 31E
98 Kootenay, R., B. C., Can.; 400 m. long; fruit, minerals; 50 30N 115 45w
72 Kopa, tn., Sin Kiang; 37 25N 84 40E
72 Kopal, tn., U.S.S.R.; 45 20N 79 0E
53 Kopais, L., Greece; 38 30N 23 10E
55 Köping, tn., Sweden; p. 6,395; 59 30N 16 0E
55 Kopparberg, co., Sweden; a. 11,589 sq. m.; p. 249,647; 59 55N 15 0E
48 Koprivnica, tn., Yugoslavia; 46 12N 16 49E
52 Koprivshtitza, tn., Bulgaria; 42 39N 24 21E
70 Korat, tn., Siam; 14 55N 101 50E

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81 Kordofan, prov., A.-E. Sudan; a. 130,000 sq. m.; cattle, camels; ivory, gum, ostrich feathers; cap. El Obeid; p. 671,000; 13 20N 30 0E
75 Korea (Chosen), terr., Japan; a. 85,228 sq. m.; mountainous; agriculture, rice, barley, wheat, soya beans, cotton, silk; cattle, pigs; fishing; gold, iron ore, coal; cap. Seoul (Keijo); p. 22,898,695; 34 to 43N 125 to 130E
74 Korea B., China; 39 0N 124 0E
73 Korea, Str., Japan; 34 15N 129 30E
47 Koritza, tn., Albania; p. 22,787; 40 38N 20 48E
120 Koroit, tn., Vic., Austral.; 38 14s 142 20E
120 Korong Vale, tn., Vic., Austral.; 36 25N 143 38E
53 Koroni, tn., Greece; 36 49N 21 58E
79 Korosko, vil., Egypt; 22 10N 32 19E
73 Korsakovsk, tn., Japan; 46 42N 142 47E
39 Korsör, tn., Denmark; p. 9,728; 55 19N 11 8E
121 Korumburra, tn., Vic., Austral.; 38 25s 145 49E
121 Kosciusko, Mt., N.S.W., Austral.; 7,310 ft.; 36 20s 148 10E
53 Kos, I., Dodecanese, Ægean S.; 36 53N 27 20E
46 Kosice, tn., Czechoslovakia; woollens, saw-milling, distilling; p. 70,232; 48 41N 21 19E
41 Koslin, tn., Germany; brewing, textiles, soap; 54 10N 16 10E
56 Kosmodemyansk, tn., Russia; 56 24N 46 28E
79 Kosseir, tn., spt., Egypt; 26 8N 34 18E
47 Kostajnica, tn., Yugoslavia; 45 18N 16 32E
56 Kostroma, tn., Russia; on R. Volga; cath., univ.; linen, tobacco; p. 90,700; 57 48N 40 56E
46 Koszeg, tn., Hungary; 47 26N 16 33E
70 Kota Bharu, tn., Malay Pen.; p. 15,500; 6 35N 103 10E
60 Kotah, tn., India, muslins; p. 31,707; 25 14N 75 59E
82 Kota-kota, tn., Nyasaland; 12 56s 34 15E
40 Köthen, tn., Germany; iron foundry, machinery; p. 26,595; 51 46N 11 59E
55 Kotka, tn., spt., Finland; timber; p. 16,208; 60 28N 27 2E
56 Kotlas, tn., Russia; 61 9N 46 35E
70 Kota Raja, tn., Sumatra, D.E.I.; 5 30N 95 15E
47 Kotor. See Cattaro.
68 Kottayam, tn., Madras, India; 9 31N 76 32E
41 Kottbus, tn., Germany; on R. Spree; cloth, machinery, brandy; p. 52,302; 51 45N 14 20E
88 Koulikoro tn., Fr. W. Africa; 13 10N 7 55W
123 Koumala, tn., Queens., Austral.; 21 40s 149 20E
55 Kouvola, tn., Finland; 60 24N 25 18E
54 Kovda, tn., Russia; 66 45N 32 30E
42 Kovno, dist., Lithuania; 54 52N 23 55E
42 Kovno. See Kaunas.
56 Kovrov, tn., Russia; textiles, rly. works, timber; p. 26,000; 56 26N 41 15E
43 Kowel, tn., Poland; p. 17,500; 51 13N 24 41E
74 Kowloon, pen., Hong Kong, China; a. 376 sq. m.; p. 264,000; 22 30N 114 0E
53 Kozhani, tn., Greece; p. 12,700; 40 20N 21 48E
52 Kozliya, tn., Bulgaria; 43 19N 27 39E
57 Kozlov, tn., Russia; flour, cattle, meat; p. 54,390; 53 2N 40 21E
70 Kra, tn., Siam; 10 25N 98 46E
70 Kra, Isth., Siam; connects Malay Pen. with Further India; 10 20N 99 0E
55 Kragero, tn., Norway; 58 55N 9 20E
47 Kragujevac, tn., Yugoslavia; flour, textiles; p. 27,249; 44 1N 20 52E
70 Krakatao, I., Dutch E. Indies; volcano, greater part destroyed 1883; 6 12s 105 30E
48 Krakow (Cracow), Poland; 50 5N 19 59E
47 Kralyevo, tn., Yugoslavia; 43 40N 20 40E
53 Kranidion, tn., Greece; 37 20N 23 10E
42 Kraslavka, tn., Latvia; 55 50N 27 10E
43 Krasnik, tn., Poland; 50 55N 22 12E
57 Krasniyar, tn., Kalmuck, U.S.S.R.; 46 26N 48 27E
57 Krasnoarmeisk, tn., Crimea, U.S.S.R.; 44 25N 34 10E
57 Krasnodar, tn., N. Caucasian area, U.S.S.R.; glass, tobacco; p. 218,900; 45 2N 38 56E
59 Krasnoe, tn., Siberia, U.S.S.R.; 67 20N 121 0E
56 Krasno Ufimsk, tn., Ural area, U.S.S.R.; 56 39N 57 35E
58 Krasnovodsk tn., spt., Russia; fruits; p. 10,000; 40 3N 53 0E
59 Krasnoyarsk, U.S.S.R.; p. 101,500; 56 8N 93 0E
70 Krat, tn., Siam; 12 10N 102 20E
70 Kratie, tn., Fr. Indo-China; 12 25N 106 5E
47 Kratovo, tn., Yugoslavia; 42 4N 22 13E
88 Kratye, tn., Br. Togoland; p. 6,100; 7 45N 0 05E
40 Krefeld-Uerdingen, tn., Germany; silk, velvet; p. 165,305; 51 20N 6 34E
57 Kremenchug, tn., Ukraine, U.S.S.R.; on R. Dnieper; grain, timber; p. 68,700; 49 11N 33 26E
43 Krementz, tn., Poland; p. 16,750; 50 5N 25 43E
46 Krems, tn., Austria; on R. Danube; white lead; p. 12,800; 48 25N 15 36E
42 Kreutsburg, tn., Latvia; 56 32N 26 0E
41 Kreuzburg, tn., Germany; sugar, flour, machinery; p. 12,395; 51 0N 18 14E
69 Krishnagar, tn., India; p. 22,309; 23 20N 88 35E
56 Kristiansand, spt., Norway; timber; fishing; p. 18,700; 58 0N 7 55E
55 Kristianstad, co., Sweden; a. 2,493 sq. m.; p. 245,912; 56 9N 13 50E
55 Kristianstad, tn., Sweden; gloves, linens, woollens; p. 13,515; 56 8N 14 10E
55 Kristiansund, spt., Norway; 63 10N 7 45E
55 Krisuvchamn, tn., Sweden; p. 12,434; 59 20N 14 10E
55 Kristiina, tn., Finland; 62 20N 21 20E
46 Krisevca, tn., Yugoslavia; 46 1N 16 36E
72 Kroitskcsavsk, tn., Buryat, A.S.S.R., U.S.S.R.; 50 30N 106 10E
57 Krolevets, tn., Russia; 51 30N 33 15E
43 Krolewska Huta (Chorzow), tn., Poland; formerly Konigshutte; coal, iron; p. 81,300; 50 18N 19 0E
55 Kronoberg, co., Sweden; a. 3,826 sq. m.; p. 155,535; 56 40N 14 20E
55 Kronoborg, tn., Finland; 61 20N 30 0E
56 Kronstadt, tn., spt., Russia; arsenal, docks; p. 62,000; 60 0N 29 45E
88 Kroonstad, tn., O.F.S., S. Afr.; p. 5,639 (Eur.); 27 40s 27 23E
47 Kroya, tn., Albania; 41 35N 19 47E
83 Krugersdorp, tn., Trans. S. Afr.; gold; p. 13,696 (Eur.); 26 10s 27 47E
47 Krusevac, tn., Yugoslavia; p. 6,500; 43 30N 21 20E

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47 Krushevo, tn., Yugoslavia; p. 10,740; 41 21N 21 19E
70 Kuala Lipis, tn., Malay Pen.; 4 15N 102 0E
70 Kuala Lumpur, cap. Selangor, Malay Pen.; rice, tapioca, tin, rubber; p. 80,000 (est.); 3 5N 101 40E
83 Kub, tn., S.W. Africa; 24 26s 17 50E
57 Kuba, tn., Azer. Rep., U.S.S.R.; 41 22N 48 28E
57 Kuban R., Russia; 450 m. long; 45 15N 38 0E
77 Kubango R., Angola; 13 45s 16 30E
72 Kucha, tn., Sin Kiang; 41 30N 83 40E
83 Kuchan, tn., Persia; 37 0N 58 0E
70 Kuching, tn., spt., cap. Sarawak; E. Indies; 1 35N 110 25E
53 Kuchuk Chekmeje, tn., Turkey; 41 0N 28 59E
51 Kufra Oasis, Libya; 25 30N 23 0E
46 Kufstein, tn., Austria; p. 4,595; 47 35N 12 11E
79 Kuft, tn., Egypt; 26 1N 32 49E
63 Kuh Hazar Masjid, Mt., Persia; 10,500 ft.; 37 1N 59 14E
54 Kuhmoniemi, tn., Finland; 64 10N 29 50E
57 Kuibshev. See Samara.
54 Kuivaniemi, tn., Finland; 65 30N 25 18E
80 Kuka, tn., Nigeria; p. 56,500; 12 58N 13 53E
70 Kukane, tn., Siam; 14 40N 104 0E
125 Kukerin, tn., W. Australia; 33 5s 118 0E
53 Kukush, tn., Greece; 40 59N 22 58E
52 Kula, tn., Bulgaria; p. 5,487; 43 50N 22 32E
53 Kula, tn., Turkey; 38 34N 28 35E
40 Kulmbach, tn., Germany; textiles, chemicals, beer; p. 11,874; 50 8N 11 28E
88 Kumasi, tn., Gold Coast; p. 25,000; 6 50N 2 16W
75 Kumamoto, tn., Japan; p. 87,368; 32 48N 130 53E
47 Kumanovo, tn., Yugoslavia; 42 8N 21 42E
127 Kumara, bor., S.I., New Zealand; p. 475; 42 39s 171 10E
68 Kumbakonam, tn., Mad., India; sacred city; silks, cottons; p. 60,700; 11 0N 79 25E
63 Kumishah, tn., Persia; p. 25,000; 32 1N 51 50E
53 Kum Kalessi, tn., Turkey; 40 0N 26 12E
59 Kumursk, tn., U.S.S.R.; 51 20N 127 20E
64 Kundus, tn., Afghanistan; 36 50N 69 0E
60 Kunfuda, tn., Arabia; 19 12N 41 5E
56 Kungur, tn., Ural Area, U.S.S.R.; tanneries, shoes; p. 20,000; 57 27N 56 51E
69 Kunlon, vil., Burma, India; 23 23N 98 40E
75 Kunsan, tn., Korea; 36 5N 126 40E
83 Kunwana, tn., Trans., S. Afr.; 26 27s 25 22E
54 Kuolajarvi, tn., Finland; 66 54N 29 20E
54 Kuopio, tn., Finland; dairying; p. 24,500; 62 58N 27 38E
71 Kupang, tn., spt., Dutch E. Indies; 10 15s 123 40E
57 Kupyansk, tn., Ukraine, Rus.; 49 40N 37 31E
62 Kurdistan, W. Asia; a. 74,000 sq. m.; mountainous; sheep raising; p. 1,500,000; 38 0N 42 0E
62 Kur, R., Azer, Rus.; length 825 m.; 39 28N 49 19E
58 Kurgan, tn., Ural Area, U.S.S.R.; farming implements; p. 28,000; 55 0N 65 0E
61 Kuria Muria Is., Arabia; attached to Aden; guano; 17 43N 56 10E
41 Kurische Nehrung, Germany; 55 20N 21 0E
41 Kurisches Haff, Germany; 55 20N 21 10E
54 Kurikka, tn., Finland; 62 53N 22 0E
59 Kurile Is., Japan; a chain of volcanic Is., between Kamchatka and Japan; hot springs; seals and salmon; 47 0N 152 0E
72 Kurla, tn., Sin Kiang; 41 35N 86 30E
42 Kurland, prov., Latvia; 56 30N 24 0E
79 Kurna, tn., Egypt; 25 45N 32 39E
62 Kurna, tn., Iraq; 31 10N 47 21E
68 Kurnool, tn., India; carpets; p. 27,908; 15 50N 77 59E
47 Kurshumlie, tn., Yugoslavia; 43 8N 21 18E
57 Kursk, tn., Russia; flour, tobacco, iron foundries; p. 102,500; 51 47N 36 33E
85 Kuruman, tn., Bech., S. Afr.; 27 28s 23 25E
68 Kurunegala, tn., Ceylon; 7 31N 80 16E
88 Kurussa, tn., Fr. W. Africa; 10 35N 9 55W
79 Kus, tn., Egypt; 25 54N 32 46E
63 Kusi, tn., Persia; 32 47N 38 50E
75 Kushiro, tn., spt., Japan; fishing; p. 56,170; 43 0N 144 6E
63 Kushk, tn., U.S.S.R.; 35 25N 62 23E
45 Küssnacht, tn., Schwyz, Switz.; 47 0N 8 27E
45 Küssnacht, tn., Zurich., Switz.; 47 20N 8 35E
80 Kusuri, tn., Fr. Eq. Africa; 12 10N 15 0E
58 Kustanai, tn., U.S.S.R.; tanning, flour; 52 58N 64 0E
53 Kustendil, tn., Bulgaria; p. 15,440; 42 15N 22 41E
52 Kustenje. See Constanta.
41 Küstrin, tn., Germany; at junc. of R. Warthe and Oder; machinery, hardware; p. 18,000; 52 34N 14 38E
57 Kutais, tn., Russia; silks, fruit; p. 70,100; 42 15N 42 33E
62 Kütahya, tn., Turkey; carpets; p. 17,282; 39 28N 30 1E
62 Kut-el-Amara, tn., Iraq; surrendered to Turks, April 1916, retaken by Br. Feb. 1917; p. 5,100; 32 40N 46 0E
60 Kut el Hai, tn., Iraq; 32 15N 46 0E
43 Kutno, tn., Poland; p. 11,000; 52 13N 19 21E
43 Kuty, tn., Poland; 48 18N 25 9E
54 Kuusamo, tn., Finland; 65 5N 29 5E
60 Kuwait, st., Arabia; exp., horses, sheep; 29 30N 48 2E
57 Kuznetsk, tn., Russia; farming implements, leather; 53 10N 46 31E
80 Kwa R., Belg. Congo; 3 30s 17 0E
71 Kwandang, tn., Dutch E. Indies; 0 50N 122 45E
88 Kwande, tn., Fr. W. Africa; 10 18N 1 40E
80 Kwando R., Angola; 17 0s 22 30E
73 Kwang-Chow, B., and terr., China, Fr.; a. 190 sq. m.; exp., pigs, cattle, ground-nuts, sugar; p. 250,000; 22 0N 111 0E
74 Kwang-chow, tn., China; 32 15N 115 10E
77 Kwango, R., Belg., Congo; 10 50s 19 0E
72 Kwang-si, prov., China; a. 77,220 sq. m.; sugar, tobacco, rice, indigo, silk; cap. Kweilin; p. 12,258,335; 24 0N 109 0E
74 Kwang-sin, tn., China; 28 20N 118 0E
73 Kwang-tung, prov., China; a. 100,000 sq. m.; rice, tea, sugar, silk; cap. Canton; p. 36,773,502; 18 20 to 25 0N 108 0 to 117 0E
74 Kwei-chow, prov., China; a. 67,182 sq. in.; cereals, silk; timber; gold, silver, quicksilver; cap. Kweiyang; p. 11,291,261; 30 58N 111 0E
74 Kwei-hua-cheng, tn., China; p. 200,000; 41 0N 111 40E

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72 Kwei-lin, tn., China; silks, skins; p. 100,000; 25 0N 110 0E
74 Kwei-ti, tn., China; 34 30N 116 0E
72 Kwei-yang, tn., China; p. 100,000; 26 30N 107 45E
67 Kwen Lun, mts., Cent. Asia; N. wall of Tibetan plateau, 2,300 m. long; 36 0N 80 0E
69 Kyaukpyu, tn., spt., Burma, India; 19 20N 93 38E
69 Kyaukse, tn., Burma, India; 21 35N 96 0E
53 Kymi, tn., Greece; 38 38N 24 10E
121 Kyneton, tn., Vic., Austral.; 37 15s 144 28E
121 Kyogle, tn., N.S.W., Austral.; 28 31s 153 0E
75 Kyoto, tn., Japan; univ., temples and shrines, palace; pottery, porcelain, silks; p. 1,080,592; 34 57N 135 55E
53 Kyparissia, tn. (Arcadia), Greece; 37 14N 21 40E
54 Kyro, tn., Finland; 63 46N 27 50E
56 Kyshtymski, tn., Ural Area, U.S.S.R.; 55 39N 60 33E
53 Kythera I. See Cerigo I.
75 Kyushu I., Japan; a. 16,236 sq. m.; mountainous, fertile valleys; rice, wheat, tea, hemp; coal, copper; p. 7,000,000 (est.); 32 20N 131 0E

48 La Bañeza, Spain; 42 15N 5 56W
108 La Barca, tn., Jalisco, Mex.; p. 10,370; 20 18N 102 38W
36 La Bassée, tn., France; battle (Nov. 1914); p. 4,415; 50 33N 2 48E
10 La Calle, spt., Algeria; p. 4,120; 36 50N 7 50E
110 La Ceiba, Honduras; p. 12,000; 15 40N 86 58W
45 La Chaux des Fonds, Switz.; p. 35,325; 47 0N 6 50E
102 La Crosse, tn., Wis., U.S.A.; flour mills; lumber, rly. centre; p. 39,614; 42 47N 91 6W
34 La Fère, vil., France; fort, held by Germans Sep. 1914–Oct. 1918; 49 39N 3 24E
106 La Grande, Ore., U.S.A.; p. 8,030; 45 17N 117 58W
103 La Grange, Ga., U.S.A.; p. 20,131; 33 0N 85 1W
112 La Guaira, Venezuela; spt. of Caracas; sugar, coffee, cocoa; p. 21,000; 10 43N 66 59W
34 la Hague, C. de, France; 49 44N 1 57W
107 La Junta, Col., U.S.A.; p. 7,193; 28 29N 107 21W
48 La Linea, tn., Cadiz, Spain; p. 63,236; 36 10N 5 24W
112 La Mana, French Guiana; 5 50N 53 55W
48 La Palma, Huelva, Spain; 37 22N 6 37W
113 La Paz, Argentina; on Parana R.; p. 10,000; 30 45s 59 33W
113 La Paz, tn., Bolivia; wool, alpaca, copper; commercial and administrative cap. of Bolivia; p. 142,000; 16 10s 68 15W
108 La Paz, Mexico; 24 8N 110 23W
75 La Perouse Str., Japan; between Sakhalin and Hokkaido; 45 40N 142 0E
113 La Plata, cy., Argentina; univ.; trade, farming prod., cattle; cap. of Buenos Aires prov.; p. 168,000; 34 55s 58 0W
48 La Puebla, tn., Spain; 39 50N 4 21W
113 La Quiaca, Argentina; 22 15s 65 50W
114 La Quiaca, Bolivia; 22 0s 65 32W
35 La Réole, tn., France; on R. Garonne; 44 36N 0 03W
35 La Roche sur Yon, tn., cap. Vendée, France; farm produce, live-stock, flour mills; p. 15,247; 46 40N 1 28W
35 La Rochelle, spt., cap. Charente-Inf., France; cath., palace; shipbuilding, cotton, glass, distilling; p. 45,043; 46 11N 1 11W
49 La Roda, Spain; 39 12N 2 11W
113 La Serena, tn., Coquimbo, Chile; p. 20,696; 29 56s 71 20W
35 La Seyne, spt., France; p. 26,817; 43 4N 5 53E
94 La Tuque, tn., Que., Can.; on St. Maurice R.; p. 7,871; 47 8N 72 12W
110 La Union, spt., Salvador; p. 7,000; 13 18N 87 52W
49 La Union, tn., Murcia, Spain; iron, manganese, sulphur; p. 25,000; 37 37N 0 52W
41 Labiau, tn., Germany; 54 52N 21 8E
57 Labinskaya, Russia; 44 40N 40 45E
93 Labrador, pen., N. America; a. 110,000 sq. m.; administered with Newfoundland; important cod and herring fisheries; p. 4,163; 56 0N 61 0W
71 Labuan I., Br. N. Borneo; a. 30 sq. m.; under administration of Straits Settlements; coconuts, rice, rubber; p. 7,500; 5 20N 115 15E
58 Laccadive Is., adm. by Mad., Ind.; Brit. coral islands; off W. coast; 11 0N 73 0E
121 Lachlan, R., N.S.W., Australia; 700 m. long, trib. of Murrumbidgee R.; 33 45s 144 50E
97 Lachute, tn., Que., Can.; p. 3,995; 45 41N 74 23W
98 Lacombe, tn., Alta, Can.; p. 1,229; 52 28N 113 43W
67 Ladakh, Kashmir, India; wild and mountainous mountain chain from E. to W.; R. Indus flows through; intensive cultivation in valleys; minerals little worked; cap. Leh; p. 37,000; 34 0N 77 15E
83 Ladismith, mun., C. of Good Hope, S. Afr.; p. 1,500; 33 32s 21 20E
81 Lado, tn., A.-E. Sud.; on Bahr-el-Jebel; 5 0N 31 40E
56 Ladoga, L., Russia; a. 7,000 sq. m.; largest European lake drained by R. Neva; rich fisheries; 61 0N 31 30E
116 Ladrone Is. See Marians Is.
83 Lady Grey, tn., C. of Good Hope, S. Afr.; 30 25s 27 24E
27 Ladybank, burgh, Fife, Scotland; locomotives; p. 1,128; 56 17N 3 07W
83 Ladybrand, tn., O.F.S., S. Afr.; health resort; p. 2,396 (Eur.); 29 10s 27 31E
87 Ladyfrere, tn., C. of Good Hope, S. Afr.; 31 42s 27 10E
27 Ladykirk, par., Berwick, Scot.; p. 338; 55 44N 2 12W
83 Ladysmith, tn., Nat., S. Afr.; rly. works, coal; noted for Brit. defence in S. Afr. War (1899–1900); p. 3,659 (Eur.); 28 33s 29 40E
38 Laeken, Belgium; suburb, Brussels; p. 31,250; 50 53N 4 21E
39 Laeso I., Denmark; to Hjorring prov.; 57 15N 11 0E
102 Lafayette, cy., Ind., U.S.A.; farm implements, lumber; p. 26,240; 40 24N 86 55W
25 Laggan, par., Inver., Scot.; p. 664; 57 2N 4 16W
48 Lagoa, Portugal; 37 7N 8 29W
108 Lagos, tn., Jalisco, Mexico; p. 13,250; 21 19N 101 59W
88 Lagos, spt., Nigeria; only natural harbour on Slave Coast; rail to interior; engineering workshops; cap. of Nigeria; p. 100,000; 6 27N 3 23E
48 Lagos, spt., Portugal; fisheries; p. 10,000; 37 5N 8 40W
47 Lagosta, I., Italian poss. in Adriatic Sea; p. 1,420; 42 47N 16 52E

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124 Lagrange, W. Australia; 18 40s 122 50e
113 Laguna, tn., Brazil; 28 15s 48 40w
63 Lahijan, tn., Persia; 37 8n 50 11e
55 Laholm, tn., Sweden; p. 1,750; 56 30n 13 0e
66 Lahore, tn., India; on R. Ravi; Hindu temples and Mohammedan mosques, Anglican cath., univ.; textiles, carpets, pottery; cap. of Pun.; p. 429,747; 31 31n 74 22e
40 Lahr, tn., Germany; tobacco, cardboard, cottons, woollens; p. 14,075; 48 22n 7 50e
55 Lahti, Finland; p. 9,623; 61 3n 25 42e
47 Laibach, tn., Yugoslavia; cas.; textiles, chemicals, bell founding; p. 59,760; 46 2n 14 33e
74 Laichow, tn., China; 37 5n 119 55e
60 Laila, Arabia; 22 21n 47 0e
83 Laings Nek, Natal, S. Afr.; 27 33s 30 0e
83 Laingsburg, C. of Good Hope, S. Afr.; 33 8s 20 56e
20 Lairg, par., Suther., Scot.; tourist centre; p. 1,046; 58 2n 4 54w
70 Lais, vil., Sumatra; 3 30s 102 0e
56 Laisk, tn., Russia; 58 3n 60 0e
103 Lake Charles, tn., La., U.S.A.; winter resort; rice, oil, lumber; p. 15,791; 30 15n 93 10w
125 Lake Grace, W. Australia; 33 10s 118 30e
96 Lake St. Clair, N. America; a. 460 sq. m.; 42 25n 82 40w
69 Lakhimpur, dist., Assam, India; a. 3,757 sq. m.; coal, petroleum; ch. tn. Dibrugarh; p. 588,000; 27 12n 94 10e
70 Lakhon, Siam; 17 30n 99 30e
67 Lalitpur, tn., Un. Prov., India; 24 33n 78 30e
17 Lambeth, met. bor., London, England; Lambeth Palace, residence of Archbishop of Canterbury; pottery, chemicals; p. 296,162. See London.
17 Lambourn, par., Berks, Eng.; farming, training stables; p. 2,193; 51 31n 1 31w
112 Lamboyeque, dept. Peru; a. 4,614 sq. m.; cotton, tobacco, sugar; p. 588,000; 6 40s 79 55w
48 Lamego, tn., Portugal; 41 6n 7 52w
53 Lamia, tn., Greece; p. 14,200; 38 55n 22 29e
26 Lamlash, Arran, Bute, Scot.; 55 32n 5 08w
27 Lammermuir, dist., Berwick, Scot.; 55 50n 2 25w
27 Lammermuir Hills, E. Lothian, Scot.; highest point Lammer Low 1,733 ft.; 55 52n 2 40w
114 Lampa, tn., Peru; p. 2,560; 15 23s 70 16w
109 Lampazos, tn., Mexico; 27 0n 100 31w
18 Lampeter, mun. bor., Card., Wales; St. David's College; p. 1,742; 52 7n 4 04w
70 Lampun, tn., Siam; 18 45n 99 0e
69 Lampung, tn., Siam; 18 27s 99 0e
27 Lanark, bor., co. tn., Lanark, Scot.; lace, shoemaking, weaving; p. 6,178; 55 44n 3 47w
27 Lanark, co., Scot.; a. 879 sq. m.; most densely populated and highly industrialized co. in Scotland; coal, iron; iron and steel works, textiles; p. 1,585,968; 55 41n 3 47w
20 Lancashire, co., Eng.; a. 1,708 sq. m.; most densely populated and highly industrialized co. in England; chief rivers, Lune, Ribble, Mersey, and Irwell; bounded on E. by Pennines; the Furness district is detached; for long enjoyed special jurisdiction as County Palatine of Lancaster; seat of cotton trade; coal, textiles, machinery, blast furnaces, shipbuilding, chemicals, glass; p. 5,039,097; 54 40n 2 30w
21 Lancaster, mun. bor., co. tn., spt., Lancs, Eng.; cas.; cottons, silks, furniture, machinery; p. 43,383; 54 3n 2 48w
72 Lanchow, China; on R. Hwang-ho; camel-hair cloth; marketing centre for silk, tobacco, grain, tea; cap. of Kansu; p. 370,000; 36 0n 103 30e
50 Lanciano, tn., Italy; wine, fruit, oil, silk, linen; p. 20,000; 42 17n 14 22e
40 Landau, tn., Germany; p. 14,486; 49 12n 8 07e
38 Landen, tn., Limbourg, Belgium; p. 2,750; 50 46n 5 04e
35 Landes, dept., France; a. 3,604 sq. m.; timber, resin, iron, horse breeding; p. 257,186; 44 2n 0 50w
66 Landi Kotal, N.W. Front. Provs., India; 34 13n 71 10e
36 Landrecies, vil., Nord, France; taken by Germ. 1914, retaken Nov. 1918; 50 8n 3 41e
19 Land's End, Corn., Eng.; extreme S. point of Eng.; granite cliff 60 ft. high; 50 4n 5 42w
41 Landsberg, tn., Germany; on R. Warthe; machinery, bricks; p. 43,303; 52 42n 15 12e
40 Landsberg, tn., Germany; p. 6,040; 48 4n 10 55e
40 Landshut, tn., Germany; on R. Isar; cas.; machinery, brewing; p. 26,105; 48 34n 12 10e
55 Landskrona, tn., Sweden; p. 18,534; 55 55n 12 55e
39 Langaa, tn., Denmark; 56 23n 9 59e
53 Langadia, tn., Greece; 37 41n 22 2e
53 Langaza, tn., Greece; 40 46n 23 8e
26 Langbank, par., Ren., Scot.; p. 597; 55 54n 4 37w
83 Lange Berge, mts., C. of Good Hope, S. Afr.; 28 30s 22 30e
39 Langeland Belt, Denmark; 55 0n 11 0e
40 Langensalza, tn., Germany; p. 11,979; 51 7n 10 38e
27 Langholm, burgh, Dumf., Scot.; woollens, tanning, fishing; p. 2,448; 55 9n 3 02w
45 Langnau, comm., Berne, Switz.; p. 8,300; 46 56n 7 46e
19 Langport, par., Som., Eng.; p. 781; 51 3n 2 49w
34 Langres, tn., France; grain, live-stock, cutlery, wines; 47 52n 5 21e
70 Langsar, tn., Sumatra; 4 35n 97 50e
21 Langtoft, par., E. Riding, Eng.; p. 470; 54 5n 0 26w
35 Languedoc, prov., France; 43 50n 3 40e
104 Lansdale, Pa., U.S.A.; p. 8,379; 40 14n 75 18w
102 Lansing, cy., cap. Mich., U.S.A.; motor-cars, agric. machinery; p. 78,397; 42 45n 84 30w
76 Lanzarote I., Canary Is., Africa; a. 326 sq. m.; mountainous and volcanic; wine, cochineal; p. 17,000; 29 0n 13 40w
71 Laoag, tn., Luzon, Phil. Is.; p. 40,800; 18 5n 120 35e
34 Laon, tn., cap. Aisne, France; fort, cath.; linen, metal; p. 19,125; 49 33n 3 37e
19 Lapford, par., Dev., Eng.; p. 451; 50 52n 3 49w
54 Lapinlahti, vil., Finland; 63 20n 27 38e
54 Lapland, Scandinavia; a. 150,000 sq. m.; mountain and moorland wastes; Lapps, hunters and fishers with herds of domesticated reindeer; p. 100,000 (est.); 68 0n 26 0e
54 Lappajärva, tn., Finland; 63 20n 23 38e
55 Lappeenranta, tn., Finland; 61 5n 28 30e
54 Lappo, tn., Finland; 62 59n 23 0e
53 Lapsaki, tn., Turkey; 40 20n 26 44e

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63 Lar, tn., Persia; 27 34n 54 18e
107 Laramie, cy., Wyo., U.S.A.; p. 8,609; 41 18n 105 42w
107 Laramie Mts., Wyo., U.S.A.; 41 53n 106 20w
27 Larbert par., Stirl., Scot.; coal; p. 12,389; 56 1n 3 50w
106 Laredo, cy., Tex., U.S.A.; on R. Grande; wool, skins, bricks, iron and steel products, petroleum; p. 32,618; 27 40n 99 30w
27 Largo, par., Fife, Scot.; summer resort; coal, sandstone, weaving, corn; p. 3,215; 56 13n 2 55w
26 Largs, burgh, Ayr, Scot.; battle 1263; fishing, weaving; p. 6,115; 55 48n 4 51w
50 Larino, tn., Italy; p. 7,200; 41 50n 14 57e
53 Larissa, tn., Greece; on R. Salambria; mosques; silk and cotton mnfs.; p. 24,000; 39 39n 22 28e
27 Larkhall, tn., Lanark, Scot.; coal, farming, bleaching; p. 14,974; 55 45n 3 59w
62 Larnaka, spt., Cyprus; citadel; grain, cotton, fruit; p. 9,765; 34 58n 33 40e
31 Larne, urb. dist., Antrim, N. Ire.; linen, bleaching, flour mills; p. 9,706; 54 52n 5 50w
88 Laro, tn., Nigeria; 8 29n 12 36e
38 Laroche, tn., Belgium; 50 10n 5 33e
35 Larvik, spt., Norway; saw and pulp mills, shipbuilding; p. 10,383; 59 10n 10 0e
66 Las Bela, st., Baluchistan; p. 63,008; 25 45n 66 45e
107 Las Cruces, tn., N. Mex., U.S.A.; p. 5,811; 32 53n 106 50w
108 Las Tres Marias, is., Mexico; on W. side; to Nayarit St.; 21 30n 106 30w
107 Las Vegas, tn., N. Mex., U.S.A.; p. 5,165; 35 37n 105 12w
63 Lasgird, tn., Persia; 35 28n 53 1e
66 Lash, tn., Afghanistan; on Farah Rud R.; strong fortress; 31 45n 61 31e
69 Lashio, tn., Burma, India; 22 57n 97 47e
67 Lashkar, tn., Raj., India; in Gwalior; native st.; new part of Gwalior tn.; p. 80,387; 26 10n 78 13e
27 Lasswade, See Bonnyrigg.
112 Latacunga, tn., Ecuador; p. 15,000; 1 00s 79 45w
62 Latakia, spt., Syria; olive oil, tobacco; p. 21,404; 35 31n 35 50e
42 Latgale, prov., Latvia; 56 30n 27 30e
25 Latheron, par., Caith., Scot.; fisheries, farming; p. 3,866; 58 17n 3 21w
50 Latium, dept., Italy; a. 6,631 sq. m.; p. 2,385,203; 42 2n 12 30e
121 Latrobe, tn., Tas., Australia; 41 12s 146 27e
104 Latrobe, tn., Pa., U.S.A.; p. 10,644; 40 22n 79 20w
55 Latvia, rep., Europe; a. 25,395 sq. m.; indep. 1918; level; chief river—Dŭna (Dvina); numerous lakes; pine forests; chief industries—agriculture, rye, barley, oats, potatoes, flax, cattle, sheep, pigs, dairy products; timbers; metal works, chemicals, woodworking, textiles; cap. Riga; p. 1,950,502; 59 0n 26 0e
41 Lauban, tn., Sil., Germany; p. 15,971; 51 8n 15 15e
27 Lauder, burgh, Berwick, Scot.; Thirlestane cas.; p. 628; 55 43n 2 46w
41 Lauenburg, tn., Pomerania, Germany; woollens, linen, machinery; p. 17,161; 53 25n 10 42e
40 Lauenburg, tn., Schleswig-Holstein, Germany; 53 25n 10 42e
45 Laufen, Switzerland; 47 27n 7 29e
121 Launceston, spt., Tas., Australia; ch. tn. N. Tasmania; engineering works; p. 31,040; 41 20s 147 2e
19 Launceston, mun. bor., Corn., Eng.; cas. ruins; iron, farming; p. 4,071; 50 38n 4 21w
45 Laupen, Switzerland; 46 54n 7 15e
25 Laurencekirk, burgh, Kinc., Scot.; fancy work; p. 1,316; 56 50n 2 27w
94 Laurentides Park, Que., Can.; 47 45n 71 20w
51 Lauria, tn., Potenza, Italy; p. 4,370; 40 5n 15 51e
53 Laurium, Greece; mining; 37 40n 24 2e
45 Lausanne, cy., Vaud, Switz.; N. of L. Geneva; cath., univ.; iron-casting, spirits, beer, tobacco, chocolate, paper, etc.; p. 77,775; 46 32n 6 37e
74 Lau-ting, Chihli prov., China; 36 50n 119 20e
34 Laval, tn., cap. Mayenne, France; cath.; cotton, paper, machinery, marble; p. 27,792; 48 0n 0 47w
125 Laverton, W. Australia; 28 37s 122 28e
48 Lavos, Portugal; 40 5n 8 50w
115 Lavras, Ceara, Brazil; 6 22s 38 4w
127 Lawrence, bor., S.I., New Zealand; p. 650; 45 55s 169 41e
102 Lawrence, tn., Mass., U.S.A.; on Merrimac R.; textiles, worsted mills; clothing, paper, hardware; steam engines, boots and shoes; p. 85,068; 42 48n 71 5w
102 Lawrence, cy., Kan., U.S.A.; state univ.; machinery, paper; p. 13,726; 39 0n 95 14w
20 Laxey, vil., I. of Man., Eng.; 54 13n 4 24w
16 Laxfield, par., Suff., Eng.; p. 787; 52 18n 1 22e
35 Le Blanc, tn., France; on R. Creuse; p. 19,343; 46 38n 1 04e
34 Le Cateau, tn., France; battle (1914); textiles, sugar, brewing, metal; 50 7n 3 57e
36 Le Catelet, vil., France; 50 1n 3 13e
35 Le Creuzot, tn., France; coal, iron, guns, locomotives, machinery; p. 32,034; 46 48n 4 23e
34 Le Havre, spt., France; on R. Seine; docks, harbour; shipbuilding, engineering; chemicals, rope, cottons; p. 165,076; 49 30n 0 7e
45 Le Locle, tn., Neuchâtel, Switz.; p. 12,041; 47 3n 6 43e
34 Le Mans, tn., cap. Sarthe, France; cath.; linen, chemicals, ironmongery; p. 76,868; 48 1n 0 09e
35 Le Puy, tn., cap. Haute-Loire, France; cath.; thread, lace; p. 20,288; 45 1n 3 50e
107 Lead, S.D., U.S.A.; p. 5,733; 44 29n 104 10w
27 Leadhills, vil., Lanark, Scot.; p. 829; 55 25n 3 45w
96 Leamington, tn., Ont., Can.; market gardens; p. 4,902; 42 3n 82 35w
16 Leamington, mun. bor., War., Eng.; spa; brewing; p. 29,662; 52 17n 1 32w
17 Leatherhead, urb. dist., Sur., Eng.; bricks, tiles, brewing; p. 6,916; 51 18n 0 20w
107 Leavenworth, cy., Kan., U.S.A.; furniture, machinery, bricks, coal; p. 17,466; 39 23n 95 59w
60 Lebanon, terr., Syria; Fr. mandate; grain, fruits, olives, tobacco, silk; iron, coal; cedars; cap. Beirut; p. 862,618; 34 0n 36 30e
62 Lebanon, mts., Syria; 34 0n 36 30e
102 Lebanon, cy., Pa., U.S.A.; machinery, bricks, iron; p. 25,561; 40 23n 76 25w

MAP
10 Lebda, tn., Libya; 32 30n 14 30e
83 Lebombo Mts., S. Africa; 25 0s 32 15e
113 Lebu, tn., Chile; p. 3,150; 37 30s 73 50w
51 Lecce, Apulia, Italy; cb. tn. Lecce prov.; fruit, grain; p. 39,000; 40 22n 18 7e
50 Lecco, cy., Como, Lombardy, It.; silk, iron, copper; p. 29,000; 45 52n 9 29e
19 Lechlade, par., Glouca, Eng.; p. 1,048; 51 42 1 42w
18 Ledbury, urb. dist., Here., Eng.; farming, fruit, hops, tanning; p. 3,283; 52 3n 2 25w
48 Ledesma, comm., Salamanca, Spain; 41 5n 5 59w
21 Leeds, co. bor., W. Riding, Eng.; on R. Aire; canal communications with Humber and Mersey; univ., mus., art gall., St. John's ch.; woollens, clothing, leather; locomotives, machinery, iron and steel mnfs., chemicals; p. 482,789; 53 48n 1 33w
18 Leek, urb. dist., Staffs., Eng.; iron, silks; p. 18,554; 53 7n 2 03w
38 Leerdam, tn., Netherlands; p. 5,110; 51 53n 5 06e
38 Leeuwarden, tn., Friesland, Neth.; farming, dairying, iron, copper gds., boats; p. 48,482; 53 12n 5 49e
125 Leeuwin, C., W. Australia; 34 16s 115 12e
111 Leeward Is., Br. W. Indies; a. 750 sq. m.; sugar, molasses, lime juices; p. 140,000; 16 30n 63 30w
71 Legaspi. See Albay.
79 Legayta, tn., Egypt; 25 52n 33 6e
50 Leghorn, spt., Tuscany, Italy; cath.; wine, candied fruit, olive oil; hats, hides; brassfounding, marble; p. 129,000; 43 33n 10 20e
50 Legnago, tn., Verona, Italy; on R. Adige; fortress; cereals, sugar; p. 19,000; 45 13n 11 10e
50 Legnano, tn., Lombardy, Italy; silks, cottons, machinery; p. 27,000; 45 38n 8 58e
104 Lehighton, bor., Pa., U.S.A.; p. 6,490; 40 48n 75 48w
40 Lehrte, tn., Germany; p. 10,714; 52 21n 10 0e
16 Leicester, co. bor., co. tn., Leics., Eng.; abbey ruins; boots, hosiery, wool; p. 261,744; 52 39n 1 08w
16 Leicester, co., Eng.; a. 832 sq. m.; Charnwood Forest; mixed farming, Stilton cheese; sheep, wool; boots, hosiery, woollens, distilling, pottery; p. 541,794; 52 40n 1 09w
73 Leichow, tn., Kwang-tung, China; 20 55n 110 0e
35 Leiden, tn., Netherlands; on Old Rhine; univ.; woollens, linen, printing; p. 70,850; 52 9n 4 29e
18 Leigh, mun. bor., Lancs., Eng.; silks, cottons, brass and iron foundries; p. 45,317; 53 29n 2 32w
33 Leighlinbridge, tn., Carlow, I.F.S.; cas. ruins; p. 544; 52 44n 6 58w
16 Leighton Buzzard, urb. dist., Beds., Eng.; timber, corn, paper; p. 7,631; 51 55n 0 40w
33 Leinster, prov., I.F.S.; a. 7,624 sq. m.; an ancient kingdom of Celtic Ireland prior to English invasion; containing the counties of Carlow, Dublin, Kildare, Kilkenny, Leix, Longford, Louth, Meath, Offaly, Westmeath, Wexford, Wicklow; farming; p. 1,162,044; 53 0n 7 00w
40 Leipzig, cy., Germany; Supreme Court of Justice; cas., town hall, mus., univ. and observ.; fairs; centre of book-selling and publishing, typefounding and music trades; metal, textiles, chemicals, foodstuffs, Eur. fur market; p. 713,470; 51 20n 12 20e
48 Leiria, cy. and dist., Estremadura, Portugal; 39 45n 8 52w
16 Leiston, urb. dist., Suff., Eng.; abbey ruins; farm implements; p. 4,184; 52 13n 1 33e
27 Leith, spt., Midlothian, Scot.; now included in Edinburgh; shipbuilding, fisheries, saw mills, breweries, distilleries; p. 81,618; 55 58n 3 10w
17 Leith Hill, Surrey, Eng.; 965 ft. high; 51 11n 0 24w
46 Leitmerita, tn., Czechoslovakia; brewing; p. 18,509; 50 32n 14 14e
30 Leitrim, co., I.F.S.; a. 619 sq. m.; farming, coal, iron; p. 55,888; 54 10n 8 00w
30 Leitrim, vil., Leitrim co., I.F.S.; p. 121; 54 0n 8 04w
33 Leix, co., I.F.S.; formerly Queen's co.; a. 664 sq. m.; mixed farming, coal; p. 51,549; 52 58n 7 25w
33 Leixlip, par., Kildare, I.F.S.; farming, flour; p. 1,523; 53 22n 6 30w
48 Leixoes, tn., Portugal; 41 10n 8 42w
54 Leka, tn., Norway; 65 5n 11 20e
43 Lemberg. See Lwow.
53 Lemnos I., Gr.; Ægean Sea; a. 150 sq. m.; mountainous; tobacco and fruits; cap. Kastro; p. 4,000; 39 55n 25 10e
42 Lemsal, tn., Latvia; 57 29n 24 46e
39 Lemvig, spt., Denmark; p. 4,574; 56 34n 8 18e
59 Lena R., U.S.S.R.; 2,900 m. long; drains 100,000 sq. m.; gold; 65 0n 125 0e
17 Lenham, par., Kent, Eng.; p. 1,947; 51 14n 0 44e
5 Lenin Land, N. Russia; 79 0n 96 0e
62 Leninakan. See Alexandropol.
56 Leningrad, tn., Russia; formerly St. Petersburg and Petrograd, and also formerly cap.; chief port of Russia; cath., library, palaces, universities, academies; textiles, leather, corn, flax, hemp; p. 2,776,400; 60 0n 30 20e
61 Leninsk, tn., U.S.S.R.; 39 2s 63 30e
45 Lenk, vil., Switzerland; 46 28n 7 26e
62 Lenkoran, spt., Azerbaijan; p. 12,550; 38 44n 48 52e
27 Lennoxtown, tn., Stirl., Scot.; bleaching, print and alum works, coal; p. 2,590; 55 58n 4 12w
94 Lennoxville, tn., Que., Can.; p. 1,927; 45 25n 71 57w
34 Lens, tn., France; severe damage, Gt. War; iron, steel, sugar, soap; p. 33,513; 50 26n 2 52e
51 Lentini, tn., Sicily, Italy; cereals, wine, oil; p. 26,000; 37 18s 15 0e
45 Lenzburg, tn., Switzerland; 47 24n 8 09e
46 Leoben, tn., Austria; p. 10,400; 47 24n 15 5e
18 Leominster, mun. bor., Here., Eng.; hops, cider, cattle, iron; p. 5,707; 52 14n 2 42w
105 Leominster, tn., Mass., U.S.A.; planos, paper, jewellery; p. 21,810; 42 28n 71 49w
108 Leon, tn., Mexico; textiles, leather, gold, silver; p. 53,000; 21 1n 101 45w
110 Leon, tn., Nicaragua; cath., univ., bishop's palace; textiles, boots and shoes; p. 25,000; 12 26n 86 45w
48 Léon, cy., Léon, Spain; gothic cath., Roman wall; p. 29,337; 42 38n 5 32w
48 Léon, prov., Spain; a. 5,936 sq. m.; farming, cattle; coal, iron, leather; cap. Léon; p. 419,000; 42 0n 6 00w

MAP

125 **Leonora**, tn., W. Australia; p. 1,250; 28 50s 121 28s
80 **Leopold II, L.**, Belgian Congo; 90 m. long; 2 00s 18 25s
118 **Leopoldina**, vil., Pernambuco, Brazil; 21 25s 42 50w
80 **Leopoldville**, tn., formerly Kinshasa, Fr. Eq. Af.; cap. of Belg. Congo on Stanley Pool; 4 22s 15 20s
52 **Leova**, Rumania; p. 6,438; 46 29n 28 11s
53 **Lepanto**, spt., Greece; p. 4,100; 38 21n 21 50s
44 **Leponline Alps**, Switzerland; 11,685 ft. high; 46 25n 9 00s
72 **Lepsinsk**, tn., Siberia; p. 3,200; 45 35n 80 20s
21 **Lepton**, urb. dist., W. Riding, Eng.; woollens, fancy goods, farming; p. 3,322; 53 42n 1 40s
108 **Lerdo, Mexico**; 25 32s 103 32w
49 **Lerida**, cy., Spain; on R. Segre; 2 cath.; textiles, silk, glass, leather; p. 38,680; 41 38n 0 40s
48 **Lerma**, tn., Spain; p. 2,630; 42 3n 3 48w
22 **Lerwick**, bor., co. tn., Shetland Is., Scotland; fishing; exp.—sheep, cattle, knitted goods; p. 4,221; 60 9n 1 08w
47 **Lesina L.**, Yugoslavia; 40 m. long; 43 11n 16 40s
47 **Leskovac**, tn., Yugoslavia; p. 17,600; 43 0n 21 58s
47 **Leskovic**, tn., Albania; 40 18n 20 40s
27 **Leslie**, burgh, Fife, Scot.; paper, flax, bleaching; p. 2,477; 56 8n 3 12w
23 **Leslie**, par., Aber., Scot.; p. 344; 57 18n 2 40w
27 **Lesmahagow**, par., Lanark, Scot.; mining, farming; p. 12,931; 55 38n 3 54w
111 **Lesser Antilles, W. Indies**; many islands, including Leeward Is.; 13 0n 64 0w
98 **Lesser Slave L., Alta., Can.**; a. 461 sq. m.; 55 27n 115 30w
98 **Lethbridge**, tn., Alta., Can.; coal; p. 13,489; 49 44n 112 41w
69 **Letpadan**, vil., Burma, India; 17 45n 95 45s
31 **Letterkenny**, urb. dist., Tirconaill, I.F.S.; tourist centre; flax, provisions; p. 2,308; 54 57n 7 45w
53 **Leucas, Greece**; 38 40s 20 40s
63 **Leucas I.** See Santa Maura I.
27 **Leuchars**, vil., Fife, Scot.; p. 2,765; 56 22n 2 53w
45 **Leuk**, vil., Valais, Switz.; 46 19n 7 37s
45 **Leukerbad**, vil., Switzerland; 46 23n 7 37s
46 **Léva**, vil., Czechoslovakia; 48 12n 18 37s
53 **Levadia**, vil., Greece; 38 27n 22 52s
54 **Levanger**, tn., Norway; 63 45s 11 20s
60 **Levant, E. end of Mediterranean S.**, 33 0n 34 0s
27 **Leven**, burgh, Fife, Scot.; flax, linen, coal; p. 7,411; 56 12n 3 00w
27 **Leven, L.**, Kinross, Scotland; associated with romantic escape of Mary, Queen of Scots, 1568, from Castle I.; 56 12n 3 23w
124 **Levêque, C.**, W. Australia; 16 20s 122 54s
126 **Levin**, bor., N.I., New Zealand; p. 2,635; 40 36s 175 16s
94 **Levis**, tn., Que., Can.; p. 11,724; 46 40n 71 15w
62 **Levkosia**, cap. of Cyprus; textiles, leather; p. 18,579; 35 12s 33 32s
17 **Lewes**, mun. bor., co. tn., Sus., Eng.; farming, malting, paper, corn; p. 10,785; 50 52s 0 01s
24 **Lewis, Hebrides**, Scot.; a. (with Harris) 876 sq. m.; fisheries; p. 31,587; 58 10n 6 40w
17 **Lewisham**, met. bor., London, England; p. 219,942; see London
106 **Lewiston**, tn., Idaho, U.S.A.; on Snake R.; grain, timber, mining; p. 9,403; 45 48n 117 0w
102 **Lewiston**, tn., Me., U.S.A.; textiles, machinery, lumber; p. 34,948; 44 6n 70 15w
106 **Lewistown**, tn., Mont., U.S.A.; p. 5,358; 47 2n 109 28w
104 **Lewistown**, tn., Pa., U.S.A.; p. 13,357; 40 36n 77 37w
102 **Lexington**, cy., Ky., U.S.A.; farming, horse and cattle breeding; p. 45,736; 38 3n 84 35w
20 **Leyburn**, par., N. Riding, Eng.; coal, lead, lime; p. 868; 54 19n 1 49w
83 **Leydsdorp**, tn., Trans., S. Afr.; 24 1s 30 29s
18 **Leyland**, urb. dist., Lancs, Eng.; cotton; p. 10,573; 53 41n 2 42w
17 **Leysdown**, vil., Kent, England; 51 24s 0 55s
71 **Leyte, L.**, Philippine Is.; a. 2,799 sq. m.; p. 727,600; 11 0n 125 0s
17 **Leyton**, mun. bor., Essex, England; p. 128,317; see Greater London.
72 **Lhasa**, cap. of Tibet; centre of Buddhism; the forbidden city; residence of Grand Lama; many mosques; caravan trade in tea, silk, gold, carpets, lace, etc.; p. 15,000; 29 50n 91 10s
59 **Liakhov Is., U.S.S.R.**; 73 30n 143 0s
82 **Lialui**, tn., N. Rhodesia; 20 15s 23 3s
73 **Liaoning**, prov. See Fengtien.
74 **Liao-tung, G. of, China**; 39 30n 121 0s
74 **Liao-tung Pen., Manchuria**; part of S. Manchuria, with Port Arthur (Jap.); 39 30n 121 5s
73 **Liao-yang, cy., Manchuria**; on ry. Mukden to Pt. Arthur; cotton; p. 100,000; 41 10n 124 0s
98 **Liard, Mackenzie, Can.**; 61 0n 123 30w
42 **Liban.** See Liepaja.
107 **Liberal, tn., Kan., U.S.A.**; p. 5,294; 37 2n 100 59w
46 **Liberec**, tn., Czechoslovakia; textiles; p. 38,525; 50 42s 15 7s
88 **Liberia, W. Afr.**; negro republic; a. 43,000 sq. m.; mountainous in parts, dense forests; palm oil, coffee, rubber, ivory, ginger, fibre; cap. Monrovia; p. 2,250,000; 6 20n 9 30w
35 **Libourne**, tn., France; on R. Dordogne; brandy, sugar, woollens; p. 19,103; 44 56s 0 15w
76 **Libya, Africa**; a. 810,000 sq. m.; Italian since 1912; diva. Tripolitana, Cirenaica; harvests dependent on rainfall; barley, olives, dates, oranges, lemons, ostrich feathers, skins, esparto grass, cattle, horses; p. 1,000,000; 23 0 0s 32 0s 9 00 to 25 0s
76 **Libyan Desert, N. Africa**; 26 30n 25 0s
113 **Licancaur, Mt., Bolivia**; 23 0s 66 30w
114 **Licancaur Vol., Chile**; 19,500 ft. high; 22 27s 68 30w
51 **Licata**, spt., Sicily, Italy; sulphur; p. 25,500; 37 7s 13 55s
18 **Lichfield**, mun. bor., Staffs, Eng.; cath.; birthplace of Dr. Samuel Johnson; brewing, carriage works; p. 8,649; 52 40n 1 50w
83 **Lichtenburg**, tn., Trans., S. Afr.; p. 3,309 (Eur.); 26 10s 26 10s
43 **Lida**, tn., Poland; 53 53n 25 18s
89 **Lid Köping**, tn., Sweden; p. 9,296; 58 30n 13 10s

MAP

45 **Liechtenstein**, principality, Europe; a. 65 sq. m.; farming, wheat, fruits, wine; dairying; marble; cottons, pottery; cap. Vaduz; p. 10,213 47 10n 9 35s
38 **Liége**, cy., Belgium; on R. Meuse; cath., univ., library; woollens, arms, motor-cars, machinery, coal; p. 166,820; 50 39n 5 34s
38 **Liége**, prov., Belgium; a. 1,119 sq. m.; minerals; p. 973,031; 50 36n 5 35s
41 **Liegnitz**, tn., Germany; cloth, machinery, shoes, pottery, tobacco; p. 76,544; 51 12n 16 12s
42 **Liepaja**, spt., Latvia; exps.—dairy prod., hides, grain, timber; p. 57,238; 56 32n 21 1s
38 **Lier**, tn., Belgium; p. 27,700; 51 8n 4 34s
45 **Liesthal**, comm., Switzerland; 47 29n 7 43s
36 **Liévin**, tn., France; coal; p. 26,698; 50 26n 2 47s
72 **Lifan**, tn., China; 32 0n 104 0s
33 **Liffey, R., I.F.S.**; length 50 m.; 53 10n 6 25w
31 **Lifford**, co. tn., Tirconaill, I.F.S.; p. 419; 54 50n 7 40w
38 **Ligny**, vil., Belgium; p. 2,000; 48 41n 5 18s
50 **Liguria**, dept., Italy; a. 2,097 sq. m.; coast termed Riviera; p. 1,435,038; 44 0n 8 00s
44 **Ligurian Apennines**, mts., Italy; 44 30n 9 20s
34 **Lille**, tn., France; fort, on R. Deule, univ.; iron, cotton, linen, sugar, chemicals, distilling; p. 201,568; 50 37n 3 04s
55 **Lillehammer**, tn., Norway; p. 4,260; 61 10n 10 25s
55 **Lillesand**, tn., Norway; p. 1,385; 58 15n 8 20s
55 **Lillherrdal**, tn., Sweden; 61 55s 14 0s
27 **Lilliesleaf**, par., Rox., Scot.; p. 549; 55 31n 2 45w
98 **Lillooet**, dist., B.C., Can.; 50 43s 121 59w
102 **Lima**, cy., Ohio, U.S.A.; oil, rly. works; p. 42,287; 40 42s 84 5w
112 **Lima**, cy., Peru; subject to earthquakes; cath.; Callao is its spt.; textiles, leather, furniture; cap. of Peru; p. 316,000; 12 15s 76 50w
62 **Limassol**, spt., Cyprus; grapes, wine, raisins; p. 13,302; 34 32n 33 5s
31 **Limavady**, urb. dist., Londonderry, N. Ire.; linen; p. 2,801; 55 3n 6 57w
38 **Limbourg**, prov., Belgium; sugar-beet, sugar, coal, iron; cap. Hasselt; p. 358,500; 51 0n 5 30s
40 **Limburg**, tn., Germany; p. 8,600; 50 22n 8 04s
38 **Limburg**, prov., Netherlands; farming, cattle; coal, iron; cap. Maastricht; p. 550,624; 51 10n 6 00s
115 **Limeira**, tn., Brazil; 22 30s 47 23w
32 **Limerick**, co., I.F.S.; a. 1,034 sq. m.; undulating; livestock, farming; p. 139,934; 52 30n 8 45w
32 **Limerick**, co. bor., co. tn., Limerick, I.F.S.; two caths.; dairying, shipbuilding, tanning, lace; p. 39,690; 52 40n 8 44w
54 **Limingo**, vil., Finland; 64 47n 25 30s
35 **Limoges**, tn., cap. Haute-Vienne, France; porcelain, textiles, paper; p. 92,577; 45 49n 1 16s
110 **Limon**, spt., C. Rica; on Caribbean Sea; bananas; p. 16,000; 10 0n 83 10w
35 **Limousin**, prov., France; 45 23n 2 00s
83 **Limpopo, R., S. Afr.**; also called Crocodile R.; 1,000 m. long; 23 0s 32 25s
109 **Linares**, tn., Nuevo Leon, Mexico; p. 6,100; 25 8s 99 17w
48 **Linares**, tn., Jaen, Spain; lead pipes, sheet lead, silver-lead mining; p. 40,500; 38 9s 3 39w
16 **Lincoln**, co. England; a. 2,640 sq. m.; mostly flat, rising in Wolds; drained by rivers Trent, Witham, and Welland; agriculture, wheat, oats, barley, potatoes; sheep, cattle; iron ore; fishing; divided into administrative counties of Holland, Kesteven and Lindsey; p. 624,553; 53 10n 0 15w
16 **Lincoln**, co. bor., co. tn., Lincs., Eng.; cath., cas., abbey ruins; iron, farm implements; p. 66,243; 53 15r 0 32w
127 **Lincoln**, tn., S.I., New Zealand; p. 502; 43 38s 172 29s
107 **Lincoln**, tn., Neb., U.S.A.; rly. centre; flour, canning; cap. of Nebraska; p. 75,933; 40 51n 96 46w
16 **Lincoln Wolds**, Lincs., Eng.; 53 26n 0 14w
40 **Lindau**, tn., Germany; on L. Constance; resort; p. 13,582; 48 40n 12 40s
40 **Linden**, tn., Germany; machinery, textiles, chemicals, carpets; 52 22n 9 42s
55 **Lindesnes, C.**, Norway; 58 0n 7 0s
83 **Lindley**, vil., O.F.S., S. Afr.; 27 55s 28 30s
96 **Lindsay**, tn., Ont., Can.; farm machinery, saw and flour mills, lumbering, grain; p. 7,505; 44 22n 78 45w
16 **Lindsey**, adm. co., Lincs, Eng.; a. 1,512 sq. m.; p. 422,181; 53 25n 0 15w
121 **Lindsey, Mt.**, Queens., Australia; 28 10s 152 0s
71 **Lingayen**, Phil. Is.; fisheries; health resort; p. 23,000; 16 0n 120 20s
40 **Lingen**, tn., Germany; p. 10,914; 52 32n 7 22s
109 **Lingres**, tn., Mexico; 24 52n 99 33w
74 **Linkiang**, tn., China; 28 0n 115 32s
55 **Linköping**, tn., Sweden; hosiery, tobacco; p. 29,845; 58 30n 15 40s
27 **Linlithgow**, bor., co. tn., W. Lothian, Scot.; ruins of palace, where Mary, Queen of Scots, was born; tanning, paper; p. 3,666; 55 58n 3 37w
27 **Linlithgow.** See West Lothian.
26 **Linnhe, L., Arg., Scot.**; 21 m. long, W. entrance to Caledonian Can.; 56 46s 5 10w
73 **Linshenhotten, Is.** See Shichi-to, Is.
21 **Linton**, vil., W. Riding, England; 54 4s 2 01w
25 **Lintrathen**, par., Angus, Scot.; p. 500; 56 42n 3 10w
46 **Linz**, tn., Austria; on R. Danube; cath.; iron and steel, textiles, boats; p. 102,081; 48 17s 14 18s
51 **Lioguaglossa**, tn., Italy; 37 50s 15 8s
35 **Lion Gulf, S. France**; 43 0n 4 30s
51 **Lipari Is., Italy**; Stromboli, active volcano; olives, grapes, wine, sulphur; p. 19,500; 38 30n 14 40s
57 **Lipetsk**, tn., Russia; on trib. of R. Don; flour, honey, timber; p. 21,000; 52 42n 39 32w
43 **Lipno**, tn., Poland; p. 6,850; 52 48s 19 13s
52 **Lippa**, comm., Rumania; p. 6,069; 46 9s 21 40s
40 **Lippe**, st., Germany; a. 469 sq. m.; farming, cattle, pipes, tobacco; p. 163,648; 52 0n 9 09s
40 **Lippstadt**, tn., Germ.; on R. Lippe; tobacco, farm implements, tiles, brandy; p. 18,498; 51 40n 8 20s
49 **Liria**, comm., Spain; p. 47,250; 39 37n 0 35w
48 **Lisbon**, spt., cap. Portugal; on Tagus estuary; cas., cath., museums; cotton spinning, weaving; gold and silver ware, silks, chemicals; p. 594,390; 38 32n 9 10w
31 **Lisburn**, urb. dist., Antrim, N. Ire.; linen; p. 12,394; 54 31n 6 03w
32 **Liscarroll**, par., Cork, I.F.S.; p. 687; 52 16n 8 49w
34 **Lisieux**, tn., France; textiles, dairying, boots, machinery; p. 15,362; 49 11n 0 12s
19 **Liskeard**, mun. bor., Corn., Eng.; mining, tanning; p. 4,268; 50 28n 4 27w
121 **Lismore, N.S.W.**, Australia; dairying, sugar refineries; p. 10,370; 28 42s 153 19s
120 **Lismore, Vic.**, Australia; 37 52s 143 21s
33 **Lismore**, tn., Waterford, I.F.S.; cas.; quarries, mining, angling centre; p. 1,474; 52 8s 7 56w
31 **Lisnaskea**, tn., Fermanagh, N. Ire.; p. 715; 54 15s 7 27w
32 **Listowel**, urb. dist., Kerry, I.F.S.; cas. ruins; p. 2,908; 52 27n 9 30w
96 **Listowell**, tn., Ont., Can.; p. 2,676; 43 45n 81 0w
54 **Lit**, tn., Sweden; 63 20n 14 50s
16 **Litcham**, par., Norf., Eng.; p. 575; 52 45n 0 48s
102 **Litchfield, Ill., U.S.A.**; p. 6,612; 39 13n 89 40w
121 **Lithgow**, tn., N.S.W., Australia; coal; p. 15,300; 33 29s 150 10s
42 **Lithuania**, rep., Europe; a. 21,489 sq. m.; chief industry, farming—wheat, barley, rye, oats, flax; dairying, cattle, pigs, sheep; timber; original cap. Vilna (now Polish); cap. Kaunas; p. 2,476,000; 53 25 to 56 30n 21 0s to 27 15s
110 **Little Abaco, I., W. Indies, Bahama Is.**; 26 50n 77 45w
39 **Little Belt, Denmark**; between Fyen and mainland of Jutland; 55 10n 9 50s
46 **Little Carpathians, mts., Czechoslovakia**; 48 40n 17 40s
110 **Little Cayman, I., Br. W. Indies**; 19 32s 80 2w
102 **Little Falls**, tn., Minn., U.S.A.; p. 5,014; 45 55s 94 20w
83 **Little Namaqualand**, dist., C. of Good Hope, S. Afr.; 29 0s 17 30s
103 **Little Rock**, cy., cap. Ark., U.S.A.; on Arkansas R.; cotton shipping centre; p. 81,679; 34 45w 92 20w
44 **Little St. Bernard, Pass, France**; alt. 7,175 ft.; between France and Italy; 45 43n 6 55s
62 **Little Zab, R., Iraq**; trib. of Tigris R.; 35 30n 43 55s
17 **Littlehampton**, urb. dist., Sus., Eng.; watering-pl.; p. 10,181; 50 48n 0 32w
16 **Littleport**, par., I. of Ely, Camb., Eng.; shirts, hosiery; p. 4,467; 52 28n 0 18s
47 **Ljubovya**, tn., Yugoslavia; 44 11w 19 22s
72 **Liuchew**, tn., China; 24 10n 109 0s
75 **Liu-kiu or Luchu Is., Japan**; 26 30n 127 0s
121 **Liverpool**, tn., N.S.W., Australia; p. 6,620; 33 55s 150 54s
95 **Liverpool**, tn., spt., N.S., Can.; p. 2,669; 44 2s 64 45w
18 **Liverpool**, co. bor., spt., Lancs, Eng.; on R. Mersey estuary; connected with Birkenhead by ferry steamers and under-river road and rail tunnels; chief bldgs.—cath., St. George's Hall, Walker Art Gall., mus., univ.; W. E. Gladstone born here; 2nd Br. port, docks; shipbuilding, engineering, milling, sugar refining; p. 855,539; 53 24n 2 59w
18 **Liverpool Bay, Irish Sea**; 53 50s 4 00w
121 **Liverpool Plains, N.S.W., Australia**; a. 15,626 sq. m.; 31 12s 149 45s
121 **Liverpool Ra., N.S.W., Australia**; 31 30s 151 0s
27 **Livingston**, par., W. Lothian, Scot.; p. 4,745; 55 53n 5 33w
89 **Livingstone**, tn., N. Rhodesia; near Victoria Fa., on R. Zambezi; p. 5,000; 17 55s 25 40s
82 **Livingstone Mts., Tang. Terr., Nyasa**; 9 50s 34 35s
82 **Livingstonia**, tn., Nya.; L. Nyasa; 10 35s 34 7s
47 **Livno**, fort. tn., Yugoslavia; p. 5,560; 43 50n 17 2s
57 **Livny**, tn., Russia; farming, livestock, leather; p. 21,000; 52 30n 37 33s
42 **Livonia**, prov., Latvia; 57 30n 26 0s
19 **Lizard Pt., Corn., Eng.**; extreme S. point of Eng.; 49 57s 5 13w
46 **Ljubljana.** See Laibach.
18 **Llanbedr**, par., Mer., Wales; p. 362; 52 49n 4 06w
18 **Llanberis**, par., Caer., Wales; tourist centre, cas. ruins; slate, salmon; p. 2,373; 53 2s 4 05w
19 **Llandaff**, par., Glam., Wales; cath., palace ruins; farming; p. 13,277; 51 29s 3 12w
19 **Llandilo**, urb. dist., Carm., Wales; corn, flour; p. 1,883; 51 53s 3 59w
18 **Llandinam**, par., Mont., Wales; farming, flannels p. 1,380; 52 28s 3 25w
18 **Llandovery**, mun. bor., Carm., Wales; coll., cas. ruins; lead ore mining; p. 1,980; 52 1s 3 48w
18 **Llandrillo**, par., Mer., Wales; slate, farming, fishing; p. 556; 52 55s 3 26w
18 **Llandrindod Wells**, urb. dist., Rad., Wales; three mineral springs; p. 2,925; 52 14s 3 22w
18 **Llandudno**, urb. dist., Caer., Wales; tourist resort; p. 13,677; 53 20s 3 50w
19 **Llanelly**, mun. bor., Carm., Wales; docks; tin plating, copper, coal; p. 38,393; 51 41s 4 09w
18 **Llanerchymedd**, par., Angl., Wales; snuff; p. 782; 53 20s 4 22w
18 **Llanfair Caereinon**, par., Mont., Wales; flannel, angling; p. 1,715; 52 39s 3 20w
18 **Llanfyllin**, mun. bor., Mont., Wales; Roman remains; brewing, malting; p. 1,449; 52 45s 3 18w
18 **Llangadock**, par., Carm., Wales; hand weaving; p. 1,545; 51 57s 3 53w
18 **Llangefni**, urb. dist., Angl., Wales; woollens, malting, tanning; p. 1,782; 53 16n 4 18w
18 **Llangollen**, urb. dist., Denb., Wales; tourist resort; flannel; p. 2,937; 52 58s 3 10w
18 **Llangranog**, par., Card., Wales; p. 763; 52 10n 4 27w
18 **Llanidloes**, mun. bor., Mont., Wales; tourist resort; lead, flannel; p. 2,356; 52 27s 3 32w
112 **Llanos, S. America**; vast steppes, basin of Orinoco R.; cattle; 6 30s 69 30w
18 **Llanrhaiadr-yn Mochnant**, par., Mont., Wales; waterfall; p. 741; 52 49s 3 17w
18 **Llanrwst**, urb. dist., Denb., Wales; tourist centre; p. 2,366; 53 9s 3 48w
18 **Llansantffraid**, par., Card., Wales; p. 943; 52 16s 4 10w
19 **Llantrisant**, par., Glam., Wales; cas. ruins; iron, coal; p. 21,946; 51 32s 3 21w

MAP

18 **Llanwrtyd Wells**, urb. dist., Brec., Wales; iron, farming; p. 742; 52 7N 3 38W
18 **Llanymynech**, par., Salop, England; p. 557; 52 47N 3 06W
98 **Lloydminster**, tn., Sask., Can.; farming; p. 1,516; 53 18N 110 2W
80 **Loanda**. See St. Paul de Loanda.
80 **Loango**, spt., Fr. Eq. Afr.; N. of mth. of Congo R.; exp. rubber and palm oil; 4 45s 11 55E
27 **Loanhead**, bor., Midlothian, Scot.; summer resort; p. 3,940; 55 52N 3 09W
72 **Lob Nor**, L., Sin Kiang; 39 30N 90 0E
41 **Löbau**, tn., Germany; p. 12,635; 51 5N 14 40E
113 **Loberia**, Argentina; 38 10s 58 50W
80 **Lobito B.**, Angola; 12 20s 13 30E
80 **Lobito**, spt., Angola; rly. terminus connecting with Katanga; exp. copper; 12 20s 13 30E
45 **Locarno**, tn., Switzerland; 46 12N 8 47E
24 **Lochaber**, dist., Inver., Scot.; 56 58N 5 00W
24 **Lochalsh**, par., Ross and Crom., Scot.; p. 1,650; 57 17N 5 35W
24 **Lochalsh, Kyle of**, Ross and Crom., Scot.; 57 17N 5 35W
24 **Lochbroom**, par., Ross and Crom., Scot.; p. 2,318; 57 48N 5 04W
24 **Lochcarron**, par., Ross and Crom., Scot.; fishing; p. 1,066; 57 24N 5 30W
27 **Lochearnhead**, vil., Perth, Scot.; 56 23N 4 17W
27 **Lochee**, par., Angus, Scot.; p. 2,613; 56 29N 3 00W
27 **Lochgelly**, bor., Fife, Scot.; coal, iron; p. 9,297; 56 7N 3 18W
26 **Lochgilphead**, bor., Argyll, Scot. tourist resort; p. 974; 56 3N 5 24W
26 **Lochgoilhead**, par., Argyll, Scot.; p. 982; 56 11N 4 53W
24 **Lochinver**, vil., Suther., Scot.; 58 9N 5 13W
27 **Lochmaben**, bor., Dumf., Scot.; cas. ruins; p. 1,014; 55 8N 3 25W
26 **Lochwinnoch**, tn., Ren., Scot.; silk, printing; p. 4,224; 55 48N 4 37W
27 **Lockerbie**, bor., Dumf., Scot.; farming, sheep rearing; p. 2,574; 55 7N 3 21W
121 **Lockhart**, N.S.W., Australia; 35 11s 146 14E
102 **Lock Haven**, Pa., U.S.A.; p. 9,668; 41 7N 77 30W
102 **Lockport**, cy., N.Y., U.S.A.; fruit, machinery, paper pulp, furniture; p. 23,160; 43 8N 78 48W
16 **Loddon**, par., Norf., Eng.; malting; p. 1,019; 52 32N 1 27E
35 **Lodeve**, tn., France; cloth; 43 43N 3 18E
80 **Lodi**, cy., Lombardy, Italy; cath.; dairying, especially cheese; majolica ware; 45 19N 9 32E
43 **Lodz**, tn., Poland; textiles, iron; p. 605,300; 51 44N 19 27E
43 **Lodz**, co., Poland; 51 40N 19 0E
54 **Lofoten Is.**, Norway; a. 2,000 sq. m.; chief industry—cod fishing; oil, guano; p. 41,200; 68 10N 12 0E
20 **Lofthouse**, tn., W. Riding, Eng.; stone quarries, cord; p. 9,014; 54 34N 0 55W
20 **Loftus**, urb. dist., N. Riding, Eng.; stone quarries; p. 7,631; 54 34N 0 54W
120 **Lofty, Mt.**, S. Australia; 34 57s 138 45E
106 **Logan**, cy., Utah, U.S.A.; agric. coll.; p. 9,979; 41 44N 111 50W
98 **Logan, Mt.**, Yukon Can.; 19,850 ft.; 60 30N 139 30W
102 **Logansport**, cy., Ind., U.S.A.; woollens; grain, fruit; machinery; lumber; p. 18,508; 40 50N 86 26W
49 **Logroño**, cy., Spain; on R. Ebro; wine; p. 34,329; 42 27N 2 30W
39 **Løgstör**, tn., Denmark; p. 2,250; 56 58N 9 17E
39 **Løgumkloster**, tn., Denmark; 55 3N 8 57E
60 **Lohein**, spt. on Red Sea, Yemen, Arabia; coffee; p. 9,600; 15 50N 42 30E
34 **Loir, R.**, France; 185 m. long, trib. of R. Loire; 47 35N 0 35E
34 **Loir-et-Cher**, dept., France; a. 2,478 sq. m.; cereals, fruit, wines, livestock, textiles; p. 241,592; 47 33N 1 25E
35 **Loire**, dept., France; a. 1,852 sq. m.; coal, iron, textiles, iron and steel goods, machinery, glass, paper; p. 664,822; 47 20N 1 45W
34 **Loire, R.**, France; 543 m. long; 47 44N 0 45E
34 **Loire Inférieure**, dept., France; a. 2,693 sq. m.; cereals, wines, dairying; coal, iron, shipbuilding; p. 652,072; 47 20N 1 42W
34 **Loiret**, dept., France; a. 2,629 sq. m.; grain, livestock; woollens, iron, copper; p. 342,679; 47 52N 2 20E
112 **Loja**, tn., Ecuador; p. 10,000; 4 10N 79 15W
38 **Lokeren**, tn., Belgium; textiles, chemicals; p. 24,267; 51 7N 4 00E
39 **Lökken**, tn., Denmark; 57 23N 9 45E
88 **Lokoja**, tn., Nigeria; at jc. Niger and Benue Rs.; military post; 7 47N 6 42E
52 **Lom**, Bulgaria; on R. Danube; p. 14,417; 43 51N 23 13E
77 **Lomani, R.**, Belg. Congo; trib. of Congo R.; 1 30s 24 30E
44 **Lombard Alps**, mts., Italy; 45 58N 9 50E
50 **Lombardia** (Lombardy), dept., Italy; a. 9,190 sq. m.; contains chief lakes; principal industries—farming, vineyards, mulberries; iron, zinc, marble; textiles, motor-cars; p. 5,539,928; 45 35N 9 45E
71 **Lombok I.**, Dutch E. Indies; p. 701,117; 8 40s 116 0E
88 **Lome**, tn., French Togo; 6 7N 1 15E
43 **Lomja**, tn., Poland; timber trade; p. 25,000; 53 10N 22 4E
26 **Lomond, L.**, Scotland; set in mountainous scenery; 24 m. long, 5 m. broad at S.; largest lake in Scot.; 56 5N 4 35W
96 **London**, tn., Ont., Can.; univ., caths., sulphur springs, railway centre; farming, grain, livestock, chemicals; foundries; p. 71,148; 43 0N 81 17W
17 **London**, cy., spt., cap. England and British Empire; on R. Thames; largest manufacturing city in Gt. Britain; manufs.—foods, clothing, furniture, etc.; Port of London extends 50 m. along Thames; fine docks; imports approximately twice exports; centre of rly. systems, distributing centre, banking and financial centre of England and world; p. (city) 10,996; 51 31N 0 05W
17 **London**, co., England; a. 117 sq. m.; (Greater London, 692 sq. m.); comprising met. bor. of Battersea, Bermondsey, Bethnal Green, Camberwell, Chelsea, Deptford, Finsbury, Fulham, Greenwich, Hackney, Hammersmith, Hampstead, Holborn, Islington, Kensington, Lambeth, Lewisham, London (city), Paddington, Poplar, St. Marylebone, St. Pancras, Shoreditch, Southwark, Stepney, Stoke Newington, Wandsworth, Westminster (city), Woolwich; chief buildings—Houses of Parliament, St. James' Pal., Buckingham Pal., Guildhall, Mansion House, Royal Exchange, Bank of England, British Museum, National Gallery, St. Paul's Cathedral, Westminster Abbey, Westminster Cathedral (R.C.), etc.; chief parks—Hyde Park, Kensington Gdns., Regent's Park, etc.; univ., hospitals, theatres; markets—Billingsgate, Leadenhall, Covent Garden, Smithfield; p. 4,396,821 (Greater London 8,202,818); see also Greater London.
31 **Londonderry**, co. bor., co. tn., spt., Londonderry, N. Ire.; linen, distilleries; p. 45,164; 55 0N 7 21W
31 **Londonderry**, co., N. Ire.; a. 816 sq. m.; linen, farming; p. 139,675; 54 57N 6 57W
106 **Long Beach**, cy., Cal., U.S.A.; seaside resort; fruits, oil, lumber; p. 142,032; 33 45N 117 50W
105 **Long Beach**, N.Y., U.S.A.; p. 5,817; 40 35N 73 35W
105 **Long Branch**, cy., N.J., U.S.A.; watering-place; p. 18,309; 40 18N 73 59W
111 **Long I.**, W. Indies; p. 4,600; 23 15N 75 12W
102 **Long Island**, N.Y., U.S.A.; a. 1,681 sq. m.; separated from mainland by East R.; W. part of New York; w.-pl.; veg. gardening; 40 50N 73 0W
16 **Long Eaton**, urb. dist., Derby, Eng.; lace, carriage works; p. 22,339; 52 54N 1 16W
16 **Long Melford**, par., Suff., Eng.; malting; p. 2,635; 52 5N 0 43E
16 **Long Stratton**, vil., Norfolk, England; 52 30N 1 13E
16 **Long Sutton**, par., Holl., Eng., corn mills, brewing; p. 2,902; 52 48N 0 07E
121 **Longford**, Tas., Australia; 41 32s 147 1E
31 **Longford**, co., I.F.S.; a. 421 sq. m.; farming, dairying; p. 39,831; 53 44N 7 49W
31 **Longford**, urb. dist., co. tn., Longford, I.F.S.; linen, woollens; p. 3,682; 53 44N 7 49W
27 **Longforgan**, par., Perth, Scot.; p. 2,032; 56 28N 3 08W
27 **Longformacus**, par., Berwick, Scot.; p. 250; 55 49N 2 30W
123 **Longreach**, vil., Queens., Australia; 23 17s 144 17E
18 **Longridge**, urb. dist., Lancs, Eng.; cottons, nails; p. 4,158; 53 49N 2 37W
25 **Longside**, vil., Aber., Scot.; granite; p. 2,484; 57 30N 1 57W
107 **Long's Peak**, Cal., U.S.A.; 14,255 ft.; 40 15N 106 0W
20 **Longtown**, par., Cumb., Eng.; farming; p. 6,636; 55 2N 2 55W
97 **Longueuil**, tn., Que., Can.; p. 5,407; 45 34N 73 30W
34 **Longwy**, tn., France; iron, porcelain; 49 31N 5 46E
25 **Lonmay**, par., Aber., Scot.; p. 1,884; 57 37N 1 57W
19 **Looe, E. and W.**, urb. dist., Corn., Eng.; tourist resort; p. 2,678; 50 22N 4 27W
32 **Loop Hd.**, Clare, I.F.S.; 52 34N 9 56W
48 **Lora**, tn., Seville, Spain; 37 38N 5 36W
102 **Lorain**, cy., Ohio, U.S.A.; shipbuilding, steelworks, fisheries; p. 44,512; 41 28N 82 10W
66 **Loralai**, tn., Baluchistan; p. 3,750; 30 25N 68 37E
49 **Lorca**, tn., Murcia, Spain; farming prods., woollens, chemicals; p. 75,000; 37 39N 1 41W
116 **Lord Howe Is.**, Pac. Oc.; dep. of N.S.W.; 31 33s 159 4E
113 **Lorena**, tn., Brazil; 23 0s 45 25W
112 **Lorica**, tn., Col., S.A.; 9 18N 75 48W
34 **Lorient**, spt., France; naval arsenal, docks; exp. sardines; p. 42,853; 47 44N 3 24W
120 **Lorne**, tn., Vic., Australia; 38 32s 143 58E
26 **Lorne**, dist., Arg., Scot.; 56 30N 5 15W
26 **Lorne, Firth of**, Arg., Scot.; 56 15N 5 50W
106 **Los Angeles**, cy., Cal., U.S.A.; health resort; univ.; fruit canning; oil refining; cinema industry at Hollywood; p. 1,238,048; 34 1N 118 20W
111 **Los Roques Is.**, W. Indies; 11 55N 66 45W
46 **Losonez**, tn., Czechoslovakia; 48 20N 19 42E
25 **Lossiemouth**, bor., spt., Moray, Scot.; summer resort; fisheries; p. 3,914; 57 43N 3 16W
19 **Lostwithiel**, mun. bor., Corn., Eng.; p. 1,325; 50 25N 4 39W
35 **Lot**, dept., France; a. 2,017 sq. m.; wines, cereals, sheep, other live-stock, iron, coal; p. 166,637; 44 33N 1 33E
35 **Lot-et-Garonne**, dept., France; a. 2,078 sq. m.; cereals, vines, fruits; p. 247,000; 44 18N 0 28E
114 **Lota**, tn., Chile; p. 25,032; 37 20s 73 20W
25 **Loth**, par., Suther., Scot.; p. 321; 58 4N 3 44W
41 **Lötzen**, tn., Germany; p. 10,552; 54 2N 21 48E
16 **Loughborough**, mun. bor., Leics., Eng.; hosiery, engineering, locomotives; p. 26,945; 52 47N 1 12W
19 **Loughor**, par., Glam., Wales; cas. ruins; tin, coal; p. 5,797; 51 40N 4 05W
32 **Loughrea**, par., Galway, I.F.S.; p. 2,388; 53 13N 8 35W
116 **Louisiade Arch**, Papua, Pacific Ocean; 11 80s 153 30E
103 **Louisiana**, st., U.S.A.; a. 48,506 sq. m.; semi-tropical; ch. industries—maize, sugar-cane, rice, cotton, fruit, breeding of horses and cattle; sugar refining; lumbering; sulphur, petroleum, salt; p. 1,798,000; 29 5 to 33 0N 89 0 to 93 50W
83 **Louis Trichardt**, vil., Trans., S. Afr.; 23 10s 30 0E
102 **Louisville**, cy., Ky., U.S.A.; univ.; largest tobacco market in world; foundries, tanneries, furniture factories; p. 307,745; 38 15N 85 45W
48 **Loulé**, tn., Algarve, Port.; mnfs.—porcelain and leather; p. 23,000; 37 7N 7 59W
35 **Lourdes**, tn., France; cas.; R.C. pilgrimage to sacred spring; marble, slate; 43 7N 0 03W
83 **Lourenço Marques**, spt., Mozam.; in Delagoa B.; chief port for Transvaal; coaling station; p. 37,311; 25 50s 32 45E
16 **Louth**, mun. bor., Linc., Eng.; abbey ruins; flour; p. 9,678; 53 22N 0 01W
31 **Louth**, par., Louth, I.F.S.; p. 9,544; 53 57N 6 33W
31 **Louth**, co., I.F.S.; a. 315 sq. m.; farming, fisheries, quarries; p. 52,687; 53 50N 6 20W
38 **Louvain**, cy., Brabant, Belgium; univ., library; brewing, tobacco, lace; p. 40,023; 50 53N 4 41E
52 **Lovech**, tn., Bulgaria; p. 9,135; 43 8N 24 44E
55 **Lovisa**, Finland; p. 3,778; 60 30N 26 20E
117 **Low Arch**. See Tuamotu Arch.
102 **Lowell**, cy., Mass., U.S.A.; textiles, machinery; p. 100,232; 42 43 71 20W
108 **Lower California**, prov., Mexico; a. 58,338 sq. m.; unproductive country, but cotton and grain grown; rearing of horses and cattle; some minerals; ch. tn. La Paz; p. 94,469; 28 0N 114 0W
16 **Lowestoft**, mun. bor., spt., Suff., Eng.; seaside resort; fisheries; p. 41,789; 52 29N 1 45E
104 **Lowville**, tn., N.Y., U.S.A.; 43 49N 75 30W
120 **Loxton**, tn., S. Australia; 34 25s 140 37E
116 **Loyalty Is.**, New Caledonia (Fr.), Pacific Ocean; cocoanuts; 21 0s 167 30E
35 **Lozère**, dept., France; a. 1,996 sq. m.; mountainous; live-stock, cheeses, cereals, fruit; silver, copper; p. 101,849; 44 24N 3 30E
47 **Loznitza**, tn., Yugoslavia; 40 30N 19 14E
80 **Lualaba**, dist., Belgian Congo; 5 0s 26 0E
70 **Luang Prabang**, tn., Fr. Indo-China; on R. Mekang; silk, rubber, ivory; p. 12,000; 19 50N 101 50E
82 **Luau**, tn., Angola; 11 0s 22 22E
43 **Lubartow**, tn., Poland; 51 28N 22 41E
40 **Lübeck**, st., Germany; a. 115 sq. m.; cereals, fruit; p. 127,971; 53 52N 10 40E
40 **Lübeck**, cy., cap. of st., port, Germany; on R. Trave; shipbuilding, machinery, chemicals, brewing; p. 129,427; 53 52N 10 40E
39 **Lübeck Bay**, Germany; 54 5N 11 0E
43 **Lublin**, Poland; farm prod. and grain trade, woollens, thread; p. 112,500; 51 13N 22 34E
43 **Lublin**, co., Poland; a. 12,031 sq. m.; p. 2,089,950; 51 20N 22 45E
43 **Lublinitz**, tn., Poland; p. 3,500; 50 40N 18 42E
57 **Lubny**, tn., Russia; p. 10,570; 50 2N 32 58E
51 **Lucania**. See Basilicata.
50 **Lucca**, tn., Italy; cath., churches, and palaces; cotton, silk; p. 78,000; 43 50N 10 30E
48 **Lucena**, tn., Cordova, Spain; textiles, pottery, wine, brandy; p. 23,000; 37 25N 4 29W
50 **Lucera**, tn., Foggia, Italy; cath.; silk; p. 17,000; 41 31N 15 20E
45 **Lucerne**. See Luzern.
74 **Luchow**, tn., China; 29 0N 105 5E
73 **Luchun**. See Liu-kiu Is.
43 **Luck**, riv. pt., Poland; on R. Styr; cloth, paper; p. 20,000; 50 45N 25 20E
41 **Luckenwalde**, tn., Germany; cloth, hats, foundries, brewing; p. 24,791; 52 7N 13 6E
67 **Lucknow**, cy., Un. Provs., India; univ.; famous for noted defence during Indian Mutiny, 1857; imp. rly. centre; p. 274,659; 26 47N 80 59E
61 **Ludd**, tn., Palestine; p. 8,103; 31 57N 34 56E
83 **Lüderitz**, spt., S.W. Afr.; formerly Angra Pequena; diamonds, fisheries; p. 2,000; 27 30s 15 0E
83 **Luderitz Land**, S.W. Afr.; 27 40s 16 0E
19 **Ludgershall**, par., Wilts, Eng.; cas. ruins; p. 1,099; 51 15N 1 35W
67 **Ludhiana**, tn., Pun., India; rly. junc.; shawls, cloth; p. 51,880; 30 55N 75 51E
102 **Ludington**, cy., Mich., U.S.A.; p. 8,893; 43 57N 86 25W
18 **Ludlow**, mun. bor., Salop, Eng.; cas. ruins; milling, tanning; p. 5,642; 53 22N 2 42W
40 **Ludwigsburg**, tn., Germany; iron foundry, arsenal, chemicals and textiles; p. 28,994; 48 56N 9 12E
40 **Ludwigshafen**, tn., Germany; on R. Rhine; dyes, chemicals, iron foundries, brewing; p. 107,344; 49 30N 8 22E
45 **Lugano**, tn., Ticino, Switz.; tourist centre; silk; p. 15,394; 46 1N 8 57E
57 **Lugansk** (Voroshilovgrad), tn., Ukraine, Russia; coal, iron and engine works; brewing; p. 19,400; 48 32N 39 14E
81 **Lugh**, vil., It. Somal.; 3 50N 42 35E
50 **Lugo**, tn., Ravenna, Italy; p. 27,950; 44 24N 11 55E
48 **Lugo**, cy., Spain; cath.; textiles, tanning; p. 31,137; 43 28N 7 33W
52 **Lugoj**, tn., Rumania; p. 23,674; 45 45N 21 55E
109 **Luis Potosi**, prov., Mexico; 22 40N 109 20W
54 **Lule**, spt., Sweden; exps.—reindeer hides, timber, iron ore; p. 11,334; 65 35N 22 20E
53 **Lüle Burgas**, tn., Turkey; 41 25N 27 27E
77 **Lulua**, tn., Belgian Congo; 6 0s 22 10E
80 **Lulua, R.**, Belgian Congo; 7 0s 22 30E
80 **Luluaburg**, tn., Belgian Congo; 5 52s 22 28E
19 **Lulworth**, par., Dor., Eng.; p. 1,063; 50 38N 2 10W
81 **Lumbira**, vil., Tang. Territory; 9 45s 34 5E
69 **Lumding**, vil., Assam, India; 25 43N 93 13E
25 **Lumphanan**, par., Aber., Scotland; p. 852; 57 8N 2 42W
127 **Lumsden**, tn., dist., S.I., New Zealand; p. 530; 45 42s 168 25E
25 **Lumsden**, vil., Aber., Scot.; 57 17N 2 53W
55 **Lund**, tn., Sweden; univ.; furniture, gloves, sugar, iron; p. 24,512; 55 40N 13 15E
19 **Lundy I.**, Dev., Eng.; at entrance of Bristol Channel; p. 48; 51 11N 4 40W
20 **Lune, R.**, Lancs, Eng.; 45 m. long; 54 35N 2 12W
40 **Lüneburg**, tn., Germany; Gothic churches, mediæval buildings; cement, salt, beer, chemicals; p. 25,393; 53 13N 10 23E
40 **Lüneburg Heath**, Germany; 53 0N 10 0E
95 **Lunenburg**, tn., spt., N.S., Can.; shipbuilding, fishing; p. 2,727; 44 22N 64 20W
34 **Lunéville**, tn., France; on R. Meurthe; cotton, woollens, hosiery; p. 24,668; 48 34N 6 31E
66 **Luni, R.**, Raj., India; 26 1N 73 12E
43 **Luniniets**, tn., Poland; 52 28N 26 50E
31 **Lurgan**, urb. dist., Armagh, N. Ire.; linen, muslin; p. 12,499; 54 27N 6 20W
47 **Lurja**, tn., Albania; 41 52N 20 10E
89 **Lusaka**, cap. of N. Rhodesia; 15 30s 28 0E
89 **Lusambo**, vil., Belgian Congo; 0 0s 24 32E
69 **Lushai Hills**, dist., Assam, India; a. 7,320 sq. m.; forest and jungle; p. 98,000; 23 30N 93 0E
81 **Lushoto**, vil., Tang. Territory; 4 55s 38 0E
73 **Lushun**. See Port Arthur.
31 **Lusk**, par., Dublin, I.F.S.; p. 3,742; 53 32N 6 11W
26 **Luss**, par., Dumb., Scot.; tourist and anglers' resort; p. 670; 56 7N 4 37W

MAP
63 Lutfabad, tn., U.S.S.R.; 37 30N 59 30E
17 Luton, mun. bor., Beds, Eng.; straw-plaiting, brass and iron foundries; p. 70,440; 51 52N 0 26W
45 Lutry, vil., Switzerland; 46 30N 6 42E
16 Lutterworth, par., Leics., Eng.; in rectory John Wycliffe (died 1384) first translated the Vulgate (Latin Bible) into English; farming, hosiery; p. 2,092; 52 27N 1 11W
38 Luxembourg, prov., Belgium; a. 1,706 sq. m.; fruit, timber, marble; p. 220,920; 50 0N 5 30E
38 Luxemburg, tn., Luxemburg; cap. of Luxemburg; p. 53,791; 49 37N 6 07E
38 Luxemburg, Grand Duchy; a. 999 sq. m.; iron ore; leather, paper, hardware; p. 299,782; 49 47N 6 00E
79 Luxor, tn., Egypt; on R. Nile; site of Thebes (ruins); tomb of King Tutankhamen discovered by Lord Carnarvon and Howard Carter in 1923, one of richest discoveries of art of ancient Egypt of all time; 25 41N 32 39E
45 Luzern, cy., Switzerland; at N.W. of Lake of the Cantons (Lucerne); watering-place and tourist resort; cap. of Luzern; p. 47,721; 47 3N 8 17E
45 Luzern, can., Switzerland; a. 575 sq. m.; farming, dairying; p. 190,069; 47 0N 8 16E
71 Luzon, I., Philippine Is.; a. 40,814 sq. m.; cotton, coffee, sugar, rice, maize, coal, copper; 16 30N 121 30E
43 Lwow, tn., Poland; formerly Lemberg; univ.; iron-ware, leather, liquors; p. 316,200; 49 50N 24 1E
66 Lyallpur, tn., Pun., India; p. 28,136; 31 28N 73 7E
25 Lybster, par., Caith., Scot.; fisheries; 58 18N 3 16W
41 Lyck, tn., Germany; machinery, tiles, paper, leather; p. 15,159; 53 49N 22 21E
54 Lydeksele, tn., Sweden; 64 35N 18 30E
17 Lydd, mun. bor., Kent, Eng.; malting, lyddite; p. 2,778; 50 56N 0 55E
61 Lydda. See Ludd.
83 Lydenburg, tn., Trans., S. Afr.; sheep farming; cotton and wheat; gold; p. 1,500; 25 7S 30 30E
19 Lydford, par., Dev., Eng.; p. 2,232; 51 5N 2 36W
19 Lydney, par., Glouc., Eng.; iron, tin-plate works; p. 3,775; 51 44N 2 30W
98 Lyell, Mt., B.C., Can.; 12,000 ft. high; 52 0N 117 20W
127 Lyell, Mt., S.I., New Zealand; 6,097 ft. high; 45 16S 167 35E
19 Lyme B., Eng. Channel; 50 36N 3 00W
19 Lyme Regis, mun. bor., spt., Dor., Eng.; landing-place of James, Duke of Monmouth, in his attempt to drive James II from throne; resort; lime, cement; p. 2,630; 50 44N 2 55W
17 Lymington, mun. bor., Hants, Eng.; farming, yacht building; p. 13,430; 50 45N 1 32W
102 Lynchburg, cy., Va., U.S.A.; boots, shoes, agric. implements p. 40,661; 37 28N 79 10W
120 Lyndhurst, tn., S. Australia; 30 17S 138 18E
17 Lyndhurst, par., Hants., Eng.; farming; p. 2,562; 50 54N 1 34W
27 Lyne, par., Peebles, Scot.; p. 78; 55 39N 3 16W
39 Lyngby, tn., Denmark; 55 48N 12 32E
102 Lynn, cy., spt., Mass., U.S.A.; boots and shoes; electric appliances; p. 102,320; 42 30N 71 0W
19 Lynton, urb. dist., Dev., Eng.; tourist resort; p. 2,012; 51 13N 3 50W
38 Lyonnais, prov., France; 45 46N 4 20E
38 Lyons, cy., cap. Rhône, France; univ., pal. of art.; silk, chemicals, cars, engineering; p. 579,763; 45 44N 4 51E
104 Lyons Falls, tn., N.Y., U.S.A.; 43 38N 75 22W
120 Lyrup, tn., S. Australia; 34 16S 140 42E
38 Lys, R., Belgium; 50 55N 3 25E
43 Lysa Gora, Mts., Poland; 51 0N 20 50E
55 Lysekil, tn., Sweden; p. 5,866; 58 15N 11 25E
18 Lytham St. Anne's, mun. bor., Lancs., Eng.; watering-pl.; p. 25,764; 53 44N 2 57W
127 Lyttelton, bor., S.I., New Zealand; p. 3,720; 43 35S 172 42E
98 Lytton, tn., B.C., Can.; p. 1,650; 50 7N 121 23W
43 Lyubashevo, tn., Poland; 51 47N 25 33E
42 Lyutsin, tn., Latvia; 56 33N 27 48E

62 Ma'an, vil., Transjordan; 30 12N 35 40E
54 Maaninka, tn., Finland; 63 4N 27 30E
55 Maarianhamina, vil., Åland Is., Finland; 60 10N 19 50E
38 Maas, R., Netherlands; 50 30N 5 20E
38 Maastricht, tn., Neth.; on R. Meuse; distilleries, breweries, glass, pottery; p. 57,986; 50 49N 5 40E
16 Mablethorpe and Sutton, urb. dist., Lind., Eng.; resort; p. 3,928; 53 20N 0 15E
113 Macahé, tn., Brazil; 23 30S 42 0W
107 McAlister, tn., Okla., U.S.A.; coal; p. 11,804; 34 50N 95 40W
74 Macao, tn., Macao I., S. China; Portuguese; fisheries; p. 84,000; 22 25N 113 30E
112 Macapá, tn., Brazil; 0 10N 51 15W
71 Macassar, spt., Celebes, Dutch E. Indies; p. 86,662; 5 00S 119 20E
71 Macassar Str., Du. E. Indies; 1 00S 118 0E
18 Macclesfield, mun. bor., Ches., Eng.; silks, cottons; p. 34,902; 53 16N 2 08W
99 McClintock, Chan., Franklin, Can.; 72 0N 104 0W
45 Maccagno, tn., Italy; 46 3N 8 44E
92 M'Clure Str., Franklin, Can.; 75 0N 118 0W
103 McComb, tn., Miss., U.S.A.; p. 10,057; 31 17N 90 28W
128 McDonald, I., Antarctica; 54 0S 73 0E
118 Macdonnell Range, N. Terr., Australia; 23 20S 134 0E
95 Macduff, burgh, spt., Banff, Scot.; fishery; p. 3,276; 57 40N 2 29W
53 Macedonia, dist., Balkans; grain, tobacco, opium, rice, fruits; 41 10N 23 0E
112 Maceió, spt., Brazil; cotton and sugar mills; p. 104,000; 9 30S 35 40W
89 Macequece, tn., Mozambique; 19 0S 32 50E
50 Macerata, tn., Italy; univ.; glass, chemicals, pottery; p. 25,139; 43 18N 13 24E
32 Macgillicuddy's Reeks, mt. group, Kerry, I.F.S.; highest peak, Carrantuohill, 3,414 ft.; 52 3N 9 47W
81 Machako, tn., Kenya; 1 30S 37 15E
22 Machin, tn., Rumania; p. 5,459; 45 16N 28 12E
18 Machynlleth, urb. dist., Mont., Wales; tourist and angling resort; p. 1,592; 52 36N 3 51W
121 Macintyre, R., N.S.W., Australia; 28 30S 150 15E

MAP
123 Mackay, tn., Queens., Australia; gold; p. 9,230; 21 11S 149 17E
102 McKeesport, tn., Pa., U.S.A.; coal, steel and iron; p. 54,632; 40 23N 79 46W
98 Mackenzie, terr., Canada; a. 527,490 sq. m.; forested; 65 0N 115 0W
98 Mackenzie Bay, Yukon, Can.; 69 30N 137 0W
98 Mackenzie, R., Mackenzie, Can.; 2,514 m. long; 67 0N 130 30W
92 McKinley, Mt., Alaska; highest in N. America, 20,464 ft.; 63 10N 151 20W
121 Maclean, tn., N.S.W., Australia; 29 29S 153 12E
83 Maclear, tn., C. of Good Hope, S. Afr.; 31 8S 28 25E
121 Macleay, R., N.S.W., Australia; 30 50S 152 30E
98 Macleod, tn., Alta., Can.; farming, ranching, coal; 49 43N 113 24W
89 Macloutsie, vil., Bechuanaland; 21 23S 27 0E
98 McMurray, tn., Alta., Can.; 56 40N 111 27W
51 Macomer, tn., Sardinia, Italy; 40 15N 8 46E
35 Mâcon, tn., France; on R. Sâone; wines, farm implements, ropes, copper; p. 18,495; 46 19N 4 49E
103 Macon, tn., Ga., U.S.A.; univ.; rly. junc.; iron foundries, cotton mills; p. 53,829; 32 53N 83 38W
121 Macpherson Ra., N.S.W., Australia; 28 15S 153 0E
128 Macquarie I., Antarctica; 54 45S 158 35E
121 Macquarie Harb., Tas., Australia; 42 17S 145 15E
121 Macquarie, R., N.S.W., Australia; 350 m. long; 32 40S 149 10E
121 Macquarie, R., Tas., Australia; 41 45S 147 15E
121 Macquarie Range, N.S.W., Australia; 34 0S 149 13E
32 Macroom, urb. dist., Cork, I.F.S.; grain, pigs, butter, flaking; p. 2,413; 51 54N 8 57W
77 Madagascar, I., Indian Oc.; Fr. col.; a. 241,094 sq. m.; mountainous; rice, coffee, bananas, coconuts, rubber, cotton; hides, cattle; gold, graphite, sulphur; cap., Antananarivo; p. 3,772,569; 20 0S 47 0E
69 Madaripur, tn., Bengal, India; p. 25,297; 23 7N 90 15E
68 Madawachchi, tn., Ceylon; 8 33N 80 27E
51 Maddalena, I., Sardinia, Italy; 41 18N 9 25E
61 Madeba, tn., Transjordan; 31 42N 35 51E
6 Madeira Is., Atl. Oc.; Port.; a. 314 sq. m. wines; p. 179,002; 32 45N 17 0W
112 Madeira R., Brazil; 6 00S 62 0W
102 Madison, tn., Ind., U.S.A.; p. 7,661; 38 47N 85 32W
102 Madison, tn., cap., Wis., U.S.A.; univ.; farm implements, machinery, footwear; p. 57,899; 43 5N 89 25W
18 Madley, par., Hereford, England; p. 677; 52 2N 2 51W
96 Madoc, tn., Ont., Can.; p. 1,059; 44 32N 77 30W
68 Madras, cap., Mad., India; cath., univ.; cotton spinning, tanneries, potteries, breweries; p. 647,228; 13 7N 80 15E
68 Madras Pres., India; a. 142,277 sq. m.; mountainous, chief ranges, Eastern and Western Ghats; drained by Godavari, Kistna, Cauvery; rice cotton, tobacco; iron ore, gold, silver; cap., Madras; p. 46,748,644; 14 45N 79 0E
48 Madrid, cap., Spain; on R. Manzanares; univ., cath., royal palace; leather goods, tobacco, furniture, chemicals; gold and silver work; p. 952,832; 40 25N 3 45W
68 Madura, tn., Mad., India; coffee, brasswork, wood carving, muslin weaving; p. 182,007; 9 55N 78 10E
70 Madura I., Dutch E. Indies; p. 1 800,000; 7 0S 113 30E
19 Maenclochog, par., Pem., Wales; p. 419; 51 55N 4 47W
19 Maesteg, urb. dist., Glam., Wales; iron and tin-plate works; p. 25,552; 51 37N 3 39W
83 Mafeking, tn., C. of Good Hope, S. Afr.; siege 1899-1900; p. 2,313 (Eur.); 25 55S 25 38E
83 Mafeteng, vil., Basut., S. Afr.; 29 50S 27 18E
121 Maffra, tn., Vic., Australia; 37 59S 147 0E
51 Mafia I., E. Africa; 31 m. long; 7 50S 39 50E
48 Mafra, tn., Portugal; 38 57N 9 20W
81 Magadoxo, cap., It. Somal., Afr.; p. 28,000; 2 03N 45 18E
113 Magallanes, tn., Chile; on Strait of Magellan; p. 24,307; 53 0S 71 0W
81 Magdala, tn., Abyssinia; 11 42N 39 18E
95 Magdalen Islands, G. of St. Lawrence, Que., Can.; 47 30N 61 45W
112 Magdalena, tn., Bolivia; 13 25S 64 0W
108 Magdalena, tn., Mexico; 30 40N 110 56W
112 Magdalena, R., Colombia; 950 m. long; 6 00N 75 0W
40 Magdeburg, cy., Germany; on R. Elbe; rly. centre; cath.; beet sugar, chicory, grain, chemicals, pottery, silk; p. 306,895; 52 8N 11 40E
113 Magellan's Str., Chile; 52 50S 66 0W
87 Magerstonlein, vil., C. of Good Hope, S. Afr.; 28 58S 24 42E
50 Maggiore, L., Italy, 38 m. long, 5½ m. wide; famous north Italian holiday resort; contains beautiful Borromean Isles; 45 50N 8 35E
31 Magherafelt, tn., Londonderry, N. Ire.; linen; p. 1,233; 54 45N 6 37W
57 Magnitogorsk, tn., Russia; until recently tiny village, now huge industrial city: iron, steel, engineering; p. 155,000; 53 10N 59 0E
97 Magog, tn., Que., Can.; p. 6,302; 45 15N 72 10W
31 Maguires Bridge, vil., Fermanagh, N. Ire.; p. 350; 54 17N 7 28W
69 Magwe, tn., Burma, India; on R. Irrawaddy; p. 6,000; 20 10N 95 2E
68 Mahabaleshwar, tn., Bom., India; 17 55N 73 44E
10 Mahadie, tn., Tunis; 35 45N 11 0E
67 Mahanadi, R., India; 20 30N 85 15E
104 Mahanoy, tn., Pa., U.S.A.; p. 14,784; 40 48N 76 12W
79 Mahsraka, tn., Egypt; 23 0N 32 45E
81 Mahenge, tn., Tang. Territry; 8 50S 36 45E
63 Mahmudabad, tn., Persia; 36 40N 52 12E
81 Mahogi, tn., Ang-Eg. Sudan; 2 25N 31 20E
49 Mahon, cap. Minorca I., Spain; p. 18,220; 39 50N 4 18E
63 Maidan-i-Naphtun, tn., Persia; oilfields; 31 50N 49 30E
17 Maidenhead, mun. bor., Berks, Eng.; on R. Thames; resort; breweries; p. 17,520. 51 32N 0 43W
17 Maidstone, mun. bor., co. tn., Kent, Eng.; on R. Medway; paper, farm implements, breweries, bricks, cement; p. 42,259; 51 17N 0 31E
57 Maikop, tn., Russia; p. 53,010; 44 38N 40 4E

MAP
40 Main, R., Germany; joins R. Rhine at Mainz, connected with R. Danube by canal; length 315 m.; 50 8N 11 10E
102 Maine, st., U.S.A.; a. 33,040 sq. m.; timber, farming, cattle raising, fisheries, fish canning; cottons; woollens, paper; cap., Augusta; p. 797,423; 43 0 to 47 30N 67 0 to 71 0W
34 Maine-et-Loire, dept., France; a. 2,811 sq. m.; grain, wines, linen, woollens; p. 475,991; 47 28N 0 25W
22 Mainland, Orkney Is. See Pomona.
22 Mainland, I., Shetland Is., Scotland; 60 20N 1 30W
112 Maipures, tn., Colombia; 5 30N 68 30W
121 Maitland, tn., N.S.W., Australia; p. 7,720; 32 48S 151 30E
75 Maizuru, tn., Japan; 35 27N 135 21E
49 Majorca I., Spain; largest of the Balearic Is.; a. 1,352 sq. m.; cap., Palma; p. 260,150; 39 30N 3 00E
83 Majuba Hill, mt., Natal, S. Afr.; 27 40S 29 45E
77 Malaga, tn., Madrid; p. 16,570; 15 50S 46 30E
81 Makale, tn., Abyssinia; p. 3,500; 13 29N 39 42E
60 Makalla, tn., Arabia; 14 37N 49 13E
81 Makani, tn., It. Somal.; 5 00N 44 10E
56 Makaryev, tn., Russia; 57 53N 43 45E
46 Mako, tn., Hungary; milling; p. 35,814; 46 13N 20 33E
89 Makori, tn., S. Rhodesia; 19 41S 31 0E
53 Makri, tn., Turkey; 36 40N 29 17E
68 Makri, tn., C.P., India; 19 47N 81 57E
62 Maku, tn., Russia; 39 14N 44 35E
70 Malacca, Straits Settlements; a. 637 sq. m.; p. 193,091; 2 15N 102 15E
49 Maladetta, Mt., Pyrenees, Spain; 11,170 ft.; 42 40N 0 40E
48 Malaga, spt., Spain; flour, sugar, chemicals; p. 188,010; 36 43N 4 23W
31 Malahide, par., Dublin, I.F.S.; oysters; p. 1,174; 53 27N 6 10W
66 Malakand Pass, India; 34 32N 71 52E
80 Malange, tn., Angola; 9 32S 16 18E
55 Malar, L., Sweden; 80 m. long, 2 to 23 m. broad; a. 472 sq. m.; contains 1,300 islands; 59 30N 17 0E
62 Malatia, tn., Turkey; fruit, opium; p. 27,737; 38 27N 38 27E
70 Malay Pen., Asia; extending from Indo-China S.E. towards Sumatra, and forming extreme S. of mainland of Asia; 5 00N 101 0E
70 Malay States (Federated); a. 27,540 sq. m.; including Perak, Selangor, Negri Sembilan and Pahang; p. 1,777,421; 4 00N 104 0E
70 Malay States (Unfederated) (5 states), Asia; a. 22,855 sq. m.; including Johore, Kedah, Perlis, Kelantan and Trengganu; p. 1,361,000; 6 00N 100 0E
123 Malbon, tn., Queens., Australia; 21 3S 140 17E
125 Malcolm, tn., W. Australia; 29 0S 121 30E
105 Malden, tn., Mass., U.S.A.; rubber goods, hosiery, furniture; p. 49,103; 42 27N 71 0W
117 Malden I., Pacific Ocean; guano; 4 00S 154 58W
58 Maldive Is., India; fisheries, tortoiseshell; p. 72,000; 5 00N 73 30E
17 Maldon, mun. bor., Essex, Eng.; sailing boats, salt, brewing, iron founding; p. 6,559; 51 44N 0 41E
120 Maldon, tn., Vic., Australia; 37 0S 144 5E
113 Maldonado, tn., Uruguay; p. 5,000; 34 55S 53 0W
81 Malekal, tn., Ang.-Eg. Sud., 9 30N 32 0E
66 Malerkotla, tn., Pun., India; p. 24,564; 30 29N 75 59E
81 Malindi, spt., Kenya; 3 12S 40 8E
38 Malines, tn., Belgium; rly. centre; furniture, linen, woollens; p. 61,648; 51 2N 4 27E
24 Mallaig, vil., Inver., Scot.; 57 0N 5 48W
32 Mallow, urb. dist., Cork, I.F.S.; farming, salmon, mineral springs; p. 4,562; 52 8N 8 38W
18 Mallwyd, par., Mer., Wales; p. 679; 52 42N 3 40W
38 Malmédy, tn., Belgium; ceded to Belgium after Gt. War; tanning, dyeing, paper; 50 26N 6 03E
120 Malmesbury, tn., Vic., Australia; 37 11S 144 22E
19 Malmesbury, mun. bor., Wilts., Eng.; on R. Avon; silk, pillow lace, brewing; p. 2,334; 51 35N 2 05W
83 Malmesbury, tn., C. of Good Hope, S. Afr.; p. 2,589 (Eur.); 33 30S 18 45E
55 Malmö, spt., Sweden; ironworks, cottons, woollens, breweries; p. 127,870; 55 35N 13 5E
55 Malmöhus, co., Sweden; a. 1,871 sq. m.; p. 519,091; 55 55N 12 45E
44 Maloja Pass, Switzerland; 46 28N 9 47E
105 Malone, vil., N.Y., U.S.A.; p. 8,537; 44 51N 74 22W
18 Malpas, par., Ches., Eng.; p. 1,098; 53 1N 2 45W
112 Malpelo I., South America; 4 03N 8 35W
10 Malta, isl., Medit. Sea, Br.; a. 95 sq. m.; Br. naval stn.; coaling stn.; p. 241,021; 36 0N 14 30E
20 Malton, urb. dist., N. Riding, Eng.; brewing, malting, founding, quarries; p. 4,418; 54 8N 0 48W
55 Malung, tn., Sweden; 60 40N 13 40E
68 Malvan, tn., Bombay, India; p. 22,215; 16 2N 73 33E
18 Malvern, urb. dist., Worcs., Eng.; health resort; p. 15,632; 52 7N 2 19W
18 Malvern Hills, Here., Eng.; 52 5N 2 17W
24 Mam Soul, mt., Ross and Crom., Scot.; 3,862 ft.; 57 17N 5 10W
20 Man, I. of, Eng.; a. 227 sq. m.; crossed by hill range running N.E. to S.W., rising to 2,034 ft. in Snaefell; beautiful coast scenery attracts many visitors; oats, root crops; sheep; lead, zinc; fishing; self-governing, administration and legislation in hands of lieutenant-governor, council, and House of Keys; cap. Douglas; p. 49,338; 54 15N 4 30W
112 Mamore R., Bolivia; 13 0S 65 25W
19 Manacles, rocks, Cornwall, England; 50 3N 5 03W
110 Managua, tn., cap. Nicaragua; on L. Managua; univ., palace; p. 83,000; 12 7N 86 15W
110 Managua, L., Nicaragua; 12 15N 86 15W
112 Manaos, tn., Brazil; on R. Negro near junc. with R. Amazon; univ.; centre for river trade; exp. rubber; p. 83,000; 3 0S 60 0W
127 Manapouri, tn., New Zealand; 45 34S 167 40E
127 Manapouri, L., New Zealand; 45 32S 167 30E
68 Manar, tn., Ceylon; 9 02N 79 54E
68 Manar, Gulf of, India; between Ceylon and India; pearl fisheries; 8 00N 78 30E
67 Manasarowar, L., Tibet; 30 45N 81 30E
34 Manche, dept., France; a. 2,475 sq. m.; cereals, fruit, cider, fisheries, dairying; p. 433,473; 49 3N 1 18W

MAP

18 **Manchester**, co. bor., Lancs., Eng.; univ., cath., town hall, new city library, John Rylands Library (one of most famous libraries in the world), aerodrome; opening of Manchester Ship Canal in 1894 has since made Manchester the fourth port of Great Britain; Ship Canal links Manchester with Runcorn on Mersey estuary; cotton trade centre; silk, machinery, chemicals; p. 766,378; 53 29w 2 16w

102 **Manchester**, tn., N.H., U.S.A.; woollens; p. 76,834; 43 2n 71 29w

73 **Manchouli**, tn., Manchuria; 49 35n 118 25n

73 **Manchukuo**. See Manchuria.

73 **Manchuria**; a. 508,080 sq. m.; mountainous in N., W. and E.; fertile basin of R. Sungari and tribs.; forested; soya beans, wheat, rice; cattle rearing; coal, iron, gold, silver; independent rep. of Manchukuo created 1932, emp. 1934; cap., Hsinking, former cap. of Manchuria, Moukden; p. 31,945,000; 47 30n 127 0e

55 **Mandal**, tn., Norway; 58 2n 7 30e

69 **Mandalay**, tn., Burma, India; on R. Irrawaddy; silk weaving; p. 144,899; 22 3n 96 2e

51 **Manduria**, tn., Italy; p. 13,500; 40 25n 17 39e

66 **Mandvi**, tn., India; p. 22,638; 22 55n 69 21e

50 **Manfredonia**, tn., Italy; cath.; grain, almonds, figs.; p. 15,000; 41 38n 15 53e

52 **Mangalia**, tn., Rumania; p. 2,776; 43 48n 28 38e

68 **Mangalore**, tn., spt., Mad., India; pepper, coffee; p. 53,877; 12 55n 74 52e

126 **Mangonui**, tn., dist., N.I., New Zealand; p. 340; 39 46s 175 42e

107 **Manhattan**, tn., Kan., U.S.A.; p. 10,136; 39 11n 96 37w

112 **Manicoré**, tn., Brazil; 5 05s 61 10w

116 **Manibiki Is.**, Pac. Oc., Br.; 10 18s 161 0e

71 **Manila**, spt., cap. Philippine Is.; cath., univ.; liquors (distilled and malt), cigars, clothing; p. 285,306; 14 40n 121 0e

71 **Manila B.**, Philippine Is.; 25 m. long, 11 m. broad; 14 30n 120 30e

121 **Manilla**, tn., N.S.W., Australia; 30 42s 150 42e

69 **Manipur**. See Imphal.

69 **Manipur**, st., Assam, India; a. 8,456 sq. m.; rice, fruits, cotton; cap., Imphal; p. 445,006; 24 45n 94 0e

53 **Manisa**, tn., Turkey; cottons, silk; p. 28,684; 38 36n 27 17e

102 **Manistee**, tn., Mich., U.S.A.; on L. Michigan; lumbering, salt, fruit; p. 8,078; 44 10n 86 20w

102 **Manitowoc**, tn., Wis., U.S.A.; on L. Michigan; shipbuilding, iron and aluminium goods, canning, flour; p. 22,963; 44 3n 87 40w

99 **Manitoba**, L., Man., Can.; 51 0n 98 58w

99 **Manitoba**, prov., Canada; a. 246,512 sq. m.; surface undulating; principal rivers—Assiniboine, Churchill, Nelson, Winnipeg, Red, Saskatchewan; chief lakes—Manitoba, Winnipeg; wheat and other cereals, vegetables, dairying and cattle raising; coal, copper, gypsum, fisheries; cap., Winnipeg; p. 700,139; 49 0 to 60 0n 89 0 to 101 50w

97 **Maniwaki**, tn., Que., Can.; p. 1,720; 46 22n 75 55w

112 **Manizales**, tn., Colombia; p. 81,000; 5 00n 75 40w

123 **Manjimup**, tn., W. Australia; 34 20s 116 0e

120 **Mannahill**, tn., S. Australia; 32 58s 140 58e

68 **Mannargudi**, tn., Mad., India; p. 21,636; 10 42n 79 30e

40 **Mannheim**, tn., Germany; commercial centre; machinery, electrical plant, motor-cars, glass, carpets; p. 275,162; 49 30n 8 26e

16 **Manningtree**, tn., Essex, Eng.; 51 56n 1 04e

120 **Mannum**, tn., S. Australia; 34 52s 139 18e

30 **Manorhamilton**, tn., Leitrim, I.F.S.; rly. works; p. 1,012; 54 18n 8 11w

49 **Manresa**, tn., Spain; linen, woollens, cottons, paper, chemicals, iron foundries; p. 27,000; 41 48n 1 50e

16 **Mansfield**, mun. bor., Notts., Eng.; coal, iron, boots, hosiery, bricks, tiles; p. 46,077; 53 8n 1 12w

102 **Mansfield**, tn., Ohio, U.S.A.; farm implements, machinery, paper; p. 33,523; 40 48n 82 35w

121 **Mansfield**, tn., Vic., Australia; 37 5s 146 5e

78 **Mansura**, tn., Egypt; cotton, linen, salicloth; p. 63,676; 31 0n 31 19e

34 **Mantes**, tn., France; farm produce, musical instruments, hosiery; 48 59n 1 43e

50 **Mantua**, tn., Italy; tanneries, breweries; p. 44,000; 45 9n 10 47e

55 **Mantyharja**, tn., Finland; 61 25n 26 55e

126 **Manukau Harb.**, N.I., New Zealand; 37 3s 174 45e

123 **Many Peaks**, tn., Queens., Australia; 24 35s 151 15e

110 **Manzanillo**, spt., Cuba; p. 29,000; 20 21n 77 3w

108 **Manzanillo**, tn., Mexico; 19 3n 104 20w

108 **Mapimi**, tn., Mexico; 25 44n 103 58w

98 **Maple Creek**, tn., Sask., Can.; p. 1,154; 49 59n 109 28w

25 **Mar**, dist., Aberdeen, Scotland; 57 10n 2 35w

113 **Mar del Plata**, tn., Argentina; p. 27,600; 37 50s 57 30w

83 **Marabastad**, tn., Trans., S. Afr.; goldfields; 24 0s 29 20e

112 **Maracaibo**, tn., Venezuela; oil, coffee, shipbuilding; p. 105,000; 10 42n 71 50w

112 **Maracaibo, G. of**, Venezuela; 11 30n 71 0w

112 **Maracaibo, L.**, Venezuela; 9 30n 71 30w

63 **Maragha**, tn., Persia; p. 15,300; 37 16n 46 19e

112 **Marajo I.**, Brazil; 180 m. long; 1 00s 49 40w

62 **Marand**, tn., Persia; 38 23n 45 45e

89 **Marandellas**, tn., S. Rhodesia; 18 25s 31 20e

112 **Maranhão**, St., Brazil; a. 177,515 sq. m.; mountainous in S.; forests; rice, cotton, sugar, coffee, tobacco; cattle raising; copper, gold; cap. Maranhão; p. 1,140,635; 5 00s 45 0w

112 **Maranhão**, Brazil; cath.; p. 63,000; 2 00s 4 40w

112 **Marañon**, R., Peru; 5 00s 76 0w

62 **Maras**, tn., Turkey; carpets, embroideries; p. 25,982; 37 31n 36 59e

53 **Marathon**, vil., Greece; famous Greek victory over Persians, 490 B.C.; 38 10n 23 57e

19 **Marazion**, par., Corn., Eng.; pilchard fishing; p. 1,114; 50 8n 5 28w

124 **Marble Bar**, tn., W. Australia; 21 20s 119 30e

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105 **Marblehead**, tn., Mass., U.S.A.; p. 8,668; 42 30n 70 53w

40 **Marburg**, tn., Germany; univ.; pottery, surgical instr., iron-ware; p. 23,239; 50 48n 8 48e

46 **Marburg**. See Maribor.

47 **Marcarsca**, tn., Yugoslavia; 43 20n 17 3e

16 **March**, urb. dist., I. of Ely, Eng.; agricultural implements; p. 11,276; 52 34n 0 06e

38 **Marche**, tn., Belgium; 50 14n 5 19e

35 **Marche**, old prov., France; 46 13n 1 40e

48 **Marchena**, tn., Spain; p. 12,500; 37 20n 5 25w

50 **Marches**, dept., Italy; a. 3,702 sq. m.; maize, wine, tobacco; silk, paper; p. 1,217,066; 43 30n 13 0e

46 **Marchfeld**, dist., Austria; 48 20n 16 40e

116 **Marcus I.**, Pacific Ocean; 24 30n 154 3e

62 **Mardin**, tn., Turkey; farming, woollens, cottons; p. 25,252; 37 12n 40 38e

89 **Marengo**, tn., Nyasaland; 14 15s 34 38e

50 **Marengo**, vil., Italy; 44 52n 84 1e

19 **Margam**. See Port Talbot.

17 **Margate**, mun. bor., Kent, Eng.; resort; p. 31,312; 51 23n 1 23e

126 **Maria van Diemen, C.**, New Zealand; 34 30s 172 40e

39 **Maringer**, tn., Denmark; 56 40n 10 1e

42 **Mariampol**, tn., Lithuania; 54 34n 23 18e

116 **Marians Is.**, Pac. Oc., Jap. Mandate; p. 69,530; 17 0n 145 50e

110 **Marianao**, tn., Cuba; 23 0n 82 41w

115 **Marianna**, tn., Brazil; 20 25n 43 30w

39 **Maribo**, tn., Denmark; p. 4,606; 54 48n 11 32e

46 **Maribor**, tn., Yugoslavia; leather goods, wine, rly. workshops; p. 32,150; 46 36n 15 40e

115 **Marica**, tn., Brazil; 23 0s 42 30w

128 **Marie Byrd Land**, Antarctica; 82 0s 125 0w

111 **Marie Galante, I.**, W. Indies; 16 0n 61 15w

46 **Marienbad**, tn., Czechoslovakia; spa; 49 58n 12 41e

38 **Marienbourg**, tn., Belgium; 50 0n 4 32e

41 **Marienburg**, tn., Germany; sawmills, sugar, farm impl.; p. 21,039; 54 0n 19 0e

42 **Marienburg**, tn., Latvia; 57 24n 27 0e

41 **Marienwerder**, tn., Germany; iron foundries, sawmills, sugar; p. 13,721; 53 45n 18 57e

55 **Mariestad**, tn., Sweden; p. 6,143; 58 40n 13 50e

102 **Marietta**, tn., Ohio, U.S.A.; coal, iron, petroleum, natural gas; foundries; p. 14,285; 39 28n 81 30w

50 **Marignano**, tn., Italy; 45 21n 9 22e

111 **Marigualla, L.**, W. Indies; p. 432; 22 28s 73 0w

59 **Mariinsk**, tn., U.S.S.R.; 56 0n 88 0e

56 **Mariisk, A.A.**, Russia; a. 4,374 sq. m.; 56 30n 47 30e

102 **Marinette**, tn., Wis., U.S.A.; paper, pulp, lumber, sawmills; p. 13,734; 45 5n 87 38w

102 **Marion**, tn., Ind., U.S.A.; iron, paper, glass; p. 24,496; 40 33n 85 45w

102 **Marion**, tn., Ohio, U.S.A.; machinery, farm implements; p. 31,084; 40 33n 83 12w

44 **Maritime Alps**, mts., on frontier of France and Italy; 10,280 ft.; 44 15n 7 00e

53 **Maritza R.**, Bulgaria; 272 m. long; 40 43n 26 0e

57 **Mariupol**, spt., Russia; p. 41,000; 47 0n 37 27e

55 **Markaryd**, tn., Sweden; 56 28n 14 2e

16 **Market Bosworth**, par., Leics., Eng.; bricks; p. 886; 52 37n 1 24w

16 **Market Deeping**, par., Kest., Eng.; brewing, malting, rope; p. 888; 52 42n 0 19w

18 **Market Drayton**, urb. dist.; Salop., Eng.; farm implements; brewing; p. 4,749; 52 54n 2 29w

16 **Market Harboro'**, urb. dist., Leics., Eng.; boots, shoes, hosiery; p. 9,312; 52 29n 0 56w

16 **Market Rasen**, urb. dist.; Lindsey, Eng.; farming, brewing; p. 2,048; 53 24n 0 20w

21 **Market Weighton**, par., E. Riding, Eng.; malting, iron; p. 1,717; 53 52n 0 41w

27 **Markinch**, burgh, Fife, Scot.; p. 1,988; 56 2n 3 08w

19 **Marlborough**, mun. bor., Wilts, Eng.; public sch.; tanning, brewing; p. 3,492; 51 26n 1 43w

105 **Marlboro, tn.**, Mass., U.S.A.; p. 15,587; 42 20n 71 33w

19 **Marlboro' Downs**, Wilts, Eng.; 51 32n 1 46w

127 **Marlborough**, prov., S.I., N.Z.; a. 4,220 sq. m.; pastoral; cap. Blenheim; p. 19,000; 41 50s 173 30e

17 **Marlow, Gt.**, urb. dist. on R. Thames, Bucks, Eng.; resort; brewing, chairs; p. 5,087; 51 34n 0 47w

68 **Marmagao**, tn., Goa, India; 15 57n 73 58e

53 **Marmara I.**, Turkey; marble, alabaster; 40 38n 27 39e

53 **Marmara, Sea of**, Turkey; separates Europe from Asia Minor; 40 40n 28 30e

50 **Marmolata Mt.**, Italy; 46 20n 12 1e

34 **Marne**, dept., France; a. 3,167 sq. m.; undulating surface; champagne, iron, copper, potteries; p. 412,156; 49 1n 4 10e

34 **Marne, R.**, France; 49 0n 3 05e

117 **Marquesas Is.**, Pac. Oc., Fr.; p. 2,255; 9 30s 140 0w

87 **Marquard**, tn., O.F.S., S. Afr.; 28 50s 27 40e

102 **Marquette**, tn., Mich., U.S.A.; on Lake Superior; iron smelting, rly. works; p. 14,789; 46 30n 87 29w

51 **Marsala**, spt., Sicily, It.; wines; p. 31,000; 37 49n 12 25e

121 **Marsden**, tn., N.S.W., Australia; 33 43s 147 32e

35 **Marseilles**, cy., France; cath., pal., mus., chief port of France; coal, grain, wines, glass, cereals, ore smelting; p. 800,881; 43 18n 5 25e

102 **Marshall**, tn., Mo., U.S.A.; p. 8,103; 39 10n 93 15w

107 **Marshall**, tn., Tex., U.S.A.; rly. works; canning, foundries; p. 16,203; 32 31n 94 24w

116 **Marshall Is.**, Pac. Oc., Jap. Mandate; coconut, sugar; p. 9,708; 9 00n 171 0e

102 **Marshalltown**, tn., Iowa, U.S.A.; iron, steel, machinery, canning; p. 17,373; 41 58n 92 53w

19 **Marshfield**, par., Gloucester, England; p. 1,030; 51 28n 2 19w

55 **Marstrand**, tn., Sweden; 57 55n 11 35e

69 **Martaban**, tn., Burma, India; 16 33n 97 35e

69 **Martaban, G. of**, Burma, India; 15 30n 96 30e

18 **Martury**, par., Pembroke, Wales; p. 615; 51 57n 5 05w

45 **Martigny**, tn., Switzerland; resort; 46 7n 7 05e

104 **Martin's Ferry**, Ohio, U.S.A.; on R. Ohio; coal; iron and steel products; p. 14,924; 40 4n 80 45w

111 **Martinique, I.**, W. Indies; a. 385 sq. m.; p. 235,000; 14 35n 61 0w

MAP

102 **Martinsburg**, tn., W. Va., U.S.A.; rly. works; cider, hosiery, worsteds; p. 14,837; 39 27n 78 2w

19 **Martock**, par., Som., Eng.; p. 2,053; 50 59n 2 45w

126 **Marton**, bor., N.I., New Zealand; p. 2,810; 40 4s 175 22e

48 **Mártos**, tn., Spain; grain, wines; p. 20,000; 37 44n 3 59w

67 **Martsang or Tsangpo**, riv., Tibet; 30 0n 83 30e

120 **Maryboro'**, tn., Vic., Australia; 37 3s 143 44e

123 **Maryborough**, tn., Queens., Australia; gold, coal, sugar; engineering; p. 12,000; 25 32s 152 35e

83 **Maryborough**, co. tn., Leix, I.F.S.; corn mills; p. 3,270; 53 2n 7 19w

25 **Marykirk**, par., Kinc., Scot.; p. 1,163; 56 47n 2 31w

102 **Maryland**, St., U.S.A.; a. 12,327 sq. m.; coal, iron, copper, lumbering, cereals, fruits, tobacco, vegetables; canning; stock raising dairying, fisheries; cottons, woollens, iron and steel, tinware, flour; Chesapeake Bay, good harbour; cap. Annapolis, largest town Baltimore; p. 1,631,526; 38 0 to 39 43n 75 3 to 79 28w

20 **Maryport**, urb. dist., spt., Cumb., Eng.; shipbuilding, coal, iron foundries; p. 10,192; 54 43n 3 30w

73 **Masanpo**, spt., Korea; p. 25,500; 35 0n 128 30e

71 **Masbate I.**, Philippine Is., a. 1,255 sq. m.; p. 108,800; 12 0n 123 30e

10 **Mascara**, tn., Algeria; wines; p. 31,449; 35 22n 0 07e

61 **Mascat, port**, Arabia; p. 20,000 (est.); 23 36n 58 40e

108 **Mascota**, tn., Mexico; 20 29n 104 49w

83 **Maseru**, tn., cap. Basut., S. Afr.; 29 17s 28 35e

20 **Masham**, urb. dist., N. Riding, Eng.; p. 1,995; 54 14n 1 40w

89 **Mashonaland**, dist., S. Rhodesia; gold, silver, copper; 17 10s 31 30e

102 **Mason City**, tn., Iowa, U.S.A.; cement, lime, bricks; beet sugar; p. 23,304; 43 5n 93 15w

50 **Massa**, tn., Italy; marble; olive oil, paper, tobacco; p. 39,000; 44 1n 10 10e

102 **Massachusetts**, St., U.S.A.; a. 8,266 sq. m.; undulating surface; wooded; maize, potatoes, tobacco, and small fruits; whale, deep sea and coast fishing; footwear, cottons, woollens, iron and steel goods; cap. Boston; p. 4,249,614; 41 20 to 43 0n 70 0 to 73 30w

82 **Massangano**, tn., Mozambique; 16 30s 33 35e

81 **Massawa, spt.**, Eritrea, Afr.; pearl fishing; p. 12,300; 15 30n 39 30e

102 **Massillon**, tn., Ohio, U.S.A.; coal, machinery, glass; p. 26,400; 40 53n 81 30w

127 **Masterton**, bor., N.I., New Zealand; p. 8,525; 40 52s 175 40e

68 **Masulipatam**, tn., Mad., India; cottons, rice mills; p. 43,940; 16 17n 81 7e

64 **Masur-i-Sharif**, tn., Afghanistan; p. 40,200; 36 48n 67 22e

89 **Matabeleland**, dist., S. Rhodesia; 20 0s 30 0e

80 **Matadi**, port, Belgium-Congo; p. 15,000; 5 45s 13 45e

110 **Matagalpa**, tn., Nicaragua; p. 10,000; 13 10n 85 38w

68 **Matale**, tn., Ceylon; 7 30n 80 35e

109 **Matamoros**, tn., Mexico; p. 18,000; 25 50n 97 32w

70 **Matan**, tn., Borneo; 20 0s 110 0e

110 **Matanzas**, spt., Cuba; p. 70,000; 23 0n 81 40w

53 **Matapan C.**, Greece; 36 23n 22 30e

94 **Matapedia**, dist., Que., Can.; 48 20n 67 14w

68 **Matara**, tn., Ceylon; 6 00n 80 30e

83 **Matatiele**, tn., C. of Good Hope, S. Afr.; 30 23s 29 03e

127 **Mataura**, bor., S.I., New Zealand; p. 1,290; 46 12s 168 51e

78 **Mataya**, tn., Egypt; 28 45n 30 42e

109 **Matehuala**, tn., Mexico; 23 33n 100 44w

51 **Matera**, tn., Italy; leather; p. 17,200; 40 40n 16 39e

68 **Matheran**, tn., Bom., India; 19 0n 73 17e

111 **Mathew Town**, tn., Bahama Is.; 20 59n 73 42w

84 **Matjesfontein**, tn., C. of Good Hope, S. Afr.; 33 15s 20 32e

16 **Matlock**, urb. dist., Derby, Eng.; on R. Derwent; health resort and spa, beautiful scenery; stalactite caves; cotton goods, paper; p. 10,599; 53 8n 1 33w

89 **Matope**, tn., Nyasaland; 15 30s 35 0e

89 **Matopo Hills**, S. Rhodesia; between Limpopo and Zambezi Rivers; "Worlds View," burial place of Cecil Rhodes; 20 0s 30 0e

89 **Matopos**, tn., S. Rhodesia; 20 19s 28 28e

11 **Matruh**, tn., Egypt; 31 10n 27 35e

75 **Matsue**, tn., Japan; paper; p. 52,034; 35 43n 133 6e

75 **Matsuyama**, tn., Japan; p. 81,940; 33 47n 132 57e

73 **Matsuye**, tn., Japan; 35 25n 133 2e

75 **Mattawa**, tn., Ont., Can.; p. 1,631; 46 18n 78 47w

45 **Matterhorn, Mt.**, Switzerland; 14,776 ft.; 45 58n 7 39e

112 **Matto Grosso**, tn., Brazil; p. 5,000; 15 0s 59 56w

112 **Matto Grosso**, st., Brazil; a. 532,210 sq. m.; dense, forests; minerals, diamonds, cattle raising; cap. Cuyaba; p. 349,857; 13 45s 56 0w

112 **Matto Grosso, Plat. of**, Brazil; 14 25s 53 40w

102 **Mattoon**, tn., Ill., U.S.A.; foundries, flour, bricks; p. 14,631; 39 29n 88 32w

112 **Maturin**, tn., Venezuela; p. 15,000; 9 25n 63 0w

34 **Maubeuge**, tn., France; on R. Sambre; metal goods, tools; p. 24,221; 50 18n 3 57e

69 **Maubin**, tn., Burma, India; 16 43n 95 44e

27 **Mauchline**, par., Ayr, Scot.; p. 2,484; 55 32n 4 22w

20 **Maughold Hd.**, I. of Man, Eng.; 54 18n 4 19w

117 **Maui I.**, Hawaii Is., Pacific Ocean; p. 48,756; 20 50n 156 20w

59 **Maunachin**, tn., China; 50 15n 106 45e

81 **Maungu**, tn., Kenya; 3 32s 38 45e

76 **Mauretania**, colony, Fr. W. Afr.; a. 347,400 sq. m.; gum, salt; stock raising; p. 322,000; 25 0n 10 0w

5 **Mauritius, I.**, Br. Cr. Col., Ind. Oc.; a. 720 sq. m.; mountainous; sugar, rum, cocoa-nut oil, rice; cap. Port Louis; p. 393,418; 20 10s 57 25e

27 **Maxton**, par., Rox., Scot.; p. 316; 55 34n 2 37w

27 **Maxwelltown**. See Dumfries.

111 **Mayaguez**, spt., Porto Rico; p. 37,000; 18 10n 67 13w

68 **Mayavaram**, tn., Mad., India; p. 28,617; 11 10n 79 42e

26 **Maybole**, burgh, Ayr, Scot.; shoes, farm implements; p. 4,210; 55 22n 4 40w

MAP

40 Mayen, tn., Germany; p. 14,327; 50 20N 7 10E
40 Mayence, tn., Germany; cath.; machinery, chemicals, wine, printing; p. 142,627; 50 0N 8 15E
103 Mayfield, tn., Ky., U.S.A.; p. 8,177; 36 45N 88 45W
34 Mayenne, dept., France; a. 1,986 sq. m.; farming, stone, live-stock, textiles; cap. Laval; p. 254,479; 48 19N 0 40W
33 Maynooth, tn., Kildare, I.F.S.; R.C. coll.; p. 886; 53 23N 6 35W
20 Mayo, co., I.F.S.; a. 2,126 sq. m.; pastoral, fishing; cap. Castlebar; p. 172,661; 53 55N 9 20W
30 Mayo, par., Mayo, co., I.F.S.; p. 1,617; 53 46N 9 06W
102 Maysville, tn., Ky., U.S.A.; wheat; p. 6,557; 38 38N 83 47W
10 Mazagan, tn., Morocco; p. 19,601; 33 10N 8 30W
49 Mazarron, tn., Spain; flour, soap, iron and lead mines; p. 18,000; 37 38N 1 20W
108 Mazatlan, spt., Mexico; p. 25,000; 23 8N 106 22W
89 Mazoe, tn., S. Rhodesia; 17 25s 30 58E
51 Mazzara, tn., Italy; sulphur springs; corn, linseed, oil; p. 22,000; 37 40N 12 33E
83 Mbabane, tn., Swazi, S. Afr.; 26 15s 31 15E
86 Mbekebeweni, tn., Swazi, S. Afr.; 26 25s 31 20E
89 Mbewe, tn., Nyasaland; 15 12s 34 38E
80 Mbomu, R., Belgian Congo; 5 00N 25 0E
102 Meadville, tn., Pa., U.S.A.; ry. works; p. 16,698; 41 37N 80 5W
96 Meaford, tn., Ont., Can.; p. 2,624; 44 38N 80 39W
121 Meandarra, tn., Queens., Australia; 27 18s 149 42E
25 Mearns. See Kincardine.
31 Meath, co., I.F.S.; a. 906 sq. m.; cattle grazing, textiles; cap. Trim; p. 62,909; 53 38N 6 35W
34 Meaux, tn., France; cath.; dairying; 48 58N 2 52E
60 Mecca, tn., Hejaz, Arabia; sacred city of Mohammedans; great mosque; p. 85,000 (est.); 21 30N 40 17E
104 Mechanicsburg, tn., Pa., U.S.A.; p. 5,647; 40 25N 77 5W
105 Mechanicsville, tn., N.Y., U.S.A.; p. 7,924; 42 55N 73 45W
40 Mechlenburg-Schwerin, St., Germany; a. 5,066 sq. m.; cap. Wismar; p. 674,045; 53 50N 11 26E
38 Mechlin. See Malines.
39 Mecklenburg B., Germany; 54 20N 11 45E
41 Mecklenburg Strelitz, St., Germany; a. 1,131 sq. m.; cap. Neu-Strelitz; p. 110,269; 53 50N 10 55E
70 Medan, tn., Sumatra; p. 74,976; 3 35N 98 30E
10 Medea, tn., Algeria; p. 16,431; 37 0N 3 00E
112 Medellin, tn., Colombia; univ.; cottons, woollens, cigarettes, cigars, matches, hats; p. 121,000; 6 25N 75 50W
48 Medellin, tn., Spain; 38 55N 5 57W
98 Medicine Hat, tn., Alta., Can.; coal, natural gas, flour; p. 10,300; 50 0N 110 30W
60 Medina, tn., Hejaz, Arabia; 2nd holy cy. of the Mohammedans; mosque; tomb of Mohammed; p. 30,000 (est.); 24 25N 40 0E
48 Medina, tn., Spain; 41 19N 4 53W
48 Medina Bidonia, tn., Spain; 36 27N 5 55W
78 Medinet el Fayum, tn., Egypt; 29 19N 30 50E
8 Mediterranean Sea; a. 1,140,000 sq. m.; largest inland sea in the world, connecting with Atlantic Ocean by Str. of Gibraltar; greatest length 2,300 m., greatest breadth 600 m.; it receives waters of the Danube, Rhône, Po, Dnieper, Don, Nile and other rivers; greatest depth, Pola Deep, 2,408 fathoms, off S.W. Greece; 30 0N to 46 0N 5 00W to 36 0E
17 Medway, R., Kent, Eng.; 51 25N 0 33E
25 Meekatharra, tn., W. Australia; 26 30s 118 0E
40 Meerane, tn., Germany; cloth, woollens; p. 24,094; 50 52N 12 25E
67 Meerut, tn., India; scene of outbreak of Indian Mutiny (1857); p. 136,709; 29 1N 77 48E
53 Megalocastron. See Candia.
94 Megantic, tn., Que., Can.; p. 3,911; 46 10N 71 30W
53 Megara, vil., Greece; 37 59N 23 21E
27 Meigle, par., Perth, Scot.; p. 735; 56 37N 3 09W
69 Meiktila, tn., Burma, India; 20 57N 95 50E
40 Meiningen, tn., Germany; on R. Werra; brewing, pottery, paper; p. 18,221; 50 37N 10 22E
45 Meiringen, tn., Switzerland; 46 43N 8 10E
52 Mejidia, tn., Rumania; p. 5,791; 44 18N 28 18E
113 Mejillones, spt., Chile; saltpetre; 23 10s 70 30W
43 Mejiryeche, tn., Poland; 52 1N 22 45E
70 Mekong, riv., Siam; rises in Tibet and flows to South China Sea; length 2,610 m.; 21 0N 100 30E
62 Melazgerd, tn., Turkey; 39 18N 42 38E
16 Melbourn, par., Camb., Eng.; farming, straw-plaiting; p. 1,294; 52 5N 0 0E
16 Melbourne, tn., Derby, Eng.; boots, shoes, silk, market gardening; p. 3,467; 52 51N 1 27W
121 Melbourne, spt., Vic., Australia; univ., caths., parliament houses, observatory, fine harbour; p. 1,014,600; 37 50s 144 58E
51 Melfi, tn., Italy; p. 14,750; 41 1N 15 40E
48 Meigar, tn., Spain; 42 26N 4 12W
10 Melilla, port, Morocco; convict settlement; p. 60,580; 35 20N 3 00W
114 Melipilla, tn., Chile; 33 49s 71 11W
51 Melito, tn., Italy; 37 58N 15 47E
57 Melitopol, tn., Russia; p. 15,450; 46 46N 35 15E
46 Melk, tn., Austria; 48 16N 15 20E
19 Melksham, urb. dist., Wilts, Eng.; on R. Avon (Bristol); woollens, cordage; p. 3,881; 51 22N 2 06W
78 Meliawi, tn., Egypt; 27 42N 30 43E
46 Mellingen, tn., Switzerland; 47 25N 8 15E
20 Melmerby, par., N. Riding, England; p. 275; 54 16N 1 54W
83 Melmoth, tn., Nat., S. Afr.; 28 35s 31 25E
27 Melrose, burgh, Rox., Scot.; on R. Tweed; tourist resort; ruins of famous Cistercian abbey; vicinity associated with Sir Walter Scott; p. 2,092; 55 36N 2 43W
89 Melsetter, tn., S. Rhodesia; 19 50s 32 40E
16 Melton Mowbray, urb. dist., Leics., Eng.; hunting centre; pork pies, cheeses; p. 10,437; 52 47N 0 54W
34 Melun, tn., France; farm implement., leather, farm prod.; p. 16,336; 48 32N 2 40E
92 Melville I., Franklin, Can.; 200 m. by 130 m.; 75 30N 111 0W

MAP

118 Melville L., N. Terr., Australia; 70 m. long; 11 30s 131 0E
99 Melville Pen., Franklin, Can.; 250 m. by 100 m.; 68 0N 84 0W
92 Melville Sd., Franklin, Can.; 74 0N 105 0W
81 Memba B., Mozambique; 14 10s 40 35E
42 Memel. See Klaipeda.
42 Memel, R., Lithuania; 55 5N 22 20E
40 Memmingen, tn., Germany; machinery, textiles; p. 14,049; 47 58N 10 10E
103 Memphis, tn., Tenn., U.S.A.; rly. centre; lumbering, cotton seed, foundries, oil; p. 253,143; 35 9N 90 0W
82 Mena, tn., N. Rhodesia; 12 47s 26 14E
71 Menado, tn., Celebes, Du. E. Ind.; p. 27,482; 1 30N 124 50E
45 Menaggio, tn., Italy; 46 2N 9 14E
18 Menai Br., urb. dist., Angl., Wales; p. 1,675; 53 13N 4 10W
18 Menai Strait, Angl., Wales; between Caernarvon and Anglesey; crossed by suspension bridge and tubular railway bridge; 14 m. long; 53 7N 4 22W
62 Mendeli, tn., Iraq; 33 38N 45 31E
53 Mendelia, tn., Turkey; 37 28N 27 40E
109 Mendez, tn., Mexico; 25 8N 98 41W
19 Mendip Hills, Som., Eng.; 1,068 ft.; caverns and swallow holes; 51 18N 2 45W
106 Mendocino C., Cal., U.S.A.; 40 30N 124 25W
113 Mendoza, tn., Argentina; wines, fruit; p. 58,800; 32 40s 68 50W
51 Menfi, tn., Italy; 37 39N 12 58E
70 Menggala, tn., Sum., Du. E. Ind.; 4 30s 105 15E
38 Menin, tn., Belgium; British War Memorial at Menin Gate; flax, tobacco; textiles, rubber goods, soap; p. 19,723; 50 48N 3 07E
120 Menindee, tn., N.S.W., Australia; 32 22s 142 54E
25 Menmuir, par., Angus, Scot.; p. 612; 56 47N 2 47W
70 Mentawei Is., Du. E. Ind.; forested; tobacco, sugar-cane, coconuts; p. 27,381; 2 00s 99 30E
35 Mentone, tn., France; winter resort; olive oil, wines, perfume; 43 48N 7 31E
125 Menzies, tn., W. Australia; gold; p. 2,500; 29 32s 121 5E
38 Meppel, tn., Netherlands; shipbuilding; p. 12,133; 52 42N 6 10E
40 Meppen, tn., Germany; 52 40N 7 20E
10 Mequinez, tn., Morocco; olives; p. 56,770; 33 50N 5 30W
50 Merano, tn., Italy; health resort; p. 19,000; 46 41N 11 12E
120 Merbein, tn., Vic., Australia; 34 10s 142 0E
68 Mercara, tn., Coorg, India; 12 30N 75 40E
114 Mercedes, tn., Argentina; p. 18,300; 33 50s 61 5W
115 Mercedes, tn., Uruguay; p. 23,000; 33 20s 57 55W
126 Mercer, tn., N.I., New Zealand; p. 350; 37 18s 175 5E
19 Mere, par., Wilts, Eng.; p. 1,847; 51 6N 2 15W
73 Mergen, tn., Manchuria; 49 0N 123 0E
69 Mergui, tn., Burma, India; pearl fishing; p. 17,000; 12 25N 98 40E
69 Mergui Arch., Burma, India; mountainous; teak; rice; pearl fishing; 12 30N 96 30E
109 Merida, tn., Mexico; univ.; sisal-hemp; ropes, cigars, brandy; p. 91,000; 8 28N 71 1W
48 Merida, tn., Spain; textiles; p. 16,000; 38 52N 6 22W
112 Merida, Venezuela; p. 16,000; 8 28N 71 1W
105 Meriden, tn., Conn., U.S.A.; hardware, cut glass, silver and silver plate; p. 38,481; 41 30N 72 47W
103 Meridian, tn., Miss., U.S.A.; foundries; oil, cotton, and lumber mills; p. 31,954; 32 21N 88 42W
18 Merioneth, co., Wales; a. 660 sq. m.; rugged surface, Cader Idris, 2,900 ft.; woollens, sheep rearing, quarries; p. 43,198; 52 48N 3 50W
125 Merredin, tn., W. Australia; 31 29s 118 40E
102 Merrill, tn., Wis., U.S.A.; p. 8,458; 45 12N 89 44W
121 Merriwa, tn., N.S.W., Australia; 32 9s 150 18E
38 Mersch, tn., Luxemburg, 49 44N 6 06E
17 Mersea I., Essex, Eng.; oysters; 51 48N 0 57E
18 Mersey, R., Eng.; 53 19N 2 53W
60 Mersifun, tn., Turkey; p. 11,334; 40 55N 35 35E
62 Mersin, tn., Turkey; textiles; p. 21,171; 36 44N 34 19E
19 Merthyr Tydvil, co. bor., Glam., Wales; iron, steel, coal, nails; flannel; p. 71,108; 51 45N 3 21W
48 Mertola, tn., Portugal; 37 40N 7 40W
17 Merton and Morden, urb. dist., Surrey, England; Merton priory ruins; p. 41,228; see Greater London
63 Merv, tn., U.S.S.R.; cereals, fruit, live-stock, carpets; 37 30N 61 55E
51 Mesagne, tn., Italy; 40 37N 17 44E
63 Meshhad, tn., Persia; silks, carpets, rugs, shawls; p. 85,000; 36 10N 59 34E
62 Mesopotamia. See Iraq.
38 Messancy, tn., Belgium; 49 36N 5 48E
51 Messina, tn., spt., Italy; cath.; univ.; silks, muslins, chemicals; p. 204,000; 38 11N 12 32E
83 Messina, tn., Trans. S. Afr.; 22 16s 29 59E
38 Messines, tn., Belgium; 50 46N 2 55E
53 Mestanli, tn., Bulgaria; 41 32N 25 26E
50 Mestre, tn., Italy; p. 11,750; 45 33N 12 18E
27 Methil. See Buckhaven and Methil.
25 Methlick, par., Aber., Scot.; p. 1,481; 46 11N 3 01W
53 Methoni, tn., Greece; 36 50N 21 43E
27 Methven, par., Perth, Scot.; linen, jute; p. 1,670; 56 25N 3 35W
127 Methven, tn., S.I., New Zealand; p. 771; 43 48s 171 40E
16 Methwold, par., Norfolk, England; p. 1,195; 52 32N 0 34E
34 Metz, tn., France; cath.; leather goods, pres. fruits, wines; p. 78,767; 49 8N 6 10E
81 Meurka, tn., It. Somaliland; 2 30N 45 0E
34 Meurthe-et-Moselle, dept., France; a. 2,036 sq. m.; hilly and forests, vines, fruits, hops; p. 592,632; 48 40N 6 30E
34 Meuse, dept., France; a. 2,408 sq. m.; undulating and forests, horses, cereals, wines; p. 215,819; 49 0N 5 25E
38 Meuse, R., Belgium; 49 52N 4 41E

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19 Mevagissey, par., Corn., Eng.; pilchard fishing; p. 1,745; 50 17N 4 47W
21 Mexborough, urb. dist., W. Riding, Eng.; potteries, iron; p. 15,856; 53 29N 1 17W
108 Mexcala, R., Mexico; 18 29N 101 30W
109 Mexico, city, cap., Mex.; p. 960,000; 19 25N 99 17W
109 Mexico, G. of, N. America; 1,100 m. long, 800 m. broad; 25 0N 93 0W
108 Mexico, republic, N. America; a. 767,198 sq. m.; consists of 31 states and territories; phy. features, interior immense tableland bordered on W. by Sierra Madre and on E. by S. Madre Oriental, in S. many volcanoes (Orizaba 18,204 ft.); apart from Rio Grande (N. boundary), rivers are unimportant; fertile on plateau and in valleys; agriculture, maize, rice, sugar, henequen, wheat, coffee, tomatoes, etc., timber; cattle, horses, mules, sheep, goats, pigs; minerals, oil, lead, zinc, copper, arsenic, silver, etc., mnfs., textiles, tobacco; cap. Mexico; p. 16,553,398; 15 0 to 32 30N 87 0 to 117 0W
109 Mexico, state, Mexico; a. 9,230 sq. m.; mountainous; silver, gold; p. 978,412; 19 30N 99 45W
56 Mezen, tn., Russia; 65 50N 44 23E
34 Mézières, tn., France; nails, hardware, type-founding; 49 44N 4 43E
46 Mezötür, tn., Hungary; milling; p. 27,643; 47 0N 20 41E
108 Mezquital, tn., Mexico; 23 28N 104 19W
66 Mhow, tn., Cent. India; p. 31,737; 22 15N 76 3E
109 Miahuatlan, tn., Mexico; 16 28N 96 33W
103 Miami, tn., Fla., U.S.A.; winter resort; fruits, fishing; p. 110,637; 25 45N 80 15W
62 Mianeh, tn., Persia; 37 22N 47 51E
53 Micenae, tn., Greece; 37 45N 22 45E
102 Michigan City, Ind., U.S.A.; rly. works, furniture, hosiery; p. 26,735; 41 40N 87 0W
91 Michigan, L., N. America; a. 22,500 sq. m.; second largest of the great lakes of N. America; 350 m. long, 90 m. wide, greatest depth, 1,000 ft., 580 ft. above sea-level; fishing; chief ports, Chicago, Milwaukee, Michigan City; 44 0N 87 0W
102 Michigan, St., U.S.A.; two peninsulas, separated by L. Michigan; hilly; large forests; cereals, fruits, timber; live-stock; iron, copper, coal, gypsum, etc.; automobiles, furniture, stoves, machinery; cap. Lansing; a. 57 980 sq. m.; p. 4,842,325; 41 35 to 48 0N 82 30 to 90 0W
108 Michoacán, st., Mexico; a. 22,621 sq. m.; mountainous; gold, silver; cap. Morelia; p. 1,014,020; 19 0N 102 0W
20 Mickle Fell, N. Riding, Eng.; 54 37N 2 18W
27 Mid Calder, par., Midlothian, Scot.; paraffin oil, chemicals; p. 2,793; 55 54N 3 29W
38 Middelburg, tn., Walcheren I., Neth.; cotton mills; p. 18,389; 51 30N 3 40E
85 Middelburg, tn., C. of Good Hope, S. Afr.; p. 2,178 (Eur.); 31 31s 24 59E
83 Middelburg, tn., Trans., S. Afr.; p. 2,755 (Eur.); 25 55s 29 30E
39 Middelfart, port., Denmark; p. 7,480; 55 30N 9 46E
80 Middle Congo, colony, Fr. Eq. Afr.; a. 172,411 sq. m.; cap., Brazzaville; p. 698,763; 2 30s 15 0E
27 Middlebie, par., Dumf., Scot.; p. 1,440; 55 7N 3 24W
105 Middleboro', tn., Mass., U.S.A.; p. 8,608; 41 52N 70 57W
20 Middleham, vil., N. Riding, Eng.; 54 18N 1 49W
103 Middlesboro, tn., Ky., U.S.A.; p. 10,350; 36 40N 83 40W
20 Middlesbrough, co. bor., river port, N. Riding, Eng.; docks; shipbuilding, iron and steel works, chemicals, salt; p. 138,489; 54 35N 1 14W
17 Middlesex, co., Eng.; a. 232 sq. m.; undulating, farming, market gardens; fruit, brewing, chemicals; p. 1,638,221; 51 34N 0 15W
18 Middleton, mun. bor., Lancs., Eng.; silk, cotton, calico printing, soap, iron foundries; p. 29,189; 53 34N 2 13W
16 Middleton Cheney, vil., Northants., England; p. 1,093; 52 4N 1 15W
20 Middleton-in-Teesdale, par., Dur., Eng.; lead mines, farming; p. 1,977; 54 39N 2 05W
105 Middletown, tn., Conn., U.S.A.; univ.; p. 24,554; 41 34N 72 40W
105 Middletown, tn., N.Y., U.S.A.; rly. works, ironworks; p. 21,276; 41 27N 74 32W
18 Middlewich, urb. dist., Ches., Eng.; vegetables, fruit, salt, chemicals; p. 5,458; 53 12N 2 27W
17 Midhurst, par., Sus., Eng.; p. 1,890; 50 59N 0 44W
83 Midia, tn., Turkey; 41 39N 28 6E
96 Midland, tn., Ont., Can.; p. 6,920; 44 47N 79 57W
31 Midleton, urb. dist., Cork, I.F.S.; distilleries; p. 2,731; 51 54N 8 11W
27 Midlothian, co., Scot.; formerly Edinburgh co.; a. 362 sq. m.; in S. rise Pentland Hills; coal, oil-shale, limestone; paper, brewing, distilling, etc.; p. 526,277; 55 51N 3 15W
67 Midnapore, tn., India; silk, copper and brass goods p. 28,965; 22 26N 87 27E
116 Midway I., Pac. Oc., U.S.A.; 28 15N 177 30W
82 Mieri-Mieri, tn., N. Rhodesia; 11 32s 29 10E
57 Migulinskaya, tn., Russia; 49 42N 41 18E
55 Mikkeli, tn., Finland; 61 44N 27 25E
50 Milan, tn., Italy; cath., riy. centre; silks, velvets, cottons and woollens, ironware, motor-cars, furniture, jewellery, glass, porcelain, chemicals; p. 990,099; 45 28N 9 12E
120 Milang, tn., S. Australia; 35 20s 138 57E
62 Milas, tn., Turkey; 37 17N 27 34E
51 Milazzo, tn., Italy; fruit, wines, olive oil, sulphur; p. 16,540; 38 12N 15 13E
19 Milborne Port, par., Som., Eng.; gloves, leather; p. 1,546; 50 58N 2 26W
16 Mildenhall, par., Suffolk, England; p. 3,370; 52 21N 0 30E
120 Mildura, tn., Vic., Australia; fruit; p. 6,000; 34 11s 142 13E
121 Miles, tn., Queens., Australia; 26 42s 150 12E
19 Milford, vil., Pembroke, Wales; 51 43N 5 01W
19 Milford Haven, urb. dist., spt., Pem., Wales; docks; shipbuilding, coal; p. 10,116; 51 40N 5 10W
127 Milford Sound, S.I., New Zealand; 44 39s 167 50E
35 Millau, tn., France; gloves; 44 7N 3 06E
20 Millom, par., Cumb., Eng.; mining, blast furnaces; p. 7,406; 54 12N 3 17W

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26 Millport, bor., Bute, Scot.; cath.; quarries; p. 2,083; 55 46N 4 45W
32 Millstreet, tn., Cork, I.F.S.; p. 1,069; 52 3N 9 04W
32 Milltown, tn., Kerry, I.F.S.; p. 449; 52 8N 9 43W
32 Milltown Malbay, tn., Clare, I.F.S.; p. 995; 52 51N 9 25W
104 Millville, tn., N.I., U.S.A.; textiles, glass; p. 14,705; 39 24N 75 2W
27 Milnathort, tn., Kinr., Scot.; plaids; p. 1,200, 56 14N 3 25W
27 Milngavie, bor., Dumb., Scot.; calico printing, bleaching; p. 5,056; 55 52N 4 18W
20 Milnthorpe, par., Westmor., Eng.; textiles, combs; p. 1,025; 54 14N 2 46W
53 Milos, I., Cyclades Is., Greece; a. 63 sq. m.; fruits; gypsum, sulphur; p. 5,100; 36 42N 24 15E
127 Milton, bor., S.I., New Zealand; p. 1,540; 46 6S 169 59E
17 Milton, parish, Hants, Eng.; p. 5,299; 50 45N 1 39W
17 Milton. See Sittingbourne.
96 Milton, tn., Ont., Can.; p. 1,839; 43 30N 79 55W
104 Milton, tn., Pa., U.S.A.; p. 8,552; 41 2N 76 51W
102 Milwaukee, tn., port, Wis., U.S.A.; univ.; rly. centre; machinery, brass and iron ware, farm implements, milling, meat canning; p. 578,249; 43 0N 88 0W
96 Mimico, tn., Ont., Can.; p. 6,500; 43 40N 79 33W
63 Minab, tn., Persia; 27 6N 57 5E
48 Minas de Riotinto, tn., Spain; 37 42N 6 32W
113 Minas Geraes, st., Brazil; a. 221,894 sq. m.; mountainous; fertile valleys; coffee, cotton, sugar-cane, tobacco, gold, diamonds, iron, etc.; cap. Bello Horizonte; p. 7,442,243; 19 0S 46 0W
113 Minas Novas, tn., Brazil; 17 30S 42 30W
69 Minbu, tn., Burma, India; 20 10N 94 55E
24 Minch, The, W. Scotland; 58 0N 6 00W
24 Minch, Little, W. Scotland; 57 32N 6 50W
71 Mindanao I., Philippine Is.; a. 36,906 sq. m.; mountainous; volcanic; forested; rice, coffee, tobacco; coal, copper, platinum; stock raising; p. 550,000; 7 30N 125 0E
71 Mindanao Sea, Philippine Is.; 8 50N 123 0E
40 Minden, tn., Germany; cath.; glass, tobacco, soap; p. 27,139; 52 56N 8 54E
71 Mindoro I., Philippine Is.; a. 3,794 sq. m.; p. 96,900; 13 0N 121 0E
19 Minehead, urb. dist.; Som., Eng.; tanning; p. 6,315; 51 13N 3 28W
18 Minera, par., Denb., Wales; coal, iron, lead; p. 1,312; 53 4N 3 0W
125 Mingenew, tn., W. Australia; 29 12S 115 38E
48 Minho. See Entre Minho e Douro.
78 Minieh, tn., Egypt; cotton; p. 44,325; 28 8N 30 41E
102 Minneapolis, tn., Minn., U.S.A.; univ.; hydro-electric power; milling, machinery, motor-cars, furniture, linseed oil; p. 464,356; 45 3N 93 20W
99 Minnedosa, tn., Man., Can.; p. 1,680; 50 25N 100 7W
102 Minnesota, st., U.S.A.; a. 84,682 sq. m.; undulating; maize, wheat, timber, iron, flour, leather, machinery; cap. St. Paul; p. 2,563,953; 43 30 to 49 0N 90 0 to 97 0W
27 Minnigaff, par., Kirk., Scot.; p. 1,144; 54 58N 4 29W
49 Minorca I., Balearic Is., Spain; a. 293 sq. m.; olives; hilly; cereals, fruits, oil, flax, hemp; cattle; iron, copper, lead, marble, alabaster; chief town Port Mahon; p. 42,000; 40 0N 4 00E
57 Minsk, tn., U.S.S.R.; machinery, leather, milling; p. 18,900; 53 52N 27 32E
18 Minsterley, vil., Salop, England; 52 38N 2 55W
27 Minto, par., Rox., Scot.; p. 379; 55 29N 2 42W
72 Minusinsk, tn., Siberia; coal, copper, sugar refinery, sawmills; p. 20,000; 53 42N 91 30E
93 Miquelon I., Newfoundland; 47 0N 56 10W
48 Mira, tn., Portugal; 40 25N 8 46W
68 Miraj, tn., Bombay, India; p. 21,424; 16 53N 74 40E
113 Miranda, tn., Brazil; 20 10S 55 50W
48 Mirandella, tn., Portugal; 41 30N 7 13W
123 Mirani, tn., Queens., Australia; 21 12S 148 25E
61 Mirbat, tn., Oman; 17 2N 54 50E
11 Mirsa Tebruk, tn., Libya; 31 58N 24 3E
67 Mirzapur, tn., India; carpets, brassware; p. 54,994; 25 5N 82 38E
109 Misantla, tn., Mexico; 19 57N 96 50W
69 Mishmis, tribe, Tibet; 28 30N 96 0E
46 Miskolcz, tn., Hungary; milling, pottery, leather; p. 61,465; 48 7N 20 50E
93 Missinaibi, tn., Ont., Can.; 47 50N 84 10W
113 Missiones, terr., Argentina; a. 11,511 sq. m.; forested; yerba maté, fruit; p. 53,563; 27 0S 55 0W
102 Mississippi R., U.S.A.; principal river of N. America; rising in Minnesota (state), it flows southwards to the Gulf of Mexico; chief tributaries—Missouri, Ohio, Tennessee, Wisconsin, Illinois, Minnesota, Arkansas, Red River; length 2,620 m.; 2,000 miles navigable; 33 30N 91 10W
103 Mississippi, st., U.S.A.; a. 46,865 sq. m.; fertile; cereals, cotton, cattle, sheep, pigs, timber; rly. workshops; cap. Jackson; p. 2,009,821; 30 20 to 35 0N 88 15 to 91 30W
53 Missolonghi, tn., Greece; Lord Byron died here 1824, fighting in the Greek War of Independence; currants; p. 9,270; 38 25N 21 26E
106 Missoula, tn., Mont., U.S.A.; univ.; farming, fruit; oil refineries; rly. works; p. 14,657; 46 50N 113 59W
102 Missouri R., U.S.A.; chief tributary of the Mississippi rising in the Rocky Mts.; joins the Mississippi at St. Louis; length 2,910 m.; 39 15N 44 0W
102 Missouri, st., U.S.A.; a. 69,420 sq. m.; undulating; Ozark Mts. (plat.); rivers—Mississippi, Missouri, etc.; maize, wheat, oats, flax and hemp; cattle, pigs; coal, lead, zinc, copper; meat preserving, leather, ironworks; cap. Jefferson City; p. 3,629,367; 36 30 to 40 30N 89 0 to 94 40W
93 Mistassini L., Que., Can.; 100 m. by 12 m.; 51 0N 73 30W
51 Mistretta, tn., Italy; p. 14,250; 37 18N 14 21E
42 Mitau. See Jelgava.
17 Mitcham, mun. bor., Surrey, England; medicinal herbs, lavender, etc.; p. 56,872; see Greater London.

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121 Mitchell, tn., Queens., Australia; 24 40S 144 45E
96 Mitchell, tn., Ont., Can.; p. 1,588; 43 30N 81 15W
107 Mitchell, tn., S.D., U.S.A.; univ.; farming; p. 10,942; 43 31N 98 0W
122 Mitchell R., Queens., Australia; 15 13S 141 36E
32 Mitchelstown, tn., Cork, I.F.S.; p. 2,153; 52 17N 8 15W
75 Mito, tn., Japan; p. 63,816; 36 30N 140 18E
41 Mitrovica, tn., Yugoslavia; p. 12,000; 42 52N 20 51E
53 Mitylene, tn., Mitylene I., Greece; p. 27,870; 39 9N 26 33E
53 Mitylene, I., Greece; a. 675 sq. m.; timber, olive-oil, wine; p. 182,500; 39 10N 26 16E
75 Miyazaki, tn., Japan; p. 64,729; 31 56N 131 24E
10 Mizda, tn., Libya; 31 30N 12 45E
52 Mizilu, tn., Rumania; p. 6,449; 45 0N 20 31E
43 Mlava, tn., Poland; milling, tanning, farm implements; p. 14,000; 53 8N 20 28E
33 Moate, tn., Westmeath, I.F.S.; p. 1,334; 53 24N 7 43W
102 Moberly, tn., Mo., U.S.A.; foundries, rly. works, hosiery, footwear; p. 13,772; 39 28N 92 28W
103 Mobile, spt., Ala., U.S.A.; shipbuilding; p. 68,202; 30 44N 88 7W
108 Mocarito, tn., Mexico; 25 29N 108 0W
26 Mochrum, par., Wig., Scot.; p. 1,477; 54 48N 4 29W
109 Moctezuma, tn., S. Luis Potosí, Mexico; 22 44N 101 6W
35 Modane, tn., France; 45 13N 6 41E
19 Modbury, par., Dev., Eng.; p. 1,103; 50 21N 3 53W
83 Modder R., O.F.S., S. Afr.; 28 55S 25 30E
50 Modena, tn., Italy; cath., univ.; leather, silk, textiles, fruit, grain; p. 91,000; 44 39N 10 55E
51 Modica, tn., Italy, grain, wines; p. 56,000; 36 50N 14 43E
70 Moduk, tn., Fr. Indo-China; 14 50N 108 50E
81 Moero, L., Cent. Africa; 9 00S 28 45E
27 Moffat, bor., Dumf., Scot.; mineral springs; p. 2,006; 55 20N 3 26W
76 Mogador, port, Morocco; exp.—cereals, gum arabic; p. 14,423; 31 30N 9 50W
69 Mogaung, tn., Burma, India; 25 22N 96 57E
69 Mogok, tn., Burma, India; rubies; 22 55N 96 35E
48 Moguer, tn., Spain; 37 15N 6 52W
46 Mohacs, r. pt., Hungary; brewing, milling; p. 17,228; 45 49N 18 40E
57 Mohilev, tn., White Russia, U.S.S.R.; tanning, tobacco, flour, beer; p. 47,000; 53 53N 30 22E
30 Mohill, tn., Leitrim, I.F.S.; yarn, corn, dairy produce; p. 755; 53 55N 7 52W
24 Moidart, Inver., Scot.; 56 49N 5 43W
42 Moisekul, tn., Estonia; 58 8N 25 6E
75 Moji, spt., Japan; p. 121,609; 33 52N 131 2E
60 Mokha, tn., Arabia; 13 23N 43 7E
73 Mokpo, tn., Korea; 34 50N 126 30E
51 Mola, tn., Italy; wine, olives, live-stock; p. 14,650; 41 3N 17 7E
53 Molai, tn., Greece; 36 50N 22 50E
18 Mold, urb. dist., co. tn., Flint., Wales; coal, lead; p. 5,133; 53 10N 3 9W
57 Moldavia, dist. rom. Ukr., Russia; a. 3,315 sq. m.; maize, wheat and rye; p. 572,000; 47 0N 29 0E
52 Moldavia, dist., Rumania; 46 20N 27 0E
54 Molde, tn., Norway; p. 1,820; 62 45N 7 00E
19 Mole, R., Dev., Eng.; 50 58N 3 56W
51 Molfetta, spt., Italy; p. 46,000; 41 13N 16 36E
114 Molina, tn., Chile; 35 5S 71 30W
49 Molina, tn., Spain; 40 51N 1 51W
102 Moline, tn., Ill., U.S.A.; iron foundries, farm implements, milling; p. 32,236; 41 30N 90 23W
114 Mollendo, spt., Peru; copper; p. 10,000; 16 40S 72 0W
42 Molodechno, tn., Poland; 54 19N 26 48E
121 Molong, tn., N.S.W., Australia; 33 4S 148 51E
83 Molopo R., C. of Good Hope, S. Afr.; 26 0S 22 30E
83 Molopolole, vil., Bech. Prot., S. Afr.; 24 30S 25 35E
83 Molteno, tn., C. of Good Hope, S. Afr.; 31 22S 26 27E
71 Molucca Sea, Du. E. Indies; 4 00S 124 30E
81 Mombassa, spt., Kenya; chief harbour Kilindini; p. 57,000; 4 04S 39 40E
112 Mompos, tn., Col., S.A.; p. 16,000; 9 10N 74 30W
111 Mona Passage, W. Indies; 18 5N 67 57W
35 Monaco, ind. state, France; a. 8 sq. m.; Monte Carlo casino; olive-oil, perfumes; 43 43N 7 27E
31 Monaghan, urb. dist., Monaghan, co., I.F.S.; cath.; p. 4,643; 54 15N 6 39W
31 Monaghan, co., I.F.S.; a. 499 sq. m.; iron, lead, cereals; p. 65,143; 54 10N 7 00W
33 Monasterevin, par., Kildare, I.F.S.; distillery, brewing; p. 732; 53 8N 7 04W
47 Monastir. See Bitolj.
10 Monastir, tn., Tunis; 41 2N 21 20E
48 Moncao, tn., Portugal; 42 4N 8 26W
48 Monchique, tn., Portugal; 37 19N 8 33W
108 Monclova, tn., Mexico; 26 37N 101 28W
93 Moncton, tn., N.B., Can.; rly. centre, textiles; p. 20,689; 46 5N 64 10W
48 Mondonedo, tn., Spain; p. 10,750; 42 25N 7 22W
50 Mondovi, tn., Italy; porcelain, paper, silk; p. 19,260; 44 20N 7 50E
33 Moneygall, vil., Tipperary, I.F.S.; p. 282; 52 53N 7 58W
31 Moneymore, tn., Londonderry, N. Ire.; p. 524; 54 42N 6 40W
50 Monfalcone, tn., Italy; shipbuilding; mineral waters, chemicals, oil refining; p. 10,000; 45 49N 13 33E
48 Monforte, tn., Spain; linen, soap; p. 13,200; 42 32N 7 32W
81 Mongalla, tn., Anglo-Eg. Sud.; 5 10N 31 46E
67 Monghyr, tn., Bihar, India; cigarettes; p. 46,825; 25 15N 86 35E
59 Mongol Buryat, A.S.S.R., Russia; 53 30N 111 0E
72 Mongolia, repub., China; 1,875,000 sq. m.; mountainous in N.W., Gobi Desert in centre and south; live-stock; gold, silver, copper, etc.; chief town, Urga; p. 850,000 (est.); 41 0N to 52 0N 84 0E to 119 0E
72 Mongolia, Inner, northern division of, China; chief town Kalgan; 37 0 to 46 0N 97 0 to 122 0E
27 Monifieth, bor., Angus, Scot.; p. 2,974; 56 29N 2 49W
27 Monikie, par., Angus, Scot.; p. 1,069; 56 32N 2 47W
69 Mong Sit, tn., Burma India; 20 40N 97 38E
30 Monivea, par., Galway, I.F.S.; p. 1,593; 53 23N 8 43W

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26 Monkton, par., Ayr, Scot.; p. 9,427; 55 32N 4 35W
19 Monmouth, mun. bor., Mon., Eng.; at confluence of R. Wye and R. Monnow; ancient bridge; chemicals, tinplate, and smelting; p. 4,731; 51 49N 2 42W
19 Monmouth, co., Eng.; a. 540 sq. m.; on Welsh border and for some purposes counted as a Welsh county; hilly, wooded, drained by rivers Usk and Wye; farming, wheat, fruit; iron and steel, coal; p. 434,821; 51 44N 3 00W
19 Monnow, R., Here., Eng.; 51 54N 2 50W
104 Monongahela, tn., Pa., U.S.A.; p. 8,675; 40 20N 79 55W
51 Monopoli, spt., Italy; p. 22,900; 40 58N 17 19E
103 Monroe, tn., La., U.S.A.; natural gas; paper, printer's ink; p. 26,028; 32 30N 92 0W
88 Monrovia, tn., Liberia, Afr.; p. 10,000; 6 20N 10 50W
38 Mons, tn., cap., Belgium; cath.; rly. junc.; cotton goods; engineering, iron foundries, glass, coal; p. 27,719; 50 28N 3 57E
55 Mönsterås, tn., Sweden; 57 5N 16 35E
44 Mont Blanc, mt., France; 15,780 ft., highest mt. in Europe; on bdy. of France and Italy; 45 51N 6 53E
44 Mont Cenis Pass, France; 45 20N 7 00E
97 Mont Laurier, tn., Que., Can.; p. 2,394; 46 32N 75 30W
83 Montagu, tn., C. of Good Hope, S. Afr.; 33 46S 20 10E
124 Montagu Sound, W. Australia; 14 27S 125 35E
105 Montague, tn., Mass., U.S.A.; p. 8,081; 42 27N 72 30W
49 Montalban, tn., Spain; 40 49N 0 45W
106 Montana, St., U.S.A.; a. 147,182 sq. m.; undulating prairie; cattle, sheep, cereals, fruit; copper, coal, gold, silver, etc.; flour, lumbering, smelting; cap. Helena; p. 537,606; 45 0N to 49 0N 104 0 to 116 0W
35 Montauban, tn., cap., Tarn-et-Garonne, France, on R. Tarn; cath.; farm prod. wines, textiles, furniture; p. 29,981; 44 1N 1 22E
35 Montceau, tn., France; coal, textiles, foundries; p. 28,173; 46 40N 4 23E
34 Montdidier, tn., France; 49 39N 2 36E
115 Monte Caseros, tn., Argentina; 30 10S 57 45W
111 Monte Cristi, tn., Santo Domingo; p. 2,500; 19 48N 71 42W
109 Monte Moretos, tn., Mexico; 25 6N 99 53W
50 Monte Sant Angelo, tn., Italy; p. 22,355; 41 44N 15 59E
110 Montego, tn., Jamaica; p. 6,500; 18 30N 77 38W
52 Montenegro, a. 3,733 sq. m.; formerly kingdom, now part of Yugoslavia; surface mountainous and wooded, few streams; tobacco, maize, fruit, olives, sheep, goats; cap. Cetinje; p. 100,000; 43 0N 19 0E
48 Monterey, tn., Spain; 41 58N 7 29W
106 Monterey, tn., Cal, U.S.A.; fishing; sardine canning; p. 9,141; 36 32N 121 58W
109 Monterrey, tn., Mexico; cath.; textiles, brewing, iron foundries, smelting; silver, copper, lead; p. 130,000; 25 39N 100 25W
113 Montevideo, cy., spt., cap. Uruguay; univ.; exp.—cereals, beef, wool; p. 482,000; 34 40S 56 10W
18 Montgomery, co., Wales; a. 795 sq. m.; wooded, fertile valleys, mountainous; chief river, Severn and tributaries; farming, sheep; minerals, slate, lead; flannel; p. 48,462; 52 34N 3 25W
18 Montgomery, mun. bor., co. tn., Mont., Wales; p. 903; 52 34N 3 09W
103 Montgomery, co., Ala., U.S.A.; cotton, timber; fertilizers; rly. works; p. 66,079; 32 22N 86 17W
45 Monthey, tn., Switzerland; 46 15N 6 52E
48 Montijo, tn., Spain; 38 53N 6 38W
35 Montluçon, tn., France; on R. Cher; iron, chemicals; p. 41,052; 46 21N 2 38E
106 Montpelier, tn., Idaho, U.S.A.; 42 20N 111 24W
102 Montpelier, cap., Vt., U.S.A.; p. 7,837; 44 14N 72 40W
35 Montpellier, tn., France; univ.; wines, fruit, silk, farming, chemicals; p. 86,924; 43 35N 3 50E
97 Montreal, cy., port, Que., Can.; largest city of Canada; univ., caths.; spacious docks and harbour; rly. centre; brewing, tobacco, boots and shoes, etc.; p. 818,577; 45 30N 73 36W
34 Montreuil, tn., France; peaches, glass, oils, chemicals; p. 70,450; 50 29N 1 48E
25 Montrose, bor. spt., Angus, Scot.; flax, linen yarns, fishery; p. 10,196; 56 43N 2 28W
111 Montserrat, I., W. Indies; a. 32 sq. m.; limes, sugar, cotton, onions; p. 12,000; 16 42N 62 15W
25 Monymusk, par., Aber., Scot.; p. 855; 57 14N 2 32W
69 Monywa, tn., Burma, India; 22 6N 95 12E
50 Monza, tn., Italy; cath.; cotton goods, silk, leather, hats; p. 43,750; 45 37N 19 18E
78 Menzala L., Egypt; 31 10N 32 0E
49 Monzon, tn., Spain; 41 53N 0 10E
42 Moon Sound, Estonia; 59 0N 23 0E
120 Moonta, tn., S. Australia; 34 3S 137 32E
27 Moonzie, par., Fife, Scotland; p. 120; 56 21N 3 04W
125 Moora, tn., W. Australia; 30 38S 116 2E
99 Moose, R., Ont., Can.; 51 0N 81 0W
99 Moose Jaw, tn., Sask., Can.; rly. junc.; farming, farm machinery; flour; p. 21,293; 50 25N 105 33W
99 Moosomin, tn., Sask., Can.; p. 1,119; 50 5N 102 0W
99 Moosonee, tn., Ont., Can.; 50 4N 80 2W
113 Moquegua, tn., Peru, S.A.; wines; p. 5,000; 16 35S 70 30W
55 Mora, tn., Sweden; 61 0N 14 25E
67 Moradabad, tn., U.P., India; calico printing, cotton weaving, brassware; p. 110,562; 28 47N 78 58E
24 Morar, dist., Inverness, Scotland, 56 56N 5 40W
49 Moratalla, tn., Spain; cloth, alcohol, wines; p. 13,000; 38 13N 1 50W
46 Moravian Hills, Czechoslovakia; 49 30N 15 40E
46 Moravska-Ostrava, tn., Czechoslovakia; coal, iron, chemicals, bricks; p. 125,347; 49 47N 18 20E
112 Morawhanna, tn., British Guiana; 8 10N 59 10W
25 Moray, co., Scotland; formerly Elginshire; a. 477 sq. m.; mountainous and wooded, coastal area; barley, oats, potatoes, etc.; distilling; fishing; p. 40,805; 57 30N 3 20W
25 Moray Firth, Scotland; 39 m. long; 57 45N 3 40W
34 Morbihan, dept., France; a. 2,738 sq. m.; fisheries, wheat, flax, cattle; p. 537,028; 47 33N 2 40W

MAP

99 Morden, tn., Man., Can.; p. 1,416; 49 10n 98 5w
17 Morden. See Merton and Morden.
54 Möre, co., Norway; a. 5,812 sq. m.; p. 165,230; 62 30n 8 00e
53 Morea, dist., Greece; 37 45n 22 10e
27 Morebattle, par., Rox., Scot.; p. 719; 55 31n 2 22w
20 Morecambe and Heysham, mun. bor., Lancs., Eng.: resort; Heysham is packet station for Belfast; p. 24,542; 54 4n 2 53w
21 Morecambe Bay, Lancs., Eng.; 54 5w 2 55w
121 Moree, tn., N.S.W., Australia; 29 29s 149 50e
108 Morelia, tn., Mexico; cath.; cottons, linens, woollens; sugar; p. 34,000; 19 42n 101 15w
49 Morella, tn., Spain; 40 36n 0 03w
109 Morelos, prov., Mexico; a. 1,895 sq. m.; mountainous; forested; cap. Cuernavaca; p. 103,519; 18 45n 97 15w
121 Moreton Bay, Queens., Australia; 27 15s 153 10e
19 Moreton Hampstead, par., Dev., Eng.; tanning; p. 1,636; 50 50n 3 47w
18 Moreton in the Marsh, par., Glouc., Eng.; linen, farming; p. 1,442; 51 59n 1 42w
120 Morgan, tn., S. Australia; 34 2s 139 11e
104 Morgantown, tn., W. Va., U.S.A.; univ.; glass, coal; p. 16,186; 39 40n 79 55w
45 Moryes, tn., Switzerland; 46 31n 6 31e
75 Morioka, tn., Japan; p. 69,127; 39 32n 141 3e
21 Morley, mun. bor., W. Riding, Eng.; cloth, machinery, coal, ironworks; p. 23,396; 53 45n 1 36w
31 Mornington, vil., Meath, I.F.S.; 53 43n 6 17w
121 Mornington, in. Vic., Australia; 38 15s 145 5e
10 Morocco, Fr. prot. in Africa; a. 213,350 sq. m.; largely desert, with considerable fertile land and pasture; divided by the Atlas Mts. (15,000 ft.); cereals; fruit; cattle, horse and mule breeding; phosphate, lead, manganese; leather, flour milling, brewing; 4 caps., Rabat, Fez, Morocco, Mequinez; p. 5,345,000; 33 0n 5 00w
10 Morocco (or Rif), Span. zone, Africa; a. 13,125 sq. m.; farming; iron ore; fishing; chief town Tetuan; p. 1,000,000; 35 0n 5 00w
10 Morocco (Marrakesh), tn., Morocco; one of the four capitals; largest town in Morocco; leather; p. 193,852; 31 30n 7 50w
110 Moron, tn., Cuba; 22 1n 78 32w
48 Morón, tn., Spain; marble, chalk; p. 19,000; 37 7n 5 28w
77 Morondava, tn., Madagascar; 20 20s 44 20e
20 Morpeth, mun. bor.; Northumb., Eng.; malting, woollens, coal; p. 7,391; 55 10n 1 41w
121 Morpeth, tn., N.S.W., Austral.; 32 47s 151 32e
126 Morrinsville, bor., N.I., New Zealand; p. 1,640; 37 40s 175 32e
97 Morrisburg, tn., Ont., Can.; p. 1,420; 44 55n 75 10w
57 Morshansk, tn., Russia; grain; soap, tallow, glass, tobacco; p. 31,820; 53 32n 41 33e
19 Morte B., Dev., Eng.; 51 10n 4 12w
19 Morte Pt., Dev., Eng.; 51 10n 4 13w
19 Morthoe, par., Dev., Eng.; p. 1,513; 51 10n 4 11w
26 Morven, par., Arg., Scot.; p. 409; 56 37n 5 45w
121 Morven, tn., Queens., Australia; 26 28s 147 7e
56 Moscow, city. cap., U.S.S.R.; Kremlin; caths., univ.; cotton, woollens, silks, leather, tobacco, machinery; p. 5,663,300; 55 45n 37 35e
57 Mosdok, tn., Russia; 43 46n 44 42e
35 Moselle, dept., France; a. 2,403 sq. m.; vines, coal, iron, hardware; p. 693,408; 49 0n 6 30e
40 Moselle, R., Germany; rises in Vosge Mts., joins Rhine at Coblence; trib. Meurthe and Saar, length 314 m.; 50 10n 7 20e
127 Mosgiel, bor., S.I., New Zealand; p. 2,000; 45 53s 170 21e
54 Mosjön, tn., Norway; 40 30n 13 20e
56 Moskva R., Russia; 305 m. long; 55 30n 37 30e
110 Mosquito Gulf, Panama; 9 00n 81 0w
55 Moss, tn., Norway; 59 30n 10 50e
121 Moss Vale, tn., N.S.W., Australia; 34 35s 150 17e
89 Mossamedes, spt., Angola; p. 5,000; 15 7s 12 15e
83 Mossel Bay, spt., C. of Good Hope, S. Afr.; oysters; whaling; p. 2,856 (Eur.); 34 10s 22 10e
121 Mossgiel, tn., N.S.W., Australia; 33 13s 144 31e
47 Mostar, tn., Y.-slavia; on R. Narenta; farm produce, tobacco, fruit, wine; p. 18,176; 43 21n 17 50e
10 Mostaganem, tn., Algiers; milling, tanning; p. 28,357; 36 0n 0 10e
43 Mosti, tn., Poland; 53 25n 24 37e
62 Mosul, tn., Iraq; mosque; petroleum; milling; p. 80,000 (est.); 36 13n 43 10e
57 Mosyr, tn., Russia; 52 0n 29 13e
55 Motala, tn., Sweden; p. 5,985; 58 35n 15 0e
27 Motherwell and Wishaw, bor., Lanark, Scot.; coal, iron, steel; p. 64,708; 55 47n 3 59w
48 Motril, tn., Spain; cotton, sugar, fruits; copper, lead, zinc; p. 17,000; 36 45n 3 32w
127 Motueka, bor., S.I., New Zealand; p. 1,530; 41 7s 173 0e
74 Moukden, tn., Manchuria; univ.; trade route centre; oil, flour, paper, soap; p. 250,000; 42 0n 123 0e
69 Moulmein, spt., Burma, India; rice, timber; p. 61,301; 16 29n 97 40e
35 Moulins, tn., France; cath., cas. ruins; saw mills, cabinet work, breweries; p. 22,225; 46 34n 3 22e
104 Moundsville, tn., W. Va., U.S.A.; on R. Ohio; coal, glass, zinc; p. 14,411; 39 55n 80 55w
120 Mount Barker, tn., S. Australia; 35 3s 138 48e
126 Mount Barker, tn., W. Australia; 34 38s 117 45e
123 Mount Cuthbert, tn., Queens., Australia; 19 55s 144 0e
96 Mount Forest, tn., Ont., Can.; p. 1,801; 43 55n 80 48w
83 Mount Frere, tn., C. of Good Hope, S. Afr.; 30 26s 27 0e
120 Mount Gambier, tn., S. Australia; p. 3,978; 37 50s 140 42e
122 Mount Garnet, tn., Queens., Australia; 17 40s 145 10e
120 Mount Hope, tn., S. Australia; 34 10s 135 10e
122 Mount Magnet, tn., W. Australia; 28 0s 117 58e
125 Mount Margaret, tn., W. Australia; 28 52s 122 5e
123 Mount Morgan, tn., Queens., Australia; gold; p. 7,214; 23 40s 150 0e
125 Mount Morgans, tn., W. Australia; 28 50s 121 55e
122 Mount Mulligan, tn., Queens., Australia; 16 55s 144 25w

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123 Mount Perry, tn., Queens., Australia; 25 15s 141 35w
102 Mount Vernon, tn., Ill., U.S.A.; lumbering, milling, woollens, coal; p. 12,375; 38 16n 89 0w
105 Mount Vernon, tn., N.Y., U.S.A.; p. 61,499; 40 52n 73 50w
18 Mountain Ash, urb. dist., Glam., Wales; coal, iron; p. 38,381; 51 40n 3 24w
30 Mountcharles, vil., Tirconaill, I.F.S.; p. 342; 54 30n 8 12w
33 Mountmellick, tn., Leix, I.F.S.; woollen goods; p. 2,340; 53 7n 7 20w
33 Mountrath, tn., Leix, I.F.S.; flour mills; p. 1,259; 52 59n 7 29w
19 Mount's Bay, Corn., Eng.; 50 7n 5 28w
16 Mountsorrel, par., Leics., Eng.; granite; p. 2,596; 52 44n 1 09w
112 Moura, tn., Brazil; 1 40s 61 40w
48 Moura, tn., Portugal; 38 7n 7 30w
48 Mourão, tn., Portugal; 38 40n 7 25e
27 Mouswald, par., Dumf., Scot.; p. 412; 55 3n 3 27w
45 Moutier, tn., Switzerland; 47 17n 7 22e
31 Moville, tn., Tirconaill, I.F.S.; p. 1,016; 55 12n 7 03w
25 Moy, par., Inver., Scot.; p. 566; 57 23n 4 03w
31 Moy, tn., Tyrone, N. Ire.; p. 471; 54 27n 6 42w
31 Moynalty, par., Meath, I.F.S.; p. 1,520; 53 48n 6 53w
112 Moyobamba, tn., Peru; p. 10,250; 5 45s 78 0w
81 Mozambique, spt., Mozambique; p. 7,500; 51 10s 41 0e
82 Mozambique (Portuguese E. Africa), colony, E. Afr.; a. 299,973 sq. m.; forested; sugar, oil-nuts, cotton, maize; p. 4,028,745; 10 23 to 26 30s 30 0 to 40 5e
89 Mpimbi, tn., Nyasa.; 15 15s 35 0e
89 Mponda, tn., Nyasa.; 15 20s 15 5e
89 Mtengula, tn., Mozambique; 12 50s 34 40e
81 Mualia, tn., Mozambique; 13 20s 38 35e
81 Muansa, tn., Tang. Territory; 2 50s 33 10e
62 Mudania, tn., Turkey; 40 15n 28 55e
121 Mudgee, tn., N.S.W., Australia; 32 38s 149 32e
53 Mudros, tn., Lemnos, Greece; 39 50n 25 20e
62 Mughla, tn., Turkey; p. 10,125; 37 15n 28 30e
40 Mühldorf, tn., Germany; 48 18n 12 30e
40 Mühlhausen, tn., Germany; woollens, hosiery, chemicals; p. 36,755; 51 15n 10 26e
38 Muiden, tn., Netherlands; 52 20n 5 04e
33 Muinebeag. See Bagnalstown.
27 Muirkirk, par., Ayr, Scot.; coal, iron p. 4,358; 55 32n 4 04w
61 Mujeidel, tn., Palestine; 32 40n 35 3e
70 Muka, tn., Sarawak; 2 55n 112 0e
46 Mukačevo, Czechoslovakia; formerly Munkacs; alum, iron; p. 26,123; 48 26n 22 41e
77 Mukdisho. See Magadoxo.
20 Mulker, vil., N. Riding, England; p. 547; 54 23n 1 09w
40 Mülheim, tn., Germany; velvet, silk, brewing, tanning; p. 133,279; 50 59n 7 00e
34 Mulhouse, tn., France; cotton, woollens, chemicals, machinery; p. 90,334; 47 45n 7 12e
26 Mull I., Arg., Scot.; granite, grazing; 56 27n 6 00w
68 Mullaittivu, tn., Ceylon; 9 15n 80 55e
125 Mullewa, tn., W. Australia; 28 30s 115 30e
33 Mullinahone, vil., Tipperary, I.F.S.; p. 387; 52 31n 7 31w
31 Mullingar, co. tn., Westmeath, I.F.S.; brewing, tanning, farming; p. 5,539; 53 32n 7 21w
19 Mullion, par., Cornwall, England; p. 954; 50 2n 5 15w
66 Multan, tn., India; carpets, pottery; p. 119,457; 30 14n 71 38e
19 Mumbles Hd., Glam., Wales; 51 34n 4 00w
81 Mumias, Kenya; 0 05n 34 40e
40 München. See Munich.
16 Mundesley, par., Norf., Eng.; fishing; p. 1,161; 52 53n 1 26e
16 Mundford, par., Norfolk, England; 52 30n 0 40e
123 Mundubbera, tn., Queens., Australia; 25 40s 151 15e
121 Mungindi, tn., N.S.W., Australia; 28 57s 148 59e
40 Munich, cy., Germany; famous for art treasures and sch. of painting; cath., univ., pal., mus.; brewing, math. instr. and machinery, gold and silver ware, stained glass; p. 735,388; 48 10n 11 36e
32 Munster, prov., I.F.S.; a. 9,490 sq. m.; an ancient kingdom of Celtic Ireland prior to English invasion; containing counties Tipperary, Clare, Limerick, Kerry, Cork, Waterford; p. 971,033; 52 18n 8 45w
40 Münster, tn., cap. of Westphalia, Germany; cath., univ., cas.; woollens, cottons, Westphalian hams, distilling, brewing, printing, wood-carving; p. 122,210; 51 58n 7 36e
45 Munster, tn., Switzerland; 46 29n 8 16e
70 Muntok, tn., Banka I., Sumatra; 2 00s 105 10e
54 Muonio, tn., Finland; 67 50n 23 50e
62 Murad Su, R., Turkey; 38 30n 41 0e
75 Murakami, tn., Japan; 38 26n 139 26e
81 Murchison Falls, R. Nile, Uganda; 2 30n 31 45e
125 Murchison R., W. Australia; 27 10s 115 0e
49 Murcia, tn., Spain; cath., univ.; silks, saltpetre, glass, hats, gloves; p. 173,987; 38 0n 1 07w
49 Murcia, prov., Spain; a. 4,453 sq. m.; mountainous; cereals, fruit; coal, copper, sulphur, lead, zinc; p. 679,651; 37 30 to 39 20n 1 00 to 3 00w
103 Murfreesboro, tn., Tenn., U.S.A.; p. 7,993; 35 45n 86 25w
45 Muri, tn., Switzerland; 47 17n 8 18e
56 Murmansk, ice-free port, N. Russia; fishing; 68 55n 33 10e
56 Murom, tn., Russia; milling, distilling, cottons, leather, smelting; p. 23,000; 55 36n 41 52e
75 Muroran, tn., Japan; p. 65,095; 42 30n 141 0e
102 Murphysboro', tn., Ill., U.S.A.; p. 8,152; 37 50n 89 30w
120 Murray Bridge, tn., S. Australia; p. 3,569; 35 7s 139 15e
120 Murray, R., Vic., Australia; largest river in Australia, used for irrigation; chief tribs.—Darling, Lachlan, Murrumbidgee; 1,120 m. long; 34 0s 140 45e
83 Murraysburg, tn., C. of Good Hope, S. Afr.; 32 0s 23 55e
120 Murrayville, tn., Vic., Australia; 35 15s 141 15e

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66 Murree, hill station, Punjab, India; 33 58n 73 25e
45 Mürren, vil., Switzerland; resort; 46 33n 7 52e
97 Murrees, par., Angus, Scot.; p. 919; 56 30n 2 55w
121 Murrumbidgee, R., N.S.W., Australia; 1,350 m. long; 34 30s 145 45e
121 Murrurundi, tn., N.S.W., Australia; 31 45s 150 50e
67 Murshidabad, tn., Bengal, India; silk weaving, ivory carving, gold and silver embroidery; p. 11,000; 24 17n 88 15e
120 Murtoa, tn., Vic., Australia; 36 38s 142 30e
20 Murton, E., Durham, England; p. 8,094; 54 48n 1 24w
48 Murtosa, tn., Portugal; p. 8,570; 40 45n 8 38w
121 Murwillumbah, tn., N.S.W., Australia; 28 19s 153 20e
10 Murzuk, tn., Libya; 25 55n 14 0e
102 Muscatine, tn., Iowa, U.S.A.; canning; p. 16,778; 41 23n 91 5w
122 Musgrave Mts., Papua; 6 00s 142 30e
118 Musgrave Ranges, S. Australia; 26 10s 131 30e
62 Mush, tn., Turkey; p. 28,000; 38 41n 41 17e
102 Muskegon, tn., Mich., U.S.A.; lumbering, engineering, dairying, fruit; p. 41,390; 43 12n 86 15w
107 Muskogee, tn., Okla., U.S.A.; rly. works, oil refineries, milling; p. 32,026; 35 35n 95 28w
62 Muslimie, tn., Syria; 36 22n 37 20e
27 Musselburgh, bor., Midlothian, Scot.; nets, twine, paper, fishing; p. 16,996; 55 57n 3 02w
67 Mussorie, hill station, U.P., India; 30 30n 78 6e
53 Mustafa Pasha, tn., Bulgaria; 41 48n 26 13e
121 Muswellbrook, tn., N.S.W., Australia; 32 18s 150 59e
26 Muthill, par., Perth, Scot.; p. 1,212; 56 20n 3 49w
123 Mutiaburra, tn., Queens., Australia; 22 38s 144 32e
67 Muttra, tn., U.P., India; religious centre for Hindus; paper; p. 52,840; 27 25n 77 47e
66 Muzaffarabad, tn., Kash., India; 34 25n 73 31e
66 Muzaffargarh, tn., Pun., India; 30 5n 71 10e
67 Muzaffarnagar, tn., U.P., India; blankets; p. 23,937; 29 22n 77 48e
67 Muzaffarpur, tn., Bihar, India; carpets, castor oil, saltpetre; p. 32,755; 26 3n 85 20e
108 Musquiz, tn., Mexico; 27 52n 101 31w
89 Mweru, tn., Nyasa; 9 00s 28 45e
82 Mweru, L., N. Rhodesia; length 68 m., breadth 24 m.; 9 00s 29 0e
89 Mwomboshi, tn., N. Rhodesia; 14 50s 28 30e
69 Myanaung, tn., Burma, India; 18 7n 95 23e
69 Myaungmya, tn., Burma, India; 16 30n 95 1e
69 Myebon, tn., Burma, India; 20 5n 93 35e
69 Myingyan, tn., Burma, India; 21 30n 95 27e
69 Myitkyina, tn., Burma, India; 25 30n 97 25e
69 Mymensingh, tn., Bengal, India; carpets; p. 25,287; 24 45n 90 30e
18 Mynydd Epynt, mt., Brec., Wales; 52 6n 3 22w
43 Myslowice, tn., Poland; rly. junc.; coal, flax mills; p. 17,800; 50 15n 19 12e
68 Mysore, tn., cap., Mys., India; univ.; carpets; p. 83,951; 12 15n 76 40e
68 Mysore, st., India; a. 29,475 sq. m.; forested; chief rivers—Kistna, Cauvery; grain, coffee, cotton, rice, silk, sugar-cane, ivory, gold; cap. Mysore; p. 6,557,871; 11 30 to 14 30n 74 45 to 78 30e
70 Mytho, tn., Fr. Indo-China; 10 25n 106 30e

38 Naarden, tn., Netherlands; 52 18n 5 10e
33 Naas, urb. dist., Kildare, I.F.S.; p. 3,443; 53 13n 6 40w
83 Naauw Poort, tn., C. of Good Hope, S. Afr.; 31 5s 25 0e
63 Nabend, tn., Persia; 27 26n 52 41e
61 Nablus, tn. (Shechem), Palestine; p. 15,947; 32 15n 35 16e
108 Nacozari, tn., Mexico; 30 26n 109 55w
66 Nadiad, tn., Bombay, India; p. 31,938; 22 42n 72 53e
43 Nadworna, tn., Poland; 48 40n 24 35e
45 Nafels, tn., Switzerland; 47 7n 9 03e
10 Nafta, tn., Tunis; 34 0n 7 30e
73 Nagano, tn., Japan; p. 72,141; 36 40n 138 0e
75 Nagasaki, tn., spt., Japan; harb., engineering, shipbuilding; enamelled and lacquer ware; p. 211,702; 32 43n 129 57e
68 Nagercoil, tn., India; p. 34,405; 8 10n 77 30e
57 Nagorny-Karabash, area, Russia; 40 0n 46 0e
75 Nagoya, cy., Japan; pottery, lacquer, enamels, textiles; p. 1,082,814; 35 8n 137 3e
67 Nagpur, tn., cap. Cent. Prov., India; salt, grain, cotton; p. 215,003; 21 4n 79 13e
52 Nagybánya, tn., Rumania; 47 40n 23 35e
52 Nagyenyed. See Aiud.
46 Nagykanizsa, tn., Hungary; distilling, milling; p. 30,936; 46 30n 17 1e
46 Nagykörös, tn., Hungary; wine; p. 28,384; 47 2n 19 43e
52 Nagyszalonta, tn., Rumania; timber, cereals; p. 14,000; 46 50n 21 41e
52 Nagyszeben. See Sibiu.
52 Nagyvarad. See Oradia.
19 Nailsworth, urb., dist., Glouc, Eng.; woollens; p. 3,129; 51 42n 2 13w
93 Nain, tn., Lab., Newfoundland; 56 30n 61 53w
63 Nain, tn., Persia; 32 54n 53 50e
67 Naini Tal, hill stn., India; p. 10,000; 29 20n 79 32e
25 Nairn, bor., co. tn., spt., Nairn, Scot.; resort; fishing; p. 4,201; 57 35n 3 52w
25 Nairn, co., Scotland; a. 161 sq. m.; considerable moorland; farming, quarries; p. 8,294; 57 30n 3 50w
81 Nairobi, tn. and cap. Kenya; trade centre on Uganda Rly.; p. 51,000; 1 18s 36 48e
79 Nakadeh, tn., Egypt; 25 52n 32 43e
75 Nakamura, tn., Japan; 32 48n 133 0e
75 Nakatsu, tn., Japan; p. 30,327; 33 38n 131 17e
57 Nakhichevan, tn., Azerbaijan, Russia; smelting, cottons, silks; p. 71,000; 47 30n 39 45e
83 Nakob, tn., C. of Good Hope, S. Afr.; 27 55s 20 0e
70 Nakon Sawan, tn., Siam; 15 14n 100 10e
63 Nalband, tn., Persia; 32 28n 57 26e
84 Namaqua Ld., S.W. Africa; copper; 29 35s 18 0e
70 Nam-dink, tn., Fr. Indo-China; 20 30n 106 0e
54 Namsos, tn., Norway; 64 30n 11 35e
38 Namur, prov., Belgium; a. 1,413 sq. m.; rivers—Maas and Sambre; iron, coal; cap. Namur; p. 355,965; 50 30n 5 00e

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38 Namur, tn., cap. of prov., Belgium; cath.; iron, steel, cutlery; p. 30,389; 50 29n 4 51e
69 Nan, tn., Siam; 18 40n 100 40e
98 Nansimo, tn., B.C., Canada; timber, brewing; p. 6,745; 49 5n 123 58w
121 Nanango, vil., Queens., Australia; 26 40s 151 59e
75 Nanno, tn., Japan; 37 0n 137 4e
74 Nanchang, tn., China; tea, rice, cotton; p. 400,000 (est.); 28 25n 116 0e
84 Nancy, tn., France; on R. Meurthe; cath., univ.; cottons, woollens, chemicals, embroidery; p. 120,578; 48 41n 6 12e
67 Nanda Devi, Mt., Tibet; 30 30n 80 0e
68 Nander, tn., India; muslin; p. 21,470; 19 10n 77 20e
74 Nan-hiung, tn., China; 25 15n 114 0e
74 Nanking, cy., cap. China; on Yang-tze-kiang R.; univ.; cotton cloth, silk, ink; p. 1,013,000; 32 10n 118 50e
125 Nannup, tn., W. Australia; 33 59s 115 45e
72 Nan Shan Mts., China; highest peak 16,000 ft.; 25 30n 110 0e
34 Nantes, tn., France; sugar, oil, chemicals, machinery, textiles; p. 187,343; 47 14n 1 34w
104 Nanticoke, tn., Pa., U.S.A.; on R. Susquehanna; anthracite; canning; p. 26,043; 41 12n 76 0w
105 Nantucket, I., and tn., Mass., U.S.A.; resort; 41 10n 70 0w
18 Nantwich, urb. dist., Cheshire, Eng.; brine baths, cheese; p. 7,132; 53 4n 2 31w
74 Nan-yang-fu, tn., China; 33 10n 112 35e
89 Nanzela, tn., N. Rhodesia; 15 2s 26 0e
97 Napanee, tn., Ont., Canada; p. 3,497; 44 16n 70 0w
126 Napier, bor., spt., N.I., New Zealand; on Hawke B.; earthquake 1931; exp. frozen meat; p. 16,160; 39 30s 176 57e
83 Napier, tn., C. of Good Hope, S. Afr.; 34 16s 19 53e
51 Naples, cy., spt., Italy; on Bay of Naples at base of Mt. Vesuvius; docks, cath., univ., pal.; macaroni, vermicelli, wine, olive-oil; shipbuilding; p. 980,338; 40 50n 14 17e
51 Naples, B., Italy; noted for scenery; 40 20n 14 20e
120 Naracoorte, tn., S. Australia; 36 57s 140 13e
69 Narayanganj, tn., India; jute centre; p. 30,602; 23 35n 90 35e
67 Narbada, R., India; length 750 m.; 22 50n 78 30e
19 Narberth, urb. dist., Pembroke, Wales; stone; p. 1,046; 51 47n 4 44w
35 Narbonne, tn., France; cath., pal.; wines, sulphur, tiles; p. 31,909; 43 11n 3 01e
51 Nardo, tn., Italy; textiles; p. 14,000; 40 11n 18 0e
125 Narembeen, tn., W. Australia; 32 5s 118 25e
125 Nareetha, tn., W. Australia; 30 55s 124 45e
66 Narnaul, tn., India; p. 20,410; 28 0n 76 13e
50 Narni, tn., Italy; linoleum; p. 14,000; 42 30n 12 29e
121 Narrabri, tn., N.S.W., Australia; 30 17s 149 47e
121 Narrandera, tn., N.S.W., Australia; 34 44s 146 31e
125 Narrogin, tn., W. Australia; p. 3,250; 32 49s 117 15e
121 Narromine, tn., N.S.W., Australia; 32 15s 148 15e
42 Narva, tn., spt., Estonia; cottons; p. 25,000; 59 23n 28 9e
54 Narvik, tn., spt., Norway; exp. iron ore; p. 7,000; 68 30n 17 20e
59 Narym, tn., U.S.S.R.; 59 0n 81 40e
16 Naseby, vil., Northants, Eng.; here Cromwell gained decisive victory over Royalists, 1645; 52 25n 0 59w
127 Naseby, bor., S.I., New Zealand; p. 190; 45 3s 170 9e
102 Nashua, cy., N.H., U.S.A.; carpets, cottons, locomotives; p. 31,463; 42 47n 71 30w
103 Nashville, cy., cap. Tenn., U.S.A.; on Cumberland R.; flour, cottons, soap, farm implements; p. 153,866; 36 8n 86 50w
66 Nasik, tn., India; on R. Godavari; Hindu pilgrim resort; metal work, cotton weaving; p. 42,756; 20 0n 73 50e
66 Nasirabad, tn., India; p. 22,000; 26 15n 74 44e
63 Nasirabad, tn., Persia; 31 8n 61 33e
62 Nasiriyeh, tn., Iraq; 31 5n 46 15e
66 Nasratabad, tn., Afghanistan; 31 20n 61 30e
64 Nasratabad. See Shahr-i-Zahul.
40 Nassau, dist., Hessen-Nassau, Germany; a. 1,830 sq. m.; mineral springs; wines; cap. Wiesbaden; 50 18n 7 46e
110 Nassau, tn., spt., cap. Bahamas, W. Indies; resort; pearls, sponges, fruit; p. 12,975; 25 0n 77 30e
126 Nassau I. (Brit.), Pacific Oc.; 11 35s 165 25w
55 Nässjö, tn., Sweden; p. 9,113; 57 40n 14 40e
52 Nassod, tn., Rumania; p. 3,527; 47 19n 24 26e
112 Natal, tn., spt., Brazil; cotton, sugar; p. 41,700; 6 00s 35 20w
63 Natal, prov., Un. of S. Africa; a. 35,284 sq. m.; mountainous, Drakensberg 11,000 ft.; agriculture, sugar, maize, tea, sheep, cattle rearing; wattle bark; coal; cap. Pietermaritzburg; p. 1,940,552 (est.); 32 0s 31 0e
103 Natchez, tn., Miss., U.S.A.; on Mississippi R.; cotton; p. 13,422; 31 32n 91 23w
63 Natenz, tn., Persia; 33 30n 51 56e
72 Nati, tn., China; 24 55n 107 20e
120 Natimuk, tn., Vic., Australia; 36 45s 141 57e
112 Natividade, tn., Brazil; 12 10s 46 40w
70 Natuna Is., Malay Arch.; p. 27,187; 4 00n 108 0e
105 Naugatuck, tn., Conn., U.S.A.; mnfs.—rubber, iron castings; p. 14,315; 40 28n 73 2w
53 Nauplia, tn., spt., Greece; p. 7,100; 37 32n 22 49e
116 Nauru, I., Pac. Oc.; Br. Mandate; phosphate; p. 2,692; 0 25s 166 0e
112 Nauta, tn., Peru; 4 30s 73 30w
109 Nava, tn., Mexico; 28 22n 100 48w
48 Navalcarnero, tn., Spain; 40 18n 4 03w
48 Navalmoral, tn., Spain; 39 52n 5 31w
31 Navan, urb. dist., Meath, I.F.S.; woollens, flour; p. 3,649; 53 40n 6 42w
36 Navanagar, cap. of st., India; on G. of Cutch; silk, embroidery; 22 20n 70 0e
53 Navarino, tn., Greece; 36 56n 21 42e
49 Navarre, prov., Spain; a. 4,055 sq. m.; chief mountains, Pyrenees, Cantabrians; R. Ebro; grain, fruits, olives, wines; cattle rearing; copper, silver and lead; chief tn. Pamplona; p. 333,000; 42 43n 1 40w

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66 Navsari, tn., India; metal work; cotton weaving; p. 19,000; 20 58n 73 2e
53 Naxos, I., Greece; fruits, wines; 37 8n 25 28e
108 Nayarit, prov., Mexico; a. 10,953 sq. m.; cap. Tepic; p. 170,054; 22 0n 105 5w
16 Nayland, par., Suffolk, Eng.; p. 1,273; 50 58n 0 53e
61 Nazareth, vil., Palestine; home of Jesus Christ; p. 7,424; 32 42n 35 20e
17 Naze, The, Essex, Eng.; 51 53n 1 17e
89 Nchanga, tn., N. Rhodesia; 12 30s 27 50e
53 Neapolis, tn., Greece; 36 30n 23 6e
19 Neath, mun. bor., Glamorgan, Wales; chemicals, coal, iron, shipping, engineering; p. 33,322; 51 39n 3 48w
19 Neath, R., Glamorgan, Wales; 51 42n 3 40w
107 Nebraska, st., U.S.A.; a. 77,510; extensive prairies; principal rivers, Missouri, Platte; farming; meat-packing; oats, wheat, maize, hay, potatoes, sugar-beet, apples; wool, live-stock; potash; cap. Lincoln; p. 1,377,963; 40 0 to 43 0n 95 15 to 104 0w
107 Nebraska City, Neb., U.S.A.; p. 7,230; 40 42n 95 58w
116 Necker I., Pacific Oc.; 23 45n 166 30w
16 Needham Mkt., par., Suffolk, Eng.; p. 1,349; 52 9n 1 02e
17 Needles, The, I. of Wight, Eng.; 50 40n 1 35w
99 Neepawa, tn., Man., Canada; p. 1,910; 50 20n 98 33w
60 Nefud, des., Arabia; 28 30n 42 0e
68 Negapatam, tn., spt.; Mad., India; cotton, tobacco, ground-nuts; p. 54,016; 10 45n 79 50e
68 Negombo, tn., Ceylon; 7 15n 79 55e
47 Negotin, tn., Yugoslavia; 41 29n 22 9e
69 Negrais, C., Burma, India; 15 55n 94 25e
53 Negropont I. See Eubœa I.
113 Negro, R., Argentina; 38 50s 67 0w
112 Negro, R., Brazil; trib. of Amazon R.; length 1,350 m.; 0 40s 62 30w
71 Negros, I., Philippine Is.; a. 4,903 sq. m.; coffee, sugar-cane, wheat; 10 0n 123 0e
63 Neh, tn., Persia; 31 33n 60 6e
27 Neilston, par., Renfrew, Scot.; bleachfields, cotton, coal; p. 15,306; 55 47n 4 25w
41 Neisse, tn., Germany; chemicals, linen; p. 32,604; 50 28n 17 20e
112 Neiva, tn., Colombia; p. 12,000; 2 55n 75 30w
60 Nejd, king. in Saudi, Arabia; mostly desert; horses, camels; dates, various fruits; p. 1,275,000 (est.); 25 0n 46 0e
62 Nejef, tn., Iraq; 31 58n 44 25e
68 Nellore, tn., India; dyeing, rice; p. 35,863; 14 27n 79 58e
98 Nelson, tn., B.C., Canada; fruit; silver; lumbering; p. 5,992; 49 28n 117 16w
18 Nelson, mun. bor., Lancs, Eng.; cotton, silk, coal, engineering; p. 38,304; 53 52n 2 14w
127 Nelson, prov., New Zealand; a. 10,875 sq. m.; mountainous, forested; fruit, hops; coal, gold; cap. Nelson; p. 51,000; 42 20s 172 20e
127 Nelson, cy., spt., S.I., New Zealand; fruit; p. 10,640; 41 16s 173 20e
99 Nelson, R., Man., Canada; 56 20n 93 0w
10 Nemours, tn., Algeria; p. 7,073; 35 0n 10 0w
34 Nemours, tn., France; 48 16n 2 41e
33 Nenagh, urb. dist., Tipperary, I.F.S.; p. 4,517; 52 25n 8 12w
27 Nenthorn, par., Berwick, Scot.; p. 349; 55 38n 2 30w
67 Nepal, king., Asia; a. 54,000 sq. m.; mountainous, Himalayas (Mt. Everest, Mt. Kinchinjunga); forested; agriculture, rice, wheat, tea, tobacco, jute, opium; cattle; cap. Katmandu; p. 5,600,000; 28 0n 84 0e
73 Nerchinsk, tn., Siberia; 52 0n 116 40e
48 Nerja, tn., Spain; 36 43n 3 53w
24 Ness, L., Inverness, Scot.; 57 15n 4 30w
18 Neston, urb. dist., Cheshire, Eng.; p. 5,674; 53 18n 3 05w
38 Netherlands (Holland), king., Europe; a. 12,603 sq. m.; flat, coast protected by dykes; agriculture, rye, oats, wheat, sugar-beet, vegetables; dairying, cattle, pigs; mining, coal; fishing; horticulture, bulbs; chief industries, shipbuilding, machinery, tobacco, sugar, diamond cutting; commerce; cap. The Hague; p. 7,935,565; 52 0n 5 0e
25 Nethybridge, vil., Inverness, Scot.; p. 478; 57 17n 3 39w
17 Netley, vil., Hants, Eng.; military hospital; p. 2,206; 50 54n 1 21w
93 Nettilling L., Franklin, Can.; 66 40n 72 0w
41 Neu Brandenburg, tn., Germ.; machinery; p. 13,748; 53 34n 13 18e
45 Neuchâtel, can., Switzerland; a. 305 sq. m.; mountainous dist., Jura mts., R. Doubs; cattle; watches, cutlery, cheese, cottons, hosiery, chocolate; p. 124,324; 47 0n 6 45e
45 Neuchâtel, tn., Switzerland; on L. Neuchâtel; cas., cath.; jewellery, watches, condensed milk; p. 23,000; 47 0n 6 56e
45 Neuchâtel, L. of, Switzerland; a. 22 sq. m., depth 505 ft.; 46 54n 6 50e
41 Neufahrwasser, tn., Germany; 54 23n 18 40e
38 Neufchâteau, tn., Belgium; 49 50n 5 26e
34 Neufchâtel, tn., France; 48 22n 5 45e
46 Neuhaüsel. See Novy Zamky.
40 Neumarkt, tn., Germany; 49 16n 11 30e
43 Neumarkt, tn., Poland; p. 6,650; 49 29n 20 0e
49 Neumünster, tn., Germ.; tanning; p. 39,895; 54 5n 10 0e
40 Neunkirchen, tn., Germ.; iron, coal; p. 41,031; 49 22n 7 10e
113 Neuquen, tn., Argentina; p. 2,500; 38 55s 68 25w
40 Neu Ruppin, tn., Germany; p. 18,187; 52 55n 12 50e
41 Neusalz, tn., Germany; on R. Oder; flax, brewing; p. 14,166; 51 50n 15 43e
43 Neu Sandec, tn., Poland; 49 37n 20 40e
40 Neuss, tn., Germany; iron-work, textiles; p. 55,771; 51 12n 6 38e
40 Neustadt, tn., Bavaria, Germany; wine, paper; p. 20,726; 49 22n 8 07e
41 Neustadt, tn., Silesia, Germany; tanning, carpets, dyes; p. 17,052; 50 23n 17 38e
46 Neustedt, L., Austria; 47 50n 16 45e

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41 Neustettin, tn., Germany; cattle, iron-work, dyes; p. 15,487; 53 21n 16 42e
41 Neuzirelitz, Germany; iron-work, furniture; p. 12,260; 53 20n 13 0e
46 Neutra. See Nitra.
40 Neuulm, tn., Germany; p. 11,919; 48 4n 10 0e
37 Neuwied, tn., Germany; on R. Rhine; iron-work, sugar, buttons; p. 20,322; 50 27n 7 26e
56 Neva R., Russia; 59 48n 30 45e
106 Nevada, st., U.S.A.; a. 110,690 sq. m.; situated in Great Basin; agriculture; grain, fruit, vegetables; minerals, gold, silver, lead, copper; cap. Carson; p. 91,058; 39 0n 117 0w
34 Nevers, tn., France; on R. Loire; cath.; iron goods, farm implements, pottery; p. 31,879; 46 59n 3 10e
18 Nevin, par., Caernarvon, Wales; p. 1,900; 52 27n 4 30w
53 Nevrokop, tn., Bulgaria; p. 7,175; 41 33n 23 47e
27 New Abbey, par., Kirk., Scot.; p. 728; 54 59n 3 33w
102 New Albany, cy., Ind., U.S.A.; furniture, leather, machinery; p. 25,819; 38 20n 85 55w
112 New Amsterdam, tn., Br. Guiana; p. 8,000; 6 10n 57 25w
5 New Amsterdam, I., Indian Oc. 37 0s 77 10e
83 New Amsterdam, tn., Trans., S. Afr.; 26 42s 30 40e
102 New Bedford, cy., spt., Mass., U.S.A.; mnfs., cottons, cordage, glass, shoes; p. 112,597; 41 40n 71 0w
88 New Benin, tn., Nigeria; 5 55n 5 07e
85 New Bethesda, tn., C. of Good Hope, S. Afr.; 31 51s 24 38e
18 New Brighton, tn., Cheshire, Eng.; part of Wallasey; resort; 53 27n 3 01w
105 New Britain, cy., Conn., U.S.A.; hardware, foundries; p. 68,128; 41 40n 72 41w
122 New Britain, I., New Guinea; a. 10,000 sq. m.; largest island in Bismarck Arch.; cap. Rabaul; 6 00s 150 0e
94 New Brunswick, prov., Canada; a. 27,985 sq. m.; extensive forests; chief rivers, St. John, Restigouche; farming, lumbering, fishing, canning, coal, gypsum, natural gas; cap. Fredericton; p. 408,219; 44 32 to 48 0n 64 0 to 69 0w
105 New Brunswick, tn., N.J., U.S.A.; rubber goods, hosiery, hardware; p. 34,555; 40 28n 74 28w
16 New Buckenham, vil., Norfolk, England; p. 464; 52 28n 1 02e
20 New Byr., vil., Lancs., England; 54 16n 2 57w
116 New Caledonia, Is., Pac. Oc., Fr.; a. 8,548 sq. m.; coffee, copra, chrome ore, nickel; cap. Noumea; p. 51,816; 20 0 to 22 0s 164 0 to 167 0e
48 New Castile, prov., Spain; 39 0n 4 00w
102 New Castle, cy., Pa., U.S.A.; tinplate, glass, steel wire; iron, coal; p. 48,674; 41 2n 80 24w
27 New Castleton, vil., Roxburgh, Scot.; p. 847; 55 11n 2 48w
27 New Cumnock, par., Ayr, Scot.; coal; p. 6,419; 55 24n 4 10w
25 New Deer, par., Aberdeen, Scot.; p. 3,666; 57 31n 2 13w
102 New England, the six N.E. Atlantic States of U.S.A.; 44 0n 71 0w
121 New England Ra., N.S.W., Austral.; highest pk. Ben Lomond 5,000 ft.; 30 0s 151 45e
17 New Forest, dist., Hants, Eng.; ancient royal forest established as a hunting preserve by William the Conqueror; noted for scenery; 50 50n 1 38w
27 New Galloway, bor., Kirk., Scot.; p. 307; 55 5n 4 10w
95 New Glasgow, tn., N.S., Canada; coal, iron, steel; p. 8,858; 45 36n 62 41w
47 New Gradiska, tn., Yugoslavia; 45 18n 17 21e
116 New Guinea, Australasia; island, incorporating British and Dutch territory; a. 312,000 sq. m., length about 1,500 m., breadth 480 m.; traversed by high mts., peaks reaching 16,000 ft.; tropical forests; 0 30 to 10 40s 131 0 to 150 0e
116 New Guinea, terr., Dutch E. Indies; a. 160,692 sq. m.; commercially undeveloped; p. 279,698; 0 30 to 9 00s 131 0 to 141 0e
122 New Guinea, British. See Papua.
116 New Guinea, terr., New Guinea; a. 93,000 sq. m.; former German possession, now an Australian mandate, including Kaiser Wilhelm's Land, Bismarck Arch., German Solomons, Nauru, etc.; chief products, copra, timber, gold, mother-of-pearl, sandalwood, tortoise-shell; cap. Rabaul; p. 740,000; 0 00 to 7 30s 141 0 to 160 0e
102 New Hampshire, st.; a. 9,341 sq. m.; mountainous except S.E., White Alts.; forested; agriculture, hay, wheat, oats, potatoes, apples; dairying; granite; mnfs., cottons, boots and shoes, wood pulp; cap. Concord; p. 465,293; 42 45 to 43 25n 70 50 to 72 30w
102 New Haven, cy., spt., Conn., U.S.A.; Yale Univ.; firearms, clocks, tools, paper; meat-packing; p. 162,655; 41 18n 72 57w
116 New Hebrides, Is., Pac. Oc.; jointly administered by Britain and France; copra, cocoa, cotton; p. 55,000; 13 0 to 20 0s 166 0 to 170 0e
16 New Holland, spt., Lindsey, Eng.; 53 42n 0 21w
103 New Iberia, tn., La., U.S.A.; p. 8,003; 30 0n 91 50w
116 New Ireland, I., Bismarck Arch., Pacific Oc.; copra; p. 40,000; 3 14s 152 0e
102 New Jersey, st., U.S.A.; a. 8,224 sq. m.; agriculture, maize, potatoes, hay; fruit; dairying; fishing; clay; industries, petroleum refining, smelting, silks, chemicals, cottons, sanitary ware; cap. Trenton; p. 4,041,334; 39 0 to 41 20n 7 40 to 75 30w
26 New Luce, par., Wigtown, Scot.; p. 423; 54 57n 4 50w
25 New Machar, par., Aberdeen, Scot.; p. 2,113; 57 17n 2 12w
121 New Norfolk, tn., Tas., Austral.; 42 42s 147 2e
107 New Mexico, st., U.S.A.; a. 122,634 sq. m.; plateaux and mountain ranges; agriculture, maize, wheat, sorghums, cotton; sheep, cattle, horses, pigs; wool; minerals, gold, silver, copper, coal; cap. Santa Fé; p. 423,317; 31 20 to 37 0n 103 0 to 109 0w
103 New Orleans, cy., spt., La., U.S.A.; on Mississippi R.; cath., univ., pal.; cotton mkt.; mnfs., cottons, machinery; sugar refining; p. 458,762 30 0n 90 0w

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126 **New Plymouth**, bor., N.I., New Zealand; p. 15,375; 39 5s 174 5s

110 **New Providence**, I., Bahamas, W. Indies; cap. Nassau; p. 13,000; 24 30s 78 15s

18 **New Quay**, urb. dist.; Cardigan, Wales; p. 1,112; 52 13n 4 20w

18 **New Radnor**, tn., Radnor, Wales; 52 15n 3 09w

17 **New Romney**, mun. bor., Kent, Eng.; p. 1,786; 51 0n 0 56s

33 **New Ross**, urb. dist., Wexford, I.F.S.; brewing, malting; p. 5,009; 52 24n 6 56w

17 **New Shoreham**, urb. dist., Sussex, Eng.; p. 8,757; 50 50n 0 16w

59 **New Siberian, Is.**, U.S.S.R.; 75 0n 145 0e

121 **New South Wales**, st., Australia; a. 309,432 sq. m., in E. coastal plain, mountains, Gt. Dividing Ra., New England Ra., Blue Mts., in W. extensive plains; chief rivers—Murray, Darling; chief industries—agriculture, wheat, maize, oats, potatoes; fruit growing; pastoral farming, sheep, wool; dairying, cattle, meat; mining, coal, silver, lead, zinc; various manufactures; cap. Sydney; p. 2,601,104; 28 0 to 37 30s 141 0 to 153 0s

98 **New Westminster**, tn., B.C., Canada; exps.—timber, canned salmon; p. 17,524; 49 17n 122 40w

102 **New York**, st., U.S.A.; a. 49,204 sq. m.; E. mountainous, Adirondack Mts., Catskill Mts.; chief rivers—Hudson, Mohawk; agriculture, maize, oats, wheat; fruit, vegetables; dairying; timber; iron ore, petroleum, natural gas, gypsum; various manufactures; cap. Albany; p. 12,588,066; 40 30 to 45 0s 72 0 to 79 45w

102 **New York**, cy., spt., New York, U.S.A.; on R. Hudson, greater portion situated on Long I.; chief cy. of U.S.A.; includes Manhattan, Bronx, Brooklyn, Queens, Richmond; good harbour, docks; chief buildings—City Hall, Custom Ho., cath., univ., noted for "skyscrapers"; fine parks and bridges and Statue of Liberty; chief industries—cloth, textiles, printing and publishing, iron and steel work, machinery, sugar refining, meat preserving and packing; commercial and banking centre of U.S.A.; p. 6,930,446; 40 20n 74 0w

126 **New Zealand**, dom., S. Pacific Oc.; comprising North I., South I., Stewart I.; a. 103,722 sq. m., length 1,000 m., greatest breadth 180 m.; chief physical features—mountains, Southern Alps, Mt. Cook 12,349 ft., Mt. Egmont 8,260 ft., Ruapehu 9,175 ft., volcanic region in North I. famous for geysers and hot springs, Roto Rua; chief lakes—Taupo, Wakatipu, Te Anau; Canterbury Plain; chief industries—agriculture, wheat, oats; fruit farming; pastoral farming, sheep, wool, meat; dairying, cattle, meat; timber; mining, coal, gold; various manufactures; cap. Wellington; p. 1,491,000 (est.); 34 20 to 47 20s 166 25 to 178 35w

81 **Newala**, tn., Tang. Ter.; 11 0s 39 10e

16 **Newark**, mun. bor., Notts, Eng.; ruins of castle, besieged three times during Civil War, and fortifications razed to ground 1646; malting, brewing, foundries; p. 18,055; 53 5n 0 49w

102 **Newark**, cy., spt., N.J., U.S.A.; machinery, chemicals, leather, jewellery; p. 442,337; 40 48n 74 15w

102 **Newark**, cy., Ohio, U.S.A.; locomotives, steel rails, glass; p. 30,596; 40 5n 82 30w

104 **Newark Valley**, tn., N.Y., U.S.A.; 42 16n 76 16w

20 **Newbiggin**, urb. dist., Northumb., Eng.; coal; p. 6,904; 54 19n 3 23w

33 **Newbridge**, tn., Kildare, I.F.S.; p. 3,400; 53 11n 6 48w

25 **Newburgh**, vil., spt., Aberdeen, Scot.; p. 1,966; 57 19n 2 00w

27 **Newburgh**, bor., spt., Fife, Scot.; linens; p. 2,152; 56 21n 3 14w

102 **Newburgh**, cy., N.Y., U.S.A.; on Hudson R.; cottons, woollens, chemicals, flour; p. 31,275; 41 29n 74 3w

17 **Newbury**, mun. bor., Berks, Eng.; racecourse; corn, malting; p. 13,340; 51 24n 1 20w

121 **Newcastle**, tn., spt., N.S.W., Australia; on Hunter R.; coal; exps.—wool, frozen meat; p. 104,170; 32 56s 151 42e

95 **Newcastle**, tn., N.B., Canada; lumbering; p. 3,383; 47 2n 65 37w

31 **Newcastle**, urb. dist., Down, N. Ire.; p. 2,119; 54 12n 5 53w

20 **Newcastle**, co. bor., co. tn., spt., Northumb., Eng.; on R. Tyne; cath., Guildhall, Royal Exchange, Nat. History Museum, castle; engines, tools, firebricks, chemicals, shipbuilding; p. 283,145; 54 59n 1 36w

32 **Newcastle**, tn., Limerick, I.F.S.; p. 2,585; 52 27n 9 03w

83 **Newcastle**, tn., Natal, S. Afr.; p. 2,017 (Eur.); 27 46s 29 55e

18 **Newcastle Emlyn**, urb. dist., Carmarthen, Wales; p. 762; 52 2n 4 27w

18 **Newcastle-under-Lyme**, mun. bor., Staffs, Eng.; paper, ironware; p. 54,349; 53 1n 2 14w

118 **Newcastle Waters**, tn., N. Terr., Austral.; 17 25s 133 25e

74 **Newchwang**, spt., treaty port, Manchuria; cottons, soap, hosiery, glass; p. 106,242; 40 50n 122 5e

19 **Newent**, tn., Gloucs, Eng.; p. 2,325; 51 56n 2 12w

93 **Newfoundland**, dom., N. America; includes Labrador, most easterly part of cont.; a. 42,734 sq. m.; in E. low, in W. rugged mts., innumerable lakes, forested; fishing—cod, salmon, halibut, lobster, seal; lumber, wood pulp, paper; rich iron deposits (Bell I.); cap. St. John's; p. 289,472; 46 30 to 51 30n 52 30 to 59 20w

17 **Newhaven**, urb. dist., spt., Sussex, Eng.; cross-channel service; brewing, cement; p. 6,790; 50 47n 0 03e

96 **Newmarket**, tn., Ont., Canada; p. 3,743; 44 5n 79 28w

16 **Newmarket**, urb. dist., Suffolk, Eng.; racecourse; p. 9,705; 52 15n 0 25e

32 **Newmarket**, tn., Clare, I.F.S.; p. 621; 52 46n 8 55w

32 **Newmarket**, tn., Cork, I.F.S.; p. 934; 52 13n 9 00w

27 **Newmilns**, bor., Ayr, Scot.; muslins, lace; p. 3,979; 55 37n 4 19w

19 **Newnham**, urb. dist., Gloucs, Eng.; p. 1,035; 51 48n 2 23w

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17 **Newport**, mun. bor., cap. I. of Wight, Eng.; nearby is Carisbrooke Cas. where Charles I was imprisoned during Civil War; cement, brewing; p. 11,313; 50 43n 1 18w

19 **Newport**, co. bor., Monmouth, Eng.; shipbuilding, engineering, chemicals; exps.—coal, iron; p. 89,203; 51 35n 3 00w

18 **Newport**, urb. dist., Salop, Eng.; coal; p. 3,439; 52 46n 2 24w

30 **Newport**, tn., Mayo, I.F.S.; p. 467; 53 54n 9 33w

32 **Newport**, tn., Tipperary, I.F.S.; p. 594; 52 43n 8 25w

27 **Newport**, bor., Fife, Scot.; fishing; p. 3,275; 56 26n 2 56w

102 **Newport**, cy., spt., R.I., U.S.A.; naval stn., resort; fishing; p. 27,612; 41 32n 71 18w

102 **Newport**, cy., Ky., U.S.A.; on Ohio R.; iron, steel; p. 29,744; 38 58n 84 30w

18 **Newport**, par., Pembroke, Wales; p. 1,292; 52 1n 4 50w

16 **Newport**, par., Essex, England; p. 914; 50 43n 1 18w

18 **Newport B.**, Pembroke, Wales; 52 2n 4 25w

103 **Newport News**, spt., Va., U.S.A.; shipbuilding; p. 34,417; 37 2n 76 25w

16 **Newport Pagnell**, urb. dist., Bucks, Eng.; p. 3,957; 52 0n 0 43w

19 **Newquay**, urb. dist., Cornwall, Eng.; resort; fishing; p. 5,958; 50 26n 5 04w

31 **Newry**, urb. dist., Down, N. Ire.; machinery, rope, brewing, granite; p. 12,159; 54 11n 6 20w

62 **Newshehr**, tn., Turkey; 38 34n 34 50w

18 **Newton**, urb. dist., Lancs, Eng.; iron foundries, coal, paper, glass; p. 20,150; 53 28n 2 37w

107 **Newton**, cy., Kan., U.S.A.; silks, worsted; p. 11,034; 38 3n 97 20w

31 **Newtownards**, urb. dist., Down, N. Ire.; linen, muslin; p. 10,150; 54 36n 5 41w

33 **Newtownbarry**, tn., Wexford, I.F.S.; p. 884; 52 39n 6 39w

31 **Newtownforbes**, vil., Longford, I.F.S.; p. 379; 53 46n 7 51w

31 **Newtownhamilton**, par., Armagh, N. Ire.; p. 2,810; 54 12n 6 35w

33 **Newtownmountkennedy**, vil., Wicklow, I.F.S.; p. 313; 53 0n 6 08w

31 **Newtownstewart**, tn., Tyrone, N. Ire.; p. 1,012; 54 43n 7 23w

27 **Newtyle**, par., Angus, Scot.; p. 831; 56 34n 3 08w

19 **Neyland**, urb. dist., Pembroke, Wales; p. 2,161; 51 40n 4 57w

89 **Ngami L.**, Bech., S. Africa; 20 30s 22 30e

126 **Ngaruawahia**, bor., N.I., New Zealand; p. 1,245; 37 43s 175 11e

88 **Ngaundere**, tn., Cameroons; 7 16n 13 30e

126 **Ngauruhoe Mt.**, New Zealand; 39 9s 175 39e

120 **Nhill**, tn., Vic., Australia; 36 15s 141 41e

96 **Niagara Falls**, tn., Ont., Canada; hydro-electric power; carborundum, canning; p. 19,046; 43 7n 79 5w

102 **Niagara Falls**, cy., N.Y., U.S.A.; on R. Niagara; paper, flour, aluminium; p. 75,460; 43 6n 79 5w

102 **Niagara Falls**, N. America; on Niagara R. between L. Erie and L. Ontario, the American Fall is about 1,400 ft. wide and falls 167 ft.; Horse-shoe Fall (Canadian) is 2,600 ft. wide and falls 158 ft.; enormous hydro-electric power developed; 43 15n 79 5w

96 **Niagara Town**, Ont., Canada; p. 1,228; 43 15n 79 5w

81 **Niangara**, tn., Belgian Congo; 3 25n 28 10e

39 **Nibe**, tn., Denmark; 56 59n 9 40e

110 **Nicaragua**, rep., Cent. America; a. 51,660 sq. m.; interior mountainous, 6,000 ft., Lakes Nicaragua and Managua; farming; coffee, cacao, sugar, bananas; gold and silver; cap. Managua; p. 750,000; 10 55 to 15 0n 83 20 to 87 40w

110 **Nicaragua, L.**, Nicaragua; 11 30n 85 30w

63 **Nicaria, I.**, Greece; 37 38n 26 10e

51 **Nicastro**, tn., Italy; olives, wine; p. 21,000; 39 0n 16 20e

35 **Nice**, tn., France; resort; exps.—flowers, fruit, perfumes, olive-oil; p. 219,549; 43 44n 7 14e

112 **Nickerie**, tn., Dutch Guiana; p. 3,500; 5 55n 57 15w

70 **Nicobar Is.** (Br.), India; p. 10,240; 8 00n 94 0e

97 **Nicolet**, tn., Que., Canada; p. 2,868; 46 13n 72 38w

51 **Nicosia**, tn., Italy; 37 48n 14 22e

62 **Nicosia**. See Levkosia.

113 **Nictheroy**, tn., Brazil; soap, textiles; p. 108,000; 23 0s 43 0w

40 **Nienburg**, tn., Germany; p. 10,406; 52 40n 9 12e

38 **Nieuport**, Belgium; 51 8n 2 45e

38 **Nieuwpoort**, tn., Netherlands; 51 56n 4 52e

108 **Nieves**, tn., Mexico; 24 0n 102 58w

34 **Nièvre**, dept., France; a. 2,658 sq. m.; forests; livestock; coal, iron, steel; cap. Nevers; p. 255,195; 47 7n 3 40e

62 **Nigde**, tn., Turkey; p. 50,000; 37 50n 34 43e

80 **Niger Colony**, Fr. W. Africa; a. 463,200 sq. m.; cattle rearing; forests; cap. Niamey; p. 1,473,940; 15 3n 6 00e

88 **Niger, R., W. Africa**; length 2,600 m., over 1,000 miles navigable; chief trib., Benue; 7 00n 6 30e

88 **Nigeria**, Br. col. and prot., W. Africa; a. 372,674 sq. m.; coast swampy, interior plateau and mts., forests; agriculture, palm oil, cocoa, coconuts, groundnuts, cotton; cattle rearing in N., hides, skins; minerals, coal, tin; cap. Lagos; p. 19,865,422; 4 0 to 14 0n 2 40 to 14 35w

25 **Nigg**, par., Kincardine, Scot.; p. 1,300; 57 8n 2 06w

25 **Nigg**, par., Ross and Crom., Scot.; p. 725; 57 43n 4 00w

127 **Nightcaps**, tn., dist., S.I., New Zealand; p. 680; 45 57s 168 3e

53 **Nigrita**, tn., Greece; 40 54n 23 32e

63 **Nihavend**, tn., Persia; 34 6n 48 17e

MAP

75 **Niigata**, tn., Japan; coal, petroleum; lacquer ware; p. 134,992; 37 58n 139 2e

49 **Nijar**, tn., Spain; lead, manganese and iron ore; textiles; p. 11,000; 36 32n 2 13w

38 **Nijkerk**, tn., Netherlands; 52 12n 5 30e

38 **Nijmegen**, tn., Netherlands; town hall, pal.; tobacco, metal work, beer; p. 80,126; 51 50n 5 51w

56 **Nijne Tagilsk**, tn., Russia; 58 0n 60 0e

56 **Nijni Novgorod**, tn., Russia; at junc. of Oka and Volga R., noted for its fairs, Kremlin (citadel); distilling, flour, machinery; p. 451,500; 56 18n 44 0e

75 **Nikko**, tn., Japan; tourist resort, noted shrines and temples; 36 42n 139 27e

57 **Nikolayev**, tn., spt., Russia; naval stn., cath.; iron, flour, tobacco, glass; p. 141,400; 46 59n 32 0e

57 **Nikolayevsk (Pugachev)**, tn., Russia; 50 9n 45 35e

66 **Nikolayevskaya**, tn., Russia; 53 4n 61 47e

56 **Nikolsk**, tn., Russia; 59 33n 45 30e

59 **Nikolsk**, tn., U.S.S.R.; 43 40n 132 0e

57 **Nikopol**, tn., Russia; 47 32n 34 25e

52 **Nikopoli**, tn., Bulgaria; p. 4,963; 43 40n 24 47e

41 **Niksic**, tn., Yugoslavia; 42 48n 18 58e

78 **Nile, R., Egypt**; longest river of Africa, 3,670 m. long (3,000 m. navigable); chief tribs.—White Nile, Bahr-el-Jebel, Blue Nile, Atbara; between Aswan and Khartoum 6 cataracts; river rises April, overflows September; dams at Asyut, Aswan, Sennar for regulating flow and irrigation; 27 30n 30 45e

78 **Nile Delta**, Egypt; 31 40n 31 12e

68 **Nilgiri Hills**, India; 8,760 ft.; 11 25n 76 45e

35 **Nimes**, tn., France; cath.; silks, cottons, machinery, carpets, wines; p. 59,213; 43 49n 4 20e

74 **Ning-po**, tn., treaty port, China; wood-carving, fishing; lace, hardware; p. 212,518; 29 55n 121 40e

72 **Ningsia**. See Sitao.

73 **Ninguta**, tn., Manchuria; 44 30n 129 50e

70 **Ninh-binh**, tn., Fr. Indo-China; 20 15n 105 50e

70 **Ninh-hoa**, tn., Fr. Indo-China; 12 30n 108 50e

62 **Ninive**, Iraq; ruins; 36 16n 43 14e

35 **Niort**, tn., France; market gardens; leather, gloves; p. 25,935; 46 19n 0 28w

99 **Nipawin**, tn., Sask., Canada; 53 28n 103 50w

99 **Nipigon**, Ont., Canada; 49 10n 88 20w

99 **Nipigon, L.**, Ont., Canada; a. 1,590 sq. m., 70 m. long; 49 42n 88 30w

93 **Nipissing, L.**, Ont., Canada; 46 18n 79 50w

63 **Niris**, tn., Persia; 29 10n 54 10e

68 **Nirmal**, tn., Hyd., India; 19 4n 78 25e

47 **Nis**, tn., Yugoslavia; p. 35,400; 43 19n 21 53e

63 **Nishabar**, tn., Persia; 36 11n 58 44e

59 **Nishni Kolimsk**, tn., U.S.S.R.; 68 30n 161 0e

59 **Nishi Udinsk**, tn., U.S.S.R.; 54 40n 99 0e

53 **Nisi**, tn., Greece; 37 3n 22 1e

62 **Nisibin**, tn., Turkey; 37 1n 41 17e

46 **Nitra**, tn., Czechoslovakia; p. 21,259; 48 20n 18 7e

38 **Nivelles**, tn., Belgium; paper; rly. works; p. 12,791; 50 36n 4 18e

34 **Nivernais**, prov., France; 47 0n 3 30e

48 **Niza**, tn., Portugal; 39 30n 7 42w

68 **Nizamabad**, tn., Hyd., India; 18 40n 78 5e

68 **Nizam's Dominions**, see Hyderabad, India.

89 **Nkala**, tn., N. Rhodesia; 15 53s 26 4e

82 **Nkata**, tn., Nyasaland; 15 53s 26 4e

31 **Nobber**, par., Meath, I.F.S.; p. 881; 53 50n 6 46w

75 **Nobeoka**, tn., Japan; p. 56,421; 32 11n 131 29e

51 **Nocera**, tn., Italy; p. 30,000; 40 45n 14 39e

39 **Nœstved**, tn., Denmark; p. 11,301; 55 14n 11 47e

108 **Nogales**, tn., Mexico; p. 10,000; 31 16n 111 7w

51 **Noia**, tn., Italy; p. 17,000; 40 59n 14 32e

56 **Nolinsk**, tn., Russia; 57 34n 49 57e

108 **Nombre de Dios**, tn., Mexico; 23 47n 104 10w

90 **Nome**, tn., Alaska; gold; p. 1,213; 64 30n 165 0w

70 **Nong-khai**, tn., Siam; 18 0n 102 30e

70 **Nongson**, tn., Fr. Indo-China; 15 33n 108 0e

55 **Nora**, tn., Sweden; 59 35n 15 10e

93 **Noranda**, tn., Que., Canada; gold; p. 3,225; 48 28n 79 20w

34 **Nord**, dept., France; a. 2,228 sq. m.; flax, cereals; iron, coal; textiles, chemicals, machinery; cap. Lille; p. 2,029,449; 50 50n 2 31e

64 **Nord Trøndelag**, co., Norway; a. 8,659 sq. m.; p. 96,916; 64 0n 12 0e

40 **Norden**, tn., Germany; p. 11,025; 53 38n 7 12e

40 **Nordhausen**, tn., Germany; cath.; beer, spirits; p. 35,056; 51 32n 10 48e

54 **Nordkapp**, Norway; 71 10n 25 40e

54 **Nordkyn, C.**, Norway; 71 5n 27 40e

54 **Nordland**, co., Norway; a. 14,728 sq. m.; p. 187,572; 66 30n 14 20e

40 **Nordlingen**, tn., Germany; 48 54n 10 30e

55 **Nore**, tn., Norway; 60 15n 8 45e

16 **Norfolk**, co., England; a. 2,044 sq. m.; flat; ch. rivers—Ouse, Bure, Wensum, Yare, Waveney, noted for the Broads, a holiday resort; farming, wheat, barley, oats, potatoes; cattle; fishing; brewing, boots, mustard, agricultural implements; p. 504,546; 52 42n 0 55e

107 **Norfolk**, tn., Neb., U.S.A.; p. 14,717; 41 59n 97 32w

103 **Norfolk**, tn., spt., Va., U.S.A.; naval sta., rly. centre; p. 129,710; 36 55n 76 10w

116 **Norfolk I.**, Pacific Oc.; 29 58s 168 3e

20 **Norham**, par., Northumberland, England; p. 697; 55 44n 2 10w

98 **Norman**, tn., Mackenzie, Can.; 65 0n 125 30w

126 **Normanby**, tn., dist., N.I., New Zealand; p. 373; 39 33s 174 17e

34 **Normandy**, old prov., France; of which William the Conqueror was Duke when he invaded England in 1066; it remained in the possession of the English crown until the reign of John; 48 50n 0 00w

122 **Normanton**, tn., Queens., Austral.; 17 39s 141 20e

21 **Normanton**, urb. dist., W. Riding, Eng.; coal; p. 15,634; 53 42n 1 25w

54 **Norrbotten**, co., Sweden; a. 40,742 sq. m.; p. 193,235; 66 35n 19 20e

39 **Nörre Sundby**, tn., Denmark; p. 6,913; 57 30n 9 23e

104 **Norris Town**, tn., Pa., U.S.A.; woollens, cottons, carpets; p. 35,883; 40 9n 75 18w

55 **Norrköping**, tn., spt., Sweden; cottons, sugar, paper; p. 61,494; 58 40n 16 20e

MAP

54 Norrland, dist., Sweden ; 63 15N 17 40E
55 Norrtalje, tn., Sweden ; 59 45N 18 40E
125 Norseman, tn., W. Australia ; 32 12s 121 15E
126 North C., New Zealand ; 34 38s 173 2E
105 North Adams, tn., Mass., U.S.A. ; p. 21,621 ; 42 41N 73 8W
90 North America, cont. comprising Canada, Newfoundland, United States, Mexico and Cent. America ; a. 8,700,000 sq. m., greatest length 4,500 m., greatest breadth 3,300 m. : coast much indented ; chief mountains—Rockies, Appalachians, Coast Ra. ; chief peaks—Mt. McKinley 21,310 ft., Mt. Rainier 14,530 ft. ; chief rivers—St. Lawrence, Mackenzie, Saskatchewan, Nelson, Mississippi, Missouri, Ohio, Hudson, Rio Grande ; Great Lakes ; vegetation diverse, varying with height, climate and latitude, deciduous, coniferous and tropical forests ; agriculture, temperate and tropical products ; rich in minerals ; formerly inhabited by Red Indians, now occupied by white race ; p. 170,000,000 (est.) ; 10 0 to 80 0N 20 0 to 170 0W
118 North Australia, now included in Northern Territory
24 North Ballachulish, vil., Inverness, Scotland ; 56 42N 5 10W
92 North Battleford, tn., Sask., Canada ; wheat ; p. 5,986 ; 52 40N 108 28W
90 North Bay, tn., Ont., Canada ; lumbering ; p. 15,528 ; 46 19N 79 27W
98 North Bend, tn., B.C., Canada ; 49 55N 121 25W
27 North Berwick, bor., E. Lothian, Scot. ; p. 3,473 ; 56 3N 2 43W
103 North Carolina, st., U.S.A. ; a. 52,426 sq. m. ; in W. mountainous, in centre undulating, coastal plain ; forested ; agriculture—maize, cotton, tobacco ; dairying, cattle, pigs, fishing ; mnfs.—cotton, flour ; lumber ; cap. Raleigh ; p. 3,170,276 ; 33 40 to 36 30N 75 30 to 84 20W
57 North Caucasia Area, prov., Russia ; a. 115,000 sq. m. ; cereals ; live stock ; petroleum ; p. 8,320,000 ; 44 50N 39 50E
107 North Dakota, st., U.S.A. ; a. 70,837 sq. m. ; prairie and plateau ; agriculture—wheat, maize, oats, barley, flax ; cattle, horses, sheep ; wool ; coal ; flour ; cap. Bismarck ; p. 680,845 ; 46 0 to 49 0N 96 0 to 104 0W
17 North Downs, Kent, Eng. ; chalk range of hills extending through Hampshire, Surrey, and Kent to Dover cliffs ; extensive views across Weald ; 51 17N 0 0E
90 North-East Foreland, Greenland ; 8 02N 11 45W
122 North-East New Guinea, terr., Australian Mandate, New Guinea ; a. 69,700 sq. m. ; mountainous, undeveloped ; cap. Madang ; p. 197,048 ; 3 0s 144 0E
17 North Foreland, C., Kent, Eng. ; 51 23N 1 27E
199 North Indian L., Man., Canada ; 57 30N 97 30W
26 North Island, Sth New Zealand
57 North Ossetia, aut. area, Russia ; 43 0N 44 30E
107 North Platte, tn., Neb., U.S.A. ; p. 12,061 ; 41 8N 100 50W
20 North Riding, co., Yorkshire, Eng. ; a. 2,128 sq. m. ; see Yorkshire ; p. 469,389 ; 54 21N 1 20W
12 North Ronaldshay, I., Shetland Is., Scotland ; 59 23N 2 30W
98 North Saskatchewan, R., Alta., Can. ; 760 m. long ; 54 0N 112 0W
8 North Sea, N.W. Europe, arm of Atlantic Oc. lying between Br. Isles and Scandinavia ; a. 160,000 sq. m., length 600 m., breadth 400 m., greatest depth 442 fathoms, mean depth 100 fathoms ; includes large banks—Dogger, Jutland ; enormous fisheries ; 52 30N 3 30E
83 North Shepstone, tn., Natal, S. Afr. ; 30 38s 30 28E
95 North Sydney, tn., spt., N.S., Canada ; docks ; coal ; p. 6,139 ; 46 12N 60 18W
126 North Taranaki Bight, New Zealand ; 38 50s 174 45E
54 North Tröndelag, co., Norway ; a. 8,659 sq. m. ; p. 95,941 ; 64 20N 12 30E
22 North Uist, I., Hebrides, Scotland ; 57 35N 7 20W
16 North Walsham, urb. dist., Norfolk, Eng. ; p. 4,137 ; 52 49N 1 23E
124 North-West C., W. Australia ; 21 45s 114 4E
66 North-West Frontier Prov., India ; a. 38,665 sq. m. ; one-third of area is British ; Hindu Kush Mts. form N. bdy. ; chief river, Indus ; farming ; cap. Peshawar ; p. 2,425,076 ; 31 30 to 37 0N 69 20 to 74 0E
92 North-West Territories, Canada ; a. 1,309,682 sq. m. ; divided into three districts—Mackenzie, Keewatin, Franklin ; forests ; furs ; p. 9,723 ; 60 0 to 83 0N 59 0 to 126 0W
20 Northallerton, urb. dist., N. Riding, Eng. ; p. 4,787 ; 54 20N 1 26W
125 Northam, tn., W. Australia ; p. 4,975 ; 31 39s 116 45E
16 Northampton, co., England ; a. 1,003 sq. m. ; in parts undulating and wooded ; agriculture, wheat, barley ; cattle, sheep ; iron ore ; mnfs.—boots and shoes, lace, paper ; includes the Soke of Peterborough in N.E., which ranks as a separate administrative county ; p. 309,428 ; 52 51N 1 00W
16 Northampton, co. bor., co. tn., Northants, Eng. ; boots, shoes, lace, bricks ; p. 92,341 ; 52 15N 0 54W
105 Northampton, tn., Mass., U.S.A. ; paper, cottons, silks, woollens ; p. 24,581 ; 42 14N 72 39W
125 Northampton, tn., W. Australia ; 28 16s 114 32E
40 Northeim, tn., Germany ; 51 42N 10 0E
28 Northern Ireland, Ireland ; a. 5,237 sq. m. ; occupies N.E. Ireland ; counties—Antrim, Armagh, Down, Fermanagh and Tyrone ; separate parliament and returns members to Imperial Parl. ; industries—agriculture, oats, potatoes and other root crops, flax, fruit, hay ; minerals—chalk, clay, granite, sandstone, etc. ; mnfs.—linen, shipbuilding, ropes, tobacco, soap, etc. ; cap. Belfast ; see Ireland ; p. 1,256,561 ; 54 30N 6 30W
89 Northern Rhodesia, Br. cr. col., S. Africa ; a. 287,950 sq. m. ; plateau ; agriculture—maize, tobacco, wheat, coffee ; minerals—zinc, copper, vanadium, gold ; ivory ; cap. Livingstone, proposed new cap. Lusaka ; p. 1,341,229 ; 8 35 to 18 0S 22 0 to 33 30W
118 Northern Territory, Australia ; a. 523,620 sq. m. ; includes former terrs. of Northern and Central Australia ; some grazing ; cap. Darwin ; p. 4,860 ; 11 0 to 26 0S 129 0 to 138 0E
19 Northleach, par., Gloucester, England ; p. 611 ; 51 50N 1 50W

MAP

20 Northumberland, co., England ; a. 2,018 sq. m. ; inland, hilly ; barley, oats ; sheep rearing, wool ; coal ; industries—shipbuilding, engineering, chemicals, glass ; p. 756,725 ; 55 13N 2 05W
95 Northumberland Str., Canada ; 46 0N 63 30W
18 Northwich, urb. dist., Cheshire, Eng. ; on R. Weaver ; brine baths, salt, chemicals ; p. 18,728 ; 53 15N 2 31W
20 Norton, urb. dist., E. Riding, Eng. ; p. 3,934 ; 54 8N 0 47W
19 Norton-Radstock, urb. dist., Somerset, England ; coal ; p. 3,622 ; 51 17N 2 25W
105 Norwalk, cy., Conn., U.S.A. ; oysters ; iron foundries, clothing ; p. 36,019 ; 41 6N 73 26W
54 Norway, king., Eur. ; a. 124,556 sq. m. ; fjorded coast, mountainous ; N. "land of midnight sun" ; chief industries—agriculture, oats, barley ; forest, timber, wood-pulp, paper ; minerals and metals—aluminium, ferro-alloys, pyrites ; fishery—cod, herring, whale-oil ; hydro-electric power ; cap. Oslo ; p. 2,814,194 ; 58 72N 5 32E
16 Norwich, co. bor., co. tn., Norfolk, Eng. ; on R. Wensum ; ancient mediæval city still containing numerous mediæval buildings and houses, including cathedral (11th century) and Norman castle ; the Flemings in the Middle Ages established woollen industry, which still survives ; farm implements, mustard, starch, boots, shoes ; p. 126,236 ; 52 38N 1 18E
105 Norwich, cy., Conn., U.S.A. ; firearms, cutlery, machinery, textiles ; p. 23,021 ; 41 32N 72 6W
104 Norwich, tn., N.Y., U.S.A. ; p. 8,378 ; 42 30N 75 30W
83 Nosob, R., S.W. Africa ; 23 30s 18 40E
51 Noto, tn., Italy ; olive oil, wine ; p. 32,000 ; 36 53N 15 10E
16 Nottingham, co., England ; a. 843 sq. m. ; undulating, "The Dukeries," "Sherwood For." ; wheat, oats, barley ; cattle ; coal ; mnfs.—hosiery, lace ; p. 712,681 ; 53 12N 1 00W
16 Nottingham, co. bor., co. tn., Notts, Eng. ; on R. Trent ; an ancient borough of the Danes ; famous castle, now art museum ; racecourse ; univ. coll. ; lace, cotton, hosiery, woollens, iron foundries, brewing, drugs ; p. 268,801 ; 52 57N 1 08W
116 Nouméa, tn. and cap., New Caledonia ; p. 10,226 ; 22 7s 166 30E
68 Nova Goa, spt., Goa, India ; p. 7,500 ; 15 30N 74 0E
80 Nova Lisboa, tn., Angola ; 12 30s 15 40E
95 Nova Scotia, prov., Canada ; a. 21,068 sq. m. ; rivers and lakes are numerous ; farming, fruit, apples ; livestock ; dairying ; fisheries ; lumbering ; coal, gypsum ; cap. Halifax ; p. 512,846 ; 43 25 to 47 0N 59 45 to 66 30W
52 Nova Zagora, tn., Bulgaria ; p. 9,873 ; 42 29N 26 0E
50 Novara, tn., Italy ; cath. ; textiles ; p. 63,211 ; 45 25N 8 38E
58 Novaya Zemlya, U.S.S.R. ; two islands in the Arctic Oc. ; furs ; walrus, whale, seal fisheries ; 74 0N 60 0E
56 Novgorod, tn., Russia ; saw mills ; boots and shoes, bricks ; 58 32N 31 2E
50 Novi, tn., Italy ; silks ; p. 18,000 ; 44 47N 8 50E
47 Novi, tn., Yugoslavia ; 45 1N 16 21E
52 Novi Pazar, tn., Bulgaria ; p. 4,266 ; 43 20N 27 14E
46 Novi Sad, tn., Yugoslavia ; cottons, pottery ; p. 63,966 ; 45 16N 19 53E
47 Novi Varosh, tn., Yugoslavia ; 43 28N 19 47E
43 Novo Georgievsk, tn., Poland ; 52 26N 20 43E
43 Novo Radomsk, tn., Poland ; furniture, textiles ; tanneries ; p. 20,000 ; 51 4N 19 29E
80 Novo Redondo, tn., spt., Angola ; 11 12s 13 52E
52 Novo Selo, tn., Bulgaria ; 43 3N 27 21E
59 Novo Sibirsk, tn., cap. Siberian Area., U.S.S.R. ; on R. ; grain, machinery ; p. 278,000 ; 54 50N 83 0E
57 Novo Uzensk, tn., Russia ; 50 32N 48 11E
57 Novocherkask, tn., Russia ; on R. Don ; cereals, timber ; p. 86,200 ; 47 26N 40 3E
57 Novorossisk, tn., spt., Russia ; on Black Sea ; exp.—petroleum, tobacco ; p. 100,000 ; 44 43N 37 32E
46 Novy Zámky, tn., Cz.-slov. ; p. 22,141 ; 48 0N 18 12E
69 Nowgong, tn., India ; 26 15N 92 50E
43 Nowogrodek, co., Poland ; 53 30N 26 0E
43 Nowogrodek, tn., Poland ; 53 45N 25 48E
121 Nowra, tn., N.S.W., Australia ; 34 56s 150 3E
66 Nowshera, tn., India ; p. 27,742 ; 34 2N 72 0E
36 Noyon, tn., France ; on R. Oise ; 49 35N 3 00E
82 N'tenke, vil., Belg. Congo ; 11 30s 26 45E
79 Nubian Des., Egypt ; 21 0N 33 0E
112 Nueva Iquitos, tn., Brazil ; 9 15s 72 40W
110 Nuevitas, tn., Cuba ; p. 12,000 ; 21 30N 77 20W
109 Nuevo Laredo, tn., Mexico ; 27 30N 99 38W
109 Nuevo Leon, st., Mexico ; farming, cattle raising, sugar ; cap. Monterey ; 25 30N 100 0W
57 Nukha, tn., Azerbaijan, Russia ; 41 12N 47 6E
124 Nullagine, tn., W. Australia ; 21 43s 120 8E
118 Nullarbor Plain, S. Australia ; 30 45s 130 0E
16 Nuneaton, mun. bor., Warwick, Eng. ; worsteds, cottons, coal, engineering ; p. 46,305 ; 52 32N 1 28W
51 Nuoro, tn., Italy ; 40 22N 9 21E
40 Nüremberg, tn., Germany ; mediæval buildings ; hops ; toys, wood and ivory carving, brewing ; chemicals ; p. 410,438 ; 49 30N 11 5E
72 Nurinsk, tn., Siberia ; 50 0N 71 30E
54 Nurmes, tn., Finland ; 63 40N 29 8E
40 Nürnburg. See Nüremberg.
68 Nuwara Eliya, tn., Ceylon ; 7 00N 80 50E
125 Nyabing, tn., W. Australia ; 33 33s 18 20E
88 Nyamina, tn., Fr. W. Africa ; 13 20N 7 20W
80 Nyanga, tn., Fr. Eq. Africa ; 2 58s 10 10E
81 Nyasa, L., S.E., Africa ; length 350 m., breadth 40 m. ; 12 0s 34 30E
89 Nyasaland Prot., Br., S. Africa ; a. 37,596 sq. m. ; plateau on W. shore of L. Nyasa ; tobacco, cotton, coffee, ivory ; cattle, sheep ; cap. Zomba ; p. 1,604,000 ; 9 30 to 17 18S 32 50 to 35 50W
39 Nyborg, tn., Denmark ; p. 9,740 ; 55 19N 10 49E
57 Nyejin, tn., Russia ; 51 4N 31 45E
46 Nyiregyháza, tn., Hungary ; wine ; farming implements ; p. 51,273 ; 48 0N 21 46E
39 Nykjöbing, tn., Mors, Den. ; p. 13,919 ; 56 48N 8 47E
39 Nyköbing, spt., Falster, Den. ; p. 7,928 ; 54 46N 11 52E

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39 Nyköbing, tn., Zealand, Den. ; p. 4,058 ; 55 56N 11 47E
55 Nyköping, tn., spt., Sweden ; p. 11,953 ; 58 50N 17 10E
83 Nylstroom, tn., Trans., S. Afr. ; 24 40s 28 31E
121 Nymagee, tn., N.S.W., Australia ; 32 5s 146 18E
121 Nyngan, tn., N.S.W., Australia ; 31 31s 147 15E
45 Nyon, tn., Switzerland ; 46 23N 6 14E
39 Nysted, tn., Denmark ; 54 40N 11 46E

16 Oadby, urb. dist., Leics, Eng. ; boots and shoes ; p. 4,724 ; 52 37N 1 05W
117 Oahu, I., Hawaii Is. ; p. 202,887 ; 21 30N 158 0W
16 Oakham, urb. dist., co. tn., Rutland, Eng. ; boots, hosiery ; p. 3,191 ; 52 41N 0 44W
106 Oakland, spt., on San Francisco B., Cal., U.S.A. ; motor-cars, shipbuilding, fruit canning, electric machinery, clothing, tanneries, and sawmills ; p. 284,062 ; 37 47N 122 18W
16 Oakley, vil., Beds., England ; 52 11N 0 32W
96 Oakville, tn., Ont., Canada ; p. 3,857 ; 43 28N 79 45W
127 Oamaru, bor., spt., S.I., New Zealand ; wool and frozen meat ; p. 7,510 ; 45 6s 171 2E
128 Oates Ld., Antarctica ; 70 0s 160 0E
121 Oatlands, tn., Tas., Austral. ; 42 8s 147 11E
109 Oaxaca, tn., Mexico ; cath., textiles, brewing, sugar refineries ; p. 24,000 ; 17 1N 96 49W
109 Oaxaca, st., Mexico ; a. 35,690 sq. m. ; cereals, rubber, coffee, and cochineal ; cap. Oaxaca ; p. 976,000 ; 15 35N to 18 10N 94 50W to 98 20W
81 Obbia, tn., Italian Somaliland ; 6 00N 48 50E
56 Obdorsk, tn., U.S.S.R. ; 66 32N 66 50E
40 Oberammergau, tn., Germany ; scene of Passion Play ; wood and ivory carving ; 47 40N 11 2E
71 Obi Is., Dutch E. Indies ; p. 17,958 ; 1 30s 127 40E
112 Obidos, Brazil ; river port ; cacao, cotton ; p. 20,000 ; 1 50s 55 40W
48 Obidos, tn., Portugal ; 39 19N 9 10W
81 Obok, spt., Fr. Somaliland ; coaling stn. ; 11 58N 43 20E
47 Obrenovatz, tn., Yugoslavia ; 44 40N 20 14E
57 Obshchi Syrt, Mts., Russia ; 52 0N 52 0E
108 Ocampo, tn., Mexico ; 27 20N 102 30W
48 Ocaña, tn., Spain ; 39 55N 3 30W
105 Ocean City, N.J., U.S.A. ; p. 5,525 ; 39 15N 74 32W
27 Ochiltree, par., Ayr, Scot. ; p. 2,023 ; 55 28N 4 22W
52 Ocnele Mari, tn., Rumania ; p. 7,255 ; 45 4N 24 20E
73 Odate, tn., Japan ; 40 0N 140 33E
75 Odawara, tn., Japan ; 35 16N 139 6E
55 Odde, vil., Norway ; 60 3N 6 30E
39 Odder, tn., Denmark ; 55 58N 10 10E
48 Odemira, tn., Portugal ; 37 35N 8 38W
62 Ödemish, tn., Turkey ; p. 16,793 ; 38 12N 27 59E
37 Odenkirchen, tn., Germany ; cottons, silk ; p. 20,078 ; 51 8N 6 27E
39 Odense, Denmark ; tanneries, breweries, butter, cheese, bacon, hides ; birthplace of Hans Andersen ; p. 56,759 ; 55 25N 10 25E
41 Oder, R., Germany ; rises in Sudetes Mts., flows N.W. to Baltic ; tribs.—Warthe, Neisse, Bartsch ; length 560 m. ; 53 15N 14 20E
57 Odessa, tn., spt., Russia ; on Black S. ; cath., univ. ; wheat, rye, barley, maize and oats ; ice-bound for a few weeks in winter ; p. 97,000 ; 46 29N 30 36E
52 Odobesti, tn., Rumania ; p. 7,974 ; 45 47N 27 2E
73 Odomari. See Korsakovsh.
48 Oeiras, tn., Portugal ; 38 40N 9 18W
33 Offaly, co. (late King's Co.), Irish Free State ; a. 772 sq. m. ; farming ; p. 52,521 ; 53 22N 8 05W
40 Offenbach, tn., Germ. ; on R. Main ; machinery, chemicals, printing ; p. 79,362 ; 50 5N 8 46E
40 Offenburg, tn., Germany ; textiles, cement, farm machinery, tobacco ; p. 16,613 ; 48 30N 7 59E
54 Öfver Tornea, tn., Sweden ; 66 20N 25 20E
106 Ogden, cy., Utah, U.S.A. ; beet-sugar, flour milling, canned goods ; p. 40,272 ; 41 15N 112 0W
102 Ogdensburg, riv. port, New York, U.S.A. ; p. 16,915 ; 44 40N 75 25W
80 Ogowe, R., Fr. Eq. Afr. ; length 750 m. ; 1 00s 9 30E
47 Ogulin, tn., Yugoslavia ; 44 59N 15 18E
102 Ohio, R., U.S.A. ; trib. of Mississippi ; nav. between Cairo and Pittsburgh ; length 965 m. ; 39 45N 80 55W
102 Ohio, st., U.S.A. ; 41,000 sq. m., drained by R. Ohio and tribs. ; maize, wheat and oats ; horses and cattle ; minerals—coal, petroleum and natural gas ; iron and steel works, carriage and wagon works ; boots and shoes, clothing, timber ; cap. Columbus ; p. 5,760,000 ; 38 35N 80 30W
75 Oho-sima, I., Japan ; 28 10N 129 20W
102 Oil City, Pa., U.S.A. ; oil, machinery ; p. 22,075 ; 41 28N 79 45W
96 Oil Springs, tn., Ont., Canada ; 42 48N 82 5W
59 Oiratsk, autonomous area, U.S.S.R. ; 51 0N 86 30E
34 Oise, dept., France ; a. 2,272 sq. m. ; forests, cereals, fruits, iron, textiles, chemicals ; p. 407,432 ; cap. Beauvais ; 49 28N 2 30E
34 Oise, R., France ; trib. of R. Seine, canalized, nav. to Chauny ; length 186 m. ; 49 34N 3 10E
75 Oita, tn., Japan ; p. 61,731 ; 33 15N 131 41E
83 Okahania, tn., South W. Africa ; 22 0s 16 55E
82 Okanahana, tn., South W. Africa ; 18 40s 15 40E
75 Okasaki, tn., Japan ; p. 77,195 ; 34 54N 137 26E
75 Okayama, tn., Japan ; p. 166,145 ; 34 48N 134 2E
82 Okavango Swamp, Bechuanaland Prot., S. Africa ; 20 0S 22 30E
103 Okechobee, L., Florida, U.S.A. ; length 40 m., width 26 m. ; 27 0N 81 0W
19 Okehampton, mun. bor., Devon, Eng. ; flour, cabinet making ; p. 3,352 ; 50 45N 4 01W
59 Okhotsk, tn., U.S.S.R. ; 59 0N 143 0E
73 Okhotsk, Sea of, North East Asia ; 55 0N 150 0E
47 Okhrida, tn., Yugoslavia ; mosques ; hides ; p. 10,000 ; 41 7N 20 49E
47 Okhrida Lake, Yugoslavia ; length 18 m., width 8 m. ; 41 0N 20 45E
73 Okinawa, I., Japan ; 26 30N 128 0E
107 Oklahoma, st., U.S.A. ; a. 70,057 sq. m. ; prairies and rolling plains ; chief rivers—Arkansas, Red ; maize, wheat, oats, fruits and cotton stock raising.

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petroleum, natural gas, zinc, coal; cotton-seed oil; cap. Oklahoma; p. 2,028,000; 37 0n 94 28w
107 Oklahoma, cy., Okla., U.S.A.; univ.; cotton goods, flour, machinery; p. 185,389; 35 28n 97 30w
55 Öland L, Sweden; a. 519 sq. m.; chief tn. Borgholm; p. 10,000; 56 40n 16 50e
120 Olary, tn., S. Australia; 32 16s 140 16e
113 Olavarria, tn., Argentina; 36 50s 60 25w
88 Old Calabar R., Nigeria; 5 00n 8 10e
48 Old Castile, historical division, Spain; a. 25,408 sq. m.; 40 10 to 41 30n 1 45 to 5 30w
28 Old Deer, par., Aberdeen, Scot.; distilling, brewing, woollens; p. 3,380; 57 31n 2 03w
47 Old Gradeska, tn., Yugoslavia; 45 10n 16 15e
22 Old Head of Kinsale, Cork, I.F.S.; 51 36n 8 33w
25 Old Meldrum, burgh, Aberdeen, Scot.; 57 20n 2 20w
82 Old Livingstonia, Nyasaland Prot., 14 0s 34 50e
18 Oldbury, mun. bor., Worcester, Eng.; engineering, iron and steel, chemicals; p. 35,918; 52 29n 2 0w
31 Oldcastle, par., Meath, I.F.S.; lime, corn; p. 1,801; 53 45n 7 09w
40 Oldenburg, tn., Oldenburg, Germ.; musical instruments, leather; p. 66,951; 53 8n 8 12e
40 Oldenburg, State, Germany; a. 2,480 sq. m.; farming, cattle and horses, bricks, brewing; cap. Oldenburg; p. 545,172; 52 30 to 53 30n 7 30 to 8 45e
38 Oldenzaal, tn., Netherlands; p. 10,021; 52 19n 6 55e
39 Oldesloe, tn., Germany; 53 49n 10 22e
18 Oldham, co. bor., Lancs., Eng.; cottons, coal, weaving machinery, iron; p. 140,314; 53 33n 2 08w
104 Olean, tn., New York, U.S.A.; oil refineries, natural gas, leather; p. 21,790; 42 5n 78 30w
59 Olekminsk, tn., U.S.S.R.; 60 15n 120 05e
39 Olgod, tn., Denmark; 55 50n 8 35e
48 Olhao, tn., Portugal; 37 04n 7 49w
85 Olifantsfontein, tn., O.F.S., S. Africa; 28 52s 25 08e
83 Olifants Mts., C. of Good Hope, S. Africa; 32 45s 19 0e
83 Olifants R., Transvaal, S. Africa; 24 0s 30 30e
42 Olita, tn., Lithuania; 54 23n 24 0e
113 Oliveira, tn., Brazil, 21 15s 45 10w
48 Olivenza, tn., Spain; 38 40n 7 07w
113 Ollague, tn., Chile; 21 40s 68 15w
16 Ollerton, par., Notts, Eng.; p. 676; 53 12n 1 02w
46 Olmütz. See Olomouc.
16 Olney, par., Bucks, Eng.; boots, shoes, lace; p. 2,651; 52 10n 0 42w
46 Olomouc, tn., Czechoslovakia; cath., palace; brewing, distilling, milling; p. 65,989; 49 48n 17 15e
35 Oloron, tn., France; cath.; 43 11n 0 38w
49 Olot, tn., Spain; cotton, cloth; 42 10n 2 30e
41 Olte, tn., Germany; 51 2n 17 20e
45 Olten, tn., Switzerland; p. 13,625; 47 22n 7 53e
52 Oltenitsa, tn., Rumania; p. 10,395; 44 6n 26 41e
62 Olti, tn., Turkey; 40 32n 42 12e
53 Olympia, ruins, Greece; 37 40n 21 37e
106 Olympia, tn., Wash., U.S.A.; machinery, farm produce, and timber; p. 11,733; 47 0n 122 53w
106 Olympic Mts., Wash., U.S.A.; 48 0n 124 0w
53 Olympus Mt., height 9,744 ft., Greece; 40 7n 22 21e
31 Omagh, urb. dist., Tyrone, N. Ireland; corn, tanning; p. 5,124; 54 36n 7 19w
107 Omaha, Neb., U.S.A.; river port; smelting, refining; meat packing; p. 214,006; 41 15n 96 0w
61 Oman, State, Arabia; a. 82,000 sq. m.; under Brit. protection; dates, cereals; pearls; cap. Mascat; p. 500,000 (est.); 23 30n 57 0e
61 Oman, G. of, Indian Oc.; 24 30n 58 0e
81 Omdurman, tn., Anglo-Egypt. Sudan; on R. Nile; trade in ivory, ostrich feathers, gum arabic, cattle and camels; battle site (1898), old Dervish cap.; p. 102,983; 15 40n 32 40e
109 Ometepec, tn., Mexico; 16 20n 98 32w
58 Omsk, tn., U.S.S.R., Asia; riv. port, caravan centre; exp. dairy produce; p. 227,000; 55 0n 73 38e
49 Onda, tn., Spain; 39 58n 0 15w
56 Onega, spt., White Sea, Russia; saw-mills and fisheries; 64 2n 38 23e
56 Onega, L., Russia; a. 3,765 sq. m.; connection with Volga R. by canal; length 140 m., width 45 m.; 61 30n 35 30e
56 Onega R., Russia; length 240 m.; 63 0n 39 30e
126 Onehunga, bor., N.I. New Zealand; p. 11,120; 36 56s 174 49e
104 Oneida, tn., N.Y., U.S.A.; p. 10,558; 43 2n 75 35w
104 Oneonta, tn., N.Y., U.S.A.; p. 12,536; 42 27n 75 4w
123 Ongerup, tn., W. Australia; 33 58s 118 30e
68 Ongole, tn., Madras, India; 15 30n 80 2e
88 Onitsha, tn., Nigeria; 6 10n 6 48e
124 Onslow, tn., W. Australia; 21 38s 114 58e
92 Ontario (Prov.), Canada; a. 412,582 sq. m.; chief rivers, St. Lawrence, Ottawa; lakes, Nipissing, Simcoe, Nipigon; hydro-electric power; wheat and other grains; dairying; forests; gold, silver, copper, lead, nickel, petroleum; farm implements, railway rolling stock; cap. Toronto; p. 3,431,683; 42 0n to 57 0n 74 0w to 95 0w
91 Ontario, L., N. America; a. 7,540, depth 740 ft.; smallest of the five great lakes; 43 30n 77 30w
120 Oodnadatta, tn., S. Australia; 27 30s 135 29e
83 Ookiep, tn.; C. of Good Hope, S. Africa; copper ores; 29 35s 17 47e
38 Oosterhout, tn., Neth.; p. 15,107; 51 31n 4 52e
68 Ootacamund, tn., Mad., India; sanatorium; p. 19,500; 11 30n 76 42e
46 Opava, tn., Cz.-slov.; formerly Troppau; textiles, machinery, sugar; p. 36,083; 49 55n 17 55e
103 Opelousas, tn., La., U.S.A.; p. 6, 299; 30 30n 92 2w
118 Ophthalmia Ra., W. Australia; 23 26s 119 45e
55 Opland, co., Norway; a. 9,608 sq. m.; p. 137,575; 61 15n 9 00e
56 Opochka, tn., Russia; 56 48n 28 48e
43 Opochna, tn., Poland; 51 21n 20 17e
48 Oporto, spt., Portugal; cath., palace; port wine trade, sardines, cottons, woollens, silks, distilling, sugar, fruit; p. 215,625; 41 8n 8 18w
126 Opotiki, bor., N.I., New Zealand; p. 1,255; 38 2s 117 18e
41 Oppeln, tn., Germany; leather, minerals; p. 41,507; 50 40n 18 0e
126 Opunake, (tn. dist.) N.I. New Zealand; p. 980; 39 27s 173 52e

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52 Oradia, tn. (formerly Nagyvarad), Rumania; p. 82,355; 47 2n 21 57e
46 Orahovica, tn., Yugoslavia; 45 33n 17 55e
10 Oran, spt., Algeria; cath., mosque; wines, wool, cereals, cattle, sheep, and hides; Fr. naval and military stn.; p. 163,743; 35 40n 0 50w
113 Oran, tn., Argentina; 23 10s, 64 25w
121 Orange, tn., N.S.W. Australia; gold, copper and silver; p. 8,590; 33 14s 149 6e
35 Orange, tn., France; silks, sugar, fruit; 44 7n 4 50e
83 Orange, R., C. of Good Hope, S. Afr.; tribs., Caledon and Vaal, length 1,300 m.; 28 50s 18 30e
83 Orange Free State, prov., Union of S. Afr.; a. 49,647 sq. m.; undulating surface with Drakensberge to N.E.; chief rivers, Orange, Vaal and Caledon; pastures, sheep, cattle and horses; wheat, maize, fruit and tobacco; coal, diamonds; cap. Bloemfontein; p. 766,850; 26 35 to 30 45s 24 20 to 29 50e
103 Orangeburg, tn., S.C., U.S.A.; p. 8,776; 33 26n 80 52w
96 Orangeville, tn., Ont., Can.; p. 2,614; 43 55n 80 8w
110 Oranjewalk, tn., Br. Hond.; p. 1,200; 17 20n 88 45w
41 Oranienburg, tn., Germany; p. 14,710; 52 45n 13 15e
32 Oranmore, par., Galway, I.F.S.; p. 2,264; 53 16n 8 56w
54 Oravais, tn., Finland; 63 20n 22 20e
112 Oraya, tn., Peru; p. 3,000; 11 30s 75 50w
50 Orbetello, tn., Italy; 42 45n 11 0e
121 Orbost, tn., Vic., Australia; 37 42s 148 55e
57 Ordjonikidze, tn., Russia; p. 113,200; 43 2n 44 45e
72 Ordos, dist., China; mean alt., 3,300 ft.; 39 30n 108 30e
62 Ordu, tn., Turkey; 40 57n 37 56e
62 Ordubad, tn., Azer., Russia; 37 55n 46 5e
55 Örebro, tn., Sweden; timber, machinery and matches; p. 37,523; 59 20n 15 20e
55 Örebro, co., Sweden; a. 3,561 sq. m.; p. 219,236; 59 0n 15 0e
106 Oregon, St., U.S.A.; a. 96,699 sq. m.; princ. mts., Cascade; princ. rivers, Columbia and tribs., numerous lakes; forests, wheat, oats, sugar-beet, fruits, cattle, wool; gold, silver, copper, coal; lumbering, fish canning, flour mills, meat packing; cap. Salem; p. 1,065,000; 42 0 to 46 10n 117 0 to 124 35w
106 Oregon City, Ore., U.S.A.; p. 5,761; 45 0n 121 30w
55 Öregrund, tn., Sweden; 60 20n 18 20e
57 Orel, tn., Russia; univ.; candles, oil, flour; p. 91,300; 52 59n 36 0e
48 Orellana, tn., Spain; 39 4n 5 29w
57 Orenburg, tn., Russia; saw-mills; textiles, metal goods, sugar; p. 144,600; 51 48n 55 10e
48 Orense, tn., Spain; flour, leather, and iron; p. 21,581; 42 18n 7 52w
16 Orford, vil., Suff., Eng.; oysters; p. 818; 52 6n 1 32e
16 Orford Ness, Suff., Eng.; 52 6n 1 35e
52 Orhanie, tn., Bulgaria; p. 4,965; 42 56n 23 48e
52 Orichovitza, tn., Bulgaria; p. 8,674; 43 10n 25 45e
86 Origstad, tn., Trans., S. Afr.; 24 40s 31 25e
49 Orihuela, tn., Spain; leather; silks, textiles; wine, cereals, and fruit; p. 37,500; 38 7n 0 53w
96 Orillia, tn., Ont., Can.; p. 8,183; 44 35n 79 27w
112 Orinoco, R., Venezuela; rises in Sierra Parima and flows to Atlantic Oc.; princ. tribs., Meta Guaviare, Apure, and Caura, length 1,600 m.; 8 00n 66 0w
67 Orissa, prov., India; a. 32,000 sq. m.; agricultural with few towns. Great Hindu temple of Juggernaut at Puri; p. 8,500,000 (est.); 21 17n 85 30e
51 Orisiano, spt., Italy; 39 54n 8 36e
55 Orivesi L., Finland; 62 20n 29 40e
109 Orizaba, Mexico; cotton mills; coffee, cotton, sugar, and maize; p. 50,000; 18 46n 97 15w
109 Orizaba, mt., Mexico; alt. 18,204 ft.; 19 1n 97 25w
22 Orkney Is., co., Scotland; a. 376 sq. m.; separated from Scotland by Pentland Firth; consisting of 29 inhabited islands and 39 smaller islands; principal islands are Pomona (Mainland), Hoy, N. and S. Ronaldshay Rousay, Sanday, Westray; numerous antiquarian remains and stone circles; farming, fishing; cap. Kirkwall; p. 22,075; 59 0n 3 00w
34 Orléans, tn., France; cath.; house and statue of Joan of Arc (Maid of Orleans); cottons, woollens, wines, live-stock; p. 71,606; 47 53n 1 52e
34 Orléans, old prov., France; 47 50n 1 50e
10 Orleansville, tn., Algeria; p. 18,487; 36 6n 1 19e
16 Ormesby, 2 pars., Norfolk, England; p. 1,449; 52 40n 1 42e
18 Ormes Hd., Gt., Caer., Wales; 53 21n 3 51w
18 Ormskirk, urb. dist., Lancs, Eng.; centre of potato growing dist., agricultural research centre; cord, rope, iron, brass; p. 17,121; 53 34n 2 53w
54 Örnsköldsvik, tn., Sweden; p. 5,032; 63 17n 18 50e
34 Orne, dept., France; a. 2,371 sq. m.; mineral springs, cereals, cider, linen, iron; p. 273,717; 48 38n 0 15e
48 Oropesa, tn., Spain; 40 6n 0 07e
46 Orosháza, com., Hungary; p. 24,941; 46 34n 20 42e
56 Orsha, tn., Russia; on R. Dnieper; tanneries and iron-works; port at head of navigation; 54 40n 30 15e
57 Orsk, tn., Russia; p. 14,250; 51 14n 58 33e
52 Orsova, tn., Rumania; on R. Danube, above the "Iron Gate"; p. 8,528; 44 42n 22 30e
54 Orskog, tn., Norway; 62 30n 6 50e
53 Orlakeui, tn., Bulgaria; 41 31n 26 8e
50 Orie, tn., Italy; 42 23n 12 24e
41 Oriesburg, tn., Germany; p. 10,357; 53 34n 21 0e
35 Orthez, tn., France; hams, chocolate, leather; 43 31n 0 45w
50 Ortona, tn., Italy; cath.; wines; 42 20n 14 21e
54 Örtrask, tn., Sweden; 64 10n 18 55e
111 Oruba, I., W. Indies; 12 30n 70 0w
113 Oruro, tn., Bolivia; alt. 12,160 ft.; gold, silver, copper and tin; p. 40,000; 17 50s 67 10w
50 Orvieto, tn., Italy; cath.; wines; 42 42n 12 4e
16 Orwell, R., Suff., Eng.; 52 0n 1 15e
75 Osaka, spt., Japan; cottons, iron, glass, sugar; arsenal, shipbuilding; p. 2,989,866; 34 41n 135 28e
40 Oschersleben, tn., Germany; sugar, bricks, farm impl., manures; p. 13,545; 52 2n 11 20e
42 Ösel I., Estonia; 58 18n 22 30e
96 Oshawa, tn., Ont., Can.; motors; p. 23,439; 43 54n 78 52w
102 Oshkosh, tn., Wis., U.S.A.; meat-packing, farming, flour, motors; p. 40,108; 44 3n 88 33w

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46 Osijek (formerly Essegg), tn., Yugoslavia; cottons, silks, beet-sugar, glass; p. 40,330; 45 34n 18 41e
102 Oskaloosa, tn., Iowa, U.S.A.; p. 10,123; 41 14n 92 40w
55 Oskarshamn, tn., Sweden; p. 8,674; 57 15n 16 35e
55 Oslo (Christiania), spt. and cap., Norway; univ., cath., harbour; woollens, cottons, condensed milk, paper; exp.—timber, fish, matches; p. 249,688; 59 45n 10 20e
68 Osmanabad, tn., Hyd., India; 18 3n 76 6e
62 Osmanie, tn., Turkey; 37 6n 36 29e
62 Osmanlar, tn., Turkey; 39 40n 27 40e
52 Osman Pazar, tn., Bulgaria; 43 6n 26 27e
16 Osmaston, par., Derby, Eng.; p. 227; 52 59n 1 45w
40 Osnabrück, tn., Germany; machinery, cigars, nails; p. 94,277; 52 17n 8 03e
38 Ostende, spt., Belgium; seaside resort; fisheries; p. 43,954; 15 13n 3 00e
55 Östergötland, co., Sweden; a. 4,265 sq. m.; p. 369,995; 58 0n 16 0e
41 Osterode, tn., Germany; machinery, farming; p. 16,482; 53 40n 19 38e
54 Östersund, tn., Sweden; p. 14,138; 63 15n 14 50e
55 Östfold, co., Norway; a. 1,613 sq. m.; p. 186,786; 59 20n 11 20e
50 Ostia, tn., Italy; cath., formerly an important harb.; 41 42n 12 18e
43 Ostrog, tn., Poland; 50 20n 25 29e
43 Ostrolenka, tn., Poland; 53 4n 21 39e
43 Ostrov, tn., Poland; 52 45n 21 53e
56 Ostrov, tn., Russia; 57 21n 28 18e
43 Ostrovets, tn., Poland; 52 57n 21 22e
102 Oswego, tn., N.Y., U.S.A.; port on L. Ontario; water power; hosiery, matches, engines, textiles; p. 22,652; 43 25n 76 37w
18 Oswestry, mun. bor., Salop, Eng.; machinery, malting, bricks; p. 9,754; 52 51n 3 04w
127 Otago, prov. dist., S.I., New Zealand; a. 25,312 sq. m. (including Southland); mountainous and forests in W.; farming land in E.; farming, sheep, fruit; gold; cap. Dunedin; p. 214,543 (including Southland); 44 18 to 46 40s 166 25 to 171 0e
127 Otago Harb., S.I., New Zealand; 45 48s 170 40e
126 Otaki, bor., N.I., N.Z.; p. 1,590; 40 42s 175 7e
75 Otaru, port, Japan; herring fisheries; p. 155,387; 43 15n 140 45e
82 Otavi, tn., S.W. Afr.; riy. junc. for copper-mining dist.; 19 45s 17 20e
53 Othrys Mts., Greece; 39 0n 22 30e
127 Otira Gorge, S.I., New Zealand; 42 51s 171 35e
21 Otley, urb. dist., W. Riding, Eng.; printing machinery, woollens, worsteds; p. 11,020; 53 54s 1 41w
47 Otočac, tn., Yugoslavia; 44 54n 15 14e
126 Otorohanga, tn., dist., N.I., New Zealand; p. 625; 38 12s 175 14e
51 Otranto, spt., Italy; riy. term., cath., cas., sub., cable stn.; 40 8n 18 28e
51 Otranto, C., Italy; 40 7n 18 29e
53 Otranto, Str. of, Italy; 40 30n 19 0e
73 Otsu, tn., Japan; p. 34,380; 34 59n 135 53e
97 Ottawa, tn., Ont., Can.; cap. of Dominion of Canada; univ., cathe., parliament buildings; hydro-electric power, lumbering, flour, leather, matches, machinery, ironware; p. 126,872; 45 26n 75 41w
102 Ottawa, tn., Ill., U.S.A.; grain, glass; p. 13,094; 41 23n 89 0w
107 Ottawa, tn., Kan., U.S.A.; p. 9,553; 38 40n 95 15w
97 Ottawa R., chief trib. of St. Lawrence, forming bdy. between Ontario and Quebec; length 625 m.; 45 40n 74 40w
20 Otterburn, par., Northumb., Eng.; celebrated in ballads of *Chevy Chase* and *The Battle of Otterburn*; coal, iron; p. 350; 55 13n 2 10w
19 Otter R., Dev., Eng.; 50 42n 3 17w
19 Ottery St. Mary, urb. dist., Dev., Eng.; silk, rope, brushes; p. 3,713; 50 45n 3 16w
83 Ottoshoop, tn., Trans., S. Afr.; 25 50s 26 0e
102 Ottumwa, tn., Iowa, U.S.A.; centre of coal region, and surrounded by rich farming dist.; iron and steel work, meat packing; p. 28,075; 41 0n 92 18w
45 Ouchy, tn., Switzerland; on N. shore of L. Geneva; 46 1n 6 37e
38 Oudenarde. See Audenaarde.
67 Oudh, dist., U.P., India; p. 12,794,979; 26 30n 81 30e
83 Oudtshoorn, tn., C. of Good Hope, S. Afr.; ostrich farms, tobacco, fruit; p. 5,599 (Eur.); 33 35s 22 20e
30 Oughterard, Galway, I.F.S.; marble quarries, farming, fishing; p. 601; 53 27n 9 20w
54 Oulu, co., Finland, 65 28n 27 0e
55 Oulu, tn., spt., Finland; shipbuilding, salmon, timber, pitch and tar; p. 24,200; 65 0n 25 32e
54 Oulu L., Finland; 64 20n 27 30e
16 Oundle, urb. dist., Northants, Eng.; brewing; p. 2,001; 52 30n 0 28w
48 Ourem, tn., Portugal; 39 40n 8 36w
113 Ouro Preto, tn., Brazil; iron, manganese; 20 25s 43 40w
16 Ouse, Lit., R., Eng.; 52 25n 0 30e
16 Ouse, R., Norf., Eng.; 52 30n 0 23e
21 Ouse, R., Yorks, Eng.; 53 45n 1 00e
127 Outram, tn., dist., S.I., N.Z.; p. 350; 45 51s 170 15e
114 Ovalle, tn., Chile; p. 11,795; 30 33s 72 10w
82 Ovambo, Bantu tribe, S.W. Afr.; 19 15s 17 0e
82 Ovamboland, native reserve, S.W. Afr.; 17 35s 17 0e
48 Ovar, tn., Portugal; sardines, wine; 40 51n 8 38w
38 Over Flakkee I., Netherlands; 51 44n 4 10e
24 Overscaig, Suther., Scot.; 58 10n 4 41w
38 Overyssel, prov., Netherlands; a. 1,295 sq. m.; dairying, fishing, cottons; cap. Zwolle; p. 520,788; 52 25n 6 30e
48 Oviedo, tn., Spain; univ.; textiles, leather, matches; p. 73,453; 43 23n 5 50w
102 Owensboro, tn., Ky., U.S.A.; petroleum, tobacco, farming, stock-raising; p. 22,765; 37 46n 87 15w
96 Owen Sound, tn., Ont., Can.; shipbuilding, grain, shipping; p. 12,539; 44 35n 80 40w
122 Owen Stanley Ra., Papua, New Guinea; highest pk., Mt. Victoria, 13,121 ft.; 9 30s 148 0e
102 Owosso, tn., Mich., U.S.A.; p. 14,495; 42 57n 84 5w
55 Oxelösund, tn., Sweden; 58 45n 17 10e
17 Oxford, co., England; a. 785 sq. m.; surface level, S. wooded; well watered; cereals; paper, gloves, blankets, agric. implements, motor-cars; p. 209,599; 51 30 to 52 20n 0 52 to 1 40w

MAP

17 Oxford, co. bor., Ox., Eng.; on R. Cherwell; university comprising 21 colleges and 1 hall; women's colleges —Lady Margaret, Somerville, St. Hugh's, St. Hilda's; Bodleian Library; motor-cars, printing; p. 80,540; 51 45N 1 16W
95 Oxford, tn., N.S., Can.; p. 1,133; 45 41N 63 44W
27 Oxnam, par., Rox., Scot.; p. 550; 55 28N 2 28W
58 Oxus, R. See Amu R.
19 Oxwich B., Glam., Wales; 51 34N 4 07W
24 Oykell Bridge, Ross and Crom., Scot.; 57 58N 4 44W
25 Oyne, par., Aber., Scot.; p. 630; 57 19N 2 31W
88 Oyo, tn., Nigeria; 7 50N 3 55E
105 Oyster Bay, tn., N.Y., U.S.A.; fashionable resort on Long I.; 40 53N 73 30W
121 Oyster Bay, Tas., Australia; 42 12S 148 13E
19 Oystermouth, vil., Glamorgan, Wales; 51 35N 4 00W
107 Ozark, Mts., U.S.A.; plateau; 37 0N 94 0W
51 Ozieri, tn., Italy; 40 38N 9 01E

87 Paarde Berg, O.F.S., S. Afr.; battle, Boer War; 28 57S 25 20E
83 Paarl, tn., C. of Good Hope, S. Afr.; wines, fruit and tobacco; p. 7,809 (Eur.); 33 45S 18 55E
43 Pabianice, tn., Poland; textiles, farming implements and paper; 51 37N 19 20E
69 Pabna, tn., Bengal, India; carpets; 24 0N 89 20E
112 Pacasmayo, spt., Peru; p. 4,000; 7 30S 79 30W
109 Pachuca, tn., Mexico; silver; p. 40,000; 20 5N 98 20W
116 Pacific Ocean; a. 68,000,000 sq. m.; largest ocean in the world; extends from W. coast of America to E. coasts of Asia and Australia and to the Southern Ocean in the S.; enters Arctic Oc., via Baring Str., greatest length N. to S. 8,000 m., breadth 10,000 m., mean depth 12,560 ft., greatest depth 32,089 ft., off Philippine Is.
70 Padang, spt., Sum., Dut. E. Ind.; coffee, spices, rubber, tobacco and copra; p. 51,976; 1 00S 100 25E
54 Padasjärvi, tn., Finland; 65 20N 26 56E
17 Paddington, met. bor., London, England; p. 144,950; see London.
40 Paderborn, tn., Germany; glass, cattle, grain; p. 33,719; 51 43N 8 42E
114 Padilla, tn., Bolivia; 19 15S 64 25W
19 Padstow, urb. dist., Corn., Eng.; harbour, fishing; p. 1,929; 50 33N 4 56W
50 Padua, tn., Italy; cath., streets of arcades and ancient bridges; machinery, chemicals, silks, distilleries and cloth; p. 125,500; 45 23N 11 52E
103 Paducah, tn., Ky., U.S.A.; sawmills, rly. works; p. 33,541; 37 0N 88 40W
126 Paeroa, bor., N.I., New Zealand; p. 1,890; 38 24S 175 52E
126 Pahiatua, bor., N.I., New Zealand; p. 1,520; 40 26S 175 47E
63 Pahlewi (Enzeli), spt., Persia; on S. shore Caspian S.; rice, hides and skins and fruit; 37 28N 49 27E
42 Paide, tn., Estonia; 58 15N 16 40E
19 Paignton, urb. dist., Dev., Eng.; watering-pl.; farming, cider; p. 18,405; 50 27N 3 35W
27 Paisley, tn., Ren., Scot.; linen, cotton, dyeing, chemicals, machinery; p. 86,441; 55 51N 4 26W
70 Pajakombo, tn., Sum., Dut. E. Ind.; 0 12S 100 32E
54 Pajala, tn., Sweden; 67 15N 23 20E
72 Pakhoi, spt., China; treaty port; indigo and groundnuts; p. 34,600; 21 30N 109 5E
70 Pak-lai, tn., Siam; 18 10N 101 15E
70 Paknam, tn., Siam; 13 30N 100 30E
69 Pakokku, tn., Burma, India; sugar, rice, tobacco; oilfields, teak; 21 27N 95 5E
46 Paks, com., Hungary; p. 11,817; 46 40N 18 54E
88 Palaba, tn., Fr. W. Afr.; 9 40N 10 20W
68 Palamcottah, tn., Mad., India; p. 46,643; 8 40N 77 47E
47 Palanka, tn., Yugoslavia; 45 19N 19 20E
66 Palanpur, tn., Bom., India; 24 14N 72 29E
71 Palapo, spt., Celebes, Dutch E. Indies; 3 00S 120 5E
83 Palapye, tn., Bech. Prot., S. Afr.; 22 30S 27 36E
40 Palatinate (detached part of Bavaria), Germany; a. 5,849 sq. m.; p. 1,561,017; 49 30N 7 50E
69 Palaw, tn., Burma, India; 12 55N 98 45E
71 Palawan I., Philippine Is.; a. 4,500 sq. m.; coffee, resin, timber; p. 74,000; 9 30N 119 0E
88 Palawe, tn., Togo, Fr. W. Africa; 7 38N 0 50E
43 Palawy, tn., Poland; 51 25N 21 58E
42 Paldiski (formerly Baltic Port), spt., Estonia; 59 21N 24 4E
71 Palelee, tn., Celebes, Dut. E. Ind.; 1 00N 121 50E
70 Palembang, tn., Sum., Dut. E. Ind.; cotton, rubber, coffee; p. 109,069; 3 00S 104 40E
48 Palencia, tn., Spain; ironfounding and weaving; p. 22,936; 42 2N 4 32W
51 Palermo, spt., Italy; cath., univ.; machinery, chemicals; wines, fruit, tobacco; 38 7N 13 20E
62 Palestine, Br. Mandate, Asia; a. 10,000 sq. m. (est.); the scene of great events in sacred history, Pal. is a land of pilgrimage; contains the Dead Sea, S. of Galilee and R. Jordan; chief peak, Jebel Jermuk 3,834 ft.; captured by British in the Great War; many Jewish settlements; products, olives, wine, fruits, cedar; sheep, goats; cap. Jerusalem; p. 1,035,000; 29 30 to 32 20N 34 0 to 35 35E
107 Palestine, tn., Tex., U.S.A.; p. 11,445; 31 36N 95 37W
68 Palghat, tn., Mad., India; p. 45,487; 10 45N 76 42E
66 Pali, tn., Raj., India; 25 47N 73 25E
68 Palk Str., India; 10 5N 80 0E
50 Pallanza, tn., Italy; 45 56N 8 37E
32 Pallaskenry, vil., Limerick, I.F.S.; p. 201; 52 38N 8 53W
112 Palma, tn., Brazil; 12 40S 47 50W
49 Palma, spt.; cap., Balearic Is.; Spain; cath., palaces; wine, fruit, silk; p. 88,262; 39 32N 2 42E
76 Palma I., Span., Canary Is.; a. 280 sq. m.; wines, silk, fruits; cap., Santa Cruz; p. 53,000; 28 50N 18 0W
105 Palmer, tn., Mass., U.S.A.; p. 9,577; 35 45N 120 45W
96 Palmerston, tn.; Ont., Can.; p. 1,543; 43 50N 80 54W
127 Palmerston, bor., S.I. New Zealand; p. 800; 45 30S 170 41E
126 Palmerston I., Br., Cook Is., Pac. Oc.; 18 2S 163 7W

MAP

126 Palmerston N., cy., N.I., New Zealand; dairying, sheep; rly. junc.; p. 20,150; 40 19S 175 38E
51 Palmi, tn., Italy; p. 13,346; 38 22N 15 52E
116 Palmyra, I., Br., Pacific Ocean; 6 00N 162 10W
62 Palmyra. See Tadmor.
67 Palmyras Pt., Orissa, India; 20 47N 87 0E
71 Palu, tn., Celebes, Dut. E. Ind.; 0 50S 119 50E
121 Pambula, tn., N.S.W., Australia; 36 58S 149 50E
58 Pamirs, Mts., U.S.S.R.; "Roof of the World"; plateau region in Cent. Asia, U.S.S.R.; peaks 25,000 ft.; 38 0N 70 30E
113 Pampas, Argentina; vast grassy plains stretching from Rio Negro in S. to Gran Chaco in N., and from Andes to Atlantic, rich pastures in E., sheep, cattle; W. mostly barren; 35 0S 72 59W
49 Pamplona, tn., Spain; cath., fortress; textiles, leather and paper; p. 42,259; 42 45N 1 39W
52 Panaguirishte, tn., Bulgaria; p. 9,575; 42 30N 24 12E
110 Panama, spt., cap. Panama; cath., harb., at S. entrance to P. Canal; p. 82,000; 8 59N 79 32W
110 Panama, Canal Zone, U.S.A.; strip of land extending 5 m. on either side of Panama Canal; p. 9 00N 80 0W
110 Panama, rep., Cent. Amer.; a. 32,380 sq. m.; mountainous; cattle raising, farming and pearls; bananas; cocoa, coconuts, rubber, sugar and coffee; cap. Panama; p. 467,459; 5 00N 80 0W
110 Panama Canal, Panama; opened Aug. 1914; length 41¼ m., ranging in width from 300 to 1,000 ft.; average time of transit through canal 7 to 8 hrs.; begins at Cristobal on Atlantic, thence to Gatun locks, through Gatun lake, Culebra cut, Pedro Miguel locks, Miraflores locks, ending at Bilbao on Pacific; open to world's shipping; 9 00N 79 33W
110 Panama, G. of, Panama; 8 00N 79 0W
71 Panay, I., Philippine Is.; a. 4,448 sq. m.; cotton, rice, sugar and coffee; p. 800,000; 11 0N 122 30E
52 Panchin, tn., Rumania; p. 6,910; 45 54N 27 3E
52 Pandaklu, tn., Bulgaria; 42 19N 26 28E
62 Panderma, tn., Turkey; 40 15N 27 59E
115 Pando, tn., Uruguay; p. 3,000; 34 40S 55 55W
68 Pandharpur, tn., temple, pilgrimage; Bom., India; p. 25,210; 17 35N 75 23E
81 Pangani, spt., Tang. Terr., Africa; copra, sisal hemp, maize; 5 23S 39 0E
67 Panipat, tn., Pun., India; silver and brass ornaments; cotton goods and blankets; p. 27,343; 29 20N 77 6E
89 Panja, tn., Mozambique; 20 15S 34 2E
68 Panjim. See Novo Goa.
68 Panruti, tn., Mad., India; 11 53N 79 30E
19 Panteg, par., Mon., Eng.; coal, iron, stone, steel, tin; p. 11,300; 51 40N 3 00W
51 Pantellaria I. (volcanic), Italy; figs and raisins; 36 47N 12 0E
109 Panuco, R., Mexico; 22 2N 98 45W
74 Pao-ting, tn., China; 39 0N 115 30E
74 Paotow, tn., China; 40 45N 110 0E
74 Paoying, tn., China; 33 7N 119 23E
46 Papa, tn., Hungary; p. 21,352; 47 20N 17 28E
109 Papantla, tn., Mexico; p. 10,150; 20 29N 97 27W
69 Papao, tn., Siam; 19 25N 99 25E
62 Paphos, ruins, Cyprus; p. 4,117; 34 40N 32 30E
114 Paposo, spt., Chile; 25 2S 70 30W
122 Papua, terr. of, New Guinea; a. 90,540 sq. m.; S.E. portion New Guinea d'Entrecasteaux Is., and Louisiade Arch., are included; gold, copra, rubber and timber; cap. Port. Moresby; p. 276,229 (est.); 9 30S 149 0E
112 Pará, st., Brazil; a. 443,789; well wooded and watered; rubber, fruits, cacao, and brazil nuts; cap. Pará; p. 1,432,401 (est.); 4 00S 52 0W
112 Pará (Belem), spt., Brazil; cath., bishop's pal., arsenal and mus.; coaling stn., rubber, rice, sugar; p. 279,000; 1 10S 48 15W
112 Pará, R., Brazil; 0 20S 47 30W
115 Paracatu, tn., Brazil; sugar; 17 8S 47 3W
47 Parachin, tn., Yugoslavia; 43 51N 21 27E
106 Paradise Valley, tn., Nev., U.S.A.; 41 30N 117 25W
113 Paraguay, rep., S. Amer.; a. 61,647 sq. m.; a further area of 100,000 sq. m. (Chaco) disputed with Bolivia; undulating, swamps, forests; rivers, Parraguay, Pilcomayo, Paraná, etc.; fertile; cattle; yerba maté, oranges, sugar, maize, cotton, tobacco, timber; iron, manganese, copper; meat packing, sugar; cap. Asuncion; p. 901,768; 21 0 to 27 30S 54 15 to 61 20W
113 Parahyba R., Brazil; rises in São Paulo and flows to the Atlantic; length 270 m.; 21 30S 40 0W
112 Parahyba, st., Brazil; a. 28,846 sq. m.; cotton, cocoa, sugar, rubber, tobacco; cap. Parahyba; p. 1,322,069 (est.); 7 00S 37 30W
112 Parahyba, tn., Brazil; sugar and cotton; p. 74,000; 7 10S 35 0W
112 Paramaribo, tn., Dutch Guiana; coffee, cocoa, rubber, sugar; cap.; p. 47,000; 6 00N 55 25W
53 Paramythia, tn., Greece; 39 30N 20 30E
113 Paraná, st., Brazil; a. 93,269 sq. m.; forested; yerba maté; cap. Curitiba; p. 974,273 (est.); 24 30S 52 30W
113 Parana, tn., Argentina; p. 36,100; 31 51S 60 30W
113 Paraná, R., Brazil; formed by junc. of Rio Grande and Paranahyba; flows S. to Rio de la Plata; navigable to Braz. frontier near Iguazu Falls; length 2,000 m.; 22 0S 53 0W
113 Paranaguá, tn., spt., Brazil; yerba maté; 25 50S 48 30W
113 Paranahyba, R., Brazil; l. 750 m.; 19 0S 50 30W
68 Parbhani, tn., India; 19 15N 76 55E
40 Parchim, tn., Germany; p. 11,857; 53 26N 11 52E
46 Pardubitz, tn., Czechoslovakia; saw-milling, brewing, distilling; p. 28,841; 50 3N 15 47E
112 Parentins, tn. (V. Vella), Brazil; on R. Amazon; 2 50S 57 10W
50 Parenzo, spt., Italy; cath.; fishing; Roman remains; 45 14N 13 35E
53 Parga, spt., Greece; 39 18N 20 25E
71 Parigi, tn., Celebes, Dut. E. Ind.; 7 40S 108 30E
112 Pariña, C., Peru; 4 30S 82 20W
96 Paris, tn., Ont., Can.; p. 4,137; 43 13N 80 25W
34 Paris, cy., cap. France; on R. Seine, third largest cy. of Europe; chief bldgs., Notre Dame, Louvre, Palais de Justice, Tuileries, Arc de Triomphe, Eiffel Tower,

MAP

985 ft. high; network of canals, rivers, roads and railways; Latin quarter with Sorbonne (univ. 1253); industries, clothes, boots, perfume, watches, fancy articles, instruments, books, flour, cotton-seed oil; p. 2,891,020; 48 52N 2 20E
102 Paris, tn., Ill., U.S.A.; p. 8,781; 39 35N 87 50W
107 Paris, tn., Tex., U.S.A.; cotton, fruit, canned goods; p. 15,649; 33 42N 95 27W
102 Parkersburg, tn., W. Va., U.S.A.; petroleum, oil refining, iron and steel works; p. 29,623; 39 17N 81 32W
121 Parkes, tn., N.S.W., Australia; 33 8S 148 10E
96 Parkhill, tn., Ont., Can.; p. 1,030; 43 11N 81 47W
50 Parma, comm., Italy; cath., univ.; silks, iron goods, Parmesan cheese; p. 71,271; 44 48N 10 21E
112 Parnahyba, port, Brazil; cotton and cattle; p. 15,000; 3 00S 41 50W
112 Parnahyba, R., Brazil; l. 750 m.; 6 30S 45 0W
53 Parnassus, mt., Greece; alt. 8,068 ft.; 38 37N 22 28E
42 Pärnu, spt., Estonia; watering-place; flax; p. 21,000; 58 23N 24 32E
53 Paros, I., Greece; in the Ægean S.; 37 5N 25 12E
120 Parrakie, tn., S. Australia; 33 17S 140 17E
114 Parral, tn., Chile; p. 9,640; 35 30S 72 41W
108 Parral, tn., Mexico; p. 16,000; 26 50N 105 36W
121 Parramatta, tn., N.S.W., Australia; fruits, oranges; p. 16,760; 33 50S 151 5E
108 Parras, tn., Mexico; 25 28N 102 5W
19 Parret, R., Som., Eng.; 51 10N 3 03W
92 Parry Is., Franklin, Can.; 45 18N 80 15W
96 Parry Sound, tn., Ont., Can.; lumbering; p. 3,512; 45 20N 80 5W
107 Parsons, tn., Kan., U.S.A.; coal, natural gas, machinery; p. 14,903; 37 21N 95 23W
33 Parsonstown. See Birr.
66 Partabgarh, tn., Raj., India; p. 76,539; 25 52N 82 2E
67 Partabpur, Cent. Provs., India; 20 0N 80 51E
51 Partanna, tn., Italy; p. 14,400; 37 44N 12 52E
35 Parthenay, tn., France; 46 38N 0 17W
51 Partinico, tn., Italy; silk; p. 23,900; 38 4N 13 3E
27 Parton, par., Kirk., Scot.; p. 597; 55 1N 4 01W
114 Paruro, tn., Peru; 13 45S 72 0W
87 Parys, tn., O.F.S., S. Afr.; p. 2,813 (Eur.); 26 55S 27 37E
34 Pas de Calais, dept., France; a. 2,606 sq. m.; farming; coal, iron, sugar, distilling, paper, pottery; p. 1,205,191; 50 25N 2 20E
106 Pasadena, tn., Cal., U.S.A.; observatories; fruit canning; p. 76,086; 34 8N 118 10W
63 Pasargada, tn., Persia; 30 16N 53 12E
41 Pasewalk, tn., Germany; p. 11,768; 53 30N 14 0E
33 Passage East, vil., Waterford, I.F.S.; p. 561; 52 14N 6 58W
32 Passage West, urb. dist., spt., Cork, I.F.S.; shipping, fishing; p. 3,024; 51 53N 8 20W
38 Passchendaele, tn., Belgium; important strategic point during the Great War; 50 55N 2 54E
113 Passo Fundo, tn., Brazil; 28 20S 52 15W
112 Pasto, tn., Colombia; p. 40,000; 1 15N 77 25W
113 Patagonia, dist., Argentina; arid plateau; chief rivers —Colorado, Rio Negro and Chubut; sheep, horse and cattle rearing; petroleum; Patagonians becoming extinct; 45 0S 69 0W
66 Patan, tn., Bom., India; swords, silk and cotton goods; p. 27,017; 23 54N 72 14E
67 Patan, tn., Nepal; temples; p. 31,500 (est.); 27 32N 85 17E
67 Pataudi, tn., Punjab, India; 28 25N 76 52E
126 Patea, bor., N.I., New Zealand; p. 1,130; 39 43S 174 27E
21 Pateley Br., tn., W. Riding, Eng.; lead, stone; p. 2,492; 54 5N 1 45W
51 Paterno, tn., Italy; mineral springs, wines; p. 34,000; 37 35N 14 52E
121 Paterson, tn., N.S.W., Australia; 32 38S 151 31E
102 Paterson, N.J., U.S.A.; chief centre of silk manufacture; machinery; p. 138,513; 41 0N 74 20W
66 Patiala, tn., Pun., India; p. 47,531; 30 18N 76 29E
67 Patiala, st., India; a. 5,932 sq. m.; valuable forests; slate and limestone; copper and lead; cotton; cap. Patiala; p. 1,625,520; 30 15N 75 45E
113 Patillos, tn., Chile; 20 45S 70 10W
69 Patkai Hills, Burma, India; 26 30N 95 30E
69 Patna, tn., cap. Bihar and Orissa, India; univ.; rice, indigo, cotton, salt; p. 158,230; 25 30N 85 16E
53 Patras, spt., Greece; currants, wine; p. 61,270; 38 14N 21 45E
21 Patrington, tn., E. Riding, Eng.; p. 1,187; 53 40N 0 00
51 Patti, tn., Italy; cath.; 38 10N 14 57E
108 Patzcuaro, tn., Mexico; p. 8,000; 19 30N 101 36W
35 Pau, tn., France; cas.; health resort; linen, choco late, hams, wine; p. 38,962; 43 20N 0 26W
117 Paumoto Arch. See Tuamotu Arch.
67 Pauri, tn., Centr. Provs., India; 30 8N 78 48E
45 Paverne, tn., Switzerland; 46 49N 6 55E
50 Pavia, tn., Italy; univ.; olives, silk, wine, iron goods, chemicals; p. 50,419; 45 10N 9 10E
57 Pavlograd, tn., Ukraine; 48 31N 35 57E
105 Pawtucket, tn., R.I., U.S.A.; water power; woollen, cotton and silk goods, machinery, chemicals; p. 77,149; 41 53N 71 23W
113 Paysandu, tn., Uruguay; port on R. Uruguay; meat, cattle, sheep, and wool; p. 26,000; 32 10S 57 50W
112 Payta, tn., Peru; p. 4,000; 5 05S 81 0W
105 Peabody, tn., Mass., U.S.A.; leather, machinery; p. 21,069; 42 31N 71 0W
98 Peace, R., Alta., Can.; 1,054 m. long; 56 0N 122 50W
16 Peak, The, Derby, Eng.; hill dist.; noted for limestone scenery; terminates the Pennine Chain, the highest point being Kinder Scout 2,088 ft.; 53 23N 1 50W
121 Peak Hill, tn., N.S.W., Australia; 32 33S 148 42E
125 Peak Hill, tn., W. Australia; 25 31S 118 45E
83 Pearston, tn., C. of Good Hope, S. Afr.; 32 35S 25 6E
112 Pebas, tn., Peru; 3 25S 71 55W
69 Pechaburi, tn., Siam; 13 2N 99 56E
56 Pechora, R., Russia; 66 0N 52 30E
42 Pechori, tn., Estonia; 57 48N 27 36E
46 Pécs, tn., Hungary; formerly Fünfkirchen; cath., univ.; tanning, weaving, paper, majolica; p. 61,801; 46 5N 18 12E

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83 Peddie, tn., C. of Good Hope, S. Afr.; 33 15s 27 13e
110 Pedregal, tn., Panama; 8 27s 82 25w
120 Peebinga, tn., S. Australia; 34 54s 140 55e
27 Peebles, bor., co. tn., Peebles, Scot.; hydro, woollens; p. 5,853; 55 39n 3 11w
27 Peebles, co., Scot; a. 346 sq. m.; hilly, Broad Law 2,734 ft.; sheep, woollens; p. 15,050; 55 40n 3 15w
105 Peekskill, tn., N.Y., U.S.A.; on R. Hudson; ironworks; p. 17,125; 41 15n 73 55w
20 Peel, tn., I. of Man, Eng.; cas., cath. ruins, resort; fisheries; p. 2,476; 54 13n 4 41w
20 Peel Fell, Northumb., Eng.; mt., 1,964 ft.; 55 17n 2 35w
127 Pegasus B., S.I., New Zealand; 40 m. long; 43 20s 173 0e
69 Pegu, tn., Burma, India; pagoda 320 ft. high, temple; rice; p. 19,000; 17 22n 96 32e
69 Pegu Yoma (mts.), Burma, India; 19 0n 96 0e
17 Pegwell B., Kent, Eng.; resort; 51 19n 1 22e
80 Peho, tn., Angola; 11 55s 20 0e
74 Peiping. See Peking.
42 Peipus, L., Estonia; between Est. and Rus.; southern half known as Pskov L.; 70 m. long; 58 30n 27 30e
102 Pekin, tn., Ill., U.S.A.; p. 16,129; 40 32n 89 40w
74 Peking (Peiping), China; former cap. of China; two cities bounded by walls; the inner Manchu cy. to N. contains the Purple or Forbidden Cy., and palaces of former emperors; outer or Chinese cy. is commercial Peking, containing Temple of Heaven; p. 811,138; 1,297,718 (with suburbs); 39 55n 116 30e
111 Pelée, Mt., Martinique; vol.; 14 40n 61 0w
53 Peloponnesus. See Morea.
54 Pelkosenniemi, tn., Finland; 67 9n 27 32e
83 Pella, tn., C. of Good Hope, S. Afr.; 29 3s 19 10e
61 Pella, vil., Trans-Jord.; 32 29n 35 37e
54 Pello, tn., Finland; 66 50n 24 10e
98 Pelly Mts., Yukon, Can.; 61 30n 132 0w
98 Pelly, R., Yukon, Can.; 62 0n 133 0w
113 Pelotas, tn., Brazil; p. 60,000; 31 30s 52 25w
81 Pemba, I., Zanzibar Prot.; a. 380 sq. m.; cloves, coconuts; p. 87,650; 5 10s 39 45e
18 Pembridge, par., Here., Eng.; p. 991; 52 13n 2 52w
97 Pembroke, tn., Ont., Can.; p. 9,368; 45 46n 77 4w
19 Pembroke, co., Wales; a. 617 sq. m.; stock-raising; coal, lead, slate; p. 87,179; 51 50n 4 55w
19 Pembroke, mun. bor., Pem., Wales; cas.; naval dockyard; p. 12,008; 51 40n 4 54w
19 Pembroke Dock, Pem., Wales; 51 41n 4 56w
48 Peñafiel, tn., Spain; 41 35n 4 07w
48 Penamacor, tn., Portugal; 40 10n 7 13w
70 Penang I. (with Wellesley Prov.) constitutes one of the Stra. Setts., Malay Pen.; a. 282 sq. m.; coconuts, rice, spices and tin; cap. Georgetown; p. 198,000; 5 15n 100 15e
48 Peñaranda, tn., Spain; 41 42n 3 27w
19 Penarth, urb. dist., Glam., Wales; resort; mineral waters; exports coal, iron; p. 17,710; 51 26n 3 10w
18 Penboyr, par., Carm., Wales; flannel; p. 1,285; 52 0n 4 23w
88 Pendembu, tn., Sa. Leone; 8 07n 10 47w
106 Pendleton, tn., Ore., U.S.A.; p. 6,621; 45 37n 118 44w
112 Penedo, tn., Brazil; p. 12,400; 10 15s 36 30w
17 Penge, urb. dist., Kent, England; p. 27,762; see Greater London
48 Peniche, tn., Portugal; 39 19n 9 22w
27 Penicuik, bor., Midlothian, Scot.; paper, iron, coal, stone; p. 2,750; 55 50n 3 13w
21 Penistone, urb. dist., W. Riding, Eng.; steel; p. 3,264; 53 31n 1 38w
18 Penmaen-mawr, urb. dist., Caer., Wales; watering pl.; quarries; p. 4,021; 53 15n 4 00w
50 Penne, tn., Italy; 42 30n 13 52e
68 Penner, R., Mad., India; 14 55n 77 30e
44 Pennine Alps, Switzerland; chief peaks—Matterhorn (14,776 ft.), Weisshorn (14,804 ft.), Mischabelhörner (14,942 ft.); includes Zermatt; 46 0n 7 30e
20 Pennine Range (or Chain), England; "backbone of England"; main watershed, separating drainage into North and Irish Seas; chief rivers flowing E. from it to North S. are N. and S. Tyne, Wear, Tees, Yorkshire Ouse and tributaries; chief rivers flowing W. from it to Irish S. are Eden, Lune, Ribble, Mersey; extends from borders of England and Scotland to the Peak in Derbyshire with spurs extending into Cheshire and Staffordshire; length 140 m.; highest peak, Cross Fell, 2,892 ft.; 54 15n 2 35w
102 Pennsylvania, st., U.S.A.; a. 45,126 sq. m.; maize, wheat, oats, rye; coal (anthracite, bituminous), natural gas, petroleum, iron ore; textiles, machinery, motor-cars, tobacco; cap. Harrisburg; p. 9,631,350; 39 40 to 42 0n 75 0 to 80 30w
120 Penola, tn., S. Australia; 37 19s 140 49e
27 Penpont, par., Dumf., Scot.; p. 827; 55 14n 3 49w
117 Penrhyn I., Cook Is., Pac. Oc.; Br.; 9 00s 158 2w
20 Penrith, urb. dist., Cumb., Eng.; cas. ruins; farming, woollens, iron; p. 9,065; 54 40n 2 45w
121 Penrith, tn., N.S.W., Australia; 33 45s 150 43e
19 Penryn, mun. bor., Corn., Eng.; paper, ships, slate, coal, fishing; p. 3,414; 50 11n 5 6w
103 Pensacola, spt., Fla., U.S.A.; naval stn.; fish, naval requisites, wool, hides, cotton and lumber mills; p. 31,579; 30 30n 87 15w
120 Penwurst, tn., Vic., Australia; 37 51s 142 16e
123 Pentland, tn., Queens., Australia; 20 38s 145 28e
25 Pentland Firth, Caith., Scot.; 58 40n 3 10w
27 Pentland Hs., Scotland; 55 50n 3 20w
73 Pentwanlintze, tn., Manchuria; 46 40n 127 20e
67 Penza, tn., Russia; grain, sawmills, paper, soap and candles; p. 119,000; 53 15n 44 59e
19 Penzance, mun. bor., Corn., Eng.; good harbour; shipping, tin, copper, iron; p. 11,342; 50 8n 5 31w
102 Peoria, tn., Ill., U.S.A.; river port; farming implements, grain; p. 104,969; 40 40n 89 40w
67 Perekop, tn., Russia; 46 12n 33 34e
113 Pergamino, tn., Argentina; p. 20,560; 33 50s 60 55w
36 Périgueux, tn.; cap. Dordogne; cath.; china, iron, woollens, figs, truffles; noted for pâtés de foie gras; p. 33,988; 45 14n 0 43e
60 Perim I. (Brit.), Red Sea; 12 40n 43 20e
53 Perin Dagh, Mts., Bulgaria; 41 40n 23 30e

MAP

70 Perlis, st., Unf. Malay St.; a. 316 sq. m.; rice, tin, coconuts; p. 49,000; 7 58n 99 30e
56 Perm, tn., Russia; river port on Kama R.; sawmills, machinery, tanneries; p. 170,500; 58 1n 56 20e
112 Pernambuco, st., Brazil; a. 49,560 sq. m.; mountainous interior, coast fertile; sugar, fruits, cotton, coffee; cap. Recife; p. 2,869,814 (est.). 8 00s 34 0w
112 Pernambuco (Recife), spt., Brazil; palaces; cotton, machinery, sugar, rubber and cacao; p. 340,000; 8 00s 35 0w
42 Pernau. See Pärnu.
52 Pernik, tn., Bulgaria; p. 12,236; 42 35n 23 5e
34 Péronne, tn., France; 49 56n 2 59e
35 Perpignan, tn., France; wine, brandy, silk, wool; p. 73,982; 42 42n 2 55e
19 Perranporth, Corn., Eng.; 50 20n 5 08w
63 Persepolis (ruins), Persia; anc. cap. of the sovereigns of Persia; 29 52n 52 55e
63 Persia (Iran.), king., Asia; a. 628,000 sq. m.; tableland 6,000–8,000 ft.; chief range Elburz Mts. (Demavend 18,500 ft.); rivers unimportant; centre barren, N. coast fertile; dates, rice and other cereals; cotton, tobacco, wool; petroleum; carpets; cap. Tehran; p. 12,000,000 (est.); 25 0 to 39 50n 44 18 to 63 30e
60 Persian Gulf, Asia; a. 80,000 sq. m.; inland sea between Arabia and Persia; 30 0n 56 30e
18 Pershore, tn., Worcs., Eng.; abbey ch.; machinery; p. 3,384; 52 7n 2 04w
97 Perth, tn., Ont., Can.; p. 4,099; 44 54n 76 27w
27 Perth, bor., Perth., co., Scot.; till 1437, assassination of James I, cap. of Scotland; nearby is Scone Palace; "Fair City"; linen, wincеys, brewing, rope, dyeing; p. 34,807; 56 23n 3 26w
27 Perth, co., Scot.; a. 2,493 sq. m.; Trossachs and P. of Killiecrankie; noted for beautiful scenery; crossed by Grampians in N. and W.; chief peaks Ben More, Ben Lawers, Schiehallion; chief rivers—Tay, with its tributaries Isla, Garry, Tummel, Sarn; pastoral; fruit; distilling; textiles; p. 120,772; 56 30n 4 09w
125 Perth, tn., cap. W. Australia; 12 m. above the port of Fremantle; univ., observatory, racecourses; p. 204,780; 31 52s 115 50e
105 Perth Amboy, tn., spt., N.J., U.S.A.; shipyards and dry docks; p. 43,516; 40 31n 74 17w
112 Peru, rep., S. America; a. 482,133 sq. m.; traversed N. to S. by the Andes, attaining 22,000 ft.; principal rivers Marañon and Ucayali; in S.E., L. Titicaca (12,450 ft.); sugar, cotton, coffee, wool, hides, timber, cocoa, wheat, tobacco, balata; petroleum, silver, copper; cap. Lima; p. 6,147,000; 2 30 to 18 0s 69 0 to 81 15w
50 Perugia, spt., Italy; univ., observatory; woollens, silks; 43 8n 12 21e
50 Pesaro, spt., Italy; resort; figs, wines, olive oil, silks; p. 34,881; 43 56n 12 53e
50 Pescara, tn., Italy; 42 26n 14 12e
50 Peschiera, tn., Italy; 45 27n 10 42e
66 Peshawar, tn., N.W. Front. Prov., India; on rly. to Khyber, commanding route between Afghan. and India; military stn.; p. 121,966; 34 8n 71 32e
53 Peshtera, tn., Bulgaria; p. 7,079; 42 1n 24 18e
112 Pesqueira, tn., Brazil; 8 30s 36 40w
89 Petauke, tn., N. Rhodesia; 13 59s 31 3e
69 Petchaburi, tn., Siam; 13 0n 99 55e
47 Petchevo, tn., Yugoslavia; 41 40n 23 1e
128 Peter I., Antarctica; 68 0s 91 0w
120 Peterborough, tn., S. Australia; 32 58s 138 56e
96 Peterborough, tn., Ont., Can.; cath.; machinery, flour, lumber, woollens; p. 22,327; 44 20n 78 20w
16 Peterborough, mun. bor., Eng.; cath.; milling, bricks, tiles; p. 43,558; 52 36n 0 14w
16 Peterborough, Soke of, Eng.; administrative co.; in N.E. of Northamptonshire; a. 84 sq. m.; p. 51,845; 52 38n 0 16w
25 Peterhead, burgh, spt., Aber., Scot.; red granite, fisheries; p. 12,545; 57 30n 1 47w
90 Petermann Pk., Greenland; alt. 9,175 ft.; 73 30n 27 0w
104 Petersburg, tn., Va., U.S.A.; tobacco and cotton; p. 28,564; 37 14n 77 28w
17 Petersfield, urb. dist., Hants, Eng.; malting, brewing; p. 4,386; 51 0n 0 56w
109 Peto, tn., Mexico; 20 10n 89 6w
127 Petone, bor., N.I. New Zealand; p. 10,770; 41 10s 174 56e
62 Petra, anc., tn., Transjordan; temples, rock tombs and Roman ruins; 30 20n 35 30e
53 Petrich, tn., Bulgaria; p. 8,380; 41 22n 23 12e
70 Petrin, tn., Siam; 13 35n 101 0e
56 Petrograd. See Leningrad.
43 Petrokov, tn., Poland; 51 23n 19 43e
96 Petrolia, tn., Ont., Can.; sugar-beet, flax; petroleum; p. 2,596; 42 55n 82 5w
56 Petropavlovsk, tn., Ural Area, U.S.S.R.; 60 12n 59 58e
59 Petropavlovsk Kamchatsky, tn., U.S.S.R.; furs; 53 0n 158 20e
115 Petropolis, tn., Brazil; 22 0s 43 20w
52 Petroșény, tn., Rumania; p. 15,377; 45 25n 23 27e
47 Petrovac, tn., Yugoslavia; 44 39n 16 21e
47 Petrovaradin, tn., Yugoslavia; 45 15n 19 53e
57 Petrovsk, tn., Russia; 52 17n 45 27e
56 Petrozavodsk, tn., Russia; port on L. Onega; cap. of Karelia Rep.; 61 50n 34 28e
87 Petrusburg, tn., O.F.S., S. Afr.; 29 5s 25 27e
54 Petsamo, spt., Finland; 69 44n 31 22e
30 Pettigo, tn., Tirconnell, N. Ire.; p. 365; 54 32n 7 50w
73 Petuna, tn., Manchuria; 45 10n 125 0e
17 Petworth, par., Sus., Eng.; building stone; p. 2,435; 50 59n 0 37w
90 Peary Land, Greenland; 83 0n 35 0w
17 Pevensey Cas., Sus., Eng.; 50 50n 0 22e
19 Pewsey, par., Wilts, Eng.; farming, iron, bricks, tiles; p. 1,092; 51 20n 1 45w
40 Pfaffenhofen, tn., Germany; 48 34n 11 30e
45 Pfaffers, tn., Switzerland; 46 58n 9 27e
45 Pfaffikon, vil., Switzerland; 47 24n 8 47e
40 Pforzheim, tn., Germany; gold and silver work, paper, machinery; p. 79,816; 48 52n 8 41e

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66 Phalodi, tn., Raj., India; 27 12n 72 20e
53 Pharsala, tn., Greece; 39 18n 22 25e
104 Philadelphia, cy., spt., Pa., U.S.A.; univ., R.C. cath., masonic temple, mint, academy of fine arts; shipbuilding, locomotives, woollens, cottons, worsteds; sugar and petroleum refining; founded by Wm. Penn, 1682; p. 1,950,961; 40 0n 75 15w
79 Philae I., Egypt; in R. Nile above Aswan Dam. "Temple of Isis"; 24 0n 32 50e
38 Philippeville, tn., Belgium; 50 12n 4 30e
10 Philippeville, tn., spt., Algeria; wine, sheep, cattle, cereals and cork; p. 47,750; 37 0n 6 50e
71 Philippine Is., commonwealth, Asia; a. 114,400 sq. m.; arch comprising 2,000 islands, largest: Luzon, Mindanao, Mindoro and Palawan; mountainous, volcanoes, highest Apo 10,312 ft.; coal, iron, copper and gold; dyewoods, rice, maize, tobacco, coffee, cotton and manilla hemp; coconuts, cigars, and pearl fisheries; p. 13,055,220; cap. Manila; 13 0n 125 0e
53 Philippopolis. See Plovdiv.
83 Philippolis, tn., O.F.S., S. Afr.; 30 15s 25 18e
83 Philipstown, tn., C. of Good Hope, S. Afr.; 30 30s 24 30e
33 Philipstown, tn., Offaly, I.F.S.; p. 659; 53 17n 7 18w
104 Philipsburg, tn., N.J., U.S.A.; water power, machinery, ry. workshops; silk and pulp; p. 19,253; 40 50n 75 0w
106 Phœnix, tn., cap., Ariz., U.S.A.; winter resort; cotton, fruits, live-stock; p. 48,118; 33 29n 112 1w
116 Phœnix Is., Brit., Pacific Ocean; a. 16 sq. m.; p. 59; 2 00 to 4 00s 171 0 to 174 0w
50 Piacenza, tn., Italy; cath., palaces; motor-cars; 45 2n 9 43e
112 Piauhy, st., Brazil; a. 116,494 sq. m.; cattle, cotton, sugar, tobacco, rubber; silver, iron and lead; cap. Therezina; 7 30s 43 15w
62 Piatra Neamtu, tn., Rumania; textiles, timber; p. 30,211; 46 56n 26 20e
51 Piazza Armerina, Italy; oil, wines and nuts; 37 24n 14 20e
34 Picardy, old prov., France; 49 50n 2 50e
20 Pickering, urb. dist., N. Riding, Eng.; iron, bricks; p. 3,663; 54 14n 0 44w
121 Picola, tn., Vic., Australia; 36 1s 145 7e
121 Picton, tn., N.S.W., Australia; 34 11s 150 36e
97 Picton, tn., Ont., Can.; p. 3,380; 44 0n 77 10w
127 Picton, bor., S.I. New Zealand; p. 1,285; 41 16s 174 0e
95 Picton, spt., N.S., Can.; coal; p. 3,152; 45 41n 62 46w
68 Pidurutalagala, mt., Ceylon; alt. 8,296 ft.; 7 10n 80 50e
108 Piedad, tn., Mexico; 20 18n 102 5w
50 Piedimonte, tn., Italy; 41 22n 14 21e
50 Piedmont, dept., Italy; a. 11,331 sq. m.; rice, wheat, vines and fruits; silk, cottons and woollens; p. 3,495,427; 45 0n 7 40e
48 Piedrahita, tn., Spain; 40 27n 5 21w
54 Pieksämäki, tn., Finland; 62 26n 27 15e
54 Pielavesi, tn., Finland; 63 14n 26 50e
54 Pielisjärvi, tn., Finland; 63 19n 30 15e
112 Pierre, tn., French Guiana; 2 50n 52 50w
107 Pierre, tn., S.D., U.S.A.; 44 28n 100 15w
83 Pietermaritzburg, tn., cap. Natal, S. Afr.; p. 21,581 (Eur.); 29 35s 30 25e
83 Pietersburg, tn., Trans., S. Afr.; gold, asbestos, tin; cereals, tobacco; p. 3,686 (Eur.); 23 53s 29 28e
83 Pietpotgieters Rust, tn., Trans., S. Afr.; 24 14s 29 1e
83 Piet Retief, tn., Trans., S. Afr.; 27 3s 30 51e
50 Pieve, tn., Italy; 40 26n 12 23e
107 Pike's Pk., Colombia; alt. 14,109 ft.; 38 47n 105 30w
45 Pilatus, mt., Switzerland; alt. 6,988 ft.; 46 57n 8 10e
124 Pilbara, tn., W. Australia; 21 20s 118 30e
86 Pilgrims Rest, tn., Trans., S. Afr.; 24 52s 30 52e
67 Pilibhit, tn., U.P., India; rice, pepper and sugar; p. 32,344; 28 36n 79 52e
41 Pillau, tn., port, Germany; shipbuilding, fishing; 54 40n 19 56e
46 Pilsen. See Plzen.
33 Piltown, vil., Kilkenny, I.F.S.; p. 354; 52 21n 7 20w
110 Pinar del Rio, tn., Cuba; tobacco; p. 17,500; 22 20n 83 45w
43 Pinchov, tn., Poland; 50 33n 20 33e
125 Pindar, tn., W. Australia; 28 27s 115 54e
53 Pindus Mts., Greece; highest alt. 7,665 ft.; 39 40n 21 20e
103 Pine Bluff, Ark., U.S.A.; cotton, motor-cars; p. 20,760; 34 10n 92 0w
118 Pine Creek, tn., N. Terr., Australia; 13 55s 132 3e
50 Pinerolo, tn., Italy; cath.; silk, cotton, woollens; 44 54n 7 21e
83 Pines, vil., Trans., S. Afr.; 22 45s 28 29e
83 Pinetown, tn., Nat., S. Afr.; 29 50s 30 52e
125 Pingelly, tn., W. Australia; 32 31s 117 0e
74 Ping-yang, anc. walled tn., Korea; 39 0n 126 0e
40 Pirmasens, tn., Germany; leather goods, musical instruments; p. 42,996; 49 12n 7 36e
41 Pirna, tn., Germany; tanning, brewing, glass-blowing, porcelain; p. 30,460; 50 58n 13 57e
53 Piraeus, spt., Greece; arsenal; wines, brandy, currants, marble, vinegar; machinery; p. 251,330; 37 59n 23 50e
50 Pisa, tn., Italy; cath., leaning tower, univ.; silk, cotton, linen; p. 77,000; 43 42n 10 23e

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113 Pisagua, spt., Chile; 19 30s 70 10w
114 Pisco, tn., Peru; cotton; 13 30s 76 30w
46 Pisek, tn., Czechoslovakia; brewing, iron foundries; p. 16,973; 49 19N 14 10E
50 Pisino, tn., Italy; p. 16,300; 45 18N 13 54E
50 Pistoja, tn., Italy; iron and steel goods, silk, macaroni; p. 70,000; 43 58N 10 58E
117 Pitcairn I., Brit., Pacific Ocean; a. 2 sq. m.; sweet potatoes, bananas, coconuts; 25 8s 130 5w
54 Piteå, tn., fine harb., Sweden; 65 20N 21 10E
52 Pitesti, tn., Rumania; petroleum, fruit and grain; p. 19,630; 44 52N 24 52w
25 Pitlochry, vil., Perth, Scot.; summer resort, hydros; p. 1,714; 56 43N 3 45w
83 Pitsani, tn., C. of Good Hope, S. Afr.; 25 42s 25 10E
70 Pitsanulok, tn., Siam; 16 50N 100 10E
17 Pitsea, par., Essex, Eng.; p. 1,129; 51 34N 0 30E
25 Pitsligo, par., Aber., Scot.; cas. ruins; p. 2,457; 57 40N 2 07w
27 Pittenweem, burgh, Fife, Scot.; fisheries; p. 1,619; 56 13N 2 44w
102 Pittsburgh, cy., Pa., U.S.A.; R.C. cath., Carnegie Lib. and Inst.; port on the Ohio R., centre of richest American coalfield; natural gas, petroleum; iron and steel goods, machinery, metal goods, meat packing and glass; p. 659,817; 40 30N 79 55w
105 Pittsfield, tn., Mass., U.S.A.; winter and tourist resort; electrical products, motor-cars, cottons, woollens; p. 49,677; 42 30N 73 18w
104 Pittston, tn., Pa., U.S.A.; coal and machinery; p. 18,246; 41 18N 77 53w
121 Pittsworth, tn., Queens., Australia; 27 40s 151 40E
93 Placentia, spt., Newfoundland; 47 15N 54 0w
48 Plasencia, tn., Spain; 40 2N 6 07w
69 Plassey, vil., Bengal, India; battlefield (1757); 23 47N 88 22E
113 Plate, R. See Rio de la Plata.
107 Platte, R. (North fork), U.S.A.; length 800 m.; 41 53N 99 0w
107 Platte, R. (South fork), U.S.A.; length 550 m.; 41 5N 102 30w
105 Plattsburg, N.Y., U.S.A.; port on L. Champlain; tourist centre; p. 13,349; 44 42N 73 27w
40 Plauen, tn., Germ.; lace; p. 113,855; 50 28N 12 8E
127 Pleasant Point, tn., S.I. New Zealand; 44 19s 171 10E
126 Plenty, B. of, N.I. New Zealand; 37 40s 177 10E
43 Pleschen, tn., Poland; 51 53N 17 45E
43 Pless, tn., Poland; 49 57N 18 58E
52 Pleven, tn., Bulgaria; famous siege 1877; woollens, silks and wines; p. 28,775; 43 25N 24 35E
47 Plevlie, tn., Yugoslavia; 43 20N 19 21E
52 Plevna. See Pleven.
24 Plockton, par., Ross and Crom., Scot.; fishing; p. 628; 57 20N 5 38w
39 Plon, tn., Germany; 54 10N 10 24E
52 Ploëști, tn., Rumania; petroleum; refining, tanning; p. 77,325; 44 54N 26 0E
34 Plombières, tn., France; watering-pl.; 47 57N 6 29E
43 Plonsk, tn., Poland; 52 37N 20 29E
43 Płotsk, tn., Pol.; grain, beet-sugar; 52 32N 19 40E
53 Plovdiv (Philippopoli), Bulgaria; wheat, fruit; silks, woollens and tobacco; p. 84,655; 42 8N 24 45E
42 Plungyani, tn., Lithuania; 55 56N 21 52E
19 Plymouth, co. bor., spt., Dev., Eng.; includes also naval port of Devonport; Hoe, made famous by Drake's game of bowls when Spanish Armada came in sight R.C. cath., guildhall, mus.; shipbuilding; p. 208,182; 50 23N 4 08w
105 Plymouth, spt., Mass., U.S.A.; Pilgrim Hall (granite); Pilgrim Fathers landed 1620 from "Mayflower"; textiles, cordage, machinery, cottons and woollens; p. 13,042; 41 54N 70 43w
104 Plymouth, tn., Pa., U.S.A.; coal; p. 19,543; 41 41N 76 0w
19 Plymouth Sd., Dev., Eng.; 50 20N 4 10w
19 Plympton Earle, par., Dev., Eng.; p. 1,102; 50 23N 4 02w
18 Plynlimmon, Mt., Card., Wales; 2,468 ft. high; source of R. Severn; 52 28N 3 47w
46 Plzen. See Pilsen.
70 Pnom-penh, tn., Fr. Indo-China; rice and cotton; p. 81,712; 11 30N 104 55E
50 Po, R., largest riv. of Italy, 420 m. long; 45 8N 10 50E
106 Pocatello, tn., Idaho, U.S.A.; rly. works; p. 16,471; 42 52N 112 24w
21 Pocklington, par., E. Riding, Eng.; milling, malting, bricks, tiles; p. 2,640; 53 56N 0 47w
47 Podgorica, tn., Yugoslavia; 42 27N 19 20E
57 Podolia (former govt.), Russia; 48 45N 28 30E
11 Pointe à Pitre, tn., Guadeloupe; p. 26,000; 16 17N 61 28w
35 Poitiers, tn., France; univ.; brewing, hosiery, cloth; p. 41,546; 46 33N 0 20E
35 Poitou, old prov., France; 46 44N 0 30w
57 Pokwani, tn., C. of Good Hope, S. Afr.; 27 43s 25 57E
50 Pola, fortified spt., Italy; cath., Roman temples, observatory, arsenal; dockyards; 44 53N 13 47E
43 Poland, rep., Europe; a. 149,274 sq. m.; independence Nov. 1918; plain, Carpathians in S.; chief rivers, Vistula and tributaries; agriculture, cereals, potatoes, sugar-beet; forests; cattle, sheep, horses, pigs; minerals, coal, iron and steel; petroleum, nat. gas, potash, etc.; cap. Warsaw; p. 33,418,000; 48 0 to 55 50N 15 45 to 28 25E
17 Polegate, vil., Sussex, England; 50 50N 0 14E
43 Polesia, co., Poland; a. 16,327 sq. m.; p. 881,000; 52 0N 25 25E
68 Polgahawela, tn., Ceylon; 7 25N 80 15E
53 Poligyros, tn., Greece; p. 2,477; 40 22N 23 26E
49 Pollensa, tn., on Majorca I., Spain; 39 53N 3 05E
27 Polmont, par., Stirl., Scot.; p. 5,011; 55 59N 3 43w
56 Polotsk, tn., Russia; cath.; p. 21,000; 55 29N 28 58E
57 Poltava, tn., Russia; horses, cattle and grain; p. 98,600; 49 33N 34 29E
61 Poltoratsk, tn., U.S.S.R.; 37 56N 58 20E
54 Polvijärvi, tn., Finland; 63 50N 29 20E
48 Pombal, tn., Portugal; 39 55N 8 37w
41 Pomerania, prov., Germany; a. 11,665 sq. m.; coastal prov.; farming, shipbuilding, fishing; p. 1,878,781; 52 58 to 54 50N 12 30 to 18 2E
31 Pomeroy, par., Tyrone, N. Ire.; p. 3,413; 54 36N 6 56w

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22 Pomona, I., Orkney Is., Scotland; largest island; farming, fishing; 59 0N 3 10w
43 Pomoryi, co., Poland; a. 6,327 sq. m.; p. 935,645; 53 30N 18 30E
116 Ponapi, I., Caroline Is., Pac. Oc.; p. 8,586; 6 55N 158 10E
107 Ponca, tn., Okla., U.S.A.; p. 16,136; 36 34N 97 4w
111 Ponce, spt., Pto. Rico, W. Indies; coffee, sugar and rum; p. 53,430; 18 0N 66 48w
68 Pondicherry, tn., Mad., India; a. 112 sq. m.; Fr. settlement; rice; 12 0N 79 50E
83 Pondo Land, native dist., C. of Good Hope, S. Afr.; timber; 31 15s 29 30E
42 Ponevjez, tn., Lithuania; p. 20,287; 55 40N 24 28E
48 Ponferrada, tn., Spain; 42 32N 6 33w
83 Pongola, tn., Natal, S. Afr.; 27 25s 32 0E
82 Pongola, tn., Nyasaland Prot.; 12 15s 33 55E
83 Pongola, R., Natal S. Afr.; 27 30s 31 30E
56 Ponoi, tn., Russia; 67 0N 41 0E
88 Ponza, tn., Fr. W. Afr.; 13 44N 0 44w
48 Ponte de Lima, tn., Portugal; 41 43N 8 36w
48 Ponte de Sôr, tn., Portugal; 39 16N 8 04w
51 Pontecorvo, tn., Italy; 41 27N 13 39E
50 Pontedera, tn., Italy; 43 39N 10 40E
21 Pontefract, mun. bor., W. Riding, Eng.; ruins of castle in which Richard II met his death, 1400; sacking, iron, tanning, brass; p. 19,057; 53 42N 1 19w
48 Pontevedra, tn., Spain; fishing; p. 30,821; 42 6N 8 38w
80 Ponthierville, tn., Belg. Congo, Africa; 0 11s 25 30E
70 Pontianak, tn., cap., Borneo; Dut. E. Ind.; p. 17,750; 0 00 109 25E
51 Pontine Is., Italy; 41 0N 12 55E
51 Pontine Marshes, Italy; 41 20N 13 0E
34 Pontoise, tn., France; 49 6N 2 04E
50 Pontremoli, tn., Italy; 44 21N 9 50E
45 Pontresina, tn., Switzerland; resort; 46 30N 9 57E
18 Pontrilas, vil., Hereford, England; 51 57N 2 51w
19 Pontypool, urb. dist., Mon., Eng.; coal, iron; p. 6,788; 51 42N 3 02w
19 Pontypridd, urb. dist., Glam., Wales; coal, iron; p. 42,737; 51 35N 3 19w
19 Poole, mun. bor., spt., Dor., Eng.; sailcloth, rope; exports, corn, clay; p. 57,258; 50 43N 1 59w
19 Poole Har., Dor., Eng.; 50 43N 1 58w
24 Poolewe, par., Ross and Crom., Scot.; fisheries, farming; p. 1,294; 57 46N 5 36w
66 Poona, tn., Bombay, India; cotton, sugar, rice; p. 163,100; 18 30N 73 59E
120 Pooncarie, tn., N.S.W., Australia; 33 20s 142 33E
112 Popayan, tn., Colombia; cath., univ.; p. 32,000; 2 30N 76 50w
38 Poperinghe, tn., Belgium; hops, woollens, linens; p. 11,554; 50 52N 2 43E
17 Poplar, met. bor., London, England; docks; shipbuilding, engineering; p. 155,083; see London
109 Popocatepetl Mt., Mexico; alt. 17,784 ft.; volcanic (dormant); 19 10N 98 45w
50 Popoli, tn., Italy; 42 9N 13 52E
66 Porbandar, tn., Bom., India; p. 28,699; 21 41N 69 40E
93 Porcupine, Ont., Can.; gold; 48 32N 81 20w
98 Porcupine, R., Alaska; 67 0N 143 0w
50 Pordenone, tn., Italy; cath.; cottons, silks, pottery; 45 58N 12 40E
109 Porfirio Diaz, tn., Mexico; 28 37N 100 35w
55 Pori, tn., Finland; shipbuilding, timber; p. 18,400; 61 29N 21 32E
45 Porlezza, tn., Italy; 46 3N 9 07E
61 Porlock, par., Som., Eng.; p. 965; 51 13N 3 35w
53 Poros, tn., Greece; 37 28N 23 30E
45 Porrentruy, tn., Switzerland; watches; 47 26N 7 03E
55 Porsgrunn, tn., Norway; 59 10N 9 40E
120 Port Adelaide, spt., S. Australia; 34 48s 138 30E
121 Port Albert, Vic., Australia; 38 42s 146 45E
80 Port Alexander, Angola, Africa; 14 0s 11 55E
83 Port Alfred, spt., C. of Good Hope, S. Afr.; 33 35s 26 58E
81 Port Amelia, Mozam., Africa; 13 0s 40 28E
110 Port Antonio, spt., Jamaica, W. Indies; p. 6,000; 18 12N 77 2w
26 Port Appin, vil., Argyll, Scot.; p. 607; 56 33N 5 23w
99 Port Arthur, spt., Ont., Can.; grain; lumbering, mining; p. 19,818; 48 30N 89 0w
74 Port Arthur, spt., Jap., Manchuria; 38 40N 121 10E
120 Port Augusta, spt., S. Australia; 32 28s 137 46E
111 Port au Prince, spt., cap. Haiti, W. Indies; coffee, cacao; p. 80,000; 18 40N 72 20w
93 Port Aux Basque, port, Newfoundland; 47 50N 59 0w
26 Port Bannatyne, vil., Bute, Scot.; summer resort; fisheries, farming; p. 695; 55 52N 5 05w
93 Port Burwell, vil., Newfoundland; 60 15N 64 45w
96 Port Burwell, vil., Ont., Can.; 42 39N 80 51w
83 Port Beaufort, spt., C. of Good Hope, S. Afr.; 34 27s 20 42E
81 Port Bell, tn., Uganda, Africa; 0 10N 32 30E
69 Port Blair, spt., Andaman Is., India; penal settlement; p. 13,373; 11 42N 92 40E
120 Port Broughton, tn., S. Australia; 33 33s 137 58E
111 Port Castries, cap. St. Lucia, W. Indies; 14 0N 60 58w
127 Port Chalmers, bor., S.I. New Zealand; docks, shipyards; p. 2,575; 45 47s 170 38E
105 Port Chester, tn., N.Y., U.S.A.; summer resort; cottons and woollens; p. 22,662; 40 57N 73 45w
96 Port Colborne, tn., Ont., Can.; entrance to Welland canal; p. 6,603; 42 53N 79 17w
96 Port Dalhousie, vil., Ont., Can.; p. 1,547; 43 13N 79 20w
121 Port Dalrymple, Tas., Australia; 41 2s 146 45E
118 Port Daly, vil., N. Terr., Australia; 12 5s 131 30E
81 Port Durnford, It., Somaliland; 1 05s 41 45E
118 Port Darwin, N. Terr., Australia; pearl fisheries; 12 20s 130 50E
121 Port Davey, Tas., Australia; 43 15s 145 55E
70 Port Dickson, tn., Malay Pen.; 2 35N 101 45E
96 Port Dover, vil., Ont., Can.; p. 1,707; 42 48N 80 15w
96 Port Elgin, vil., Ont., Can.; p. 1,305; 44 27N 81 28w
83 Port Elizabeth, spt., C. of Good Hope, S. Afr.; wool, mohair, fruit; p. 43,924 (Eur.); 33 55s 25 35E
26 Port Ellen, spt., Argyll, Scot.; p. 741; 55 37N 6 12w
20 Port Erin, vil., I. of Man, Eng.; 54 6N 4 12w
98 Port Essington, vil., B.C., Can.; 54 5N 130 0w

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120 Port Fairy, tn. (Belfast Harb.), Vic., Australia; 38 16s 142 13E
81 Port Florence. See Kisumu.
80 Port Francqui, tn., Belg. Congo; present terminus of Congo ry. on the Kasai R. which will eventually reach the cap. Leopoldville; 4 30s 20 5E
78 Port Fuad, tn., Egypt; N. entrance to Suez Canal; p. 30,000; 31 16N 32 20E
26 Port Glasgow, burgh., spt., Ren., Scot.; shipbuilding, engineering, sails, timber; p. 19,580; 55 57N 4 41w
83 Port Grosvenor, tn., C. of Good Hope, S.Afr.; 31 23s 29 55E
75 Port Hamilton, tn., Korea; 34 5N 127 12E
88 Port Harcourt, tn., Nigeria; palm oil; 4 46N 7 01E
124 Port Hedland, tn., W. Australia; 20 18s 118 43E
89 Port Herald, tn., Nyasaland Prot., Africa; on R. Shire; 16 58s 35 16E
121 Port Hunter, N.S.W., Australia; 32 56s 151 42E
102 Port Huron, tn., Mich., U.S.A.; on L. Huron, resort; docks, grain; p. 31,361; 42 59N 82 30w
19 Port Isaac B., Corn., Eng.; 50 36N 4 50w
121 Port Jackson, N.S.W., Australia; natural harb., for Sydney; 33 55s 151 12E
105 Port Jervis, tn., N.Y., U.S.A.; p. 10,243; 41 22N 74 40w
121 Port Kembla, spt., N.S.W., Australia; 34 24s 150 55E
33 Port Lacighse. See Maryborough.
120 Port Lincoln, tn., S. Australia; 34 42s 135 50E
88 Port Lokko, tn., Fr. W. Afr.; 8 45N 12 50w
121 Port Macquarie, spt.; N.S.W., Australia; 31 29s 152 51E
96 Port Maitland, tn., Ont. Can.; 42 51N 79 37w
110 Port Maria, spt., Jam., W. Indies; p. 2,500; 18 22N 76 58w
110 Port Morant, tn., Jam., W. Indies; 17 58N 76 30w
122 Port Moresby, spt., Papua; 9 30s 147 12E
87 Port Natal. See Durban.
99 Port Nelson, Man., Can.; 57 0N 93 2w
83 Port Nolloth, spt., C. of Good Hope, S. Afr.; terminus of rly. to Ookiep mining dist.; 29 15s 16 50E
111 Port of Spain, cap. Trinidad; sugar and cocoa; p. 69,000; 10 36N 61 29w
26 Port Patrick, par., Wig., Scot.; p. 1,495; 54 51N 5 07w
121 Port Phillip, B. Vic., Australia; 38 10s 145 20E
120 Port Pirie, spt., S. Australia; smelting; wheat and minerals; p. 9,446; 33 10s 137 59E
110 Port Royal, tn., Jamaica, W. Indies; 18 0N 76 52w
78 Port Said, spt., Egypt; at N. entrance to Suez Canal; exp. cotton; p. 104,603; 31 16N 32 19E
98 Port Simpson, tn., B.C., Can.; 54 30N 130 25w
83 Port St. Johns, tn., C. of Good Hope, S Afr.; 31 33s 29 33E
20 Port St. Mary, vil., I. of Man, Eng.; 54 4N 4 45w
19 Port Talbot, mun. bor.; Glam., Wales; copper, coal; p. 40,672; 51 35N 3 46w
78 Port Tewfik, tn., Egypt; 27 54N 32 35E
17 Port Victoria, vil., Kent, England; 51 26N 0 41E
120 Port Wakefield, tn., S. Australia; 34 11s 138 12E
26 Port William, spt., Wig., Scot.; sea-resort; p. 645; 54 46N 4 34w
31 Portadown, urb. dist., Armagh, N. Ire.; farming, linens; p. 11,991; 54 25N 6 27w
102 Portage, tn., Wis., U.S.A.; iron; p. 6,308; 43 32N 89 40w
99 Portage la Prairie, tn., Man., Can.; wheat; p. 6,597; 50 1N 98 28w
31 Portaferry, spt.; Down, N. Ire.; shipping, fisheries; p. 1,318; 54 23N 5 33w
48 Portalegre, tn., Portugal; p. 11,171; 39 16N 7 29w
33 Portarlington, tn., Offaly, I.F.S.; farming; p. 2,102; 53 10N 7 11w
84 Porterville, tn., S. Africa; 33 0s 18 53E
31 Portglenone, par., Antrim, N. Ire.; linen; p. 3,382 54 53N 6 29w
25 Portgordon, vil., Banff, Scot.; fisheries; p. 1,369; 57 40N 3 00w
19 Porthcawl, urb. dist., Glam., Wales; resort; exports coal, iron; p. 6,447; 51 29N 3 40w
19 Porthleven, vil., Cornwall, England; 50 5N 5 19w
19 Portishead, urb. dist., Som., Eng.; shipping; p. 3,908; 51 28N 2 46w
25 Portknockie, vil., Banff, Scot.; fisheries; p. 1,664; 57 42N 2 52w
120 Portland, tn., Vic., Australia; 38 18s 141 33E
98 Portland, can., B.C., Can.; 55 0N 130 15w
102 Portland, tn., spt., Me., U.S.A.; machinery, paper, woollens and matches; cod and mackerel fisheries; p. 70,810; 43 40N 70 5w
106 Portland, tn., Ore., U.S.A.; wheat; foundries; meat packing; lumber; p. 301,815; 45 30N 122 31w
19 Portland Bill, Dor., Eng.; promontory; 50 31N 2 25w
19 Portland I., Dor., Eng.; convict prison; quarries, farming, fishing; p. 12,434; 50 33N 2 25w
33 Portlaw, tn., Waterford, I.F.S.; p. 947; 52 18N 7 20w
25 Portlethen, par., Kinc., Scot.; p. 873; 57 3N 2 08w
18 Portmadoc, urb. dist., Caer., Wales; slate quarries; p. 3,986; 52 55N 4 07w
25 Portmahomack, vil., Ross and Crom., Scot.; fishing; 57 56N 3 48w
112 Porto Acre, tn., Brazil; 9 25s 67 30w
113 Porto Alegre, spt., Brazil; p. 273,000; 30 0s 51 0w
51 Porto Anzio, tn., Italy; 41 20N 12 40E
51 Porto Empédocle, spt., Italy; p. 11,400; 37 19N 13 27E
50 Porto Maurizio (Imperia), spt., Italy; 43 55N 8 00E
88 Porto Novo, spt., Dahomey, Fr. W. Afr.; p. 23,620; 6 30N 2 40E
68 Porto Novo, spt., Mad., India; p. 13,000; 11 30N 79 45E
111 Porto Rico, I., W. Indies, U.S.A.; a. 3,435 sq. m.; sugar, coffee, tobacco, fruits; cigars; cap. San Juan; p. 1,543,913; 18 15N 66 30w
113 Porto Seguro, spt., Brazil; 16 30s 39 5w
51 Porto Torres, tn., Italy; 40 50N 8 22E
112 Porto Velho, tn., Brazil; 8 40s 63 40w
27 Portobello, par., Midlothian, Scot.; bricks, pottery, paper; p. 9,900; 55 57N 3 07w
50 Portoferrajo, tn., Italy; 42 50N 10 10E
24 Portree, par., Inver., Scot.; p. 2,120; 57 25N 6 11w
31 Portrush, urb. dist., Antrim, N. Ire.; p. 2,952; 55 12N 6 39w
17 Portsmouth, co. bor. spt., Hants, Eng.; naval station,

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strongly fortified, shipbuilding, victualling yard, brewing; p. 252,421; 50 48N 1 06W
102 Portsmouth, spt., N.H., U.S.A.; summer resort, naval dockyard; cotton; p. 14,495; 43 2N 70 50W
102 Portsmouth, tn., Ohio, U.S.A.; manufactures, aeroplanes, iron and steel goods, boots, shoes, and bricks; p. 42,560; 38 45N 83 0W
103 Portsmouth, tn., Va., U.S.A.; naval dockyard, farm produce, and cotton; p. 45,704; 36 50N 76 21W
25 Portsoy, burgh, Banff, Scot.; fisheries, distillery; p. 1,651; 57 40N 2 42W
31 Portstewart, urb. dist., Londonderry, N. Ire.; bathing resort, fishing; p. 1,663; 55 12N 6 43W
48 Portugal, rep., Europe; a. 35,490 sq. m.; forms part of W. side of Iberian Pen., interior mountainous, chief range, Sa. da Estrella (6,540 ft.) and Sa. Morena; chief rivers, Guadiana, Tagus, Douro, Minho; agriculture, wheat, maize, oats, rice, fruit, etc.; sheep, goats, pigs, cattle; forests (26 per cent. area), cork, pine and other timbers; copper; fisheries; textiles, pottery, tanning, wine, olive oil; consists of 6 provinces, Azores and Madeira Is., cap. Lisbon; p. 6,825,883; 36 0 to 43 45N 6 0 to 9 30W
48 Portugalete, spt., Spain; 43 19N 3 03W
89 Portuguese East Africa. See Mozambique.
82 Portuguese West Africa. See Angola.
88 Portuguese Guinea, W. Afr.; a. 22,000 sq. m.; colony; rubber, ground-nuts, hides and wax; chief port Bissao; p. 343,961; 12 0N 15 0W
33 Portumna, tn., Galway, I.F.S.; p. 873; 53 6N 8 14W
55 Porvoo, tn., Finland; 60 25N 25 45E
48 Posadas, tn., Spain; 37 48N 5 10W
113 Posados, tn., Argentina; p. 15,700; 27 40s 56 0W
43 Posen. See Poznan.
83 Postmasburg, tn., C. of Good Hope, S. Afr.; 28 25s 23 7E
50 Postumia, tn., Italy; 45 43N 14 19E
53 Potamos, Mitylene I., Greece; 39 0N 26 23E
83 Potchefstroom, tn., Trans., S. Afr.; p. 9,909 (Eur.); 26 45s 27 14E
51 Potenza, tn., Italy; cath.; 40 39N 15 52E
57 Poti, tn., spt., Russia; Black S.; sawmills; 42 3N 41 39E
103 Potomac, R., U.S.A.; length 450 m.; 38 15N 76 45W
113 Potosi, Bolivia; cath.; tin mines; alt. 13,600 ft.; p. 34,000; 19 30s 65 50W
41 Potsdam, tn., Germany pal.; brewing, sugar, optical instruments; p. 73,676; 52 24N 13 0E
85 Potsdam, tn., C. of Good Hope, S. Afr.; 32 52s 27 38E
16 Potter Heigham, par., Norf., Eng.; p. 516; 52 44N 1 35E
16 Potton, par., Beds, Eng.; straw-plaiting; p. 2,087; 52 7N 0 12W
104 Pottstown, tn., Pa., U.S.A.; iron and steel; farming implements; silk; p. 19,430; 40 16N 75 38W
102 Pottsville, tn., Pa., U.S.A.; iron and steel; rly. works; p. 24,300; 40 45N 76 15W
105 Poughkeepsie, tn., N.Y., U.S.A.; on R. Hudson; blast furnaces, farm implements, clothing and silk thread; p. 40,288; 41 42N 73 52W
18 Poulton, urb. dist., Lancs, Eng.; farming; p. 3,366; 53 50N 2 58W
48 Povoa do Varzim, tn., Port.; 41 25N 8 46W
56 Povyenets, tn., Russia; 62 55N 34 57E
118 Powell's Creek, N. Terr., Australia; 17 58s 133 40E
18 Powick, par., Worcs., Eng.; p. 2,640; 52 10N 2 06W
31 Poyntzpass, vil., Down, N. Ire.; p. 348; 54 18N 6 23W
47 Pozarevac, tn., Yugoslavia; 44 26N 21 10E
47 Pozega, tn., Yugoslavia; 45 10N 17 40E
47 Pozhega, tn., Yugoslavia; 43 50N 20 0E
43 Poznan, tn., Poland; rly. junc.; farming implements, locomotives, grain, cattle and wool; p. 246,500; 52 22N 17 0E
43 Poznan, co., Poland; a. 10,242 sq. m.; cereals; farming; p. 1,967,865; 53 15N 15 45E
51 Pozzuoli, spt., Italy; iron; 40 50N 14 17E
46 Prague, cy., cap. Cz.-slov.; on R. Moldau; cath., palaces; machinery, leather, sugar, milling, chemicals; p. 848,081; 50 6N 14 26E
46 Praha. See Prague.
70 Prai, tn., Siam; 18 15N 100 5E
39 Praesto, tn., Denmark; 55 9N 12 3E
50 Prato, tn., Italy; cath.; straw plaiting, woollens, cottons and machinery; 43 50N 11 7E
53 Pravishta, tn., Greece; 40 57N 24 14E
19 Prawle Pt., Dev., Eng.; 50 15N 3 43W
18 Preesall, urb. dist., Lancs, Eng.; farming; p. 2,043; 53 55N 2 57W
41 Prenzlau, tn., Germany; beer, tobacco, sugar, woollens and machinery; p. 21,622; 53 18N 13 50E
46 Prerau, tn., Czechoslovakia; textiles, hardware; p. 22,362; 49 28N 17 29E
106 Prescott, tn., Ariz., U.S.A.; p. 5,517; 34 30N 112 30W
97 Prescott, tn., Ont., Can.; p. 2,984; 44 43N 75 35W
46 Presov, tn., Czechoslovakia; formerly Eperies; p. 21,870; 49 0N 21 18E
46 Pressburg. See Bratislava.
18 Presteigne, urb. dist., co. tn., Rad., Wales; woollens; p. 1,102; 52 17N 3 00W
18 Preston, co. bor., port, Lancs, Eng.; large docks; cottons, iron, brass; p. 119,001; 52 44N 2 28W
27 Prestonpans, bor., E. Lothian, Scot.; battle, 1745; bricks, soap, brewing; p. 2,426; 55 58N 2 59W
26 Prestwich, bor., Ayr, Scot.; coasting, farming; p. 8,538; 55 30N 4 36W
83 Pretoria, tn., cap. Trans., S. Afr.; sdm. cap. of Union of S. Africa; p. 62,138 (Eur.); 25 45s 28 15E
53 Prevesa, tn., Greece; p. 8,550; 38 59N 20 45E
46 Pribram, tn., Cz.-slov.; p. 10,468; 49 40N 14 0E
49 Prienga, tn., Spain; 40 28N 2 18W
83 Prieska, tn., C. of Good Hope, S. Afr.; 29 42s 22 45E
47 Prijedor, tn., Yugoslavia; 44 58N 16 41E
47 Prilep, tn., Yugoslavia; 41 20N 21 34E
57 Priluki, tn., Ukraine; 50 32N 32 20E
98 Prince Albert Pen., Franklin, Can.; 72 0N 115 0W
98 Prince Albert Sd., Franklin, Can.; 70 25N 115 0W
83 Prince Albert, tn., C. of Good Hope, S. Afr.; 33 12s 22 3E
99 Prince Albert, tn., Sask., Can.; lumbering, furs; p. 9,905; 53 18N 106 0W
84 Prince Alfred, tn., C. of Good Hope, S. Afr.; 33 15s 19 20E

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128 Prince Edward Is., Southern O., Ant.; 47 30s 37 30E
95 Prince Edward Island, prov., Canada; a. 2,184 sq. m.; smallest province; oats, potatoes, dairying, live-stock, fox farms, fisheries; cap. Charlottetown; p. 88,038; 45 57 to 47 4N 61 58 to 64 35W
124 Prince Frederic Harb., W. Australia; 15 0s 123 10E
98 Prince George, tn., B.C., Can.; p. 2,479; 54 0N 122 45W
4 Prince Leopold Land, Antarctica; 76 0s 30 0W
99 Prince of Wales I., Franklin, Can.; 72 0N 100 0W
98 Prince Rupert, tn., B.C., Can.; rail terminus; mining, lumbering, fishing; p. 6,350; 54 18N 130 27W
80 Princes I. (Port.), G. of Guinea, W. Africa; 1 30N 7 30E
17 Princes Risborough, par., Bucks, Eng.; chairs, brewing; p. 2,438; 51 43N 0 50W
128 Princess Elizabeth Land, Antarctica; 75 0s 68 30E
105 Princeton, tn., N.J., U.S.A.; p. 6,992; 40 23N 74 37W
19 Princetown, vil., Dev., Eng.; Dartmoor prison in vicinity; 50 33N 4 00W
43 Pripet Marshes, Poland; Russians forced into marshes in Gt. War Aug.-Sept. 1915; 51 42N 27 40E
43 Pripet, R., Russia; flows through the Pripet marshes, joining the Dnieper in Ukraine; 51 30N 29 30E
47 Prisren, tn., Yugoslavia; steel, glass and pottery; 42 13N 20 41E
47 Pristina, tn., Yugoslavia; 42 40N 21 11E
51 Procida I. and tn., Italy; castle; wine and fruit; p. 14,500; 40 43N 13 59E
109 Progreso, spt., Mexico; 21 15N 89 45W
47 Prokuplje, tn., Yugoslavia; 43 16N 21 34E
69 Prome, tn., Burma, India; on R. Irrawaddy; silk, rice, cotton and tobacco; p. 26,067; 18 49N 95 25E
57 Proskurov, tn., Russia; p. 40,750; 49 30N 27 0E
52 Provadia, tn., Bulgaria; p. 7,550; 43 10N 27 31E
35 Provence, old prov., France; 43 48N 6 00E
102 Providence, spt., R.I., U.S.A.; univ.; industrial centre; foundry and machine-shop products; worsted, woollens; jewellery, textiles, cottons, rubber products; p. 252,981; 41 55N 71 30W
106 Provo, tn., Utah, U.S.A.; p. 14,766; 40 15N 111 44W
20 Prudhoe, urb. dist., Northumb., Eng.; cas. ruins; coal; p. 9,260; 54 57N 1 51W
43 Prujani, tn., Poland; 52 33N 24 26E
41 Prussia, st., Germany; a. 113,036 sq. m.; largest state in the German rep.; two-thirds surface European Plain, rest mountainous (Schneekoppe 5,260 ft.); rivers—Rhine, Oder, Elbe, Weser; farming, extensive mineral workings, coal, iron, zinc, etc.; cap. Berlin; p. 38,175,989; 47 20 to 55 0N 6 00 to 19 0E
41 Prussia, East. See East Prussia.
52 Pruth R., Rumania; rises N. of Carpathians, flows S. to join Danube; length 500 m.; 48 12N 26 23E
43 Przemysl, tn., Poland; two caths.; timber, leather and corn; 49 48N 22 48E
43 Przeworsk, tn., Poland; 50 1N 22 42E
56 Pskov, tn., Russia; cath.; flax, leather, sawmills, flour, cordage; p. 38,750; 57 48N 28 17E
42 Pskov, former govt., Russia; 57 0N 29 20E
24 Pskov, L., Russia; 58 0N 28 0E
68 Pudukkottai, tn., Mad., India; p. 26,101; 10 27N 7 53E
109 Puebla, tn., Mexico; cath.; cottons and woollens; p. 111,000; 19 0N 98 19W
109 Puebla, prov., Mexico; a. 12,992 sq. m.; p. 1,023,428; lat 40 to 40N 97 5 to 98 50W
107 Pueblo, cy., Colombia; mineral springs; coal; iron and steel, gold, silver, copper smelting; p. 50,096; 38 17N 104 39W
69 Puerhfu, tn., China; 23 0N 101 2E
112 Puerto Alturo, tn., Colombia; 2 25N 73 0W
110 Puerto Barrios, spt., Guatemala; 16 0N 88 20W
110 Puerto Bello, tn., spt., Panama; 9 32N 79 35W
112 Puerto Berrio, tn., Colombia; 6 25N 73 30W
112 Puerto Cabello, tn., Venezuela; 11 0N 68 20W
112 Puerto Colombia (Sabanilla), spt., Colombia; 11 0N 74 52W
110 Puerto Cortes, tn., Honduras; p. 2,500; 15 50N 87 56W
113 Puerto Deseado, tn., Argentina; 47 40s 66 10W
48 Puente Genil, tn., Spain; olive oil; 37 22N 4 45W
113 Puerto Madrin, tn., Argentina; p. 1,000; 42 55s 65 0W
112 Puerto Maldonado, tn., Peru; 12 30s 69 0W
109 Puerto Mexico (Coatzacoalcos), spt., Mexico; 18 7N 94 35W
113 Puerto Montt, spt., Chile; p. 16,150; 41 30s 73 0W
113 Puerto Pacheco, tn., Bolivia; 22 0s 58 15W
111 Puerto Plata, tn., Santo Dom., W. Indies; p. 8,000; 19 50N 70 35W
71 Puerto Princesa, tn., Phil. Is.; 9 40N 118 50E
113 Puerto Pyramides, tn., Argentina; 42 55s 64 15W
113 Puerto Roque, Argentina; 45 10s 65 30W
113 Puerto San Antonio, tn., Argentina; p. 2,000; 40 55s 65 0W
113 Puerto San Julian, tn., Argentina; 49 30s 68 0W
113 Puerto Suarez, frontier tn., Bolivia; 18 55N 57 55W
57 Pugachevsk, tn., Russia; 52 0N 48 45E
106 Puget Sd., Wash., U.S.A.; 47 20N 122 50W
49 Puigcerda, tn., Spain; 42 34N 1 55E
112 Puira, tn., Peru; p. 15,000; 5 25s 80 45W
126 Pukapuka Is. See Danger Is.
74 Pukow, tn., China; 32 0N 118 40E
17 Pulborough, par., Sus., Eng.; fishing resort; corn; p. 2,065; 50 57N 0 30W
69 Pulicat, tn. and lake, Mad., India; 13 27N 80 15E
54 Pulkkila, tn., Finland; 64 15N 26 0E
43 Pultusk, tn., Poland; cas.; woollens and hosiery; 52 41N 21 8E
67 Punaka, tn., winter cap. of Bhutan; 27 38N 89 40E
66 Punjab, prov., India; a. 136,261 sq. m.; land of the "five rivers," i.e. Sutlej, Chenab, Beas, Jhelum and Ravi; fertile and irrigated areas; wheat, cotton, barley, maize, sugar; cap. Lahore; p. 28,491,000; 28 30 to 34 0N 69 30 to 78 0E
114 Puno, tn., Peru; p. 15,000; 15 30s 70 10W
113 Punta Arenas. See Magallanes.
110 Puntarenas, tn., C. Rica; p. 8,000; 10 0N 84 50W
19 Purbeck I., Dor., Eng.; Corfe cas. in centre; quarrying for Purbeck marble, a grey, greenish limestone full of shells, much used in building; 50 39N 2 00W
67 Puri, tn., Orissa, India; pilgrims' resort, Juggernaut festival temple; p. 38,694; 19 47N 85 50E
67 Purulia, tn., Bihar, India; p. 22,161; 23 17N 86 30E
112 Purus, R., Brazil; length 1,850 m.; 8 40s 69 20W
44 Pusier Thal, Italy; resort; 46 45N 12 20E

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105 Putnam, tn., Conn., U.S.A.; p. 7,318; 41 55N 71 55W
112 Putumayo, R., Peru; 2 00s 73 0W
35 Puy-de-Dôme, dept., France; a. 3,090 sq. m.; generally mountainous, mineral springs, vines, fruits, coal, silver, lead; p. 500,590; 46 16N 3 58E
81 Pweto, tn., Belg. Congo; 8 25s 28 52E
18 Pwllheli, mun. bor., Caer., Wales; watering-pl., fishing; p. 3,599; 52 54N 4 24W
69 Pyapon, tn., Burma, India; 16 7N 95 45E
57 Pyatigorsk, tn., Russia; 44 3N 43 0E
54 Pyhajoki, tn., Finland; 64 30N 24 30E
69 Pyinmana, tn., Burma, India; p. 13,270; 19 5N 96 15E
49 Pyrenees, Mts., Spain and France; stretching 350 m. from B. of Biscay to Mediterranean S., crossed by 3 railways by tunnels; highest point Pic de Nethou 11,170 ft.; five motor roads run through passes; 42 50N 0 40E
35 Pyrénées Orientes, dept., France; a. 1,598 sq. m.; sulphur springs, wine, oranges; iron; p. 238,647; 42 40 to 43 10N 1 45 to 3 10E
112 Pyrenopolis, tn., Brazil; 15 30s 49 0W
53 Pyrgos, tn., Greece; p. 13,710; 37 40N 21 23E
41 Pyritz, tn., Germany; 53 10N 14 55E

72 Qizil, cap. tn., Tannu Tuva; 51 30N 94 0E
104 Quakertown, tn., Pa., U.S.A.; 40 28N 75 20W
19 Quantock Hills, Somerset, Eng.; 1,262 ft.; 51 8N 3 10W
99 Qu' Appelle, tn., Sask., Canada; 50 47N 104 0W
38 Quatre Bras, vil., Belgium; 50 35N 4 25E
89 Que Que, tn., S. Rhodesia; 18 58s 29 56E
121 Queanbeyan, tn., N.S.W., Australia; 35 20s 149 11E
93 Quebec, Canada; a. 594,434 sq. m.; hilly, forested; chief rivers—St. Lawrence, Ottawa, Saguenay, St. Maurice; cereals, fruit; pulpwood; asbestos, gold, copper; fisheries, furs; textiles, leather, paper; inhabitants largely French speaking; cap. Quebec; p. 3,874,255; 45 0 to 62 30N 57 0 to 80 0W
93 Quebec, tn., cap., Que., Can.; caths., parliament bldgs., univ.; worsteds, machinery, boots and shoes, hardware, shipbuilding; p. 130,594; 46 52N 71 16W
40 Quedlinburg, tn., Germany; analine dyes, starch, seeds; p. 27,014; 51 47N 11 8E
5 Queen Alexandria Ld., Antarctica; 85 0s 165 0E
98 Queen Charlotte Is., B.C., Canada; fishing, timber 53 30N 132 30W
98 Queen Charlotte Sd., B.C., Can.; 51 0N 128 0W
128 Queen Mary Land, Antarctica; 67 0s 95 0E
128 Queen Maud Ld., Antarctica; 67 0s 47 0E
17 Queenborough, mun. bor., Kent., Eng.; chemicals; cement; p. 2,941; 51 25N 0 45E
33 Queens County. See Leix.
119 Queensland, Australia; a. 670,500 sq. m.; in E. coastal plain; mountains, G. Dividing Ra., in W. plain; agriculture, maize, wheat, sugar-cane, cotton, pineapples, bananas; dairying, cattle, sheep, wool; timber; minerals—coal, copper, gold; cap. Brisbane, p. 947,789; 10 40 to 29 0s 138 0 to 153 30E
121 Queenstown, tn., Tas., Australia; p. 3,400; 42 0s 145 29E
32 Queenstown. See Cobh.
127 Queenstown, bor., S.I., New Zealand; p. 860; 45 2s 168 40E
83 Queenstown, tn., C. of Good Hope, S. Afr.; wheat, wool; p. 6,614 (Eur.); 31 57s 26 55E
113 Quequen, tn., Argentina; 38 30s 59 0W
109 Querétaro, st., Mexico; a. 4,493 sq. m.; grain, fruits, silver, gold; p. 234,388; 20 35N 100 5W
109 Querétaro, tn., Mexico; pottery, cottons, woollens; p. 32,000; 20 33N 100 30W
66 Quetta, tn., cap. Brit. Baluchistan, India; p. 49,001; 30 15N 67 1E
110 Quezaltenango, tn., Guatemala; textiles; p. 30,000; 14 47N 91 31W
34 Quiberon, tn., France; 47 30N 3 08W
81 Quilimane, spt., Mozambique; 18 0s 37 0E
68 Quilon, tn., Travancore, India; coconuts, pepper, timber; p. 25,135; 8 52N 76 42E
114 Quillotta, tn., Chile; p. 14,859; 32 58s 72 51W
121 Quilpie, tn., Queens., Austral.; 26 32s 144 20E
34 Quimper, tn., France; cath; sardines; pottery; p. 18,297; 47 59N 4 08W
32 Quin, par., Clare, I.F.S.; p. 877; 52 49N 8 52W
102 Quincy, tn., Ill., U.S.A.; milling, tobacco, ironware, machinery; p. 39,241; 39 57N 91 25W
105 Quincy, tn., Mass., U.S.A.; granite, foundries, shipbuilding; p. 71,983; 42 15N 71 0W
70 Quinhon, tn., Fr. Indo-China; 13 45N 109 0E
48 Quintanar, tn., Spain; 39 35N 3 03W
109 Quintana Roo, st., Mexico; a. 19,270 sq. m.; cap. Payo Obispo; p. 12,150; 19 30N 88 30W
112 Quito, tn., cap. Ecuador; cath., univ.; hides; cottons, woollens; p. 91,700; 0 13s 78 45W
120 Quorn, tn., S. Australia; 32 18s 138 1E

46 Raab. See Györ.
54 Raahe, tn., Finland; 64 39N 24 34E
10 Rabat, spt., Morocco; carpets, mats; p. 38,000; 34 0N 7 00W
122 Rabaul, tn., cap. N.E. New Guinea; p. 1,500; 4 30s 52 30E
88 Rabba, tn., Nigeria; 9 19N 5 00E
61 Rabbath Ammon. See Amman.
93 Race, C., Newfoundland; 46 30N 52 50W
102 Racine, tn., Wis., U.S.A.; on L. Michigan; motor-cars, farm implements; p. 67,542; 42 45N 87 57W
52 Radáuti, tn., Rumania; paper, glass; p. 16,803; 47 51N 25 59E
18 Radnor, co., Wales; a. 470 sq. m.; mountainous; oats, wheat; sheep rearing, breeding of Welsh ponies; mineral springs; p. 21,314; 52 16N 3 15W
18 Radnor Forest, mts., Wales; 52 17N 3 13W
43 Radom, tn., Poland; coal, machinery; p. 78,000; 51 23N 21 11E
57 Radomysl, tn., Russia; p. 11,380; 50 31N 29 8E
47 Radovishta, tn., Yugoslavia; 41 37N 22 28E
43 Radsin, tn., Poland; 51 48N 22 40E
19 Radstock. See Norton-Radstock.
25 Rafford, par., Moray, Scot.; p. 803; 57 36N 3 34W
45 Ragaty, tn., Switzerland; 47 1N 9 32E

MAP
126 Raclan, tn. dist., N.I., New Zealand ; p. 340 ; 37 50s 174 55e
51 Ragusa, tn., Italy; textiles; p. 48,000; 36 58n 14 41e
47 Ragusa, spt., Yugoslavia ; p. 13,250 ; 42 40n 18 5e
69 Rahang, tn., Siam ; 16 55n 99 15e
81 Rahaita, tn., Eritrea ; 12 40n 43 2e
52 Rahova, tn., Bulgaria ; 43 41n 23 48e
68 Raichur, tn., India ; pottery ; p. 26,374 ; 16 14n 77 51e
120 Rainbow, tn., Vic., Australia ; 35 53s 142 0e
106 Rainier, Mt., Wash., U.S.A. ; 14,530 ft. ; 46 50n 121 30w
68 Raipur, tn., India ; grain, cotton ; p. 38,341 ; 21 15n 81 45e
68 Rajahmundry, tn., Mad., India; on R. Godavari ; p. 53,791 ; 17 0n 81 55e
66 Rajkot, tn., India ; p. 36,057; 22 17n 70 50e
66 Rajputana, agency, India ; a. 129,059 sq. m. ; includes 19 states ; millet, cotton, pulses ; cottons, woollens, ivory ; chief towns—Jaipur, Udaipur, Alwar, Ajmer, Jodhpur ; p. 11,225,712 ; 26 45n 70 30e
62 Rajun, tn., Syria ; 36 31n 36 42e
127 Raki-ura, I. See Stewart I.
62 Rakka, tn., Syria ; 35 59n 39 12e
42 Rakvere, tn., Estonia ; 59 18n 26 20e
103 Raleigh, tn., cap. N.C., U.S.A. ; rly. works, cotton mills ; p. 37 379 ; 35 52n 78 35w
62 Ramadi, tn., Iraq ; 33 27n 43 5e
31 Ramelton. See Rathmelton.
68 Rameswaram, tn., Mad., India ; 9 3n 79 23e
67 Ramgarh, tn., India ; 22 45n 81 3e
38 Ramillies, vil., Belgium ; scene of Marlborough's victory, 1706, over French and Bavarians ; 50 39n 4 54e
61 Ramleh, vil., Palestine ; p. 7,312 ; 31 55n 31 53e
68 Ramnad, tn., Mad., India ; p. 13,815 ; 9 25n 78 57e
61 Ramoth Gilead, vil., Transjordan ; 32 14n 35 48e
67 Rampur, tn., India ; damask, pottery, sugar; p. 73,158 ; 28 46n 79 8e
69 Rampur Boalia, tn., India ; p. 24,598 ; 24 22n 88 39e
69 Ramree I., Burma, India ; p. 3,150 ; 19 0n 93 50e
54 Ramsele, tn., Sweden ; 63 30n 16 35e
16 Ramsey, urb. dist., Hunts, Eng. ; p. 5,180 ; 52 23n 0 07w
20 Ramsey, spt., tn., I. of Man, Eng. ; p. 4,198 ; 54 19n 4 22w
19 Ramsey I., Pembroke, Wales ; 51 52n 5 21w
17 Ramsgate, mun. bor., spt., Kent, Eng. ; resort ; p. 33,603 ; 51 20n 1 25e
114 Rancagua, tn., Chile ; p. 23,339 ; 34 10s 70 45w
67 Ranchi, Bihar, India ; rice, tea, shellac ; p. 39,628 ; 23 17n 85 24e
31 Randalstown, tn., Antrim, N. Ire. ; p. 986 ; 54 45n 6 20w
39 Randers, tr., Denmark; machinery, foundries; p. 27,722 ; 56 29n 10 4e
127 Rangiora, bor., S.I., New Zealand ; p. 2,165 ; 43 19s 172 35e
127 Rangitata R., S.I., New Zealand ; 43 50s 171 16e
126 Rangitikei R., N.I., New Zealand ; 40 0s 175 40e
126 Rangitoto Ra., N.I., New Zealand ; 38 25s 175 35e
69 Rangoon, tn., spt., cap. Burma, India ; on Rangoon R. ; univ., pagodas ; rice, oil, lumber, ivory and wood carving ; textiles ; p. 400,415 ; 16 47n 96 15e
69 Rangpur, tn., India ; p. 15,250 ; 25 45n 89 25e
121 Rankin Springs, tn., N.S.W., Australia ; 33 45s 146 20w
27 Rannoch, dist., Perth, Scot. ; 56 40n 4 25w
24 Rannoch L., Perth, Scotland ; 56 42n 4 17w
117 Raps, I., Pacific Oc., Fr. ; 27 35s 144 20w ; 27 35s 144 20w
50 Rapallo, spt. tn., Italy ; lace, olive oil ; p. 14,000 ; 44 19n 9 18e
31 Raphoe, par., Tirconaill, I.F.S. ; p. 2,567 ; 50 52n 7 36w
107 Rapid City, tn., S.D., U.S.A. ; p. 10,404 ; 44 1n 103 10w
42 Rappel, tn., Estonia ; 59 5n 24 50e
45 Rapperswyl, tn., Switzerland ; 47 14n 8 47e
116 Rarotonga, I., Cook Is., Pac. Oc. ; p. 3,936 ; 21 12s 159 50w
61 Rasheya, tn., Syria ; 33 31n 36 32e
57 Raspopinsk, tn., Russia ; 49 17n 42 45e
75 Rasbin, spt., Korea ; 42 17n 130 15e
40 Rastatt, tn., Germany ; brewing, cigars, lace, stoves ; p. 14,003 ; 48 52n 8 12e
41 Rastenburg, tn., Germany ; brewing, milling, sugar, machinery ; p. 13,859 ; 54 0n 21 24e
69 Ratburi, tn., Siam ; 13 30n 99 55e
33 Rathangan, tn., Kildare, I.F.S. ; p. 547 ; 53 14n 7 00w
32 Rathcormac, par., Cork, I.F.S. ; p. 1,409 ; 52 5n 8 17w
33 Rathdowney, par., Leix, I.F.S. ; p. 2,602 ; 52 51n 7 35w
33 Rathdrum, par., Wicklow, I.F.S. ; p. 1,750 ; 52 56n 6 14w
25 Rathen, par., Aberdeen, Scot. ; p. 2,399 ; 57 43n 2 00w
40 Rathenow, tn., Germany ; bricks, optical glass ; p. 27,588 ; 52 37n 12 20e
31 Rathfriland, tn., Down, N. Ire. ; p. 1,365 ; 54 15n 6 10w
32 Rathkeale, par., Limerick, I.F.S. ; p. 2,892 ; 52 31n 8 57 w
31 Rathmelton, vil., Tirconaill, I.F.S. ; p. 932 ; 55 2n 7 37w
32 Rathmore, vil., Kerry, I.F.S. ; 52 5n 9 17w
31 Rathmullen, vil., Tirconaill, I.F.S. ; p. 485 ; 55 6n 7 33w
33 Rathnew, par., Wicklow, I.F.S. ; p. 2,552 ; 53 0n 6 05w
25 Rathven, par., Banff, Scot. ; farming, sandstone, limestone, slate ; p. 15,099 ; 57 40n 2 56w
40 Ratisbon, tn., Germany ; on R. Danube ; cath. ; musical instruments, pottery, tobacco, furniture ; p. 81,106 ; 49 0n 12 5e
66 Ratlam, tn., India ; grain ; p. 30,133 ; 23 12n 75 0e
68 Ratnagiri, tn., India ; p. 14,520 ; 16 58n 73 22e
68 Ratnapura, tn., Ceylon ; 6 40n 80 20e
107 Raton, tn., N. Mex., U.S.A. ; p. 6,090 ; 36 58n 104 35w
27 Rattray. See Blairgowrie.
55 Rättvik, tn., Sweden ; 60 55n 15 10e
126 Raukumara Ra., New Zealand ; 38 0s 177 55e
55 Rauma, tn., Finland ; p. 8,888 ; 61 10n 21 30e
54 Rautavaara, tn., Finland ; 63 32n 28 22e

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20 Ravenglass, tn., Cumberland, Eng. ; 54 20n 3 25w
50 Ravenna, tn., Italy ; cath. ; glass, paper, silk, linen ; p. 77,991 ; 44 26n 12 16e
40 Ravensburg, tn., Germany ; leather, machinery, textiles ; p. 17,012 ; 47 49n 9 38e
122 Ravenshoe, tn., Queens., Austral. ; 16 32s 145 28e
125 Ravensthorpe, tn., W. Australia ; 33 28s 120 2e
123 Ravenswood, tn., Queens., Austral. ; 20 2s 146 58e
66 Ravi, R., India ; trib. of Indus, 365 m. long ; 31 0n 73 10e
70 Ravong, tn., Siam ; 12 40n 101 5e
66 Rawalpindi, tn., India ; rly. works, brewing, foundries, oil refining ; p. 119,284 ; 33 42n 73 5e
43 Rawaruska, tn., Poland ; 50 16n 23 39e
126 Rawene, tn. dist., N.I., New Zealand ; p. 430 ; 35 27s 173 32e
43 Rawitsch, tn., Poland ; carpets, cigars ; p. 11,900 ; 51 36n 16 52e
125 Rawlinna, tn., W. Australia ; 30 55s, 125 30e
113 Rawson, tn., Argentina ; p. 2,500 ; 43 25s 65 0w
17 Rayleigh, urb. dist. ; Essex, Eng. ; p. 6,256 ; 51 35n 0 35e
98 Raymond, tn., Alta., Canada ; p. 1,849 ; 49 27n 112 37w
25 Rayne, par., Aberdeen, Scot. ; p. 921 ; 57 22n 2 30w
109 Rayon, tn., Mexico ; 21 45n 99 46w
52 Razgrad, tn., Bulgaria ; p. 15,421 ; 43 30n 26 32e
47 Razhani, tn., Yugoslavia ; 43 40n 21 37e
17 Reading, co. bor., co. tn., Berks, Eng. ; univ. ; biscuits, brewing, seeds ; p. 97,153 ; 51 27n 0 58w
104 Reading, tn., Pa., U.S.A. ; rly. works ; bricks, iron, steel, paper, textiles ; p. 111,171 ; 40 26n 75 50w
25 Reay, par., Caithness, Scot. ; p. 719 ; 58 33n 3 47w
50 Recanati, tn., Italy ; p. 16,600 ; 43 24n 13 31e
112 Recife. See Pernambuco.
113 Reconquisto, tn., Argentina ; 29 10s 59 30w
92 Red, L., Ont., Canada ; gold ; 51 20n 93 30w
107 Red R., La., U.S.A. ; 32 30n 93 48w
107 Red R., Tex., U.S.A. ; 34 0n 97 50w
60 Red Sea, Asia ; inland sea, separating Arabia from Africa, connects with the Indian Ocean, 1,200 m. long ; 13 20 to 27 40n 32 30 to 43 20e
98 Red Deer, tn., Alta., Canada ; mixed farming ; p. 2,344 ; 52 12n 113 50w
98 Red Deer, R., Alta., Canada ; 52 55n 102 30w
102 Red Wing, tn., Minn., U.S.A. ; p. 9,629 ; 44 40n 92 40w
20 Redcar, mun. bor., N. Riding, Eng. ; resort ; p. 20,159 ; 54 37n 1 04w
33 Redcross, par., Wicklow, I.F.S. ; p. 548 ; 52 54n 6 10w
87 Reddersburg, tn., O.F.S., S. Afr. ; 29 36s 26 9e
18 Redditch, urb. dist., Worcs., Eng. ; needles, hooks and eyes ; p. 19,280 ; 52 18n 1 56w
79 Redesiya, vil., Egypt ; 24 54n 32 53e
10 Redeyef, tn., Tunis ; 34 10n 7 50e
17 Redhill. See Reigate.
48 Redondela, tn., Spain ; 42 15n 8 35w
48 Redondo, tn., Portugal ; 38 40n 7 35w
19 Redruth, part of Camborne-Redruth urb. dist., Cornwall, Eng. ; tin ; p. 9,904 ; 50 15n 5 13w
30 Ree, L., Irish Free State ; 53 33n 7 58w
16 Reedham, par., Norfolk, Eng. ; p. 840 ; 52 34n 1 33e
127 Reefton, tn., S.I. N.Z. ; p. 1,525 ; 42 8s 171 52e
16 Reepham, par., Norfolk, England ; p. 372 ; 52 47n 1 06e
20 Reeth, par., N. Riding, England ; p. 709 ; 54 24n 1 57w
63 Regan, tn., Persia ; 28 40n 58 58e
40 Regensburg. See Ratisbon.
51 Reggio, com., Calabria, Italy ; cath. ; perfumes, silks, terra-cotta ; p. 122,053 ; 38 9n 15 41e
50 Reggio, com., Emilia, Italy ; cath. ; cheese, locomotives ; p. 91,079 ; 44 40n 10 40e
99 Regina, tn., cap., Sask., Canada ; foundries, oil works, saw-mills ; p. 53,209 ; 50 30n 104 35w
66 Registan, des., Afghanistan ; 31 0n 64 30e
83 Reitzboth, tn., S.W. Africa ; 23 23s 17 7e
88 Rei Baba, vil., Cameroons ; 9 00n 14 5e
45 Reichenau, tn., Switz. ; p. 35,000 ; 46 50n 9 26e
40 Reichenbach, tn., Germany ; p. 30,862 ; 50 36n 12 15e
46 Reichenberg. See Liberec.
17 Reigate, mun. bor., Surrey, Eng. ; including Redhill ; fuller's earth, freestone ; p. 30,825 ; 51 14n 0 13w
24 Reims, cy., France ; cath. ; champagne ; woollens, chemicals, machinery ; p. 112,820 ; 49 17n 4 02e
45 Reinach, tn., Switzerland ; 47 15n 8 09e
99 Reindeer L., Sask., Canada ; 57 30n 102 30w
98 Reindeer Mts., Alta., Canada ; 59 30n 112 0w
48 Reinosa, tn., Spain ; 43 1n 4 12w
83 Reitzburg, tn., O.F.S., S. Afr. ; 27 2s 27 16e
38 Remich, tn., Luxemburg ; 49 33n 6 22e
40 Remscheid, tn., Germany ; cutlery ; p. 101,188 ; 51 12n 7 14e
38 Rennix, tn., Belgium ; linen, woollens ; p. 24,085 ; 50 46n 3 36e
39 Rendsburg, tn., Germany ; brewing, tanning ; p. 17,145 ; 54 17n 9 41e
97 Renfrew, tn., Ont., Canada ; p. 5,296 ; 45 32n 76 42w
26 Renfrew, co., Scotland ; a. 239 sq. m. ; farming, dairying ; coal, iron ; mnfs., shipbuilding, machinery, printing ; p. 288,575 ; 55 50n 4 30w
27 Renfrew, bor., co. tn., Renfrew, Scotland ; shipbuilding, cottons, silks ; p. 14,986 ; 55 53n 4 25w
114 Rengo, tn., Chile ; 34 24s 70 53w
52 Reni, tn., Rumania ; p. 11,995 ; 45 25n 28 20e
120 Renmark, tn., S. Australia ; 34 15s 140 35e
34 Rennes, tn., France ; univ. ; farming implements, sailcloth ; p. 88,659 ; 48 8n 142 0w
106 Reno, tn., Nev., U.S.A. ; farming, milling, mining ; p. 18,529 ; 39 31n 119 45w
127 Renwick, tn., S.I. New Zealand ; 41 28s 173 45e
49 Requena, tn., Spain ; fruits, wines ; velvets, taffetas ; p. 20,000 ; 39 30n 1 03w
27 Rescobie, par., Angus, Scot. ; p. 559 ; 56 40n 2 47w
63 Resht, tn., Persia ; silk, rice ; p. 80,000 ; 37 12n 49 56e
113 Resistencia, tn., Argentina ; p. 21,300 ; 27 30s 58 55w
47 Resnja, tn., Yugoslavia ; 41 3n 21 0e
98 Resolution, tn., Mackenzie, Can. ; 61 10n 113 20w
93 Resolution I., Franklin, Can. ; 61 45n 65 0w

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127 Resolution I., New Zealand ; 45 42s 166 39e
53 Rethymno, tn., Crete, Greece ; p. 8,630 ; 35 21n 24 30e
49 Réus, tn., Spain ; textiles, leather, soap ; p. 30,000 ; 41 10n 1 05e
5 Réunion, I., Fr. col., Indian Ocean ; a. 970 sq. m. ; rum, sugar ; cap. St. Denis ; p. 186,637 ; 21 0s 56 0e
40 Reutlingen, tn., Germany ; textiles, leather, machinery ; p. 30,501 ; 48 30n 9 12e
42 Reval. See Tallinn.
56 Revdinski, tn., Russia ; 56 50n 59 50e
67 Rewah, tn., India ; rice ; coal ; p. 20,977 ; 24 30n 81 22e
67 Rewari, tn., India ; p. 23,129 ; 28 10n 76 44e
8 Reykjavik, tn., cap., Iceland ; cath. ; exports, fish, skins, wool ; p. 26,428 ; 64 9n 21 50w
42 Rezekne, tn., Latvia ; dairying ; p. 12,680 ; 57 26n 27 22e
115 Rezende, tn., Brazil ; 22 28s 44 22w
44 Rhaetian Alps, Switzerland ; 46 35n 9 40e
18 Rhayader, par., Radnor, Wales ; p. 910 ; 52 19n 3 30w
40 Rheine, tn., Germany ; p. 17,732 ; 52 17n 7 25e
45 Rheineck, tn., Switzerland ; 47 27n 9 34e
45 Rheinfelden, tn., Switzerland ; 47 33n 7 47e
40 Rhine Prov., Prussia, Germany ; a. 9,462 sq. m. ; drained by R. Rhine and tributaries ; fruit, sugar, flax, hops ; textiles, cutlery, steel, chemicals ; cap. Coblence ; p. 7,284,028 ; 49 30 to 51 45n 6 00 to 8 00e
40 Rhine, R., Germany ; rises in Switz., flows N. and N.W. through Germany, and W. through Nether to North S. ; chief trib, Moselle, Lahn, Main, Neckar ; 810 m. long ; 550 m. navigable, i.e. to Basle ; internationalized by Treaty of Versailles 1919 ; noted for scenery between Bingen and Coblence ; 47 50n 7 35e
102 Rhinelander, tn., Wis., U.S.A. ; p. 8,019 ; 45 42n 89 29w
70 Rhio Arch., Dutch E. Indies ; 0 30n 104 30e
102 Rhode Island, st., U.S.A. ; a. 1,300 sq. m. ; fishing ; mnfs.—woollens, cottons, machinery, jewellery ; cap. Providence ; p. 687,497 ; 41 20 to 42 0n 71 8 to 71 50w
53 Rhodes, tn., Rhodes I. ; p. 12,100 ; 36 25n 28 17e
53 Rhodes I., Ægean Sea ; It. ; a. 565 sq. m. ; figs, oranges, grapes ; p. 45,000 ; 36 12n 28 0e
89 Rhodesia. See Northern and Southern Rhodesia
53 Rhodope, Mts., Bulgaria ; 10,200 ft. ; 41 40n 24 20e
35 Rhône, dept., France ; a. 1,104 sq. m. ; grain, potatoes, wine ; silk, textiles ; cap. Lyons ; p. 1,046,028 ; 45 50n 4 35e
35 Rhône, R., France ; rises in Switzerland, flows through L. Geneva, W. to Lyons, and S. to Med. S. ; chief tribs.—Saône, Ain, Isère, Drôme, Durance ; 505 m. long ; 46 0n 5 47e
18 Rhoscolyn, par., Anglesey, Wales ; p. 427 ; 53 15n 4 35w
18 Rhuddlan, vil., Flint, Wales ; 53 17n 3 28w
18 Rhyl, urb. dist., seaside resort ; Flint, Wales ; p. 13,489 ; 53 19n 3 28w
18 Ribble, R., Lancs, Eng. ; 53 48n 2 34w
39 Ribe, tn., Denmark ; 55 20n 8 48e
112 Riberalta, tn., Bolivia ; 10 50s 66 30w
39 Ribnitz, tn., Germany ; 54 14n 12 26e
27 Riccarton, vil., Roxburgh, Scotland ; 55 17n 2 44w
17 Richborough, tn., Kent., Eng. ; 51 18n 1 19e
121 Richmond, tn., N.S.W., Australia ; 33 36s 150 46e
97 Richmond, tn., Que., Can. ; p. 2,996 ; 45 39n 72 10w
20 Richmond, mun. bor., N. Riding, Eng. ; p. 4,769 ; 54 24n 1 44w
17 Richmond, mun. bor., Surrey, Eng. ; includes Kew with its Botanical Gardens and Observatory, Richmond Park ; p. 39,276 ; 51 27n 0 18w
127 Richmond, bor., S.I., N.Z. ; p. 1,125 ; 41 19s 173 10e
83 Richmond, tn., C. of Good Hope, S. Afr. ; 31 25s 24 0e
83 Richmond, tn., Natal, S. Afr. ; 29 53s 30 15e
102 Richmond, tn., Ind., U.S.A. ; farming machinery ; p. 32,493 ; 39 52n 84 55w
102 Richmond, tn., Ky., U.S.A. ; p. 6,495 ; 37 46n 84 25w
102 Richmond, tn., cap. Va., U.S.A. ; on James R. ; tobacco ; lumbering ; machinery ; p. 182,929 ; 37 30n 77 30w
17 Rickmansworth, urb. dist., Herts, Eng. ; on R. Colne ; brewing ; p. 10,810 ; 51 39n 0 29w
96 Ridout, tn., Ont., Canada ; 47 38n 82 57w
85 Riebeek, tn., C. of Good Hope, S. Afr. ; 33 13s 26 10e
41 Riesa, tn., Germany ; on R. Elbe ; ironworks, sawmills ; p. 24,218 ; 51 19n 13 17e
41 Riesen Gebirge (Giant Mts.); Germany ; 50 48n 15 35e
83 Riet, R., O.F.S., S.Afr. ; 29 25s 25 15e
83 Rietfontein, tn., S.W. Africa ; 26 40s 20 2e
50 Rieti, tn., Italy ; cath. ; p. 17,910 ; 42 27n 12 52e
87 Riet Vlei, tn., C. of Good Hope, S. Afr. ; 31 0s 29 32e
42 Riga, tn., spt., cap., Latvia ; machinery, glass, paper, cottons ; exps.—wheat, flax, hemp, dairy produce ; p. 377,917 ; 56 57n 24 10e
42 Riga, G., Latvia ; 57 30n 23 30e
97 Rigaud, tn., Que., Canada ; p. 1,099 ; 45 32n 74 20w
38 Rijswijk, tn., Netherlands ; p. 15,929 ; 52 4n 4 20e
53 Rila Mts., Bulgaria ; 42 10n 23 22e
20 Rillington, par., E. Riding, Eng. ; p. 684 ; 54 9n 0 42w
53 Rilo Monastery, Bulgaria ; 42 8n 23 28e
50 Rimini, tn., Italy ; cath. ; silks, rope, sailcloth ; p. 58,000 ; 44 5n 12 38e
94 Rimouski, tn., Que., Canada ; p. 5,589 ; 48 26n 68 35w
108 Rincon Romos, tn., Mexico ; 22 7n 102 20w
70 Ringat, tn., Sumatra ; 0 30s 102 40e
39 Ringe, tn., Denmark ; 55 14n 10 30e
39 Ringköbing, tn., Denmark ; p. 3,995 ; 56 0n 8 18e
39 Ringsted, tn., Denmark ; p. 6,148 ; 55 28n 11 50e
17 Ringwood, par., Hants, Eng. ; gloves ; p. 5,131 ; 50 52n 1 47w
115 Rio Claro, tn., Brazil ; 22 30s 47 50w
114 Rio Cuarto, tn., Argentina ; p. 18,400 ; 33 15s 64 10w
112 Rio de Janeiro, st., Brazil ; a. 26,627 sq. m. ; interior mountainous ; coffee, sugar, cotton, tobacco ; cap. Nictheroy ; p. 1,990,899 ; 22 10s 42 30w

MAP

113 **Rio de Janeiro**, tn., spt., cap. Brazil; beautiful harbour; Sugar Loaf Mt.; 2nd city of S. America; brewing, foundries, milling, sugar refining; rly. works; exps.—coffee, sugar, hides, meat, diamonds; p. 1,468,821 (est.); 23 0s 43 30w

113 **Rio de la Plata**, estuary, S. America; 200 m. long; 35 0s 57 40w

76 **Rio de Oro and Adrar**, Span. col., Africa; a. 109,200 sq. m.; fishing; cap. Villa Cisneros; p. 495; 23 30n 16 0w

107 **Rio Grande Del Norte**, N. America; 1,800 m. long; 29 48n 102 0w

112 **Rio Grande do Norte**, st., Brazil; a. 22,189 sq. m.; sugar, cotton; cattle rearing; cap. Natal; p. 738,889; 5 50s 37 0w

113 **Rio Grande do Sul**, st., Brazil; a. 91,310 sq. m.; cattle, sheep; cap. Porto Alegre; p. 2,999,627; 30 0s 54 0w

113 **Rio Grande do Sul**, spt., Brazil; leather; p. 40,000; 32 0s 52 15w

112 **Rio Hacha**, tn., Colombia; 11 37n 72 55w

48 **Rio Maior**, tn., Portugal; 39 20n 8 55w

115 **Rio Negro**, tn., Brazil; 26 2s 50 25w

113 **Rio Pardo**, tn., Brazil; p. 10,820; 29 58s 52 10w

109 **Rio Verde**, tn., Mexico; 22 48n 100 3w

112 **Riobamba**, tn., Ecuador; p. 30,000; 1 50s 78 40w

114 **Rioja**, tn., Argentina; p. 12,500; 29 20s 67 0w

51 **Rionera**, tn., Italy; p. 11,970; 40 57n 15 41e

16 **Ripley**, urb. dist., Derby, Eng.; coal, iron; p. 13,415; 53 4n 1 24w

21 **Ripley**, par., W. Riding, Eng.; p. 231; 54 2n 1 33w

49 **Ripoll**, tn., Spain; 42 15n 2 13e

20 **Ripon**, mun. bor., W. Riding, Eng.; cath.; p. 8,418; 54 8n 1 02w

19 **Risca**, urb. dist., Monmouth, Eng.; coal, chemicals; p. 16,605; 51 37n 3 05w

61 **Rishon le Zion**, Palestine; 31 58n 34 45e

55 **Risör**, tn., Norway; 58 42n 9 05e

54 **Ristijarvi**, tn., Finland; 64 28n 28 25e

50 **Riva**, tn., Italy; 45 52n 10 52e

113 **Rivadavia**, tn., Chile; 30 0s 70 30w

48 **Rivadavia**, tn., Spain; 42 18n 8 05w

48 **Rivadéo**, tn., Spain; 43 34n 7 04w

110 **Rivas**, tn., Nicaragua; p. 4,000; 11 29n 85 50w

113 **Rivera**, tn., Uruguay; p. 9,000; 30 50s 56 0w

121 **Riverina**, dist., N.S.W., Australia; sheep-farming; grain; 35 0s 145 0e

83 **Riversdale**, tn., C. of Good Hope, S. Afr.; 34 10s 21 16e

83 **Riverside**, tn., C. of Good Hope, S. Afr.; 30 4s 29 48e

127 **Riverton**, bor., S.I., New Zealand; p. 890; 46 20s 168 4e

35 **Riviera, France and Italy**; mild winters, fine scenery, holiday resort; 43 30n 6 30 to 7 30e

50 **Riviera di Ponente, Italy**; 6 30 to 8 20e

50 **Riviera di Levante, Italy**; 44 20n 9 20e

60 **Riyadh**, tn., cap. Nejd, Arabia; p. 30,000 (est.); 24 50n 46 18e

56 **Rjev**, tn., Russia; 56 25n 34 16e

48 **Roa**, tn., Spain; 41 42n 3 46w

16 **Roade**, vil., Northants, Eng.; 52 10n 0 53w

89 **Roan Antelope**, tn., N. Rhodesia; 13 0s 28 18e

35 **Roanne**, tn., France; on R. Loire; cottons, woollens, silks; p. 40,502; 46 2n 4 03e

62 **Roanoke**, tn., Va., U.S.A.; rly. works; ironworks; p. 69,206; 57 20n 80 2w

60 **Robs el Khali**, des., Arabia; 21 0n 50 0e

120 **Robe**, tn., S. Australia; 37 12s 139 44e

27 **Roberton**, vil., Rox., Scot.; p. 406; 55 24n 2 54w

17 **Roberts Bridge**, vil., Sussex, England; 51 0n 0 28e

83 **Robertson**, tn., C. of Good Hope, S. Afr.; p. 2,946 (Eur.); 33 50s 19 55e

118 **Robertson Ra., Mts.**, W. Australia; 23 25s 120 45e

88 **Robertsport**, tn., Liberia; 6 45n 11 20w

94 **Roberval**, tn., Que., Canada; p. 2,770; 48 30n 72 10w

20 **Robin Hoods Bay**, N. Riding, Eng.; 54 26n 0 31w

58 **Robson**, vil., B.C., Canada; 49 12n 117 0w

98 **Robson Pk., Mt.**, B.C., Canada; 12,972 ft.; 53 10n 118 30w

48 **Roca, C. da.**, Portugal; 38 40n 9 30w

115 **Rocha**, tn., Uruguay; p. 12,000; 34 30s 54 30w

18 **Rochdale**, co. bor., Lancs, Eng.; cottons, woollens, foundries; p. 95,590; 53 37n 2 11w

35 **Rochefort**, tn., France; on R. Charente; shipbuilding, bricks; exps.—timber, oysters; 45 56n 0 59w

17 **Rochester**, mun. bor., Kent, Eng.; on R. Medway; cath., castle; oysters; cement, farming machinery; p. 31,193; 5 23n 0 30e

102 **Rochester**, tn., Minn., U.S.A.; p. 20,621; 44 3n 92 25w

105 **Rochester**, tn., N.H., U.S.A.; p. 10,209; 43 17n 71 0w

102 **Rochester**, tn., N.Y., U.S.A.; univ.; hydro-electric power; machinery; p. 328,132; 43 8n 77 50w

104 **Rochester**, tn., Pa., U.S.A.; p. 7,726; 40 44n 80 15w

17 **Rochford**, par., Essex, Eng.; p. 2,077; 51 35n 0 42e

102 **Rock Island**, tn., Ill., U.S.A.; on R. Mississippi; lumbering; farm implements; p. 37,953; 41 27n 90 30w

106 **Rock Springs**, tn., Wyo., U.S.A.; p. 8,440; 41 31n 109 13w

102 **Rockford**, tn., Ill., U.S.A.; farm implements, machinery, tools; p. 85,864; 42 17n 89 15w

123 **Rockhampton**, tn., Queens., Australia; on Fitzroy R.; meat canning; mining; p. 30,000; 23 22s 150 36e

125 **Rockingham**, tn., W. Australia; 32 11s 115 48e

16 **Rockingham Forest**, Northants, Eng.; 52 30n 0 40w

102 **Rockland**, tn., Me., U.S.A.; p. 9,075; 44 2n 69 5w

112 **Rockstone**, tn., Br. Guiana; 5 50n 58 40e

90 **Rocky Mts.**, N. America; extend from Alaska to Mexico; highest peaks—Mt. McKinley 20,300 ft., Mt. Logan 19,550 ft., Mt. St. Elias 18,008 ft.; traversed by trans-continental rlys.; forests, minerals; 30 0 to 64 0n 105 0 to 140 0w

121 **Rocky Pt., Tas.**, Australia; 42 52s 145 25e

78 **Roda**, tn., Egypt; 27 47n 30 46e

39 **Rödby**, tn., Denmark; p. 3,108; 54 42n 11 24e

39 **Rödding**, tn., Denmark; 55 24n 9 00w

35 **Rodez**, tn., France; cath.; woollens; 44 21n 2 36e

53 **Rodosto**, tn., Turkey; grain; p. 35,000; 40 59n 27 30e

5 **Rodriguez, I.**, Ind. Oc., Br.; p. 7,993; 19 48s 63 10e

124 **Roebourne**, tn., W. Australia; 20 45s 117 11e

38 **Roermond**, tn., Netherlands; on R. Maas; textiles, beer, paper; p. 16,599; 51 14n 6 00e

MAP

99 **Roes Welcome, Keewatin, Can.**; 65 0n 86 30w

55 **Rogaland**, co., Norway; a. 3,546 sq. m.; p. 172,563; 58 20n 6 00e

25 **Rogart**, par., Sutherland, Scot.; p. 732; 58 1n 4 08w

43 **Rohatyn**, tn., Poland; 49 25n 24 40e

67 **Rohilkhand**, div., India; 28 6n 79 30e

66 **Rohri**, tn., India, 27 43n 68 58e

67 **Rohtak**, tn., India; cottons; p. 25,240; 28 52n 76 43e

43 **Rojan**, tn., Poland; 52 53n 21 27e

74 **Rokko**, tn., Formosa; 24 1n 120 25e

121 **Roma**, tn., Queens., Austral.; 26 40s 148 58e

52 **Roman**, tn., Rumania; p. 28,948; 46 58n 26 58e

45 **Romanshorn**, tn., Switzerland; 47 35n 9 23e

90 **Romanzof, C., Alas., N. America**; 61 40n 166 5w

50 **Rome**, cy., cap., Italy; on R. Tiber; St. Peter's Cath., largest in the world; Pope recognized as sovereign of the Holy See in Vatican City, comprising the Vatican and Lateran Palaces, within Rome; univ., nat. library; famous for Roman antiquities, Colosseum, Forum, Pantheon; temples, palaces, arches; medieval palaces, villas, churches; p. 999,964; 41 54n 12 29e

103 **Rome**, tn., Ga., U.S.A.; cottons; p. 21,843; 34 15n 85 0w

102 **Rome**, tn., N.Y., U.S.A.; brass, copper; p. 32,338; 43 12n 75 32w

17 **Romford**, urb. dist., Essex, Eng.; brewing, malting; p. 35,918; 51 35n 0 10e

17 **Romney Marsh**, Kent, Eng.; sheep; 51 3n 0 55e

57 **Romny**, tn., Russia; 50 40n 33 20e

45 **Romont**, tn., Switzerland; 46 42n 6 53e

17 **Romsey**, mun. bor., Hants, Eng.; p. 5,779; 51 0n 1 29w

49 **Roncesvalles**, vil., Spain; 43 0n 1 17w

48 **Ronda**, tn., Spain; leather, fruit, wines; p. 30,000; 36 44n 5 10w

55 **Rönne**, tn., Denmark; p. 10,537; 55 6n 14 44e

55 **Ronneby**, tn., Sweden; p. 5,774; 56 10n 15 20e

112 **Roosevelt, R.**, Brazil; 8 0s 60 5w

112 **Roraima, mt.**, Venezuela; 5 0n 62 0w

83 **Rorke's Drift**, Natal, S. Afr.; 28 20s 30 30e

54 **Röros**, tn., Norway; 62 35n 10 45e

45 **Rorschach**, tn., Switz.; lace; p. 10,967; 47 28n 9 29e

50 **Rosa, Mte.**, Italy; 15,217 ft.; 45 55n 7 42e

114 **Rosario**, tn., Santa Fe, Argentina; on R. Paraná; rly. terminus; sugar refining, milling, brewing; p. 481,000; 33 0s 61 0w

108 **Rosario**, tn., Mexico; 23 5n 106 2w

49 **Rosas**, tn., Spain; 42 18n 3 18e

33 **Rosbercon**, par., Kilkenny, I.F.S.; p. 702; 52 23n 6 57w

30 **Roscommon**, co. tn., Roscommon, I.F.S.; p. 1,858; 53 39n 8 12w

30 **Roscommon**, co., I.F.S.; a. 983 sq. m.; cattle; p. 83,504; 53 16 to 54 14n 7 55 to 8 52w

83 **Roscrea**, tn., Tipperary, I.F.S.; p. 2,182; 52 57n 7 49w

111 **Roseau**, tn., Dominica; p. 7,000; 15 26n 61 27w

123 **Rosedale**, tn., Queens., Australia; 24 33s 151 52e

20 **Rosedale Abbey**, N. Riding, England; 54 21n 0 51w

25 **Rosehearty**, bor., Aber., Scot.; p. 1,079; 57 42n 2 08w

81 **Roseires**, tn., A.-E. Sudan; 11 52n 34 25e

25 **Rosemarkie**, par., Ross and Crom., Scot.; p. 1,203; 57 37n 4 08w

40 **Rosenheim**, tn., Germany; on R. Inn; saline waters; cement, salt; p. 17,998; 47 53n 12 5e

83 **Rosenkal**, tn., Trans., S. Afr.; 25 5s 30 44e

78 **Rosetta**, tn., Egypt; p. 23,048; 31 21n 30 24e

52 **Roshiori de Vede**, tn., Rum.; p. 11,443; 47 7n 25 0e

61 **Rosh Pinah**, Palestine; 32 56n 35 35e

39 **Roskilde**, tn., Den.; cath.; p. 12,533; 55 40n 12 8e

57 **Roslavl**, tn., Russia; 54 0n 32 48e

85 **Rosmead Junc.**, C. of Good Hope, S. Afr.; 31 35s 25 0e

127 **Ross**, bor., S.I. New Zealand; p. 480; 42 54s 170 26e

19 **Ross**, urb. dist., Hereford, Eng.; cider; p. 4,738; 51 55n 2 34w

24 **Ross and Cromarty**, co., Scotland; a. 3,089 sq. m.; mountainous; sheep; salmon fishing; distilling; p. 62,802; 57 6 to 58 8n 3 45 to 5 52w

128 **Ross Dependency**, Antarctica, N.Z.; 60 0 to 90 0s 150 0 to 180 0e 160 0 to 180 0w

128 **Ross I.**, Antarctica; 78 0s 165 0e

128 **Ross Sea**, Antarctica; 75 0s 179 0e

51 **Rossano**, tn., Italy; cath.; silk, olive oil; marble, alabaster; p. 16,000; 39 35n 16 40e

32 **Rosscarbery**, vil., Cork, I.F.S.; p. 475; 51 35n 9 02w

42 **Rossieni**, tn., Lithuania; 55 20n 23 2e

98 **Rossland**, tn., B.C., Canada; gold; p. 2,848; 49 2n 117 33w

33 **Rosslare**, par., Wexford, I.F.S.; p. 667; 52 17n 6 24w

40 **Rosslau**, tn., Germany; p. 12,520; 51 54n 12 16e

40 **Rostock**, tn., Germany; univ.; fisheries; machinery, sugar, chemicals; p. 93,530; 54 4n 12 8e

57 **Rostov**, tn., Russia; on R. Don; footwear, flour, tobacco; fisheries; p. 520,700; 47 15n 39 32e

56 **Rostov**, tn., Russia; fisheries, market gardens; textiles, milling; p. 20,000; 57 21n 39 29e

107 **Roswell**, tn., N. Mex., U.S.A.; p. 11,173; 33 28n 104 25w

27 **Rosyth**, Fife, Scot.; formerly naval dockyard; 56 2n 3 25w

20 **Rothbury**, par., Northumb., Eng.; p. 1,255; 55 19n 1 54w

17 **Rotherfield**, par., Sussex, Eng.; p. 2,821; 51 3n 0 13e

21 **Rotherham**, co. bor., W. Riding, Eng.; iron, brass, coal, glass, brewing; p. 69,689; 53 26n 1 21w

17 **Rother, R.**, Sussex, Eng.; 51 0n 0 35e

25 **Rothes**, bor., Moray, Scot.; p. 1,292; 57 31n 3 12w

26 **Rothesay**, bor., co. tn., Bute, Scot.; fishing; p. 9,346; 55 50n 5 02w

25 **Rothiemay**, par., Banff, Scot.; p. 926; 57 32n 2 35w

16 **Rothwell**, urb. dist., Northants, Eng.; boots, shoes; p. 4,516; 52 26n 0 47w

126 **Rotorua**, bor., N.I. New Zealand; hot springs; p. 5,140; 38 9s 176 15e

127 **Rotorua, L.**, N.I., New Zealand; 38 5s 176 18w

38 **Rotterdam**, tn., spt., Netherlands; on R. Maas; breweries, sugar refining, shipbuilding, chemicals, clocks; p. 581,899; 51 55n 4 29e

116 **Rotumah, I.**, Fiji Is., Pac. Oc.; 12 25s 177 5e

34 **Roubaix**, tn., Fr.; textiles; p. 117,190; 50 41n 3 10e

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34 **Rouen**, tn., France; on R. Seine; cath.; cottons, woollens, silks; machinery, shipbuilding; p. 122,937; 49 28n 1 04e

38 **Roulers**, tn., Belgium; linens, cottons, lace; p. 27,690; 50 57n 3 07e

30 **Roundstone**, vil., Galway, I.F.S.; p. 364; 53 23n 9 57w

22 **Roussay, I.**, Orkney Is., Scotland; 59 10n 3 00w

105 **Rouses Point**, tn., N.Y., U.S.A.; 44 59n 73 25w

83 **Rouxville**, tn., O.F.S., S. Afr.; 30 25s 26 53e

93 **Rouyn**. See Noranda.

54 **Rovanieri**, tn., Finland; p. 5,350; 68 7n 26 45e

45 **Roveredo**, tn., Switzerland; 46 13n 9 07e

50 **Roverio**, tn., Italy; on R. Adige; paper, leather, silks, cottons; p. 14,000; 45 52n 11 5e

50 **Rovigo**, tn., Italy; brewing; woollens, silk, linen; p. 15,704; 45 3n 11 47e

26 **Row**, par., Dumbarton, Scot.; p. 12,765; 56 2n 4 46w

43 **Rowne**, tn., Poland; horses, cattle; p. 30,000; 50 40n 26 16e

127 **Roxburgh**, bor., S.I., N.Z.; p. 415; 45 32s 169 19e

27 **Roxburgh**, co., Scotland; a. 666 sq. m.; hilly; sheep rearing; woollens, tweed; p. 45,787; 55 25n 2 35w

27 **Roxburgh**, par., Rox., Scot.; p. 698; 55 34n 2 29w

35 **Royan**, tn., France; 45 39n 1 03w

16 **Royston**, urb. dist., Herts, Eng.; p. 3,831; 52 4n 0 02w

38 **Rozendaal**, tn., Netherlands; p. 22,053; 51 31n 4 28e

46 **Rožňava**, com., Cz.-slov.; p. 6,670; 48 37n 20 32e

18 **Ruabon**, par., Denbigh, Wales; coal, iron, bricks; p. 3,333; 53 0n 3 04w

126 **Ruahine Ra.**, New Zealand; 40 0s 176 4e

81 **Ruanda**, dist., Belgian mandate, Belg. Congo; 2 00s 30 0e

126 **Ruapehu, Mt.**, New Zealand; 39 19s 175 139e

127 **Ruapuka I., S.I.** New Zealand; 46 45s 168 32e

19 **Ruardean**, par., Glouces., Eng.; p. 1,266; 51 52n 2 34w

64 **Rudbar**, tn., Afghanistan; 30 9n 62 47e

16 **Ruddington**, par., Notts, Eng.; p. 2,877; 52 54n 1 09w

39 **Rudkjobing**, tn., Denmark; p. 4,129; 54 57n 10 45e

81 **Rudolf, L.**, Kenya; 34 0n 36 0e

40 **Rudolstadt**, tn., Germany; machinery, chemicals, porcelain; p. 15,711; 50 45n 11 22e

81 **Rufagh**, tn., A.-E. Sudan; 14 35n 33 45e

35 **Ruffec**, vil., France; 46 1n 0 11e

81 **Rufiji, R.**, Tang. Ter.; 7 56s 38 0e

113 **Rufino**, tn., Argentina; 34 20s 62 50w

16 **Rugby**, mun. bor., Warwick, Eng.; electrical and general engineering; p. 23,824; 52 23n 1 17w

18 **Rugeley**, urb. dist., Staffs, Eng.; coal, iron; p. 5,263; 52 45n 1 55w

41 **Rügen I.**, Germany; 54 25n 13 40e

40 **Ruhr, R.**, Germany; rich coal, iron and steel dist.; 51 20n 8 00e

127 **Rukaki, L.**, New Zealand; 44 10s 170 12e

81 **Rukwa, L., Tang. Ter.**; 8 20s 32 40e

47 **Ruma**, tn., Yugoslavia; 45 2n 19 51e

24 **Rum I.**, Scotland; p. 149; 57 0n 6 20w

52 **Rumania**, king., Europe; a. 122,282 sq. m.; comprising Wallachia, Moldavia, Bessarabia, Transylvania; plain, drained by Danube and tribs. Pruth, Sereth, Jalomitza, Aluta; except Transylvania, mountainous, Carpathians, Transylvanian Alps; agriculture, maize, wheat, barley, oats; sheep, cattle, pigs, horses; forests, timber; minerals, petroleum, natural gas, lignite, copper, salt; flour milling, brewing, distilling, oil refining; cap. Bucharest; p. 19,033,363; 44 0 to 48 0n 20 0 to 30 0e

81 **Rumbek**, vil., A.-E. Sudan; 6 50n 29 40e

105 **Rumford Falls**, tn., Me., U.S.A.; 44 24n 70 43w

18 **Runcorn**, urb. dist., spt., Cheshire, Eng.; docks; port on Manchester Ship Canal; chemicals, iron, rope; p. 18,158; 53 20n 2 44w

93 **Rupert R., Que., Canada**; 51 25n 78 50w

112 **Rurenabaque**, tn., Bolivia; 14 0s 67 40w

89 **Rusani**, vil., S. Rhodesia; 18 40s 31 15e

52 **Ruschuk**, tn., Bulgaria; on R. Danube; beer, sugar, tobacco; p. 45,788; 43 49n 25 59e

67 **Rusera**, tn., India; 25 45n 86 12e

31 **Rush**, spt., Dublin, I.F.S.; p. 864; 53 31n 6 05w

16 **Rushden**, urb. dist., Northants, Eng.; shoes; p. 14,247; 52 18n 0 35w

16 **Ruskington**, urb. dist., Kesteven, Eng.; p. 1,102; 53 2n 0 23w

126 **Russell**, tn., dist., N.I., N.Z.; p. 380; 35 15s 174 9e

56 **Russia**. See U.S.S.R., R.S.F.S.R.

56 **Russian Socialist Federal Soviet Republic**; a. 7,638,004 sq. m.; the largest of constituent rep. of U.S.S.R., contains 12 autonomous republics and 14 autonomous areas; the aut. reps. are Bashkir, Tartar, Kirghiz, Dagestan, Crimea, Yakutsk, Karelia, Chuvash, German Volga, Buryat Mongol, Kazak, Kara Kalpak; includes E. Europe and N. and Cent. Asia; in W. plain extending from Arctic Oc. to Black and Caspian Seas; Cent. and E. regions occupied by Tien Shan, Yablonoi and Stanovoi Mts.; chief rivers, Volga, Don, Dnieper, Dvina, Ob, Yenisei, Lena, Amur; chief lakes, Caspian S., Aral, Baikal, Balkash, Ladoga, Onega; chief industries, agriculture, wheat, rye, oats, barley, potatoes, sugar beet, fruits, sunflower, flax, cotton, hemp, tobacco; pastoral farming, sheep, cattle, dairying, pigs, horses, wool; lumbering, timber, wood pulp; minerals, coal, petroleum, iron, manganese, copper, platinum, gold; fishing; manfs., machinery, textiles, oil refining, cement, bricks, etc.; commerce; cap. Moscow; p. 113,651,000; 38 0 to 70 0n 26 0 to 180 0e

83 **Rustenburg**, tn., Trans., S. Afr.; p. 2,755 (Eur.); 25 15s 27 20e

62 **Rutbah**, tn., Iraq; 33 30n 40 15e

46 **Ruthenia**, prov., Czechoslovakia; a. 4,886 sq. m.; maize, oats, vines; p. 725,350; 48 30n 23 0e

27 **Ruthergien**, bor., Lanark, Scot.; coal, iron, chemicals, dyeing; p. 25,157; 55 49n 4 12w

18 **Ruthin**, mun. bor., Denbigh, Wales; p. 2,912; 53 7n 3 19w

25 **Ruthven**, vil., Aberdeen, Scot.; 57 30n 2 52w

27 **Ruthven**, vil., Perth, Scot.; 56 38n 3 09w

25 **Ruthven Loch**, Inverness, Scot.; 57 19n 4 17w

27 **Ruthwell**, par., Dumfries, Scot.; p. 646; 55 0n 3 23w

16 **Rutland**, co., smallest co., England; a. 152 sq. m.;

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farming, live-stock; cheese; stone, iron; p. 17,397; 52 31 to 52 46N 0 25 to 0 49W
102 Rutland, tn., Vt., U.S.A.; marble; p. 17,315; 43 40N 73 3W
51 Ruvo, tn., Italy; pottery; p. 24,400; 41 8N 16 38E
80 Ruwe, vil., Belg. Congo; 10 38S 25 32E
81 Ruwenzori, Mt., Uganda; 16,815 ft.; 0 25N 29 55E
46 Ružomberok, com., Czechoslovakia; p. 15,668; 49 40N 19 18E
57 Ryajsk, tn., Russia; 53 40N 40 0E
57 Ryazan, tn., Russia; distilling, leather; p. 49,000; 54 41N 39 38E
56 Rybinsk, tn., Russia; on R. Volga; brewing, distilling, milling; p. 86,700; 58 8N 38 58E
17 Ryde, mun. bor., I. of Wight, Eng.; yachting centre; boat, yacht building; p. 18,537; 50 44N 1 11W
17 Rye, mun. bor., Sussex, Eng.; p. 3,947; 50 57N 0 45E
20 Rye, R., N. Riding, Eng.; 54 22N 1 07W
57 Ryechitsa, tn., Russia; 52 20N 30 22E
57 Ryisk, tn., Russia; 51 37N 34 34E
43 Rypin, tn., Poland; 53 3N 19 31E
43 Rzeszow, tn., Poland; rye, oats; horses; p. 25,000; 50 1N 21 27E

40 Saale, R., Germany; 51 25N 11 45E
40 Saalfeld, Germany; machinery, cigars, beer; iron, ochre; p. 17,960; 50 40N 11 22E
40 Saar, R., Germany; 49 30N 6 35E
40 Saar, The, territory, Germany; a. 737 sq. m.; in valley of R. Saar; administered under League of Nations till 1935; chief tn. Saarbrücken; p. 770,030; 49 20N 7 00E
40 Saarbücken, tn., Germany; coal, ironworks, chemicals, glass, textiles; p. 139,686; 49 17N 7 00E
34 Saareguemines, France; on R. Saar; porcelain, leather, matches; 49 8N 7 05E
40 Saarlouis, tn., Germany; porcelain, leather, glass; coal; p. 15,836; 49 20N 6 42E
13 Saavedra, tn., Argentina; 37 40S 62 30W
49 Sabadell, Spain; textiles, flour, paper; distilling and iron founding; 41 32N 2 05E
112 Sabanilla. See Puerto Colombia.
109 Sabinas, tn., Mexico; 26 26N 100 15W
95 Sable, C., N.S., Can.; 43 25N 65 36W
102 Sable, C., Fla., U.S.A.; 25 8N 81 5W
48 Sabugal, tn., Portugal; 40 21N 7 10W
66 Sabzawar, tn., Afghanistan; 33 28N 62 8E
104 Sackets Harbour, N.Y., U.S.A.; 43 55N 76 15W
95 Sackville, spt., N.B., Can.; p. 2,234; 45 54N 64 15W
106 Sacramento, cap., Cal., U.S.A.; on Sacramento R.; caths.; rail workshops; furniture, pottery; smelting, meat and fruit packing and canning, flour; p. 93,750; 38 31N 121 32W
106 Sacramento, R., U.S.A.; 39 45N 122 0W
54 Saddede, tn., Sweden; 64 25N 14 0E
26 Saddell, par., Argyll., Scot.; p. 946; 55 32N 5 30W
60 Sade, tn., Arabia; 16 50N 43 52E
69 Sadiya, tn., Assam, India; 27 55N 95 42E
61 Safed, tn., Palestine; p. 8,761; 33 0N 35 30E
16 Saffron Walden, mun. bor., Essex, Eng.; malting, farming; p. 5,930; 52 2N 0 15E
75 Saga, tn., Japan; p. 50,154; 33 14N 130 29E
69 Sagaing, tn., Burma, India; p. 12,000; 22 0N 95 55E
81 Sagallo, tn., Fr. Somaliland; 12 0N 43 0E
41 Sagan, tn., Germany; woollens, cottons, cloth, bricks, porcelain; p. 17,572; 51 38N 15 20E
105 Sag Harbour, N.Y., U.S.A.; 41 0N 72 18W
102 Saginaw, cy., Mich., U.S.A.; machinery, railworks, beet-sugar; p. 80,715; 43 27N 84 0W
48 Sagres, tn., Portugal; 37 0N 8 55W
110 Sagua la Grande, tn., Cuba; 22 46N 80 5W
115 Saguarema, tn., Brazil; 22 55S 42 20W
94 Saguenay R., Que., Can.; 48 20N 70 20W
49 Sagunto, tn., Spain; 39 42N 0 14W
48 Sahagun, tn., Spain; 42 57N 5 00W
13 Sahama, Mt., Bolivia; alt., 21,050; 18 40S 69 0W
76 Sahara Desert, N. Africa; a. (about) 3,500,000 sq. m.; extends from the Atlantic to the R. Nile, W. to E., and from Atlas Mts. to R. Niger N. to S.; caravan routes between Mediterranean and Sudan; numerous oases; 15 0 to 34 0N 17 0W to 32 0E
67 Saharanpur, tn., India; rly. works; wood-carving; p. 62,261; 29 58N 77 40E
108 Sahuaripa, tn., Mexico; 29 3N 109 15E
61 Saida, tn., Syria; p. 10,000; 33 34N 35 28E
63 Saidabad, tn., Persia; 29 31N 55 32E
68 Saidapet, tn., Mad., India; p. 27,404; 13 0N 80 12E
70 Saigon, spt., Fr. Indo-China; cath., pal., coll.; spices and rice; 10 45N 106 45E
60 Saihut, tn., Arabia; 15 35N 51 30E
72 Sain Noina, tn., Mongolia; 46 30N 101 20E
72 Sainnoin, dist., Mongolia; 45 10N 101 0E
27 St. Abbs Hd., Berwick, Scot.; 55 55N 2 09W
19 St. Agnes, par., Corn., Eng.; tin, iron, clay, farming; p. 3,347; 50 19N 5 12W
19 St. Agnes Hd. Corn., Eng.; 50 20N 5 14W
17 St. Albans, mun. bor., Herts, Eng.; cath.; straw-plaiting, silk, brewing; p. 28,625; 51 45N 0 21W
102 St. Albans, tn., Vt., U.S.A.; p. 8,020; 44 52N 73 10W
110 St. Andrew, I., Colombia; 12 31N 81 41W
94 St. Andrews, tn., N.B., Can.; p. 1,207; 45 5N 67 8W
27 St. Andrews, burgh, Fife, Scot.; univ., cath. (ruins); p. 8,269; 56 21N 2 48W
18 St. Annes. See Lytham.
110 St. Anns, tn., Jamaica; p. 2,000; 18 27N 77 12W
19 St. Ann's Hd., Pem., Wales; 51 41N 5 10W
120 St. Arnaud, tn., Vic., Australia; 36 38S 143 13E
18 St. Asaph, tn., Flint., Wales; cath.; p. 1,830; 53 15N 3 18W
103 St. Augustine, tn., Fla., U.S.A.; resort; p. 12,111; 29 57N 81 20W
19 St. Austell, urb. dist., Corn., Eng.; china clay, tin, pilchard fishing; p. 8,295; 50 21N 4 48W
111 St. Bartholomew, I., W. Indies; 17 57N 62 50W
20 St. Bees Hd., Cumb., Eng.; freestone quarries; 54 31N 3 39W
19 St. Blazey, par., Corn., Eng.; tin, iron; p. 3,146; 50 23N 4 43W
99 St. Boniface, Man., Can.; suburb of Winnipeg; p. 16,305; 49 53N 96 59W
27 St. Boswells, par., Rox., Scot. p. 952; 55 35N 2 40W

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19 St. Bride's B., Pem., Wales; 51 47N 5 15W
34 St. Brieuc, tn., France; coll., cath.; woollens, timber, iron, farm implements; p. 28,320; 48 30N 2 50W
19 St. Buryan, par., Corn., Eng.; lobster and crab fishing; p. 1,132; 50 5N 5 38W
96 St. Catherines, tn., Ont., Can.; fruit, iron, mineral springs; p. 24,753; 43 8N 79 18W
17 St. Catherine's Pt., I. of W., Eng.; 50 35N 1 18W
102 St. Charles, tn., Mo., U.S.A.; p. 10,491; 38 52N 90 33W
93 St. Charles, C., Labrador; 52 20N 57 47W
111 St. Christopher, I., Br. W. Indies; 65 sq. m.; p. 36,000; 17 15N 62 40W
19 St. Clears, par., Carmarthen, Wales; p. 931; 51 48N 4 30W
102 St. Cloud, tn., Minn., U.S.A.; on R. Mississippi; dairying, farming; p. 21,000; 45 35N 94 10W
19 St. Columb Major, par., Corn., Eng.; farming, stone circle; p. 2,880; 50 27N 4 56W
25 St. Cyrus, par., Kinc., Scot.; p. 1,173; 56 46N 2 26W
19 St. Davids, tn., Pem., Wales; 51 53N 5 17W
18 St. David's Hd., Pem., Wales; 51 54N 5 19W
34 St. Denis, tn., France; abbey, burial pl. of Kings of France; chemicals, machinery; 48 56N 2 23E
34 St. Dié, tn., France; cath.; iron, copper, machinery, hosiery; p. 19,695; 48 18N 6 58E
34 St. Dizier, tn., France; iron, steel, copper, boats; p. 18,292; 48 38N 4 58E
98 St. Elias, Mt., Alaska; alt. 18,024 ft.; 60 10N 140 30W
35 St. Etienne, tn., France; coal, firearms, iron, ribbons, dyeing, machinery; p. 191,088; 45 27N 4 24E
97 St. Eustache, tn., Que., Can.; p. 1,187; 45 35N 73 55W
111 St. Eustatius, I., W. Indies; 17 28N 63 0W
83 St. Francis, C., C. of Good Hope, S. Afr.; 34 10S 24 55E
45 St. Gall, tn., Switzerland; cath.; cottons and embroidery; p. 64,228; 47 25N 9 23E
45 St. Gall, can., Switzerland; mountainous dist.; cattle raising, cotton spinning, lace; cap. St. Gall; p. 286,908; 47 14N 9 15E
121 St. George, tn., Queens., Australia; 28 1S 148 35E
113 St. George, G. of, Argentina; 46 0S 66 0W
95 St. George B., N.S., Can.; 45 50N 61 45W
34 St. Germain, tn., France; resort on R. Seine; cas.; cottons, woollens; p. 31,996; 48 53N 2 04E
44 St. Gotthard, pass, Switz.; alt. 6,890 ft.; 46 30N 8 40E
19 St. Govan's Hd., Pem., Wales; 51 36N 4 55W
18 St. Harmon, par., Radnor, Wales; p. 699; 52 20N 3 28W
83 St. Helena B., C. of Good Hope, S. Afr.; 32 40S 18 10E
77 St. Helena I., Brit., Atlantic Oc.; a. 47 sq. m.; coaling stn.; Napoleon exiled here 1815–21; p. 3,846; 15 30S 6 40W
18 St. Helens, co. bor., Lancs, Eng.; coal and iron, chemicals, copper smelting, iron, glass; p. 106,789; 53 21N 2 45W
121 St. Helen's, tn., Tas., Australia; 41 15S 148 17E
38 St. Hubert, tn., Belgium; 50 2N 5 21E
97 St. Hyacinthe, tn., Que., Can.; cath.; farm machinery, woollens, leather; p. 13,448; 45 37N 72 58W
112 St. Ignacio, tn., Bolivia; 16 0S 62 0W
19 St. Ives, mun. bor., Corn., Eng.; fishing, boatmaking; p. 6,587; 50 13N 5 28W
19 St. Ives B., Corn., Eng.; 50 13N 5 27W
16 St. Ives, mun. bor., Hunts, Eng.; farming, cattle; p. 2,664; 52 21N 0 05W
97 St. Jean, tn., Que., Can.; p. 11,256; 45 18N 73 20W
95 Saint John, tn., N.B., Can.; docks; cottons, woollens, machinery, paper, lumbering, sugar refinery, fisheries; p. 47,514; 45 20N 66 2W
94 St. John, L., Que., Can.; a. 375 sq. m.; 48 35N 72 0W
93 St. John, R., N.B., Can.; 47 0N 69 0W
93 St. John's, spt., Newfoundland; caths.; shipping, fishing, tanning; seal-oil; p. 41,157; 47 20N 52 50W
94 St. Joseph, tn., Que., Can.; 46 20N 70 56W
102 St. Joseph, tn., Mich., U.S.A.; resort on L. Michigan; p. 8,349; 42 6N 86 30W
102 St. Joseph, cy., Mo., U.S.A.; rly. centre; farming, meat-packing, clothing, blankets, farm impl.; p. 80,935; 39 49N 94 52W
19 St. Just., urb. dist., Corn., Eng.; copper, tin, arsenic; p. 4,356; 50 9N 5 39W
111 St. Kitts. See St. Christopher.
123 St. Lawrence, tn., Queens., Australia; 22 13S 149 30E
93 St. Lawrence, G. of, Canada; 48 0N 62 0W
93 St. Lawrence, R., Canada; 2,200 m. long; chief tribs.—Ottawa, Richelieu, St. Maurice, Saguenay; 44 55N 75 2W
17 St. Leonards. See Hastings.
88 St. Louis, tn. and cap. Senegal, Fr. W. Afr.; cath., pal.; p. 20,800; 16 0N 16 30W
111 St. Lucia, I., Brit., W. Indies; a. 233 sq. m.; cocoa, sugar, lime-juice; p. 54,500; 14 0N 60 58W
83 St. Lucia R., Natal, S. Afr.; 28 25S 32 30E
22 St. Magnus B., Shetland Is., Scotland; 60 25N 1 30W
34 St. Malo, spt., France; cath.; shipbuilding, iron; cereals, fruit, wine; 48 39N 2 02W
38 St. Mard, tn., Belgium; 49 34N 5 33E
51 St. Maria di Leuca, C., Italy; 39 45N 18 22E
87 St. Marks, tn., C. of Good Hope, S. Afr.; 32 0S 29 30E
111 St. Martin, I., W. Indies; 18 2N 63 3W
93 St. Mary B., Newfoundland; 46 50N 53 40W
17 St. Marylebone, met. bor., London, England; Regent's Park, Zoological Gardens, Wallace Art Gallery, Madame Tussaud's Waxwork Exhibition; headquarters of English cricket; p. 97,620; see London.
121 St. Mary's, tn., Tas., Australia; 41 31S 148 15E
96 St. Mary's, tn., Ont., Can.; p. 3,802; 43 18N 81 12W
97 St. Maurice, tn., Que., Can.; 46 27N 72 45W
45 St. Maurice, tn., Switzerland; 46 13N 7 01E
93 St. Maurice R., Que., Can.; 48 0N 74 0W
19 St. Mawes, tn., Corn., Eng.; cas.; fishing, rope-making; 50 10N 5 01W
90 St. Michael, tn., Alaska; 63 30N 162 0W
19 St. Michael's Mt., rock., Corn., Eng.; 50 7N 5 28W
34 St. Michel, Mt., tn., France; 48 39N 1 32W
34 St. Mihiel, tn., France; on R. Meuse; lace; 48 55N 5 33E
45 St. Moritz, tn., Switzerland; tourist resort, winter sports; mineral springs; 46 30N 9 50E

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34 St. Nazaire, port, France; on R. Loire; shipbuilding, steel works; 47 17N 2 16W
16 St. Neots, urb. dist., Hunts, Eng.; paper, corn, iron; p. 4,314; 52 15N 0 17W
45 St. Nicholas, tn., Switzerland; 46 10N 7 47E
38 St. Nicolas, tn., Belgium; cottons, woollens, lace; p. 37,975; 51 10N 4 08E
27 St. Ninians, par., Stirl., Scot.; woollens, nails; p. 14,757; 56 6N 3 56W
34 St. Omer, tn., France; cath.; brewing, distilleries, soap, linen; p. 17,815; 50 46N 2 13E
17 St. Pancras, met. bor., London, England; p. 198,113; see London.
112 St. Paul, tn., French Guiana; 3 40N 52 20W
102 St. Paul, cy. and cap., Minn., U.S.A.; on R. Mississippi; cath., univ.; meat-packing, milling; furs, lumber products, clothing; p. 271,606; 45 0N 93 2W
88 St. Paul, C., Gulf Coast; 5 40N 0 50E
7 St. Paul I., Atlantic Ocean; 0 53N 29 30W
5 St. Paul I., Indian Ocean; 39 30S 75 0E
80 St. Paul de Loanda, tn., Angola; exports—rubber, ivory, palm oil, coffee, coconuts and rum; p. 23,000; 8 48S 13 1E
34 St. Peter Port, cap. Guernsey, Chan. Is.; resort; fruit, flowers, vegetables; 49 27N 2 33W
103 St. Petersburg, tn., Fla., U.S.A.; resort; p. 40,425; 27 42N 82 41W
111 St. Pierre, tn., Martinique; 14 45N 61 10W
93 St. Pierre I., Newfoundland; 46 40N 56 10W
34 St. Pol, tn., France; cath.; 50 23N 2 20E
46 St. Pölten, tn., Austria; hardware, cotton; p. 31,576; 48 15N 15 40E
34 St. Quentin, tn., France; cotton, wool, silk, sugar, chemicals, machinery; p. 49,448; 49 52N 3 18E
94 St. Raymond, tn., Que., Can.; p. 1,772; 46 50N 71 58W
83 St. Sebastian B., C. of Good Hope, S. Afr.; 34 30S 21 0E
94 St. Stephen, tn., N.B., Can.; p. 3,437; 45 14N 67 20W
96 St. Thomas, tn., Ont., Can.; rly. workshops, flour, flax; p. 15,430; 45 49N 73 55W
80 St. Thomas I., port, G. of Guinea; coffee, cocoa, coconuts, fruit; 0 20N 6 40E
111 St. Thomas I. (to U.S.A.), W. Indies; sugar, cotton; p. 7,000; 18 25N 65 0W
38 St. Trond, tn., Belgium; brewing and distilling; p. 16,444; 50 49N 5 11E
18 St. Tudwall Is., Caer., Wales; 52 47N 4 27W
34 St. Valery-sur-Somme, spt., France; resort of pilgrims, fishing; 50 11N 1 38E
48 St. Vincent, C., Portugal; 37 0N 9 00W
120 St. Vincent, G. of, S. Australia; 35 15S 138 0E
111 St. Vincent, I., Brit., W. Indies; a. 150 sq. m.; sugar, rum, cotton; p. 53,000; 13 18N 61 12W
38 St. Vith, tn., Belgium; 50 17N 6 08E
35 Saintes, tn., France; cath.; farm implements, earthenware; p. 20,592; 45 46N 0 41W
35 Saintonge, prov., France; 45 25N 0 30W
116 Saipan I., Pacific Ocean; 15 10N 145 40E
72 Sair-usu, tn., Mongolia; 44 50N 106 50E
59 Saisan Nor, U.S.S.R.; 48 0N 84 0E
79 Sakada, tn., Japan; p. 31,870; 39 0N 139 36E
62 Sakaria, R., Turkey; 40 0N 30 30E
73 Sakhalin I., Siberia; a. 25,000 sq. m.; northern half Russian, southern (Karafuto) Japanese; coal, petroleum; 50 30N 143 0E
57 Sakharnaya, tn., Russia; 49 38N 51 28E
78 Sakkara (pyramids), on l. bank of Nile, Egypt; 29 46N 31 9E
51 Sala Consilina, tn., Italy; 40 22N 15 38E
113 Salado, R., Argentina; 29 50S 61 0W
109 Salado, R., Mexico; 27 40N 100 30W
88 Salaga, tn., Gold Coast; 8 25N 0 28W
60 Salahabad, tn., Persia; 32 40N 48 35E
108 Salamanca, tn., Mexico; 20 33N 101 16W
48 Salamanca, tn., Spain; cath., univ.; p. 46,267; 40 57N 5 40W
104 Salamanca, tn., N.Y., U.S.A.; p. 9,577; 42 10N 78 48W
62 Salamis. See Famagusta.
53 Salamis I., Greece; 37 54N 23 30E
54 Salangen, tn., Norway; 68 55N 17 40E
117 Sala-y-Gomez, I., Pacific Ocean; 6 55S 105 0W
19 Salcombe, urb. dist., Dev., Eng.; resort; fishing; p. 2,383; 50 42N 3 12W
83 Saldanha B., C. of Good Hope, S. Afr.; 33 5S 18 0E
121 Sale, tn., Vic., Australia; dairying; 38 7S 147 2E
10 Sale, tn., Morocco; p. 125,821; 34 6N 6 48W
85 Salem, tn., C. of Good Hope, S. Afr.; 33 32S 26 28E
68 Salem, tn., Mad., India; carpets, weaving, farming centre; p. 102,181; 11 39N 78 12E
105 Salem, tn., Mass., U.S.A.; cottons, lumber products, leather goods, machinery; p. 43,353; 42 28N 70 59W
104 Salem, tn., N.J., U.S.A.; p. 8,047; 39 33N 75 27W
106 Salem, tn. and cap., Ore., U.S.A.; fruit packing, flour milling, canning; p. 26,266; 44 59N 122 47W
24 Salen, par., Arg., Scot.; p. 484; 56 43N 5 46W
51 Salerno, spt., Italy; cath.; cottons, silks; p. 63,105; 40 40N 14 47E
51 Salerno, G. of, Italy; 40 30N 14 40E
18 Salford, co. bor., Lancs, Eng.; textiles, electrical machinery; p. 223,438; 53 30N 2 17W
107 Salina, tn., Kan., U.S.A.; univ.; flour milling; p. 20,155; 38 50N 97 40W
109 Salina Cruz, tn., spt., Mex.; p. 6,000; 16 9N 95 19W
106 Salinas, tn., Cal., U.S.A.; p. 10,263; 36 41N 121 45W
108 Salinas, tn., Mexico; 22 31N 101 45W
113 Salinas Grandes, L., Argentina; 29 10S 64 30W
80 Salinas, Pt., Angola; 12 55S 13 0E
27 Saline, par., Fife, Scot.; p. 1,510; 56 7N 3 54W
19 Salisbury, mun. bor., co. tn., Wilts, Eng.; cath.; farming, cattle mkt.; p. 36,456; 51 4N 1 48W
89 Salisbury, cap., S. Rhodesia; gold; p. 28,800; 17 50S 31 7E
103 Salisbury, tn., N.C., U.S.A.; p. 16,951; 35 40N 80 30W
19 Salisbury Plain, Wilts, Eng.; ancient remains; military camp; 51 13N 1 55W
55 Salo, tn., Finland; 60 25N 23 0E
50 Salo, tn., Italy; 45 39N 10 35E
53 Salonika, tn., Greece; cottons, woollens, soap, brewing, milling; p. 236,500; 40 40N 23 0E
68 Salsette, I., Bom., India; 19 15N 73 0E
63 Salt Desert. See Kavir.

MAP

98 **Saskatchewan**, prov., Canada; a. 251,700 sq. m.; considerable forests; principal rivers—Saskatchewan, Athabasca, Churchill; lakes; hydro-electric power; largest wheat-producing prov.; livestock, dairying; coal; furs, fisheries; cap. Regina; p. 921,785; 49 0 to 60 0N 102 0 to 110 0W
99 **Saskatchewan**, R., Sask., Can.; 1,205 m. long; 53 17N 105 0W
98 **Saskatoon**, tn., Sask., Can.; univ; flour, cement; p. 43,291; 52 10N 106 48W
89 **Sassare**, tn., N. Rhodesia; 13 50S 31 20E
51 **Sassari**, tn., Italy; cath., univ.; oil and grain; p. 51,000; 40 47N 8 33E
50 **Sassuolo**, tn., Italy; 44 34N 10 46E
88 **Satadoag**, tn., Fr. W. Afr.; 12 55N 11 0W
66 **Satara**, tn., India; p. 22,454; 17 40N 74 3E
55 **Säter**, tn., Sweden; 60 20N 15 40E
66 **Satpura Rs.**, India; highest peak 4,450 ft.; 21 45N 75 0E
52 **Satu Mare**, tn., Rumania; pottery, textiles; p. 49,914; 47 46N 22 55E
60 **Saudi Arabia**, king. of Asia; comprises Nejd, Hejaz, Hasa and Asir; very scanty rainfall; mainly desert traversed by caravan routes; population largely nomadic; religion Mohammedanism; caps. Riyadh and the holy city of Mecca with tomb of Mohammed; 25 45N 41 45E
67 **Sangor**, tn., C.P., India; p. 39,319; 23 50N 78 47E
99 **Sault Ste. Marie**, tn., Ont., Can.; pulp and paper, iron and steel; p. 23,082; 46 31N 84 32W
102 **Sault Ste. Marie**, Mich., U.S.A.; flour, woollens, locomotives; p. 13,755; 46 25N 84 25W
34 **Saumur**, tn., France; wines, enamels, tinware; p. 16,332; 47 14N 0 05W
127 **Saunders, C.**, New Zealand; 45 52S 170 44E
116 **Savage I.**, Cook Is., Pac. Oc.; p. 3,795; 19 2S 169 54W
126 **Savaii I.**, Samoa, Pac. Oc.; 13 40S 172 20W
110 **Savanna la Mar**, tn., Jamaica; p. 3,500; 18 10N 78 15W
103 **Savannah**, spt., Ga., U.S.A.; turpentine, manure, soap; p. 85,024; 32 2N 81 7W
103 **Savannah, R.**, U.S.A.; 33 30N 82 0W
47 **Save, R.**, Yugoslavia; 500 m. in length; 44 40N 19 55E
63 **Saveh**, tn., Persia; 34 59N 50 16E
34 **Saverne**, tn., France; tanneries; 48 45N 7 20E
35 **Savoie**, dept., France; a. 2,388 sq. m.; mineral springs; mountainous; pastoral, dairying; cap. Chambéry; p. 235,544; 45 30N 6 42E
50 **Savona**, spt., Italy; cath.; iron industry, shipbuilding; tinplate, glass; 44 18N 8 28E
44 **Savoy Alps**, France; 45 50N 6 15E
16 **Sawtry**, vil., Hunts., England; 52 28N 0 17W
16 **Saxilby**, par., Lindsey, England; p. 1,279; 53 17N 0 26W
16 **Saxmundham**, urb. dist., Suff., Eng.; farming; p. 1,259; 52 14N 1 28E
40 **Saxony**, prov., Germany; a. 9,759 sq. m.; Harz Mts. (part) and Thuringian For.; cereals, sugar-beet; coal, mineral springs; cap. Magdeburg; p. 3,277,476; 51 35N 11 50E
41 **Saxony**, st., Germany; a. 5,786 sq. m.; farming, printing and type founding; toys, textiles, lace, spirits and beer; coal, iron; mineral springs; cap. Dresden; p. 4,994,281; 51 0N 13 32E
88 **Say**, tn., Fr. W. Afr.; 13 10N 2 22E
72 **Sayan Mts.**, Mongolia; 53 0N 94 0E
108 **Sayula**, tn., Mexico; 19 51N 103 38W
20 **Sca Fell**, Cumb., Eng.; 3,210 ft.; 54 28N 3 13W
16 **Scalford**, par., Leicester, England; p. 581; 52 49N 0 51W
22 **Scapa Flow**, Orkney Is., Scotland; where German Grand Fleet surrendered at Armistice, Nov. 1918; 58 55N 3 00W
20 **Scarborough**, mun. bor., spt., N. Riding, Eng.; jet ornaments, fishing; p. 41,791; 54 17N 0 25W
123 **Scarrbury**, tn., Queens., Australia; 23 0S 144 44E
44 **Schaffhausen**, tn., Switzerland; on R. Rhine; cath., cas.; famous falls; iron, steel, aluminium, cottons; brewing and distilling; 47 43N 8 37E
44 **Schaffhausen**, can., Switzerland; farming, vine growing; 47 46N 8 36E
40 **Schaumburg-Lippe**, st., Germany; a. 131 sq. m.; coal; cap. Bückeburg; p. 48,046; 52 22N 9 08E
38 **Schelde, E., R.**, Netherlands; 51 34N 4 00E
38 **Schelde, W., R.**, Netherlands; 51 25N 4 00E
102 **Schenectady**, cy., N.Y., U.S.A.; foundries, electrical works; locomotives; p. 95,692; 42 45N 74 10W
38 **Scheveningen**, tn., Netherlands; resort; fishing; p. 23,000; 52 7N 4 16W
38 **Schiedam**, tn., Netherlands; liquors, candles, yeast; p. 52,802; 51 55N 4 23E
38 **Schiermonnikoog I.**, Netherlands; 53 30N 6 12E
50 **Schio**, tn., Italy; p. 14,825; 45 43N 11 12E
39 **Schleswig**, tn., port, Germany; tanning, milling, fishing; p. 18,451; 54 32N 9 36E
40 **Schleswig-Holstein**, prov., Germany; a. 5,818 sq. m.; surface, plains, moors; livestock; textiles, tobacco; cap. Schleswig; p. 1,519,365; 54 20N 9 40E
40 **Schmalkalden**, tn., Germany; resort; iron and steel, toys, beer; p. 10,440; 50 43N 10 28E
40 **Schnee Berg**, Germany; 50 5N 12 0E
41 **Schneidemühl**, tn., Germany; iron, lumber, bricks; p. 37,518; 53 10N 16 46E
71 **Schouten I., Du. E. Indies**; p. 25,344; 1 00S 136 30E
38 **Schouwen I.**, Netherlands; 51 40N 4 00E
99 **Schreiber**, tn., Ont., Can.; 48 50N 87 10W
45 **Schnis**, tn., Switzerland; 46 48N 10 18E
46 **Schütt I.**, Czechoslovakia; 47 55N 17 40E
104 **Schuylkill**, tn., Pa., U.S.A.; p. 6,514; 40 35N 76 10W
45 **Schwarzenburg**, tn., Switzerland; 46 48N 7 20E
41 **Schweidnitz**, tn., Germany; textiles, leather, machinery, beer; farm. impl.; p. 30,758; 50 52N 16 30E
40 **Schwerin**, tn., Germany; cath., pal.; pianos, furniture, soap, bricks; p. 53,621; 53 38N 11 26E
41 **Schwerin**, tn., Germany; 52 36N 15 30E
45 **Schwyz**, can., Switzerland; p. 62,406; 47 5N 8 48E
45 **Schwyz**, tn., Switzerland; 47 2N 8 37E
51 **Sciacca**, spt., Italy; cath.; sardines, olives; mineral springs; p. 24,800; 37 31N 13 3E
19 **Scilly Is.**, Corn., Eng.; flowers, vegetables; p. 1,732; 49 55N 6 20W
105 **Scituate**, tn., Mass., U.S.A.; 42 11N 70 44W
121 **Scone**, tn., N.S.W., Australia; 32 5S 150 50E
27 **Scone**, par., Perth, Scot.; p. 2,559; 56 26N 3 24W

MAP

24 **Sconser, I. of Skye, Inver., Scot.**; 57 18N 6 07W
24 **Scoraig, Ross and Crom., Scot.**; 57 54N 5 22W
90 **Scoresby Sd., Greenland**; 70 30N 26 0W
22 **Scotland**, Br. Isles; a. 29,796 sq. m.; N. part of Gt. Britain, separated from England by Solway Firth, R. Tweed and Cheviot Hills; consists of 33 counties; broadly divided into Highlands, Middle Lowlands and Southern Uplands; highest peaks, Ben Nevis 4,406 ft., Ben Macdhui 4,296 ft., Ben Lawers 3,984 ft.; chief lakes—Lochs Lomond, Ness, Awe; chief rivers—Clyde, Tweed, Tay, Spey, Dee, Don, Forth; agriculture in E., grazing to W.; oats, wheat, barley, potatoes, root crops; fruit; minerals, coal, iron, oil shale, granite, slate, etc.; fisheries; mnfs., textiles, shipbuilding, machinery, distilling, sugar refining, printing, etc.; cap. Edinburgh; p. 4,842,554; 54 50 to 60 40N 2 00 to 7 30W
5 **Scott I., Antarctica**; 67 30S 180 0E
121 **Scottsdale**, tn., Tas., Australia; 41 4S 147 31E
102 **Scranton**, cy., Pa., U.S.A.; coal-fields; steel works, locomotives, silks; p. 143,433; 41 26N 75 33W
16 **Scunthorpe**, mun. bor., Lind., Eng.; iron; p. 33,761; 53 36N 0 35W
47 **Scutari**. See Shkoder.
53 **Scutari**. See Uskŭdar.
47 **Scutari, L., Albania**; 42 10N 19 20E
51 **Scylla**, tn., Italy; 38 15N 15 45E
17 **Seaford**, urb. dist., Sus., Eng.; tourist resort; farming produce; p. 6,570; 50 47N 0 06E
96 **Seaforth**, tn., Ont., Can.; p. 1,686; 43 33N 81 26W
20 **Seaham Harb.**, urb. dist., Dur., Eng.; shipping, coal, chemicals, bottles; p. 19,394; 54 51N 1 20W
120 **Sea Lake**, Vic., Australia; 35 29S 142 47E
20 **Seamer, par., N. Riding, Eng.**; p. 640; 54 14N 0 26W
20 **Seascale**, par., Cumb, Eng.; p. 1,144, 54 24N 3 30W
19 **Seaton**, urb. dist., Dev., Eng.; freestone quarries; p. 2,351; 50 43N 3 04W
106 **Seattle**, spt., Wash., U.S.A.; on Puget Sd., univ., cath.; shipbuilding, glass, canning, fishing, whaling, lumbering; p. 365,583; 47 31N 122 15W
121 **Seaview, Mt., N.S.W., Australia**; alt. 3,100 ft.; 31 20S 152 25E
127 **Seaward Kaikouras, Mts., New Zealand**; 42 15S 173 35E
57 **Sebastopol**, spt., Russia; resort on Black Sea, dockyard and naval arsenals; leather, tiles, machinery; famous siege (1854-55); p. 78,300; 44 41N 33 31E
47 **Sebenik**, tn., Yugoslavia; cath.; fishing, weaving; woollens, chemicals; p. 20,000; 43 46N 15 52E
64 **Sebseweh**, tn., Afghanistan; 33 20N 62 14E
61 **Sebustieh**, tn., Palestine; 32 18N 35 16E
63 **Sebzevar**, tn., Persia; 36 10N 57 43E
112 **Secorro**, tn., Colombia; 6 25N 73 30W
68 **Secunderabad, Hyd., India**; 17 27N 78 30E
102 **Sedalia**, tn., Mo., U.S.A.; farming; meat-packing; machinery, locomotives, textiles; coal; p. 20,806; 38 45N 93 17W
34 **Sedan**, tn., France; on R. Meuse, fort, battle (1870); machinery, metalware, woollens, flour; p. 18,908; 49 42N 4 58E
120 **Sedan, L., S. Australia**; 34 30S 139 18E
20 **Sedbergh**, par., W. Riding, Eng.; woollens; p. 2,586; 54 19N 2 32W
20 **Sedgefield**, tn., Dur., Eng.; farming; p. 3,111; 54 39N 1 27W
53 **Sedil Bahr**, tn., Turkey; 40 1N 26 11E
83 **Seeheim**, tn., S.W. Afr.; 26 45S 17 37E
61 **Seffurieh**, tn., Palestine; 32 46N 35 17E
52 **Segesvar**. See Sighisoara.
48 **Segovia**, tn., Spain; cath.; ironware, cloth, earthenware, paper, flour; p. 18,027; 40 56N 4 08W
111 **Seibo**, tn., Haiti; p. 12,000; 18 45N 69 2W
34 **Seine**, dept., France; a. 185 sq. m.; market gdns., gypsum, freestone; p. 4,933,278; 48 48N 2 20E
34 **Seine B.**, France; 49 47N 0 30W
34 **Seine-et-Marne**, dept., France; a. 2,275 sq. m.; cereals, porcelain, "Brie" cheese, flagstone, gypsum; p. 406,108; 48 40N 3 02E
34 **Seine-et-Oise**, dept., France; a. 2,184 sq. m. undulating, forested; vines, wheat; machinery, chemicals, porcelain, stone; p. 1,365,616; 48 42N 2 10E
34 **Seine-Inférieure**, dept., France; a. 2,448 sq. m.; undulating, fertile; grain, dairying, textiles, iron, shipbuilding, flax, chemicals, fisheries; p. 905,278; 49 48N 1 13E
34 **Seine, R., France**; length 475 m.; 49 0N 1 50E
75 **Seishin**, spt., Korea; 41 50N 129 50E
66 **Seistan**, dist., Afghanistan; cereals, cotton, wool, fruits; 31 40N 61 15E
57 **Seitovski**, tn., Russia; 52 0N 55 12E
88 **Sekondi**, spt., Gold Coast; connected with Takoradi Harb.; p. 16,742; 4 58N 1 43W
21 **Selby**, urb. dist., W. Riding, Eng.; flax, cotton, twine; p. 10,064; 53 47N 1 04W
62 **Selefke**, tn., Turkey; 36 17N 34 1E
62 **Selindi**, tn., Turkey; 36 15N 32 27E
98 **Selkirk**, Yukon, Can.; 62 52N 137 25W
99 **Selkirk**, tn., Man., Can.; p. 4,486; 50 8N 97 0W
27 **Selkirk**, bor., co. tn., Selkirk, Scot.; tartans, tweeds; p. 5,667; 53 32N 2 51W
27 **Selkirk**, co., Scotland; a. 267 sq. m.; mountainous, Broad Law 2,723 ft.; sheep farming, woollens; p. 22,608; 53 50N 2 51W
98 **Selkirk Mts.**, B.C., Can.; 51 0N 117 30W
103 **Selma**, cy., Alabama; dairying, lumbering, cottons, iron works, fertilizers; p. 18,012; 32 26N 87 5W
17 **Selsey**, par., Sus., Eng.; p. 2,307; 50 44N 0 48E
17 **Selsey Bill**, Sus., Eng.; 50 43N 0 47W
89 **Selukwe**, tn., S. Rhodesia; 19 30S 30 20E
123 **Selwyn**, tn., Queens., Australia; 21 35S 140 30E
47 **Semendria**, tn., Yugoslavia; 44 39N 20 52E
80 **Semio**, tn., Fr. Eq. Africa; 4 58N 25 5E
59 **Semipalatinsk**, tn., U.S.S.R.; leather, flour; p. 120,200; 50 30N 8 05E
44 **Semmering Pass**, S. Austria; 47 39N 15 50E
63 **Semnan**, tn., Persia; tobacco; cottons and almond paste; 35 36N 53 20E
45 **Sempach**, tn., Switzerland; 47 8N 8 11E
82 **Sena**, tn., Mozambique; 17 30S 34 50E
88 **Sena**, tn., Nigeria; 8 20N 11 30E
75 **Sendai**, tn., Japan; salt and fish; p. 219,545; 38 9N 140 38E
75 **Sendai B.**, Japan; 38 10N 141 30E

MAP

104 **Seneca Falls**, tn., N.Y., U.S.A.; p. 6,433 42 50N 76 50W
76 **Senegal**, col., Fr. W. Afr.; a. 74,112 sq. m.; groundnuts; weaving and pottery; cap. St. Louis; p. 1,318,287; 15 0N 15 0W
83 **Senekal**, tn., O.F.S., S. Afr.; 28 23S 27 42E
57 **Sengiley**, tn., Russia; 53 57N 48 51E
50 **Senigallia**, tn., Italy; p. 12,000; 43 42N 13 12E
34 **Senlis**, tn., France; 49 13N 2 37E
81 **Sennar**, tn., Ang.-Eg. Sudan; dam for irrigating land between White and Blue Niles; 13 30N 33 44E
34 **Sens**, tn., France; cath.; farm implements, boots, chemicals, cutlery; 48 13N 3 19E
46 **Senta**, tn., Yugoslavia; farm produce, livestock; p. 32,000; 45 55N 20 4E
49 **Sêo de Urgel**, tn., Spain; 42 22N 1 25E
75 **Seoul**, spt., cap. Korea; brass-ware, pottery, silk; 37 26N 126 58E
53 **Serai**, tn., Turkey; 41 28N 27 55E
53 **Serai Köi**, tn., Turkey; 37 56N 29 0E
38 **Seraing**, tn., Belgium; engineering and machine shops; p. 45,310; 50 37N 5 30E
67 **Serampore**, tn., Bengal, India; cotton and silk weaving; pottery; p. 33,197; 22 45N 88 22E
57 **Serdobsk**, tn., Russia; 52 29N 44 10E
89 **Serenje**, tn., N. Rhodesia; 13 13S 30 40E
53 **Seres**, tn., Greece; woollens, cottons; p. 30,000; 41 4N 23 55E
52 **Sereth**, tn., Rumania; p. 10,024; 47 59N 26 4E
56 **Sergievski**, Russia; 56 46N 38 2E
72 **Sergiopol**, tn., Siberia; 47 50N 80 10E
112 **Sergipe**, st., Brazil; forested, fertile valleys; tobacco, sugar, maize, cotton; cap. Aracaju; 11 0S 37 30W
68 **Seringapatam**, tn., Mys., India; 12 25N 76 42E
53 **Seriphos I., Greece**; 37 10N 24 30E
48 **Serpa**, tn., Portugal; 37 59N 7 35W
111 **Serpent's Mouth**, chan., W. Indies; 10 0N 61 30W
43 **Serpets**, tn., Poland; 52 52N 19 43E
56 **Serpukhov**, riv. port, Russia; textiles, paper, chemicals; copper and iron works; p. 77,500; 54 57N 37 28E
113 **Serra de Sta Martha**, Brazil; 17 0S 51 30W
112 **Serra do Piauhy**, Brazil; 10 0S 43 0W
112 **Serra dos Pyrenees**, Brazil; 15 0S 47 30W
62 **Sert**, tn., Turkey; 37 59N 41 45E
63 **Servia**, tn., Greece; 40 10N 21 59E
120 **Servicetown**, Vic., Australia; 36 22S 141 0E
89 **Sesheke**, tn., N. Rhodesia; 17 23S 25 10E
35 **Sète**, spt., France; formerly Cette; wines, chemicals; fisheries; p. 36,953; 43 24N 3 42E
10 **Setif**, tn., Algeria; 36 10N 5 12E
89 **Setoutse**, tn., S. Rhodesia; 21 24S 30 2E
80 **Sette Cama**, tn., Fr. Eq. Afr.; 2 30S 9 40E
21 **Settle**, par., W. Riding, Eng.; thread, cotton; p. 2,389; 54 4N 2 16W
83 **Settlers**, tn., Trans., S. Afr.; 25 0S 28 55E
88 **Settra Kru**, tn., Liberia; 5 00N 8 50W
48 **Setubal**, spt., Portugal; sardine fisheries; lace, fertilizers; p. 37,074; 38 30N 8 55W
48 **Setubal, B. of**, Spain; 38 20N 9 00W
62 **Sevan, L., Armenia**; 40 18N 45 45E
17 **Sevenoaks**, urb. dist., Kent, Eng.; p. 10,482; 51 16N 0 12E
19 **Severn, R., Eng.**; rises on Plynlimmon and flows to Bristol Chan., length 180 m.; 451 55N 2 12W
99 **Severn, R., Ont., Can.**; 55 0N 88 57W
48 **Seville**, spt., Spain; on R. Guadalquivir; cath., pal., univ.; iron ware, machinery, cigars, silks; p. 228,729; 37 25N 6 00W
52 **Sevlievo**, tn., Bulgaria; p. 9,325; 43 1N 25 7E
90 **Seward**, tn., Alaska; 60 0N 149 30W
5 **Seychelles, Is.**, Brit., Indian Oc.; group numbering about 100, surrounded by coral reefs; principal I. Mahé; coconuts, maize, vanilla, rubber; cap. Victoria; p. 27,600; 4 30S 55 30E
53 **Seymen**, tn., Bulgaria; 42 3N 25 52E
121 **Seymour**, tn., Vic., Australia; 37 2S 145 6E
83 **Seymour**, tn., C. of Good Hope, S. Afr.; 32 35S 26 29E
10 **Sfax**, spt., Tunis; textiles; p. 27,723; 35 0N 10 40E
47 **Shabatz**, Yugoslavia; 44 46N 19 42E
62 **Shabin Karahissar**, tn., Turkey; alum mines; p. 18,000; 40 7N 38 59E
42 **Shadov**, tn., Lithuania; 55 45N 23 48E
56 **Shadrinsk**, tn., Russia; 56 10N 63 43E
19 **Shaftesbury**, mun. bor., Dor., Eng.; farming; p. 2,925; 51 0N 2 10W
127 **Shag Pt.**, New Zealand; 45 27S 170 49E
63 **Shah Abdul Azim**, tn., Persia; 35 30N 51 30E
67 **Shahjahanpur**, tn., India; sugar; p. 72,616; 27 46N 79 58E
63 **Shahr-i-Zabul**. See Nasirabad.
63 **Shahrud**, tn., Persia; 36 30N 55 0E
62 **Shahtakhta**, tn., Azerbaijan; 39 28N 45 6E
81 **Shambeh**, tn., Ang.-Eg. Sudan; 7 08N 30 45E
72 **Shambelik**, tn., Siberia; 50 50N 109 30E
89 **Shamva**, tn., S. Rhodesia; 17 34S 31 25E
69 **Shan States**, Burma, India; region, largely undeveloped; p. 1,565,098; 21 30N 98 0E
89 **Shanda**, tn., S. Rhodesia; 17 59S 27 6E
89 **Shangane, R., S. Rhodesia**; 21 30S 28 0E
74 **Shanghai**, spt., China; chief commercial cy. and port, cath.; shipbuilding, engineering; cotton, paper, cigarettes; p. 3,259,114; 31 25N 121 30E
74 **Shan-hai-kwan**, tn., China; 40 0N 119 55E
59 **Shanki**, tn., U.S.S.R.; 54 40N 134 20E
17 **Shanklin**, urb. dist., I. of W., Eng.; p. 5,071; 50 38N 1 10W
126 **Shannon**, bor., N.I., New Zealand; p. 1,150; 40 32S 175 22E
32 **Shannon, R., I.F.S.**; length 224 m.; 52 35N 9 15W
74 **Shansi**, prov., China; a. 81,853 sq. m.; coal, iron ore, petroleum, salt; cap. Taiyuan; p. 12,153,127; 38 0N 112 0E
74 **Shan-tung**, prov., China; a. 55,984 sq. m.; fertile plain in W.; R. Hwang-ho flows through prov.; grain, silk, fruit, coal, iron, lead, copper; cap. Tsinan; p. 34,375,849; 36 10N 118 0E
73 **Shao-chow**, tn., China; 24 55N 113 30E
74 **Shao-hing**, tn., China; 30 0N 120 40E
74 **Shao-wu**, tn., China; 27 15N 117 40E
20 **Shap**, par., Westmor., Eng.; nearby, Shap Summit 914 ft., imp. pass traversed by L.M.S. Ry.; granite; p. 1,227; 54 32N 2 42W

MAP

67 Sharja, tn., Arabia; 25 5N 55 15E
125 Shark Bay, W. Australia; 25 0S 113 30E
102 Sharon, tn., Pa., U.S.A.; iron, bricks and electrical goods; p. 25,908; 41 18N 80 25W
89 Shasham, R., S. Rhodesia; 21 0S 28 20E
74 Shasi, port., China; cotton cloth; p. 95,843; 30 27N 112 15E
106 Shasta, Mt., Cal., U.S.A.; 14,162 ft.; 41 25N 122 0W
42 Shavli. See Siaulial.
97 Shawinigan, tn., Que., Can.; hydro-electric power; pulp and paper; p. 13,345; 46 32N 72 50W
107 Shawnee, cy., Okla., U.S.A.; cottons, meat preserving; p. 23,283; 35 20N 97 0W
102 Sheboygan, cy., Wis., U.S.A.; on L. Michigan, planos, furniture, gloves; p. 39,251; 43 45N 87 47W
61 Shechem. See Nablus.
95 Shediac, tn., N.B., Can.; p. 1,883; 46 12N 64 38W
17 Sheerness, urb. dist., spt., Kent, Eng.; naval arsenal, dockyard; corn, malt; p. 16,721; 51 27N 045E
61 Shefr Amr, Palestine; 32 49N 35 10E
21 Sheffield, co. bor., W. Riding, Eng.; on R. Don; univ., cath.; seat of cutlery trade, brass, iron and steel works; machinery, instruments, electro-plate, etc.; p. 511,757; 53 23N 1 27W
16 Shefford, par., Beds., England; p. 849; 52 3N 0 20W
63 Shehribabek, tn., Persia; 30 17N 55 10E
93 Shelburne, tn., N.S., Can.; p. 1,474; 43 46N 65 20W
96 Shelburne, tn., Ont., Can.; p. 1,077; 44 8N 80 15W
89 Shelenda, tn., N. Rhodesia; 12 30S 25 19E
16 Shelford, par., Cambridge, England; 52 10N 0 07E
79 Shellal, tn., Egypt; 24 0N 32 52E
124 Shellborough, tn., W. Australia; 20 5S 119 12E
62 Shemakha, tn., Azerbaijan; 40 37N 48 30E
102 Shenandoah, cy., Pa., U.S.A.; coal mining centre; p. 21,782; 40 57N 76 20W
81 Shendi, tn., Ang.-Eg. Sudan; 16 30N 33 40E
56 Shenkursk, tn., Russia; 62 4N 43 0E
72 Shensi, prov., China; a. 75,290 sq. m.; cotton, wheat; coal, petroleum; p. 17,222, 571; 34 40N 108 0E
121 Shepparton, tn., Vic., Australia; 37 22S 145 25E
17 Sheppey, I. of, Kent, Eng.; cereals, sheep rearing; 51 24N 0 50E
16 Shepshed, urb. dist., Leics., Eng.; gloves, boots, shoes, needles; p. 5,759; 52 47N 1 12W
19 Shepton Mallet, urb. dist., Som., Eng.; velvet, silk; p. 4,108; 51 10N 2 31W
19 Sherborne, urb. dist., Dor., Eng.; gloves, silk; p. 6,542; 50 58N 2 30W
88 Sherbro I., Sa. Leone; 7 35N 12 40W
94 Sherbrooke, spt., Que., Can.; woollens, carpets, machinery, saw-mills; p. 28,933; 45 8N 72 0W
21 Sheriburn, par., W. Riding, England; p. 1,731; 53 47N 1 15W
107 Sheridan, tn., Wyo., U.S.A.; p. 8,536; 44 46N 107 2W
27 Sheriff Muir, Perth, Scot.; 56 12N 3 54W
16 Sheringham, urb. dist., Norf., Eng.; fishing; p. 4,141; 52 57N 1 12E
107 Sherman, tn., Texas, U.S.A.; p. 15,713; 33 34N 96 23W
38 's Hertogenbosch, tn., Netherlands; cath., hats, cloth, cutlery; 51 41N 5 19E
16 Sherwood Forest, Notts, Eng.; 53 0N 1 05W
22 Shetland Is. (Zetland), Scotland; a. 550 sq. m.; grp. of about 100 isls. in the N. Atlantic, princ., Mainland, Yell, Unst.; chief industry, fishing, also cattle, sheep, ponies; cereals, potatoes, etc.; knitted goods; cap. Lerwick; p. 21,410; 60 15N 1 30W
60 Shibam, tn., Arabia; 16 0N 48 40E
78 Shibin el Kôm, tn., Egypt; p. 27,440; 30 30N 30 56E
73 Shichi-to, Is., Japan; 29 50N 130 0E
73 Shidzuoka, tn., Japan; p. 156,481; 38 40N 141 27E
24 Shiel, L., Arg., Scot.; 56 47N 5 35W
20 Shields, N., spt., Northumb., Eng. (see Tynemouth); marine engines, chain cables, anchors; 55 1N 1 26W
18 Shifnal, par., Salop., Eng., malting, coal, iron; p. 3,303; 52 41N 2 23W
59 Shigansk, tn., U.S.S.R.; 66 10N 121 10E
72 Shigatze, tn., Tibet; 29 20N 88 40E
66 Shikarpur, tn., Sind, India; trading centre, gems and silk; p. 55,503; 28 0N 68 39E
75 Shikoku, I., Japan; rice, fruits, sugar-cane; copper; 33 40N 133 30E
33 Shillelagh, vil., Wicklow, I.F.S.; 52 45N 6 33W
69 Shillong, tn., Assam, India; resort on R. Brahmaputra; p. 17,000; 25 30N 91 59E
75 Shimizu, tn., Japan; p. 61,123; 35 2N 138 3E
68 Shimoga, tn., Mys., India; p. 11,000; 13 55N 75 30E
75 Shimonoseki, port, Japan; p. 132,738; 34 1N 131 2E
24 Shin, L., Suther., Scot.; 58 5N 4 30W
72 Shi-nan, tn., China; 30 5N 109 15E
61 Shinas, tn., Arabia; 24 48N 56 30E
76 Shingeti, tn., Fr. W. Afr.; 20 30N 12 0W
52 Shipka, P., Bulgaria; 42 42N 25 30E
21 Shipley, urb. dist., W. Riding, Eng.; worsted goods; p. 30,243; 53 50N 1 47W
16 Shipston-on-Stour, par., War., Eng.; farming, rope; p. 1,365; 52 4N 1 38W
81 Shiramba, tn., Mozambique; 17 0S 34 25E
81 Shirati, tn., Tang. Ter.; 1 37S 34 1E
63 Shiraz, tn., Persia; mosques; mosaics, carpets, silk, wine; p. 35,000; 29 33N 52 36E
78 Shirbin, tn., Egypt; 31 10N 31 20E
82 Shire, R., Mozambique; 15 50S 34 55E
82 Shirwa, L., Nyasaland; 15 15S 35 45E
57 Shisdra, tn., Russia; 53 43N 34 20E
72 Shi-tsien, tn., China; 27 30N 108 5E
74 Shinchow, tn., China; 24 50N 113 24E
72 Shiuden, tn., Tibet; 29 10N 96 59E
74 Shihing, tn., China; 25 2N 112 28E
47 Shkodra, tn., Albania; on L. Shkoder (Scutari); cas., cath.; textiles, fire-arms; p. 29,209; 45 5N 19 30E
42 Shkudi, tn., Lithuania; 56 26N 21 30E
56 Shlusselberg, tn., Russia; 59 56N 31 2E
17 Shoeburyness, urb. dist., Essex, Eng.; barracks, gunnery school; bricks; p. 6,717; 51 32N 0 48E
66 Sholapur, tn., Bom., India; silk, cotton cloth; p. 135,632; 17 40N 75 55E
17 Shoreditch, met. bor., London, England; furniture, footwear; p. 2038; see London.
17 Shorncliffe Camp, Kent, Eng.; 51 7N 1 08E
81 Shosha, tn., Mozambique; 16 52S 34 35E
106 Shoshone, tn., Idaho, U.S.A.; 42 59N 114 19W
133 Shoshong, tn., Bech. Prot., S. Afr.; 23 3S 26 46E

MAP

10 Shott el Jerid, L., Tunis, 33 40N 9 00E
10 Shott esh Shergui, L., Algeria; 34 0N 0 05E
10 Shott Melrin, L., Algeria; 34 0N 6 10E
20 Shotton, par., Dur., Eng.; p. 15,647; 52 45N 1 22W
27 Shotts, par., Lanark, Scot.; coal, ironstone; p. 20,537; 55 50N 3 47W
10 Shotts, plateau of the, Algeria; 35 30N 0 10W to 6 00E
103 Shreveport, cy., La., U.S.A.; petroleum; p. 76,655; 32 29N 93 52W
18 Shrewsbury, mun. bor., co. tn., on R. Severn, Salop, Eng.; glass staining, iron, malting, brewing, lead; p. 32,370; 52 43N 2 45W
18 Shropshire (Salop), co., England; a. 1,343 sq. m.; sheep, cattle; coal, iron, lead, etc.; p. 244,162; 52 18 to 53 0N 2 15 to 3 12W
74 Shu-choo, tn., China; 32 37N 116 47E
60 Shugra, tn., Arabia; 13 29N 45 22E
89 Shumba, tn., S. Rhodesia; 20 38S 31 36E
52 Shumla. See Choumen.
72 Shunking, tn., China; 31 5N 106 5E
72 Shunning, tn., China; 24 35N 100 0E
74 Shunteh, tn., China; 37 18N 114 35E
89 Shupanga, tn., Mozambique; 18 3S 35 37E
62 Shusha, tn., Azerboljan; 39 43N 46 40E
63 Shuster, tn., Persia; carpets, woollens, pottery, etc.; 37 7N 48 59E
56 Shuya, tn., Russia; 56 53N 41 27E
69 Shwebo, tn., Burma, India; 22 35N 95 37E
69 Shwedaung, tn., Burma, India; 18 33N 95 20E
69 Shwegyin, tn., Burma, India; 17 55N 97 0E
64 Siah Koh, dist., Afghanistan; 34 0N 63 0E
66 Sialkot, tn., Punjab, India; cotton, paper; p. 70,619; 32 31N 74 30E
70 Siam, kingdom, S.E. Asia; a. 200,149 sq. m.; generally hilly in N.; much jungle; chief rivers, Mekong and Menam; chief product, rice; also teakwood, salt, pepper; bullock, buffaloes; tin, rice mills; cap. Bangkok; p. 11,506,207; 6 00 to 20 15N 97 30 to 105 35E
70 Siam, G. of, Siam; 11 0N 101 0E
72 Sianfu, tn., China; imp. trading centre; silk, cotton, tea, sugar, and porcelain; cap. of Shen-si prov.; p. 1,000,000 (est.); 34 15N 108 50E
74 Siangtan, tn., China; p. 1,000,000 (est.); 28 0N 112 55E
74 Siang-yang, tn., China; 32 5N 112 0E
74 Siangyin, tn., China; 28 30N 113 0E
53 Siatista, tn., Greece; 40 15N 21 33E
42 Siauliai (Shavli), Lithuania; p. 22,996; 55 50N 23 18E
59 Siberia, terr., N. Asia; between Ural Mts. on W. and Pac. Oc. on E., length W. to E. 4,000 m., breadth N. to S. 1,200 m.; lowland plain to the N.W. traversed by great plateau of Asia from L. Baikal (3,500–4,000 ft.) N.E. towards Bering Strait; 50 0 to 51 0N 60 0 to 180 0E
52 Sibiu, tn., Rumania; linen, leather; brewing; p. 48,013; 45 49N 24 8E
70 Siboga, spt., Sum., E. Ind.; 1 50N 98 40E
38 Sibret, vil., Belgium; 49 58N 5 36E
69 Sibsagar, tn., Assam, India; tea; 26 59N 94 40E
16 Sibsey, par., Lindsey, England; p. 1,063; 53 3N 0 01E
70 Sibu, tn., Sarawak, Borneo, E. Ind.; 2 20S 111 50E
51 Sicily, island, dept., Italy; a. 9,935 sq. m.; separated from mainland by Str. of Messina; mountainous; highest point, Mt. Etna 10,870 ft. (volcanic); wheat, fruit, olives, almonds, wine; sulphur, silk, tunny, and sardines; cap. Palermo; p. 3,972,379; 36 38 to 38 16N 12 25 to 15 40E
55 Sideby, tn., Finland; 62 0N 21 20E
27 Sidlaw Hills, Scotland; 1,400 ft.; 56 33N 3 10W
19 Sidmouth, urb. dist., Dev., Eng.; Honiton lace, gloves; p. 6,126; 50 42N 3 14W
61 Sidon. See Saida.
40 Siegburg, tn., Germany; fireworks; p. 19,405; 50 48N 7 15E
40 Siegen, tn., Germany; iron, machinery; p. 31,205; 50 52N 8 02E
70 Siem Rap, tn., Fr. Indo-China; 13 20N 103 5E
50 Siena, tn., Italy; cath., univ., palaces; machinery, textiles, p. 46,013; 43 20N 11 19E
47 Sienitza, tn., Yugoslavia; 43 16N 19 59E
107 Sierra Blanca, tn., Tex., U.S.A.; 31 17N 105 20W
48 Sierra de Gata, mts., Spain; 40 20N 6 25W
48 Sierra de Guadarrama, mts., Spain; 41 0N 4 00W
112 Sierra de Merida, mts., Venezuela; 8 00N 71 0W
108 Sierra de Nayarit, mts., Mexico; 22 45N 104 25W
88 Sierra Leone, col., prot., Br. W. Africa; a. 31,000 sq. m.; chief products—palm oil, palm kernels, kola nuts, ginger, rubber; some cotton is grown; cap. Freetown; p. 1,557,000; 8 00N 12 0W
108 Sierra Madre, mts., Mexico; 25 0N 105 30W
48 Sierra Morena, mts., Spain; 38 20N 4 30W
48 Sierra Nevada, mts., Spain; highest mt. range in Spain; Mulhacen 11,420 ft.; 37 10N 3 20W
106 Sierra Nevada, mts., Cal., U.S.A.; length 400 m.; highest pk. Mt. Whitney 14,900 ft.; 39 0N 120 0W
112 Sierra Nevada de Sta. Marta, mts., Colombia; alt. 16,740 ft.; 11 15N 73 30W
112 Sierra Pacaraima, mts., Venezuela; highest pk. Roraima 8,530 t.; 4 00N 63 0W
108 Sierra Tarahumare, mts., Mexico; 28 0N 107 40W
74 Sieu-choo, tn., China; 33 40N 117 7E
52 Sighet, tn., Rumania; p. 27,646; 47 57N 23 52E
52 Sighisoara, tn., Rumania; p. 13,096; 46 14N 24 50E
40 Sigmaringen, tn., Germany; 48 0N 9 10E
75 Sigu, tn., Japan; 33 45N 135 51E
72 Sikang. See Chwanpien.
66 Sikar, tn., Raj., India; p. 21,080; 27 33N 75 10E
88 Sikaso, tn., Fr. W. Afr.; p. 12,286; 11 10N 5 28W
73 Sikhota Alin, mts., Siberia, U.S.S.R.; 47 0N 138 0E
67 Sikkim, native state, Bengal, India; a. 2,818 sq. m.; mountainous and forested; maize and rice; woollens; p. 109,651; 27 30N 88 25E
69 Silchar, tn., cantonment, Assam, India; 24 47N 92 55E
41 Silesia, prov., Germany; a. 14,020 sq. m.; Sudetes mts. on S. border; chief river, Oder; farming, sugar beet, cereals, fruit; coal, zinc, iron, arsenic; mnfs. —woollens, linens, cottons, metal goods, paper; chief tn. Breslau; p. 4,511,606; 51 0N 17 0E
46 Silesia, former crown land Austria, now in Czechoslovakia; 49 50N 18 10E
43 Silesia, co. (former Germ. terr.), Poland; a. 1,683 sq. m.; coal; p. 1,124,967; 50 0N 18 50E

MAP

52 Silistra, tn., Rumania; important trade centre; cloth, distilleries, sawmills; grapes; p. 17,415; 44 4N 27 19E
39 Silkeborg, tn., Denmark; p. 12,078; 56 10N 9 30E
20 Silloth, tn., Cumb., Eng.; coal, grain; 54 52N 3 23W
82 Silva Porto, tn., Angola; 12 20S 16 50E
45 Silvaplana, tn., Switzerland; 46 27N 9 48E
106 Silver, tn., N. Mex., U.S.A.; 32 50N 108 20W
106 Silver City, Idaho, U.S.A.; 43 0N 116 44W
104 Silver Creek, tn., N.Y., U.S.A.; 42 32N 79 11W
120 Silverton, tn., N.S.W., Australia; 31 23S 141 10E
53 Silvri, tn., Turkey; 41 2N 28 15E
79 Silwa, vil., Egypt; 24 45N 32 57E
96 Simcoe, tn., Ont., Can.; p. 5,226; 42 52N 80 19W
57 Simferopol, tn., Russia; soap, candles and fruit; p. 98,600; 44 56N 34 2E
67 Simla, tn., Punjab, India; govt. hill stn.; health resort; alt. 7,040 ft.; p. 27,494; 31 1N 77 13E
75 Simoda, tn., Japan; 34 47N 138 52E
83 Simon's Town, C. of Good Hope, S. Afr.; naval sta.; large docks; p. 2,171 (Eur.); 34 15S 18 25E
88 Simpa, tn., Gold Coast; 5 20N 0 40W
44 Simplon Pass, 6,600 ft., Switzerland; rly. tunnel 12½ m. long, motor road; 46 15N 8 05E
98 Simpson, post, Mackenzie R., Can.; 61 50N 121 45W
78 Sinai, Mt. (sacred), Egypt; one of several peaks identified as Jebel Musa; Mt. Horeb forms the W. part on Sinai Pen.; 28 40N 34 11E
78 Sinai, Pen., Egypt; mts. in S., waterless and desert to the N.; 29 0N 34 0E
52 Sinaia, tn., Rumagia; p. 3,906; 45 20N 25 39E
69 Sinajganj, tn., Bengal, India; 24 30N 85 50E
108 Sinaloa, tn., Mexico; 25 0N 107 30W
108 Sinaloa, st., Mexico; a. 27,557 sq. m.; cereals, sugar, coffee; silver, gold, iron and copper; cap. Culiacan; p. 341,265; 22 30 to 27 20N 105 25 to 109 30W
53 Sinav, vil., Turkey; 39 11N 29 0E
72 Sin-chow, tn., China; 23 25N 109 55E
66 Sind, prov., India; a. 46,378 sq. m.; chief river, Indus; mostly desert; one-tenth cultivated; wheat, rice, barley, hemp, cotton, indigo; chief tns. —Hyderabad, Karachi (sept. and cap.); p. 3,887,070; 23 3N to 28 40N 66 40 to 71 20E
88 Sinder, tn., Fr. W. Afr.; 13 45N 9 05E
48 Sines, tn., Portugal; 37 55N 8 50W
70 Singapore I. (Brit.), Str. Setts., Malay Pen.; a. 225 sq. m.; coffee, fruits; cap. Singapore; p. 557,000; 1 25N 106 15E
70 Singapore, spt.; 2 caths., mosques, temples, museum, naval coaling stn., docks; large entrepôt trade; exp.—rubber, tin, copra; p. 194,500; 1 20N 103 50E
121 Singleton, tn., N.S.W., Australia; 32 35S 151 12E
70 Singora, tn., Malay Pen.; 7 00N 100 30E
74 Singminfu, tn., China; 41 56N 122 50E
47 Sinj, tn., Yugoslavia; 43 42N 16 40E
72 Sinkiang, China; a. 550,340 sq. m. (est.); cereals, fruit, cotton, wool, silk; cap. Urumtsi; p. 1,200,000; 40 10N 86 0E
63 Sinna, tn., Persia; 35 24N 47 11E
112 Sinnamarie, tn., French Guiana; 5 25N 53 0W
89 Sinoia, tn., S. Rhodesia; gold mining; 7 20S 30 12E
62 Sinop, spt., Turkey; timber, silk; 42 1N 35 7E
74 Sin-yang, tn., China; 32 17N 114 8E
75 Sinzin, tn., Japan; 38 51N 140 15E
89 Sioma, tn., N. Rhodesia; 16 35S 23 46E
102 Sioux City, Iowa, U.S.A.; on R. Missouri; meat packing, foundries, electrical goods, cement; p. 79,183; 42 30N 96 22W
107 Sioux Falls, cy., S.D., U.S.A.; machinery, motor-cars, farming implements; p. 33,362; 43 32N 96 47W
110 Siquia R., Nicaragua; 12 10N 84 10W
68 Sira, tn., Mys., India; 13 42N 76 55E
51 Siracusa, spt., Italy; chemicals, pottery; fruit, wine, olive oil; p. 52,439; 37 2N 15 18E
66 Sirohi, tn., Raj., India; 24 59N 72 57E
62 Sis, tn., Turkey; 37 31N 36 5E
46 Sisak, tn., Yugoslavia; 45 30N 16 20E
45 Sissach, tn., Switzerland; 47 28N 7 47E
72 Sitao, prov., Inner Mongolia, China; 41 0N 101 30E
67 Sitapur, tn., cantonment, U.P., India; p. 21,584; 27 30N 80 45E
53 Sitia, tn., Crete, Greece; 35 12N 26 8E
98 Sitka, tn., port, Alaska; observatory; canning, lumbering; p. 1,056; 57 2N 135 20W
69 Sittang, tn., Burma, India; 17 30N 97 0E
17 Sittingbourne and Milton, urb. dist., Kent, Eng.; oysters, paper, bricks; p. 20,175; 51 20N 0 45E
73 Siu-yang, tn., Manchuria, China; 40 25N 123 0E
74 Siu-yen, tn., Manchuria; 123 0N 40 15E
62 Sivas, tn., Turkey; woollens; p. 28,498; 39 32N 37 11E
62 Sivrihissar, tn., Turkey; 39 33N 31 29E
11 Siwa, oasis, Egypt; dates, olives; remains of Temple of Ammon, Fountain of the Sun; 29 15N 25 20E
89 Siwongo, vil., N. Rhodesia; 16 0S 28 40E
32 Six Mile Bridge, vil., Clare, I.F.S.; p. 325; 52 44N 8 46W
39 Sjörring, tn., Denmark; 56 57N 8 35E
39 Skagen, tn., spt., Denmark; p. 4,048; 57 35N 10 30E
55 Skager Rak, str.; 57 50N 9 00E
98 Skagway, spt., Alaska; p. 492; 59 22N 135 10W
39 Skanderborg, tn., Denmark; p. 4,083, 56 2N 9 57E
55 Skara, tn., Sweden; p. 6,770; 58 25N 13 20E
55 Skaraborg, co., Sweden; a. 3,274 sq. m.; p. 242,320; 58 20N 13 20E
39 Skaw. See Skagen Horn.
16 Skegness, urb. dist., Lind., Eng.; resort; farming, vegetables; p. 9,121; 53 9N 0 21E
54 Skellefteå, harb., Sweden; p. 5,203; 64 45N 20 55E
18 Skelmersdale, urb. dist., Lancs, Eng.; coal, bricks, drain pipes; p. 6,177; 53 33N 2 48W
39 Skeiskör, tn., Denmark; 55 15N 11 18E
25 Skene, par., Aber., Scot.; p. 1,310; 57 10N 2 21W
43 Skernevitsi, tn., Poland; 51 58N 20 19E
18 Skerries, Is., Angl., Wales; lighthouse; 53 25N 4 36W
31 Skerries, spt., Dublin, I.F.S.; fishing, muslin, stone; p. 1,819; 53 34N 6 06W
53 Skiatho I., Greece; 39 10N 23 15E

MAP

49 **Spain**, rep., Europe: a. 196,607 sq. m.: occupies five-sixths of Iberian pen., Catalonia in N.E. is a separate self-governing unit within the rep. : interior plateau alt. 2,000–3,000 ft., highest peaks are Picde Nethou 11,170 ft. (Pyrenees), Mulhacen 11,420 ft. (Sa Nevada); chief rivers—Tagus, Ebro, Douro, Guadiana and Guadalquivir; industries—agriculture, wheat, barley, etc., vines, citrus fruits, potatoes, sugar-beet, olives, nuts; sheep, goats, pigs, etc. ; minerals—coal, copper, iron, lead, zinc, mercury ; cork ; mnfs.—wine, sugar, silk, brewing, distilling ; cap. Madrid ; p. 23,563,867 : 36 0 to 42 50n 3 00e to 9 30w

47 **Spalato**. See Split.

16 **Spalding**, urb. dist., Holl., Eng. ; farming, garden produce ; p. 12,592 ; 52 48n 0 09w

41 **Spandau**, tn., Germany ; mnfs. firearms, gunpowder ; 52 34n 13 10e

80 **Spanish Guinea**, Africa ; a. 9,470 sq. m. ; rubber, timber, palm oil ; chief tn., Bata ; p. 130 (whites), 80,000 (natives) ; 1 35n 10 30e

110 **Spanish Torin**, Jamaica ; p. 9,000 ; 18 0n 77 15w

53 **Sparta**, tn., Greece ; p. 5,800 ; 37 5n 22 24e

103 **Spartanburg**, tn., S.C., U.S.A. ; cotton ; p. 28,723; 34 57n 82 2w

16 **Spartel**, C., Morocco ; 35 56n 5 58w

61 **Spartivento**, C., Italy ; 38 52n 8 55e

24 **Spean Bridge**, Inver., Scot. ; 56 53n 4 55w

120 **Spencer**, C., S. Australia ; 35 20s 136 55e

120 **Spencer's Gulf**, S. Australia ; l. 200 m. ; 34 0s 137 0e

127 **Spenser Mts.**, S.I. New Zealand ; 42 10s 172 30e

25 **Spey**, R., Scotland ; 57 28n 3 15w

40 **Speyer**, tn., Germany ; on R. Rhine ; beer, sugar, paper, musical instruments ; p. 25,600 ; 49 20n 18 25e

50 **Spezia**, tn., Italy ; arsenal, naval stn., docks, ship-building ; electrical machinery ; olive oil ; 44 5n 9 49e

48 **Spiez**, tn., Switzerland ; 46 42n 7 41e

16 **Spilsby**, tn., Lind., Eng. ; p. 1,400 ; 53 11n 0 06e

51 **Spinazzola**, tn., Italy ; 41 0n 16 6e

87 **Spion Kop**, Natal, S. Afr. ; 28 38s 29 33e

17 **Spithead**, roadstead, Hants, Eng. ; 50 44n 1 05w

128 **Spitsbergen**, Is. (Svalbard), Norway ; mountainous ; sealing, whaling ; coal, marble, iron ore, zinc, asbestos ; a. 25,000 sq. m. ; p. 2,000 (est.) ; 78 0n 17 0e

128 **Spitsbergen Sea**, Arctic Oc. ; 75 0n 40 0e

47 **Split**, tn. (formerly Spalato), spt., Yugoslavia ; Roman remains ; wine, olive oil ; p. 43,800 ; 43 33n 16 29e

44 **Spliigen (Pass)**, Switzerland ; 6,946 ft. ; 46 29n 9 25e

106 **Spokane**, tn., Wash., U.S.A. ; water power ; commercial centre ; flour, saw-mills ; wheat, fruit ; live-stock ; p. 115,514 ; 47 33n 117 28w

50 **Spoleto**, tn., Italy ; cath. ; 42 47n 12 42e

53 **Sporades, Is.**, Ægean S. ; 37 0n 27 0e

41 **Spree**, R., Germany ; length 250 m., flows through Berlin ; 52 20n 13 50e

41 **Spremberg**, tn., Brandenburg, Germany ; cloth, machinery, cycles ; p. 12,726 ; 51 36n 14 20e

83 **Springbok**, tn., C. of Good Hope, S. Afr. ; mining centre ; 29 40s 17 56e

102 **Springfield**, tn., cap. Ill., U.S.A. ; home and burial place of Abraham Lincoln ; coal, engineering, watches, farming implements ; p. 71,864 ; 39 47n 89 39w

102 **Springfield**, cy., Mass., U.S.A. ; on R. Connecticut ; arsenal ; motor cars, electrical apparatus, paper ; p. 147,900 ; 42 6n 72 35w

102 **Springfield**, tn., Mo., U.S.A. ; machinery, fruit, dairying ; p. 57,527 ; 37 17n 93 22w

102 **Springfield**, tn., Ohio, U.S.A. ; machinery, farm implements ; p. 68,743 ; 39 53n 83 45w

83 **Springfontein**, tn., O.F.S., S.Afr. ; 30 15s 25 43e

95 **Springhill**, tn., N.S., Can. ; coal ; p. 6,355 ; 45 39n 64 1w

86 **Springs**, tn., Trans., S. Afr. ; p. 7,669 (Eur.) ; 26 12s 28 22e

123 **Springsure**, tn., Queens., Australia ; 23 30s 148 15e

27 **Sprouston**, par., Rox., Scot. ; p. 720 ; 55 37n 2 23w

21 **Spurn Hd.**, E. Riding, Eng. ; 53 35n 0 08e

47 **Srebrenica**, tn., Yugoslavia ; 44 9n 19 18e

59 **Sredne Kolimsk**, tn., U.S.S.R. ; 67 0n 154 0e

66 **Srinagar**, tn., cap. Kashmir, India ; on R. Jhelum ; silver, copper wares, carpet weaving, paper ; p. 173,649 ; 34 12n 74 50e

68 **Srivilliputur**, tn., Mad., India ; p. 31,195 ; 9 30n 77 40e

46 **Stackerau**, tn., Austria ; grain ; p. 11,350 ; 48 23n 16 13e

39 **Stade**, tn., Germ. ; alcohol, leather ; p. 11,985 ; 53 35n 9 26e

26 **Staffa I.**, Arg., Scot. ; 56 26n 6 20w

18 **Stafford**, mun. bor., co. tn., Staffs, Eng. ; iron, boots, shoes ; electrical engineering ; p. 29,485 ; 52 43n 2 06w

18 **Stafford**, co., England ; a. 1,171 sq. m. ; farming ; pottery, coal, engineering, machinery, footware, brewing ; p. 1,431,175 ; 52 45n 2 05w

17 **Staines**, urb. dist., Middx., Eng. ; on R. Thames ; brewing, mustard ; p. 21,209 ; 51 26n 0 31w

27 **Stair**, par., Ayr, Scot. ; p. 1,034 ; 55 29n 4 27w

20 **Staithes**, vil., N. Riding, England ; 54 34n 0 48w

19 **Stalbridge**, par., Dorset, England ; p. 1,222 ; 50 57n 2 21w

45 **Stalden**, tn., Switzerland ; 46 14n 7 52e

16 **Stalham**, par., Norfolk, England ; p. 937 ; 52 47n 1 30e

67 **Stalino**, tn., Russia ; coal, iron, manganese ; p. 285,500 ; 47 59n 37 35e

67 **Stalingrad**, tn., Russia ; formerly Tsaritsin ; machinery, chemicals, oil refining ; p. 388,000 ; 48 40n 44 22e

72 **Stalinsk**, tn., Siberia, U.S.S.R. ; coal ; p. 199,800 ; 53 50n 87 30e

18 **Stalybridge**, mun. bor., Ches., Eng. ; cotton, woollens, iron, nails ; p. 24,823 ; 53 29n 2 05w

105 **Stamford**, cy., Conn., U.S.A. ; p. 46,346 ; 41 7n 73 24w

16 **Stamford**, mun. bor., Kest., Eng. ; malting, coal ; p. 9,946 ; 52 39n 0 29w

21 **Stamford Br.**, E. Riding, Eng. ; 54 0n 0 54w

83 **Standerton**, tn., Trans., S. Afr. ; coal, farming ; p. 2,863 (Eur.) ; 27 0s 29 17e

20 **Stanhope**, urb. dist., Dur., Eng. ; limestone, lead ore ; p. 1,746 ; 54 45n 2 00w

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63 **Stanimaka**, tn., Bulgaria ; p. 17,287 ; 42 0n 24 53e

43 **Stanislawow**, co., Poland ; a. 7,092 sq. m. ; forests ; dairying, horses, petroleum ; p. 1,339,191 ; 48 47n 24 36e

43 **Stanislawow**, tn., Poland ; rly. works, flour mills, farm produce ; p. 28,000 ; 48 51n 24 40e

121 **Stanley**, tn., Tas., Australia ; 27 30s 152 45e

113 **Stanley**, spt., cap., Falkland Is. ; whaling ; 52 0s 58 30w

27 **Stanley**, Perth, Scot. ; 56 30n 3 26w

80 **Stanley Falls**, Belg. Congo ; on R. Congo ; 0 15n 25 32e

80 **Stanley Pool**, Belg. Congo ; on R. Congo ; 4 15s 15 35e

80 **Stanleyville**, tn., Belg. Congo ; on R. Congo ; 0 34n 25 15e

59 **Stanovoi, Mts.**, U.S.S.R. ; 60 0n 140 0e

120 **Stansbury**, tn., S. Australia ; 34 55s 137 42e

121 **Stanthorpe**, tn., Queens., Australia ; 28 44s 151 49e

45 **Stanz**, tn., Switzerland ; 46 57n 8 22e

56 **Staraya Russa**, tn., Russia ; brine baths ; cereals and flax ; p. 21,500 ; 57 59n 31 21e

52 **Stara Zagora**, tr., Bulgaria ; copper smelting ; mineral springs and silk ; p. 28,957 ; 42 23n 25 40e

117 **Starbuck I.** (Brit.), Pacific Ocean ; 5 30s 155 0w

41 **Stargard**, tn., Germany ; machinery, woollens, cottons, and spirits ; p. 32,545 ; 53 20n 15 2e

57 **Stari-Ozkol**, tn., Russia ; 51 25n 37 33e

57 **Starobyelsk**, tn., Russia ; 49 17n 38 38e

57 **Starodub**, tn., Russia ; 52 37n 32 37e

82 **Star of The Congo**, tn., Belg. Congo ; centre of copper mining dist. ; 11 30s 27 40e

19 **Start Pt.**, Dev., Eng. ; 50 14n 3 40w

43 **Stashov**, tn., Poland ; 50 33n 21 12e

40 **Stassfurt**, tn., potash salts, chemicals, Germany ; p. 16,144 ; 51 52n 11 38e

105 **Staten I.**, N.J., U.S.A. ; at mth. of Hudson R. ; a. 57 sq. m. ; shipyards ; 40 35n 74 10w

102 **Staunton**, tn., Va., U.S.A. ; p. 11,990 ; 38 12n 79 0w

55 **Stavanger**, spt., Norway ; fishing, fish-canneries, shipbuilding ; p. 46,353 ; 58 55n 5 40e

16 **Staveley**, urb. dist., Derby, Eng. ; coal, iron ; p. 12,646 ; 53 16n 1 20w

38 **Stavelot**, tn., Belgium ; 50 24n 5 55e

38 **Stavoren**, tn., Netherlands ; 52 53n 5 23e

57 **Stavropol**, tn., Russia ; farming implements, textiles, coal ; p. 58,657 ; 45 8n 41 59e

120 **Stawell**, tn., Vic., Australia ; gold ; 37 6s 142 48e

96 **Stayner**, tn., Ont., Can. ; p. 1,019 ; 44 23n 80 8w

86 **Steelpoort**, tn., Trans., S. Afr. ; 25 10s 29 30e

38 **Steenwijk**, tn., Netherlands ; 52 48n 6 07e

125 **Steep Pt.**, W. Australia ; 26 0s 113 0e

39 **Stege**, tn., Denmark ; 55 0n 12 17e

54 **Steinkjer**, tn., Norway ; 64 0n 11 30e

83 **Steinkopfontein**, tn., C. of Good Hope, S. Afr. ; 29 15s 17 40e

83 **Stellenbosch**, tn., C. of Good Hope, S. Afr. ; univ. ; wines, fruit ; p. 4,707 (Eur.) ; 33 57s 18 53e

44 **Stelvio (Pass)**, Italy ; 9140 ft. ; 46 35n 10 40e

40 **Stendal**, tn., Germany ; rly. works, machinery, textiles ; p. 29,701 ; 52 37n 11 50e

54 **Stenseie**, tn., Sweden ; 65 0n 17 15e

81 **Stephanie, L.**, Abyssinia ; 4 20n 37 0e

17 **Stepney**, met. bor., London, England ; includes in N., Spitalfields, Whitechapel, Mile End in S., Wapping, Shadwell, Limehouse ; Tower of London Royal Mint, People's Palace ; Mile End, associated with Wat Tyler's Rebellion in 1391 ; docks, silk-weaving ; p. 225,203 ; see London.

57 **Sterlitamak**, tn., Russia ; 53 42n 55 58e

83 **Sterkstroom**, tn., C. of Good Hope, S. Afr. ; 31 35s 26 35e

41 **Stettin**, tn., free port, Germany ; on R. Oder ; outport Swinemünde ; shipbuilding, machinery, chemicals, sugar, paper, cement, porcelain, oil refining ; p. 270,747 ; 53 26n 14 30e

98 **Stettler**, tn., Alta., Can. ; p. 1,219 ; 52 15n 112 35w

102 **Steubenville**, cy., Ohio, U.S.A. ; iron, steel, paper, glass ; coal, natural gas, petroleum ; p. 35,422 ; 40 27n 80 38w

17 **Stevenage**, urb. dist., Herts, Eng. ; straw-plait, farming ; p. 5,476 ; 51 55n 0 12w

102 **Stevens Point**, tn., Wis., U.S.A. ; p. 13,623 ; 44 33n 89 35w

26 **Stevenston**, par., Ayr, Scot. ; iron, sandstone, quarrying ; p. 11,572 ; 55 39n 4 45w

95 **Stewiack**, vil., N.S., Can. ; 45 14n 63 4w

98 **Stewart**, tn., B.C., Can. ; 56 0n 130 0w

98 **Stewart**, tn., Yukon, Can. ; 63 17n 139 20w

127 **Stewart I.**, New Zealand ; a. 662 sq. m. ; separated from S.I. by Foveaux Str. ; tourist centre ; granite ; 47 0s 167 55e

26 **Stewarton**, bor., Ayr, Scot. ; woollen tartans, carpets ; p. 2,749 ; 55 42n 4 30w

31 **Stewartstown**, tn., Tyrone, N. Ire. ; linen ; p. 669 ; 54 35n 6 41w

83 **Steylenville**, tn., C. of Good Hope, S. Afr. ; 33 20s 24 23e

17 **Steyning**, par., Sus., Eng. ; parchment ; p. 1,875 ; 50 53n 0 20w

83 **Steynsburg**, tn., C. of Good Hope, S. Afr. ; 31 20s 25 50e

83 **Steynsdorp**, tn., Trans., S. Afr. ; 26 10s 31 0e

50 **Stia**, tn., Italy ; 43 49n 11 42e

102 **Stillwater**, tn., Minn., U.S.A. ; farming implements, lumber ; p. 7,173 ; 45 7n 92 48w

27 **Stirling**, bor., co. tn., Stirling co., Scot. ; iron, carpets, leather, tweeds, yarn ; p. 22,993 ; 56 7n 3 56w

27 **Stirling**, co., Scotland ; a. 451 sq. m. ; coal, ironstone ; p. 166,447 ; 56 3n 4 15w

27 **Stobo**, par., Peebles, Scot. ; p. 292 ; 55 37n 3 18w

27 **Stobs**, Rox., Scot. ; 55 23n 2 47w

17 **Stockbridge**, par., Hants, Eng. ; p. 862 ; 51 7n 1 29w

55 **Stockholm**, cy., spt. and cap. Swed. ; royal palace, Storkyrka, museum, opera-house, library ; machinery, textiles, sugar, leather, chemicals ; p. 502,207 ; 59 17n 18 3e

55 **Stockholm**, co., Sweden ; a. 2,986 sq. m. ; p. 264,909 ; 59 0n 18 0e

18 **Stockport**, co. bor., Ches., Eng. ; cotton, hats, chemicals, machinery, leather ; p. 125,490 ; 53 25n 2 11w

106 **Stockton**, tn., Cal., U.S.A. ; commercial centre ; farming implements, flour, lumber ; p. 47,963 ; 38 0n 121 20w

MAP

20 **Stockton-on-Tees**, mun. bor., spt., Dur., Eng. ; iron, shipbuilding, linen, potteries ; p. 67,697 ; 54 34n 1 20w

24 **Stoer**, par., Sather., Scot. ; p. 717 ; 58 12n 5 20w

16 **Stoke Ferry**, par., Norfolk, England ; p. 589 ; 52 34n 0 31e

17 **Stoke Newington**, met. bor., London, England ; p. 51,215 ; see London.

18 **Stoke-on-Trent**, co. bor., Staffs, Eng. ; includes Hanley, Burslem, Longton, Stoke, Fenton, and Tunstall ; centre of Potteries dist. ; porcelain, earthenware, iron, coal, engineering ; p. 276,639 ; 53 1n 2 11w

18 **Stoke Prior**, par., Worcs, Eng. ; wagon works, salt ; p. 3,138 ; 52 19n 2 05w

20 **Stokesley**, par., N. Riding, Eng. ; linen, gunpowder ; p. 1,641 ; 54 28n 1 11w

47 **Stolac**, tn., Yugoslavia ; 43 6n 17 40e

41 **Stolp**, tn., Germany ; machinery and linen ; p. 41,602 ; 54 28n 17 2e

83 **Stolzenfels**, vil., S.W. Afr. ; 28 20s 19 55e

18 **Stone**, urb. dist., Staffs, Eng. ; boots, shoes ; p. 5,992 ; 52 53n 2 08w

25 **Stonehaven**, bor., spt., Kinc., Scot. ; good harbour ; fishing, brewing, woollens ; p. 4,185 ; 56 58n 2 13w

19 **Stonehenge**, Wilts, Eng. ; anc. group of stone circles on Salisbury Plain, attributed to the Stone or Bronze Age ; now the property of the nation ; 51 10n 1 50w

27 **Stonehouse**, par., Lanark, Scot. ; mining, weaving, linen, limestone ; p. 3,704 ; 55 42n 3 59w

26 **Stonesykirk**, par., Wig., Scot. ; p. 2,092 ; 54 50n 4 58w

16 **Stony Stratford**, tn., Bucks, Eng. ; engineering, lace ; p. 1,992 ; 52 4n 0 51w

39 **Storehedinge**, tn., Denmark ; 55 18n 12 21e

54 **Stören**, tn., Norway ; 63 4n 10 10e

54 **Stor L.**, Sweden ; 65 56n 18 20e

121 **Storm Bay**, Tas., Australia ; 43 0s 147 30e

87 **Stormberg Junc.**, C. of Good Hope, S. Afr. ; 31 20s 26 20e

24 **Stornoway**, bor., spt., Lewis, Scot. ; fishing, corn, distilling ; p. 3,771 ; 58 13n 6 22w

52 **Storozynec**, tn., Rumania ; p. 8,511 ; 48 12n 25 45e

55 **Storvik**, tn., Sweden ; 60 35n 16 30e

38 **Stoumont**, Belgium ; 50 24n 5 48e

17 **Stour**, Gt. R., Kent, Eng. ; 51 17n 1 10w

19 **Stour**, R., Dor., Eng. ; 50 53n 2 12w

18 **Stourbridge**, mun. bor., Worcs, Eng. ; glass, fire-bricks ; p. 33,223 ; 52 27n 2 08w

18 **Stourport**, urb. dist., Worcs, Eng. ; carpets, tanning, iron ; p. 5,949 ; 52 20n 2 15w

27 **Stow**, par., Midlothian, Scot. ; p. 1,280 ; 55 42n 2 52w

19 **Stow-on-the-Wold**, par., Glouces., Eng. ; farming, malting ; p. 1,266 ; 51 55n 1 43w

16 **Stowmarket**, urb. dist., Suff., Eng. ; chemical manures ; p. 4,296 ; 52 12n 1 00e

31 **Strabane**, urb. dist., Tyrone, N. Ire. ; cath. ; iron, brass, shirts ; p. 5,156 ; 54 49n 7 28w

25 **Strachan**, par., Kinc., Scot. ; p. 546 ; 57 1n 2 33w

26 **Strachur**, par., Argyll, Scot. ; p. 499 ; 56 11n 5 04w

33 **Stradbally**, tn., Leix, I.F.S. ; farming ; p. 823 ; 53 1n 7 09w

50 **Stradella**, tn., Italy ; 45 3n 9 20e

121 **Strahan**, tn., spt., Tas., Austral. ; 42 7s 145 18e

26 **Straiton**, par., Ayr, Scot. ; p. 1,080 ; 55 19n 4 32w

70 **Straits Settlements**, cr. colony, Malay Pen. ; a. 1,356 sq. m., comprising Singapore, Penang (including Prov. Wellesley, Malacca, Labuan ; rubber, coconuts, palm oil, rice ; p. 1,114,013 ; 0 02n 102 30e

120 **Strangeways Springs**, S. Australia ; 29 10s 136 32e

31 **Strangford**, spt., Down, N. Ire. ; p. 335 ; 54 22n 5 33w

31 **Strangford L.**, Down, I.F.S. ; 54 30n 5 33w

31 **Stranorlor**, par., Tirconaill, I.F.S. ; farming, flax ; p. 3,225 ; 54 48n 7 46w

26 **Stranraer**, bor., spt., Wig., Scot. ; creameries, brewing ; p. 6,490 ; 54 54n 5 02w

34 **Strasbourg**, tn., France ; on R. Ill. ; cath ; machinery ; jewellery, hardware, brewing, tanning, printing ; p. 181,465 ; 48 37n 7 42e

96 **Stratford**, tn., Ont., Can. ; woollens, farm machinery, flour, saw-mills ; p. 17,742 ; 43 24n 81 0w

126 **Stratford**, bor., N.I., New Zealand ; p. 3,480 ; 39 19s 174 17e

16 **Stratford-upon-Avon**, mun. bor., War., Eng. ; birthplace of Shakespeare ; p. 11,616 ; 51 32n 1 43w

120 **Strathalbyn**, tn., S. Australia ; 35 35s 138 32e

27 **Strathaven**, tn., Lanark., Scot. ; cas. ; brewing, weaving ; p. 3,501 ; 55 40n 4 20w

27 **Strathblane**, par., Stirl., Scot. ; p. 1,161 ; 55 59n 4 17w

98 **Strathcona**, tn., Alta., Can. ; 53 25n 113 25w

25 **Strathdon**, par., Aber., Scot. ; p. 809 ; 57 13n 3 04w

27 **Strathmiglo**, par., Fife, Scot. ; damaska, sandstone ; p. 1,561 ; 56 17n 3 16w

24 **Strathpeffer**, Ross and Crom., Scot. ; 57 35n 4 33w

96 **Strathroy**, tn., Ont., Can. ; p. 2,964 ; 43 0n 81 17w

25 **Strathy**, par., Suther., Scot. ; p. 509 ; 58 33n 4 00w

19 **Stratton and Bude**, urb. dist., Corn., Eng. ; p. 3,836 ; 50 50n 4 30w

40 **Straubing**, tn., Germany ; chemicals, machinery and breweries ; p. 23,593 ; 48 55n 12 34e

102 **Streator**, tn., Ill., U.S.A. ; farming implements, bricks, glass and hardware ; p. 14,728 ; 41 2n 89 2w

19 **Street**, urb. dist., Som., Eng. ; boots, shoes ; p. 4,453 ; 51 7n 2 43w

41 **Strehlen**, tn., Germany ; sugar ; p. 10,142 ; 50 48n 17 2e

55 **Strengnas**, tn., Sweden ; 59 20n 17 1e

21 **Strensall**, par., N. Riding, Eng. ; p. 738 ; 54 2n 1 02w

73 **Stretensk**, tn., Siberia, U.S.S.R. ; 52 0n 117 30e

25 **Stricken**, par., Aber., Scot. ; linen, farming ; p. 2,024 ; 57 35n 2 04w

122 **Strickland R.**, Papua ; 7 30s 142 0e

30 **Strokestown**, tn., Roscommon, I.F.S. ; grain, flax, wool ; p. 801 ; 53 47n 8 07w

54 **Ström**, tn., Sweden ; 63 50n 15 45e

51 **Stromboli I.**, Lipari Is., Italy ; volcanic, 3,090 ft. ; 38 47n 15 13e

24 **Strome Ferry**, vil., Ross and Cromarty, Scotland ; 57 20n 5 33w

22 **Stromness**, vil., Orkney Is., Scotland ; 58 58n 3 15w

55 **Strömstad**, tn., Norway ; harb. ; 58 55n 11 15e

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22 Stronssay, I., Orkney Is., Scotland; 59 10n 2 40w
19 Stroud, urb. dist., Glouces., Eng.; cloth, brewing, dyeworks; p. 8,360; 51 45n 2 15w
25 Struan, vil., Perth, Scotland; 56 45n 3 56w
53 Struma, R., Bulgaria; length 150 m.; 41 40w 23 18e
18 Strumble Hd., Pem., Wales; 53 2n 5 04w
47 Strumica (Strumnitza), tn., Yugoslavia; 41 28n 22 40e
83 Strydenburg, tn., C. of Good Hope, S. Afr.; 29 56s 23 43e
43 Stryj, tn., Poland; saw-mills, matches; p. 27,500; 49 17n 23 50e
120 Stuart's Range, S. Australia; 29 30s 135 30e
39 Stubbekôbbing, tn., Denmark; 54 53n 12 3e
70 Stungireng, tn., Fr. Indo-China; on Mekong R.; 13 30n 106 0e
96 Sturgeon Falls, tn., Ont., Can; p. 4,234; 46 25n 79 55w
19 Sturminster Newton, par., Dorset, England; p. 1,619; 50 56n 2 17w
83 Stutterheim, tn., C. of Good Hope, S. Afr.; 32 36s 27 30e
40 Stuttgart, tn., cap. Württemberg, Germ.; cas., palace; on R. Neckar; publishing, textiles, pianos, chemicals, jewellery, cigars; p. 415,028; 48 50n 9 10e
53 Stylis, vil., Greece; 38 54n 22 40e
44 Styrian Alps, Austria; 47 20n 14 40e
123 Styx, tn., Queens., Australia; 22 28s 149 55e
74 Suan-hwa, tn., China; 40 34n 115 0e
10 Suara, tn., Libya; 32 57n 12 0e
42 Subat, tn., Latvia; 56 3n 25 58e
50 Subiaco, tn., Italy; ironworks, paper; 41 56n 13 6e
46 Subotica, tn., Yugoslavia; boots, railway material; p. 100,058; 46 8n 19 41e
74 Süchow, tn., treaty port; China; silks, cottons, rice; p. 350,000; 34 15n 117 30e
113 Sucre, tn., nominal cap. Bolivia; cath., univ.; p. 24,000; 18 59s 65 15w
52 Suczawa, tn., Rumania; p. 17,101; 47 38n 26 20e
96 Sudbury, tn., Ont., Can.; nickel, copper; p. 18,518; 46 29n 80 55w
16 Sudbury, mun. bor., Suff., Eng.; silk; p. 7,007; 52 3n 0 43e
57 Sudja, tn., Russia; 51 12n 35 19e
49 Sueca, tn., Spain; 39 13n 0 19w
78 Suez, spt., Egypt; docks; S. terminus of Suez Canal; p. 40,523; 29 59n 32 30e
78 Suez Canal, Egypt; ship canal between Med. S. and Red S., Port Said to Suez; length 104 m.; providing the shortest route to the East and is of the greatest commercial value to shipping; constructed by Ferdinand de Lesseps (1859-69); opened Nov. 1869; 31 0n 32 19e
78 Suez, G. of, Egypt; 29 0n 33 0e
16 Suffolk, co., England; a. 1,489 sq. m.; surface slightly undulating; dairying, fishing, agricultural implements, manures; p. 401,114; 51 56 to 52 37n 0 25 to 1 48e
16 Suffolk, adm. co., East, England; dairying; p. 294,977; 51 56 to 52 37n 0 54 to 1 48e
16 Suffolk, adm. co., West, England; dairying; p. 106,137; 51 57 to 52 27n 0 25 to 1 02e
53 Suffi, tn., Greece; 41 12n 26 20e
53 Suho, vil., Greece; 40 49n 23 22e
73 Suifenho, treaty port, Manchuria; 44 0n 131 10e
72 Suifu, tn., China; 28 50n 104 40e
74 Sui-te, tn., China; 37 40n 110 0e
72 Suining, tn., China; 31 30n 107 30e
73 Suiyan, dist. of Mongolia, China; 40 15n 109 30e
72 Suiyuan, prov., Inner Mongolia, China; 39 50n 107 0e
63 Suj Bulak, vil., Persia; 36 47n 45 46e
54 Sukajoki, tn., Finland; 64 50n 24 45e
62 Suk esh Sheikh, tn., Iraq; 30 58n 46 29e
61 Sukhain, vil., Palestine; 32 52n 35 17e
57 Sukhinichi, tn., Russia; 54 14n 35 28e
57 Sukhum, tn., spt., Russia; 43 0n 41 0e
66 Sukkur, tn., Sind, India; on the Indus R., dam constructed for irrigation; silks, cottons, woollens; p. 42,759; 27 47n 68 53e
71 Sula Is., Dutch E. Indies; rice, maize and tobacco; p. 20,154; 1 45s 125 30e
66 Sulaiman Ra., Baluch., India; 30 30n 69 45e
60 Sulaiyil, vil., Arabia; 20 35n 45 25e
62 Suleimania, tn., Iraq; 35 31n 45 29e
52 Sulina, tn., Rumania; port at mouth of Danube; grain; p. 5,924; 45 9n 29 39e
52 Sulina Mouth, Rumania; branch of Danube, for large grain-carrying ships; length 50 m.; 45 12n 29 40e
54 Sulitelma, Mt., Sweden; 6,150 ft.; 67 15n 17 20e
34 Sully, tn., France; on R. Loire; 47 48n 2 20e
63 Sultanabad, tn., Persia; p. 20,000; 34 6n 49 46e
63 Sultanabad, tn., Persia; 34 5n 49 40e
63 Sultanieh, tn., Persia; 36 26n 48 48e
71 Sulu Is., Philippine Is.; 5 30n 121 0e
71 Sulu Sea, Philippine Is.; 8 00n 120 0e
70 Sumatra I., Dutch E. Indies; a. 163,138 sq. m.; mts. run along S.W. coast; highest pk. Indrapura, 12,480 ft.; dense forests teak and oak; rubber, rice, maize, sugar, coffee, spices, coconuts; petroleum, tin, gold and coal; p. 7,604,974; 5 50s to 5 40n 95 20 to 106 0e
71 Sumbawa I., Dutch E. Indies; a. 5,362 sq. m.; rice, tobacco, coffee; p. 182,354; 8 30s 117 0e
95 Summerside, tn., P.E.I., Can.; p. 3,759; 46 27n 63 49w
103 Sumter, tn., S.C., U.S.A.; p. 11,780; 33 55n 80 18w
57 Sumy, tn., Russia; farming implements; textiles and leather factories; 50 51n 34 45e
121 Sunbury, tn., Vic., Australia; 37 34s 144 42e
104 Sunbury, tn., Pa., U.S.A.; textiles, furniture, machinery; p. 15,626; 40 50n 76 50w
70 Sunda Islands, Dutch E. Indies; 5 00n to 10 0s 95 0 to 123 0e
71 Sunda Sea, Dutch E. Indies; 6 30s 121 0e
69 Sundarbans, Bengal, India; coast strip of Ganges delta; forests and swamp; tigers and crocodiles in S. portion; rice in N. portion; 22 0n 89 30e
83 Sunday R., C. of Good Hope, S. Afr.; 32 45s 24 40e
20 Sunderland, co. bor., spt., Dur., Eng.; shipbuilding, coal, engineering, glass, paper, cordage, biscuits; p. 185,824; 54 55n 1 22w
20 Sunderland, N., Northumb., Eng.; 55 35n 1 40w
55 Sundsvall, tn., spt., Sweden; sawmills, shipbuilding, timber; p. 18,006; 62 25n 17 20e

MAP

74 Sung-Kiang, tn., China; 31 5n 121 5e
82 Sungo, vil., Mozambique; 16 33s 33 46e
57 Sunzhen Area, Russia; 43 30n 45 0e
54 Suomenjoki, tn., Finland; 62 40n 27 30e
102 Superior, tn., Wis., U.S.A.; port at W. end of L. Superior; shipbuilding, flour mills, rly. material; p. 36,113; 46 40n 92 2w
99 Superior Jc., tn., Ont., Can.; 50 1n 90 10w
90 Superior, L., N. America; a. 31,810 sq. m.; 360 m. long, greatest width 160 m.; largest fresh-water lake in the world, abounding in fish; chief ports—Duluth, Ashland, Superior, Pt. Arthur, Sault Sainte Marie; 600 ft. above sea-level; 46 25 to 49 0n 84 40 to 91 35w
62 Sur (Tyre), vil., Syria; anc. cy. of Phœnicia; 33 16n 35 15e
70 Surabaya, spt., Java; dockyards and arsenal; exp. coffee, rice, cotton, sugar, tapioca; p. 230,000; 7 25s 112 50e
70 Surakarta, tn., Java; p. 130,000; 7 30s 110 50e
121 Surat, vil., Queens., Australia; 27 10s 149 19e
66 Surat, spt., Bom., India; cottons, silks; 21 12n 72 55e
17 Surbiton, mun. bor., Surrey, England; p. 30,188; see Greater London.
47 Surdulitza, vil., Yugoslavia; 42 41n 22 54e
58 Surgut, tn., U.S.S.R.; 61 30n 73 0e
112 Surinam. See Dutch Guiana
17 Surrey, co., England; a. 758 sq. m.; cereals, vegetables, livestock; p. 1,180,810; 51 4 to 51 28n 0 04s to 0 50w
45 Sursee, tn., Switzerland; 47 10n 8 05e
75 Suruga B., Japan; 34 45n 138 45e
50 Susa, tn., Italy; 45 7n 7 04e
63 Susa, ruins, Persia; 32 15n 48 17e
10 Susa, tn., spt., Tunis, Afr.; p. 21,238; 35 50n 10 30e
102 Susquehanna R., U.S.A.; N. branch (350 m.) rises in Schuyler L., N.Y., W. branch (250 m.) in Allegheny Mts.; from union flows into Chesapeake B., another 150 m.; 42 0n 76 0w
45 Süss, tn., Switzerland; 46 45n 10 5e
17 Sussex, co., England; a. 1,459 sq. m.; wheat, barley, potatoes, hops; cattle, sheep; fruits, vegetables; fishing, paper, bricks, etc.; p. 770,078; 50 44 to 51 9n 0 52e to 0 56w
17 Sussex, adm. co. East, England; farming; p. 546,942; 50 44 to 51 9n 0 52e to 0 13w
17 Sussex, adm. co. West, England; farming; p. 223,136; 50 44 to 51 8n 0 13 to 0 56w
83 Sutherland, tn., C. of Good Hope, S. Afr.; 32 25s 20 40e
24 Sutherland, co., Scotland; a. 2,028 sq. m.; mountains, moorlands, fertile valleys; sheep rearing; p. 16,100; 57 52 to 58 37n 3 35 to 5 25w
127 Sutherland Falls, S.I., New Zealand; 44 51s 167 5e
66 Sutlej, riv., India; trib. of Indus, rises in Tibet, and flows S.W., joining Indus at Mithankot; nav. to Ferozepore; length 600 m.; 30 0n 73 0e
74 Su-tsin, tn., China; 34 0n 119 0e
17 Sutton and Cheam, mun. bor.; Sur., Eng.; p. 46,500; 51 22n 0 12w
16 Sutton-in-Ashfield, urb. dist., Notts, Eng. coal, lime, hosiery; p. 25,153; 53 6n 1 19w
16 Sutton-on-Sea. See Mablethorpe.
128 Suva, spt., cap. Fiji Is.; 18 0s 178 20e
43 Suvalki, tn., Poland; timber, grain, woollens; 54 8n 22 56e
42 Suvalki, prov., Lithuania; farming, timber, woollens and linens; 54 20n 23 30e
70 Suvanapum, tn., Siam; 15 35n 103 35e
53 Suvla, C., Turkey; scene of landing by Brit. troops during Gt. War; 40 20n 26 14e
116 Suwarrow I. (Brit.), Cook Is., Pac. Oc.; 13 12s 163 15w
56 Suyeva, tn., Russia; 55 50n 38 57e
58 Svalbard. See Spitsbergen.
55 Svealand, dist., Sweden; 60 8n 15 0e
55 Sveg, tn., Sweden; 62 5n 14 20e
39 Svendborg, port, Denmark; 55 3n 10 38e
39 Svendstrup, tn., Denmark; 55 24n 9 50e
57 Svenigorodka, tn., Russia; 49 9n 30 26e
42 Sventsyany, tn., Poland; 55 8n 26 10e
56 Sverdlovsk, tn. (formerly Yekaterinburg), Russia; univ.; coal, platinum, precious stones, gold; machinery; p. 400,800; 56 52n 60 42e
5 Svernaya Zemlya, arch., Siberia; 78 0n 100 0e
56 Sviatoi Noss, Russia; 68 5n 40 0e
52 Svistova, tn., Bulgaria; p. 12,046; 43 36n 25 22e
40 Swabia, dist., Germany; a. 3,807 sq. m.; p. 859,397; 48 0n 10 15e
16 Swadlincote, urb. dist., Derby, Eng.; collieries, potteries, earthenware; p. 20,308; 52 46n 1 33w
16 Swaffham, urb. dist., Norf., Eng.; iron; p. 2,783; 52 39n 0 42e
83 Swakopmund, port, S.W.A.; 22 40s 14 30e
20 Swale, R., N. Riding, Eng.; 54 9n 1 22w
120 Swaledale, N. Riding, Eng.; 54 23n 2 00w
23 Swan, R., W. Australia; 31 50s 116 0e
120 Swan Hill, tn., Vic., Australia; 35 18s 143 35e
99 Swan Lake, Man., Can.; 52 30n 100 55w
19 Swanage, urb. dist., Dor., Eng.; stone; p. 6,276; 50 32n 1 57w
31 Swanlinbar, Cavan, I.F.S.; p. 339; 54 12n 7 43w
121 Swansea, tn., Tas., Australia; 42 6s 148 6e
19 Swansea, mun. bor., spt., Glam., Wales; copper, iron, tin, coal; p. 164,797; 51 37n 3 55w
19 Swansea B., Glam., Wales; 51 34n 3 55w
74 Swatow, tn., treaty port, China; sugar, tea; p. 141,063; 23 35n 116 40e
83 Swaziland, native state, S. Africa; a. 6,705 sq. m.; maize, tobacco, fruit; cattle, sheep; gold, tin; cap. Mbabane; p. 126,550; 27 20s 32 5e
54 Sweden, kingdom, Europe; a. 173,347 sq. m.; forms the eastern part of the Scandinavian pen.; consists of a broad plain, sloping down to the Baltic; comprises Stockholm and 24 governments; coast rugged and indented, with fine harbours and ports; rivers are small, but lakes numerous and large, chief being Wener, Wetter, Malar and Hjelmar; large part forested, timber most imp. export; industries—agriculture, cereals, root crops, hay; cattle, sheep, pigs; fisheries imp.; minerals—iron ore, silver, lead, zinc, arsenic, sulphur pyrites, etc.; mnfs.—textiles, machinery and other iron mnfs., porcelain, glass, leather, chemicals, etc.; cap. Stockholm; p. 6,142,191; 55 20 to 69 0n 11 0 to 24 0e
107 Sweetwater, tn., Tex., U.S.A.; p. 10,848; 32 10n 100 26w
83 Swellendam, tn., C. of Good Hope, S. Afr.; 34 43s 20 25e
98 Swift Current, tn., Sask., Can.; p. 5,295; 50 24n 107 55w
19 Swindon, mun. bor., Wilts, Eng.; locomotives, quarries; p. 62,407; 51 33n 1 45w
41 Swinemünde, spt., Germany; watering-place; shipbuilding; p. 18,352; 53 54n 14 14e
16 Swineshead, par., Holland, England; p. 1,893; 52 58n 0 09w
30 Swinford, tn., Mayo, I.F.S.; farming; p. 1,302; 53 57n 8 57w
27 Swinton, par., Berwick, Scot.; p. 676; 55 43n 2 16w
21 Swinton, urb. dist., W. Riding, Eng.; coal, iron, potteries, bricks, tiles; p. 13,820; 53 29n 1 20w
45 Switzerland, rep., Cent. Europe; a. 15,940 sq. m.; comprises 25 cantons; the surface consists of an upland region, with deep valleys and lakes; Jura Mts. on N.W. frontier, and the Alps on S. forming boundary with Italy; highest peak Monte Rosa, 15,217 ft.; Geneva, Neuchâtel, Lucerne, Zurich and Constance largest lakes, and Rhône, Rhine, Aar, Ticino and Inn chief rivers; industries include textiles, cheese, condensed milk, butter, wine, brewing, watches, clocks; agriculture and cattle breeding; minerals—salt, iron ore, manganese; cap. Berne; p. 4,066,400; 45 50 to 47 50n 6 00 to 10 30e
31 Swords, tn., Dublin, I.F.S.; farming; p. 907; 53 27n 6 14w
74 Syang-shan, tn., China; 29 27n 121 47e
121 Sydney, cy., spt., cap. N.S.W., Australia; univ., cathe. (2), botanical gardens; sit. 4 m. from the entrance to P. Jackson harb., one of finest in the world; docks; commercial and industrial centre; p. 1,238,660; 33 55s 151 12e
95 Sydney, spt., N.S., Can.; iron and steel, coal, chemicals; p. 23,089; 46 7n 60 14w
11 Sydra, G. of, Libya; 31 30n 18 30e
11 Sydra, Desert of, Libya; 30 30n 17 30e
43 Sydzieb, tn., Poland; 52 11n 22 12e
79 Syene. See Aswen.
43 Syerady, tn., Poland; 51 35n 18 43e
69 Sylhet, tn., Assam, India; weaving and bamboo goods; 24 53n 91 59e
39 Sylt, I., N. Frisian Is., Germany; 54 55n 8 22e
26 Symington, par., Ayr, Scot.; p. 651; 55 33n 4 32w
27 Symington, par., Lanark, Scot.; p. 580; 55 38n 3 35w
58 Syr Daria, riv., U.S.S.R.; enters L. Aral; length 825 m.; 42 0n 68 10e
53 Syra, I., Greece; 37 22n 24 55e
102 Syracuse, cy., spt., N.Y., U.S.A.; univ.; chemicals, salt, pottery; machinery, farm implements, motor-cars, woollens; p. 209,326; 43 0n 76 10w
57 Syranski, tn., Russia; 52 59n 58 50e
61 Syria, rep., Asia; a. 60,000 sq. m. (est.); bounded on the N. by Turkey, on the W. Med. Sea, S. by Pal. and Trs. Jord., on the E. by Iraq; chief mts., Lebanon; chief r., Orontes; cereals, olives, fruit; sheep, goats; silk, wool; cap. Damascus; p. 2,831,622; 32 15 to 37 0n 35 0 to 42 15e
62 Syrian Des. See Badiet esh Sham.
56 Systshevka, tn., Russia; 55 50n 34 16e
57 Syzran, tn., Russia; 53 15n 48 29e
46 Szarvas, comm., Hungary; p. 25,490; 46 50n 20 35e
72 Sze Chwan, prov., China; a. 128,533 sq. m.; cereals, sugar, tea, cotton, silk; coal, iron, salt, petroleum; p. 52,063,606; 26 0 to 34 0n 98 0 to 110 0e
46 Szeged, tn., Hungary; mnfs.; soap, leather, breweries; p. 135,131; 46 16n 20 10e
46 Székesfehérvár, tn., Hungary; wine, shoes; p. 40,731; 47 13n 18 25e
46 Szekszard, tn., Hungary; p. 14,319; 46 22n 18 41e
72 Szemao, tn., China; p. 10,000; 22 32n 101 0e
46 Szentes, tn., Hungary; p. 32,885; 46 40n 20 20e
46 Szigetvar, tn., Hungary; 46 4n 17 46e
46 Szolnok, tn., Hungary; machinery; p. 38,730; 47 10n 20 13e
46 Szombathely, tn., Hungary; textiles, agricultural implements, wine; p. 35,000; 47 14n 16 39e
46 Szongrád, tn., Hungary; p. 26,015; 46 45n 20 10e
72 Szuching, tn., China; 24 30n 106 25e
72 Szw-nan, tn., China; 28 0n 108 25e
72 Szu-ngen, tn., China; 23 30n 107 55e

81 Tabara, tn., Tang. Ter.; aerodrome; 5 03s 32 48e
109 Tabasco, st., Mexico; a. 10,374 sq. m.; cocoa, rubber, rice; cap. Villa Hermosa; p. 223,838; 18 0n 93 0w
112 Tabatinga, tn., Brazil; 4 00s 70 0w
63 Tabbas, tn., Persia; 33 40n 56 54e
10 Tabelbalet, vil., Algeria; 29 30n 3 25w
10 Tabelkosa, vil., Algeria; 29 50n 0 12e
83 Table Bay, C. of Good Hope, S. Afr.; 33 55s 18 25e
84 Table Mt., C. of Good Hope, S. Afr.; 3,556 ft.; 33 58s 18 15e
46 Tabor, tn., Cz.-slov.; cigars, beer; p. 14,251; 49 24n 14 29e
61 Tabor Mt., Palestine; 1,343 ft.; 32 38n 35 25e
88 Tabou, tn., Fr. W. Africa; 4 30n 6 50w
63 Tabriz, tn., Persia; mosque, citadel; dried fruits, carpets; p. 180,000; 37 59n 46 22e
72 Ta-chien-lu, tn., China; 30 0n 102 0e
112 Tacna, spt., Peru; exps.—sodium and nitrate; p. 17,000; 17 50s 70 16w
106 Tacoma, spt., cy., Wash., U.S.A.; lumbering, copper smelting; p. 106,817; 47 14n 122 28w
21 Tadcaster, par., W. Riding, Eng.; brewing, stone; p. 3,514; 53 54n 1 16w
62 Tadmor, anc. cy., Syria; ruins, temple of Baal; 34 13n 38 10e
94 Tadousac, tn., Que., Canada; 48 8n 69 41w
58 Tadzhik Socialist Soviet Republic, Cent. Asia, U.S.S.R.; a. 56,608 sq. m.; mountainous; agriculture based on irrigation, cereals, cotton, fruits; cattle rearing; minerals—gold, petroleum, coal; cap. Stalinabad (formerly Dushambe); p. 1,174,100; 36 30n 70 0e
79 Tafeh, tn., Egypt; 23 36n 32 55e
19 Taff, R., Glamorgan, Wales; 51 35n 3 19w
10 Tafilet, dist., oasis, Morocco; dates; 31 0n 4 00w

MAP

57 Taganrog, spt., Russia; on Sea of Azov; tanneries, tobacco, fishing; exp. grain; p. 86,465; 47 15N 38 46E
33 Tagbilaran, vil., Wexford, I.F.S.; p. 508; 52 19N 6 40W
48 Tagus, R., Portugal; longest river in Iberian Pen., 900 miles; 39 55N 3 50W
63 Tahiri, tn., Persia; 27 46N 52 24E
117 Tahiti, I., Society Is., Pac Oc.; chief tn. Papeete; p. 8,585; 17 48S 149 30W
79 Tahta, tn., Egypt; 26 45N 31 31E
74 Tai-an, tn., China; 36 15N 17 10E
74 Tai-chow, tn., China; 28 50N 121 5E
74 Taichu, tn., Form., Japan; 24 10N 120 38E
127 Taieri, R., New Zealand; 45 42S 170 20E
60 Taif, vil., Arabia; 20 50N 40 52E
74 Tai-hing, tn., China; 32 10N 120 10E
74 Taihoku, cap. tn., Form., Japan; 25 5N 26 35E
126 Taikape bor., N.I., New Zealand; p. 2,475; 39 39S 175 46E
75 Taiku, tn., Korea; 35 40N 129 0E
120 Tailem Bend, tn., S. Australia; 35 14S 139 29E
60 Taima, vil., Arabia; 27 38N 39 40E
80 Taimo, vil., Anz.-Eg. Sudan; 10 20N 25 3E
59 Taimyr Pen., U.S.S.R.; 75 0N 100 0E
28 Tain, bor., co. tn., Ross and Crom., Scot.; p. 1,383; 57 49N 4 13W
74 Tainan, spt., Formosa, Japan; p. 58,000; 23 0N 120 10E
54 Taipale, tn., Finland; 62 40N 29 20E
72 Taiping An, tn., China; 22 35N 107 0E
74 Tai-wan. See Formosa.
74 Tai-yuan, tn., China; p. 75,000; 38 0N 112 30E
11 Taizorbo, dist., Kufra Oasis, Libya; 25 30N 22 0E
81 Tajurrah, tn., Fr. Somaliland; 11 47N 42 54E
127 Takaka, tn., dist., S.I., New Zealand; p. 390; 40 50S 172 49E
74 Ta-kao, spt., Formosa, Japan; 22 45N 120 30E
73 Takasaki, tn., Japan; p. 64,283; 36 10N 138 46E
75 Takata, tn., Japan; p. 30,934; 36 51N 137 58E
72 Takla Makan, des., Tarim Basin, Sinkiang; 39 0N 84 0E
88 Takoradi, spt., Gold Coast; 4 58N 1 43W
70 Takron, R., Siam; 15 10N 102 15E
74 Taku, spt., China; 39 0N 117 45E
74 Takushan, tn., Manchuria; 39 40N 123 12E
71 Talaut Is., Dutch E. Indies; p. 23,838; 4 30N 127 30E
48 Talavera, tn., Spain; battle, Pen. War, 1809; cloth, leather, etc.; p. 13,500; 39 55N 4 06W
113 Talca, tn., Chile; cereals, mixed farming; p. 45,020; 35 20S 71 40W
113 Talcahuano, spt., Chile; p. 27,594; 36 25S 73 0W
18 Talgarth, par., Brec., Wales; p. 1,881; 52 0N 3 14W
72 Ta-li, tn., China; 25 45 100 0E
120 Talia, tn., S. Australia; 33 17S 134 59E
103 Talladega, cy., Ala., U.S.A.; cotton; p. 7,596; 33 25N 86 5W
103 Tallahassee, cy., Fla., U.S.A.; cigars; p. 10,700; 30 25N 84 15W
121 Tallangatta, tn., Vic., Australia; 36 15S 147 17E
42 Tallinn, spt., cap. Estonia; timber, shipbuilding, textiles, etc.; p. 131,500; 59 20N 24 50E
33 Tallow, par., Waterford, I.F.S.; p. 1,212; 52 5N 8 01W
42 Talsi, tn., Latvia; 57 35N 22 40E
113 Taltal, tn., Chile; p. 835; 25 20S 70 30W
54 Talvik, tn., Norway; 70 0N 23 0E
121 Talwood, tn., Queens., Australia; 28 26S 149 30E
10 Tamagrut, tn., Morocco; 30 15N 5 30W
88 Tamale, tn., Gold Coast; p. 12,941; 9 22N 0 50W
69 Tamansk, tn., U.S.S.R.; 60 30N 154 40E
19 Tamar, R., Devon, Eng.; 50 43N 4 42W
121 Tamar, R., Tas., Australia; 41 2S 146 45E
61 Tamarida, tn., Sokotra; 13 0N 54 0E
46 Tamasi, tn., Hungary; 46 40N 18 14E
77 Tamatave, spt., Madagascar; meat-preserving; exp.—graphite, hides, raffia; p. 15,022; 18 0S 49 10E
109 Tamaulipas, st., Mexico; a. 30,831 sq. m.; mountainous; cereals, sugar, coffee; cattle; petroleum; cap. Ciudad Victoria; p. 343,680; 24 0N 98 30W
109 Tamazunchale, tn., Mexico; 21 10N 98 58W
88 Tambia, tn., Fr. W. Africa; 11 50N 10 20W
123 Tambo, tn., Queens., Australia; 24 15S 146 0E
67 Tambov, tn., Russia; woollens, tobacco; p. 101,700; 52 46N 41 16E
81 Tambura, tn., Anglo-Eg. Sudan; 5 20N 27 45E
10 Tamentit, vil., Algeria; 27 20N 0 10W
114 Tami, tn., Chile; 36 40S 72 45W
74 Tamiang, tn., China; 36 20N 115 15E
55 Tammerfors. See Tampere.
103 Tampa, tn., Fla., U.S.A.; resort; exps.—phosphates, cigars; p. 101,161; 28 0N 82 20W
55 Tampere, tn., Finland; textiles, leather, paper; p. 55,500; 61 33N 23 33E
109 Tampico, tn., Mexico; fruits, sugar, maize; p. 76,000; 22 48N 97 59W
74 Tam-sui, spt., Formosa; 25 10N 121 30E
121 Tamworth, tn., N.S.W., Austral.; milling; p. 7,690; 31 6S 150 55E
16 Tamworth, mun. bor., Staffs, Eng.; coal; p. 11,712; 52 38N 1 42W
75 Tanabe, tn., Japan; 33 47N 135 16E
75 Tanagura, tn., Japan; 37 4N 140 17E
67 Tanalitsk, tn., Russia; 61 24N 58 42E
109 Tancanhuitz, tn., Mexico; 21 31N 99 4W
31 Tanderagee, urb. dist., Armagh, N. Ire.; flax; p. 1,321; 54 22N 6 25W
113 Tandil, tn., Argentina; p. 16,000; 37 0S 59 25W
76 Tanezrufi Des., Fr. W. Africa; 24 0N 3 00W
81 Tanga, tn., Tang. Ter.; 5 06S 39 5E
81 Tanganyika Territory, Br. mandate, E. Africa; a. 360,000 sq. m.; plateau 6,000 ft. (Mt. Kilimanjaro 19,710 ft.); chief rivers—Ruffiji, Rovuma; chief lakes—Victoria, Tanganyika, Nyasa; mangroves, some forest, savannah; products—sisal hemp, coffee, cotton, ground-nuts, copra, ebony, hardwoods; cap. Dar-es-Salaam; p. 5,064,000; 11 0 to 1 00S 29 0 to 40 0E
81 Tanganyika, L., Cent. Africa; a. 14,000 sq. m.; 400 m. long; 8 30S 31 0E
10 Tangier, spt., Morocco; on Str. of Gibraltar; a. 225 sq. m.; internationalized zone; barley, cigarettes, fishing; p. 53,000 (est.); 35 40N 5 50W
72 Tangla Ra, Tibet; 33 0N 92 0E
70 Tanjong Balei, tn., Sumatra; D.E.I.; 3 00N 99 45E
68 Tanjore, tn., Mad., India; on R. Cauvery; silks, carpets, jewellery, inlaid metals; p. 59,913; 10 45N 79 17E
25 Tannadice, par., Angus, Scot.; p. 918; 56 43N 2 53W
41 Tannenberg, vil., Russian defeat 1914; 53 25N 20 9E
39 Tannis B., Denmark; 57 40N 10 0E
72 Tannu-Ola, Mts., Mongolia; 51 0N 93 0E
72 Tannu-Tuva, rep. Mongolia; under Russian protection; p. 62,000; 52 30N 95 0E
78 Tanta, tn., Egypt; religious fairs; p. 90,016; 30 46N 30 56E
27 Tantallon Castle, E. Lothian, Scot.; 56 4N 2 40W
61 Tanturah, tn., Palestine; 32 37N 34 56E
73 Taonanfu, tn., Manchuria; 45 29N 22 57E
109 Tapachula, tn., Mexico; 32 20N 92 22W
112 Tapajoz, R., Brazil; 6 00S 57 0W
68 Tapti, R., India; 410 m. long; 21 30N 74 10E
113 Taquary R., Brazil; 450 m. long; 19 0S 56 0W
121 Tara, tn., Queens., Austral.; 27 18S 150 25E
58 Tara, tn., U.S.S.R.; 57 0N 73 50E
62 Tarabulas. See Tripoli.
126 Taranaki, prov., N.I., New Zealand; a. 3,750 sq. in.; p. 71,800; 39 10S 174 40E
48 Tarancón, tn., Spain; 40 2N 2 56W
51 Taranto, tn., Italy; cath.; oysters, mussels; cottons, velvets, soap, oil; p. 105,088; 40 29N 17 15E
51 Taranto, G. of, Italy; 40 0N 17 30E
113 Tarapaca, tn., Chile; nitrates, silver; 19 45S 69 30W
127 Tararua Ra, New Zealand, 41 0S 175 30E
35 Tarascon, tn., France; silk, fruit; 43 49N 4 41E
45 Tarasp, vil., Switzerland; 46 47N 10 17E
126 Tarawera, Mt., N.I., New Zealand; 3,770 ft.; 38 13S 176 32E
49 Tarazona, tn., Spain; 41 53N 1 40W
72 Tarbagatai, Mts., Mongolia; 9,700 ft.; 47 0N 85 0E
25 Tarbat, par., Ross and Crom., Scot.; p. 1,075; 57 50N 3 49W
25 Tarbat Ness, Ross and Crom., Scot.; 57 57N 3 46W
26 Tarbert, par., Argyll, Scot.; p. 1,983; 55 48N 5 24W
24 Tarbert, vil., Harris, Scotland; 57 54N 6 47W
35 Tarbes, tn., France; on R. Adour; cath.; woollens, machinery, leather; p. 33,374; 43 13N 0 02E
26 Tarbet, vil., Dumbarton, Scot.; 56 13N 4 42W
26 Tarbolton, vil., Ayr, Scot.; p. 4,981; 55 31N 4 28W
120 Tarcoola, tn., S. Australia; 30 43S 134 38E
121 Taree, tn., N.S.W., Australia; 31 53S 152 28E
54 Tärendö, tn., Sweden; 67 15N 22 30E
52 Targu Jiu, tn., Rumania; coal, petroleum, timber; p. 12,944; 45 0N 23 20E
48 Tarifa, spt., Spain; cereals, oranges, wines; fishing; p. 12,000; 36 2N 5 36W
114 Tarija, tn., Bolivia; p. 11,000; 21 30S 64 35W
72 Tarim Basin, Sin-Kiang; 39 40N 84 0E
72 Tarim, R., Sin-Kiang; 40 30N 83 0E
83 Tarkastad, tn., C. of Good Hope, S. Afr.; 32 3S 26 15E
88 Tarkwa, tn., Gold Coast; 5 20N 2 00W
71 Tarlac, tn., Philippine Is.; sugar, tobacco, rice; p. 24,000; 15 30N 120 35E
25 Tarland, vil., Aberdeen, Scot.; p. 688; 57 8N 2 52W
76 Taradant, tn., Morocco; 30 2N 10 10W
35 Tarn, dept., France; a. 2,231 sq. m.; mountainous; wheat, wines; cap. Albi; p. 302,994; 43 43N 2 10E
35 Tarn-et-Garonne, dept., France; a. 1,440 sq. m.; cereals, fruit, wines; woollens, paper, silk; cap. Montauban; p. 164,359; 44 3N 1 07E
43 Tarnopol, co., Poland; a. 6,270 sq. m.; p. 1,599,574; 49 30N 25 30E
43 Tarnopol, tn., Poland; on R. Sereth; brewing, milling; p. 31,000; 49 34N 25 38E
43 Tarnow, tn., Poland; cath.; farm implements, glass; p. 36,000; 50 1N 21 1E
43 Tarnowitz, tn., Poland; glass; p. 13,010; 50 28N 18 52E
121 Tarong, tn., Queens., Austral.; 26 47S 151 52E
18 Tarporley, par., Cheshire, Eng.; p. 2,452; 53 10N 2 40W
49 Tarragona, tn., Spain; cath.; silk, paper, wines; fish salting; p. 30,747; 41 6N 1 17E
81 Tarrangolle, tn., A.-E. Sudan; 43 1N 33 0E
62 Tarsus, tn., Turkey; birthplace of St. Paul; exp. cotton, wool, hides; p. 21,872; 36 58N 34 50E
56 Tartar Rep., Russia; a. 26,000 sq. m.; forested; rye, oats, sugar beet, flax, hemp; mnfs., leather, machinery; cap. Kazan; p. 2,625,000; 54 10 to 56 40N 46 30 to 54 20E
73 Tartary, G. of, Japan; 48 0N 141 0E
42 Tartu, tn., Estonia; univ.; saw-mills; p. 70,000; 58 20N 26 45E
63 Tarum, tn., Persia; 28 6N 55 31E
25 Tarves, par., Aberdeen, Scot.; p. 2,062; 57 22N 2 13W
10 Tasa, tn., Morocco; p. 12,407; 34 20N 3 45W
58 Tashkent, tn., cap. Uzbek S.S.R., U.S.S.R.; univ.; grain, fruit; silks; p. 402,050; 41 25N 69 15E
10 Tasili, dist., Algeria; 26 0N 8 00E
127 Tasman Bay, S.I., New Zealand; 41 0S 173 20E
121 Tasman Pen., Tas., Australia; 43 0S 147 55E
127 Tasman Ra., mts., S.I., New Zealand; 41 10S 172 30E
121 Tasmania, island, st., Australia; a. 26,215 sq. m.; separated from Australia by Bass Str., plateau with fertile valleys (Cradle Mount 5,070 ft.); chief rivers, Derwent, Huon, Tamar; grain, fruit, cattle raising; forests; copper, coal, lead, tin, silver; whaling; cap. Hobart; p. 227,605; 42 0S 147 0E
53 Tatar Pazarjik, tn., Bulgaria; on R. Maritza; tobacco, silk; p. 22,000; 42 14N 24 18E
89 Tati, tn., Bechuanaland; 21 30S 27 43E
72 Ta-ting, tn., China; 27 0N 105 50E
16 Tattersball, par., Lindsey, Eng.; p. 424; 53 7N 0 11W
88 Taua, tn., Fr. W. Africa; 14 35N 5 30E
115 Taubate, tn., Brazil; 22 55S 45 20W
76 Taudeni, oasis, Sahara Des.; 22 0N 3 00W
126 Taumarunui, bor., N.I. New Zealand; p. 2,480; 39 53S 175 14E
69 Taunggyi, tn., Burma, India; p. 17,000; 20 53N 97 2E
83 Taungs, tn., C. of Good Hope, S. Afr.; 27 30S 24 50E
19 Taunton, mun. bor., co. tn., Somerset, Eng.; apples, cider; gloves, farming implements, silk; p. 29,177; 51 1N 3 06W
19 Taunton, Vale of, Somerset, Eng.; 51 3N 3 10W
40 Taunus Mts., Germany; 50 15N 8 10E
88 Tauo, tn., Fr. W. Africa; 14 35N 5 25E
126 Taupo, L., N.I., New Zealand; geysers, hot springs in vicinity; 38 49S 175 53E
42 Tauraga, tn., Lithuania; 55 20N 22 15E
126 Tauranga, bor., N.I., New Zealand; p. 2,790; 37 42S 176 9E
62 Taurus, mts., Turkey; 11,500 ft.; 37 0N 34 0E
62 Taushanli, tn., Turkey; 39 40N 29 45E
49 Tauste, tn., Spain; 41 57N 1 17W
81 Taveta, tn., Kenya; 3 23S 37 43E
48 Tavira, spt., Port.; fishing; p. 11,043; 37 8N 7 41W
19 Tavistock, urb. dist., Devon, Eng.; p. 4,453; 50 33N 4 10W
69 Tavoy, tn., India; tin; p. 27,480; 14 3N 98 13E
19 Taw, R., Devon, Eng.; 51 2N 4 03W
19 Tawton, N., par., Devon, Eng.; p. 1,417; 50 47N 3 53W
109 Taxco, tn., Mexico; 18 30N 99 44W
27 Tay Bridge, Fife, Scot.; 56 27N 2 58W
27 Tay, L., Perth, Scot.; 14½ m. long; 56 30N 4 10W
27 Tay, R., Perth, Scot.; length 120 m.; 56 37N 3 55W
107 Taylor, tn., Tex., U.S.A.; p. 7,463; 30 30N 97 10W
27 Tayport, bor., Fife, Scot.; linen, jute; p. 3,164; 56 27N 2 55W
75 Tayra, tn., Japan; 37 13N 140 55E
113 Taytao Pen., Chile; 46 40S 76 0W
74 Tchalin, tn., China; 26 55N 113 30E
109 Teapa, tn., Mexico; 17 31N 93 2W
127 Te Anau, L., S.I., New Zealand; 45 15S 167 46E
126 Te Aroha, bor., N.I., New Zealand; p. 2,430; 37 32S 175 44E
126 Te Awamutu, bor., N.I., New Zealand; p. 1,765; 38 0S 175 19E
126 Te Kuiti, bor., N.I.; New Zealand; p. 2,475; 32 21S 175 12E
20 Tebay, par., Westmor., Eng.; p. 1,030; 54 26N 2 36W
10 Tebessa, tn., Algeria; 35 10N 8 00E
60 Tebuk, tn., Arabia; 27 55N 37 15E
17 Teddington, in Twickenham mun. bor., Middx., England; National Physical Laboratory; p. 23,369; see Greater London.
20 Tees B., Durham, Eng.; 54 38N 1 08W
20 Tees, R., England; 70 m. long; 54 32N 1 18W
110 Tegucigalpa, tn., Honduras; cath., univ.; bananas; p. 40,000; 14 13N 87 0W
106 Tehachapi Pass, Cal., U.S.A.; 35 10N 118 30W
74 Teh-chow, tn., China; 37 35N 117 40E
63 Tehran, tn., cap. Persia; royal palace, mosques; carpets; p. 350,000; 35 40N 51 27E
109 Tehuacan, tn., Mexico; 18 25N 97 30W
109 Tehuantepec, tn., Mexico; cath.; p. 9,400; 16 10N 95 19W
109 Tehuantepec, G., Mexico; 15 30N 95 0W
109 Tehuantepec, Isth., Mexico; 17 0N 94 30W
18 Teifi, R., Cardigan, Wales; 52 3N 4 27W
19 Teign, R., Devon, Eng.; 50 40N 3 38W
19 Teignmouth, urb. dist., Devon, Eng.; resort; p. 10,019; 50 34N 3 30W
127 Tekapo, L., S.I. New Zealand; 43 50S 170 30E
109 Tekax, tn., Mexico; 20 15N 89 30W
53 Tekirdag. See Rodosto.
62 Tekrit, tn., Iraq; 34 38N 43 40E
78 Tel-el-Amarna, tn., Egypt; 27 40N 30 52E
78 Tel-el-Kebir, tn., Egypt; 30 30N 31 45E
57 Telav, tn., Russia; 41 55N 45 25E
55 Telemark, co., Norway; a. 5,837 sq. m.; p. 128,099; 59 20N 8 10E
52 Telish, vil., Bulgaria; 43 18N 24 13E
61 Tell Aviv, tn., Palestine; Jewish col.; p. 36,754; 32 3N 34 45E
61 Tell Hum (Capernaum), Palestine; 32 50N 35 35E
68 Tellicherry, tn., Mad., India; coffee, cardamoms; p. 27,576; 11 45N 75 30E
70 Telok Anson, tn., Malay Pen.; 4 00N 101 0E
70 Telok Betong, tn., Sumatra, D.E.I.; 5 30S 105 15E
42 Telshi, tn., Latvia; 56 0N 22 18E
10 Temasin, tn., Algeria; 32 50N 6 00E
10 Temassinin, tn., Algeria; 28 0N 6 50E
109 Temax, tn., Mexico; 21 3N 88 56W
70 Tembeling, tn., Malay Pen.; 4 00N 102 15E
18 Teme, R., Worcs., Eng.; 52 19N 2 25W
52 Temesvar. See Timisoara.
11 Temissa, vil., Libya; 26 20N 16 0E
57 Temnikov, tn., Russia; 54 41N 43 2E
121 Temora, tn., N.S.W., Australia; 34 28S 147 32E
51 Tempio, tn., Italy; p. 14,750; 40 55N 9 07E
107 Temple, tn., Tex., U.S.A.; p. 15,345; 31 3N 97 7W
33 Templemore, urb. dist., Tipperary, I.F.S.; p. 2,230; 52 48N 7 51W
57 Temryuk, tn., Russia; 45 16N 37 22E
113 Temuco, tn., Chile; p. 35,748; 38 25S 72 40W
127 Temuka, bor., S.I. New Zealand; p. 1,890; 44 16S 171 18E
109 Tenango, tn., Mexico; 19 59N 97 45W
69 Tenasserim, dist., Burma, India; rice; 10 0 to 17 45N 97 30 to 99 0E
69 Tenasserim, tn., Burma, India; 11 50N 99 0E
18 Tenbury, par., Worcs., Eng.; p. 1,922; 52 18N 2 35W
19 Tenby, mun. bor., Pembroke, Wales; fishing; p. 4,106; 51 40N 4 41W
76 Tendut, tn., Algeria; 27 10N 9 00W
53 Tenedos, I., Turkey; p. 5,050; 39 48N 26 0E
76 Teneriffe I., Canary Is., Africa; a. 785 sq. m.; tourist resort; wheat; fruits; wines; cap. Santa Cruz; p. 150,000; 28 20N 16 30W
10 Tenez, tn., Algeria; 36 30N 1 10E
74 Teng-chow, tn., China; 37 50N 120 35E
67 Tengri Nor, lake, Tibet; 30 45N 90 45E
71 Tenimber (Timor Laut) Is., Dutch E. Indies; a. 2,060 sq. m.; pearls; p. 31,843; 7 30S 131 30E
118 Tennants Creek, tn., N. Terr., Australia; 19 30S 134 12E
103 Tennessee R., U.S.A.; 800 m. long; unites with Ohio R.; 34 30N 88 10W
103 Tennessee, st., U.S.A.; a. 42,022 sq. m.; maize, wheat, cotton, tobacco; dairying, sheep, wool; coal, iron ore, copper; mnfs., iron and steel, flour, lumber, cottons, cotton seed oil; cap. Nashville; p. 2,616,556; 35 0 to 36 31N 81 40 to 90 0W
123 Tenningering. See Mt. Perry.
125 Tenterden, tn., W. Australia; 34 20S 117 30E
17 Tenterden, mun. bor., Kent, Eng., p. 3,472; 51 4N 0 41E

MAP

121 Tenterfield, tn., N.S.W., Australia; 29 1s 152 0n
108 Tepic, tn., Mexico; p. 15,520; 21 30n 105 0w
46 Teplice, tn., Czechoslovakia; formerly Teplitz; mineral springs; lignite, iron and steel, pottery; p 30,911 ; 50 39n 13 43n
50 Teramo, tn., Italy; pottery, silks; p. 28,500; 42 41n 13 47n
120 Terang, tn., Vic., Australia; 38 14s 142 54n
82 Tergul-Frumas, tn., Rumania; p. 4,929; 47 14n 27 0n
80 Terkama, tn., Fr. Eq. Africa; 10 50n 21 0n
51 Terlizzi, tn., Italy; almonds, wine; p. 24,000; 41 9n 16 32n
51 Termini, tn., Italy; fishing; p. 21,200; 37 59n 13 40n
71 Ternate I., Dutch E. Indies; a. 12,796 sq. m.; p. 250,466 ; 0 40n 127 30n
38 Terneuzen, tn., Netherlands; 51 22n 3 48n
50 Terni, tn., Italy; iron, steel, jute; p. 71,500; 42 36n 12 40n
120 Terowie, vil., S. Australia; 33 5s 138 57n
51 Terracina, tn., Italy; 41 19n 13 18n
51 Terranova, tn., Italy; textiles, fishing; p. 27,000; 40 57n 9 29n
51 Terranova. See Gela.
97 Terrebonne, tn., Que., Canada; p. 1,955; 45 42n 73 45w
102 Terre Haute, cy., Ind., U.S.A.; on R. Wabash; coal, petroleum; flour, paper, glass, foundries; p. 62,810; 39 30n 87 27w
107 Terrell, tn., Tex., U.S.A.; p. 8,795; 32 36n 96 5w
128 Terror, mt., Antarctica; 77 30s 166 0e
38 Terschelling, I., Netherlands; 53 20n 5 22e
49 Teruel, tn., Spain; cath.; weaving, coal; p. 13,584; 40 22n 1 05w
54 Tervola, vil., Finland; 64 5n 25 0e
47 Tešanj, tn., Yugoslavia; 44 39n 18 0e
46 Teschen, tn., Poland; coal; 49 45n 18 39e
75 Tesiwo, vil., Japan; 44 48n 141 36e
88 Tessaua, vil., Fr. W. Africa; 13 48n 7 57e
17 Test, R., Hants., Eng.; 51 8n 1 30w
19 Tetbury, par., Glouca., Eng.; p. 2,237; 51 38n 2 09w
89 Tete, tn., Mozambique; on R. Zambezi; 16 18s 33 22e
16 Tetney, par., Lindsey, Eng.; p. 790; 53 30n 0 01w
10 Tetuan, tn., Er Rif; 35 20n 5 10w
52 Tetven, vil., Bulgaria; 42 58n 24 17e
27 Teviothead, par., Roxburgh, Scot.; p. 377; 55 20n 2 56w
97 Tewfikiyeh, vil., Egypt; 21 58n 31 20e
18 Tewkesbury, mun. bor.; Glouca., Eng.; abbey; p. 4,352; 52 0n 2 09w
103 Texarkana, tn., Ark., U.S.A., p. 27,366; 30 0n 94 5w
107 Texas, st., U.S.A.; a. 265,896 sq. m.; prairie, in W., mountainous; agriculture, maize, sorghums, wheat, oats, rice, potatoes, peanuts, fruits, cotton (leading st.), pastoral farming, sheep, wool, cattle, dairying, goats, mohair; minerals, petroleum (leading st.), natural gas, coal, sulphur; fishing; mnfs., flour, cotton seed oil, etc.; cap. Austin; p. 5,824,714; 26 0 56 32w 94 45 to 106 20w
38 Texel I., Netherlands; p. 6,030; 53 5n 4 50e
60 Tez, tn., Arabia; 13 37n 44 4e
109 Teziutlan, tn., Mexico; 19 46n 97 30w
87 Thaba Bossigo, tn., Basut., S. Africa; 29 20s 27 42e
83 Thaba'nchu, vil., O.F.S., S. Africa; 29 15s 26 57e
86 Thabazimbi, tn., Transvaal; 24 30s 28 5e
121 Thallon, vil., Queens; Austral.; 28 32s 149 2e
17 Thame, urb. dist., Oxford, Eng.; p. 3,019; 51 45n 0 59w
17 Thame, R., England; 51 44n 1 08w
126 Thames, bor., N.I. New Zealand; p. 4,735; 37 8s 175 33e
16 Thames, Firth of, N.I. New Zealand; 37 0s 175 25e
17 Thames, R., chief river of England; 210 m. long; 51 25n 0 30w
96 Thamesville, tn., Ont., Canada; 42 32n 82 4w
66 Thana, tn., India; p. 22,639; 19 15n 73 1e
17 Thanet, I. of, Kent, Eng.; on coast are Margate, Ramsgate, and Broadstairs; 51 22n 1 20e
70 Than-hoa, tn., Fr. Indo China; 19 15n 105 40e
27 Thankerton, vil., Lanark, Scot.; 55 38n 3 38w
66 Thar or Indian Des., India; 27 30n 71 0e
120 Thargomindah, vil., Queens., Australia; 27 57s 143 31e
69 Tharrawaddy, tn., Burma, India; 17 35n 95 53e
16 Thaxted, par., Essex, Eng.; p. 1,596; 51 57n 0 20e
69 Thayetmyo, tn., Burma, India; 19 15n 95 15e
69 Thazi, tn., Burma, India; 20 5n 95 20e
99 The Pas, tn., Man., Canada; p. 4,030; 53 57n 101 15w
53 Thebes, tn., Greece; 38 20n 23 22e
121 Theebine, vil., Queens., Austral.; 25 55s 153 30e
46 Theiss, R. See Tisza, R.
57 Theodosia, tn., Crimea, Russia; exp., wheat, wine, fruit; p. 27,500; 45 2n 35 14e
113 Theophilo Ossini, tn., Brazil; 17 58s 47 30w
85 Theopolis, tn., C. of Good Hope, S. Africa; 33 37s 26 47e
112 Therezina, tn., Brazil; on R. Parnahyba; cotton, soap; p. 64,000; 5 50s 42 50w
53 Thermopylæ, pass, Greece; battle, 480 B.C.; 38 48n 22 34e
99 Thessalon, tn., Ont., Can.; p. 1,632; 46 20n 83 55w
53 Thessaly, dist., Greece; horse breeding; 39 30n 22 0e
16 Thetford, mun. bor., Norfolk, Eng.; p. 4,097; 52 25n 0 45e
94 Thetford Mines, tn., Que. Canada; asbestos; p. 10,701; 46 5n 71 15w
38 Thielt, tn. cap., W. Flanders, Belgium; lace, wool, cotton, linen; p. 11,611; 51 0n 3 20e
36 Thiepval, tn., France; 50 5n 2 41e
35 Thiers, tn., France; cutlery; p. 16,383; 45 49n 3 34e
37 Thionville, tn., France; fruit, vegetables; tanning, brewing; 49 21n 6 10e
20 Thirlmere L., Cumb., Eng.; 3½ m. long; source of Manchester water supply; 54 35n 3 04w
20 Thirsk, par., N. Riding, Eng.; flour, farm implements; p. 2,755; 54 14n 1 20w
39 Thisted, tn., Denmark; p. 8,046; 56 58n 8 42e
48 Thomar, tn., Portugal; p. 5,230; 39 35n 8 25w
99 Thlewliasa, R., Keewatin, Can.; 60 0n 97 0w
33 Thomastown, par.; Kilkenny, I.F.S.; p. 959; 52 32n 7 08w
103 Thomasville, tn., Ga., U.S.A.; p. 11,733; 30 47n 84 0w
38 Thommen, vil., Belgium; 50 25n 6 08e
98 Thompson, R., B.C., Canada; 51 30n 120 0w
45 Thonon, tn., France; 46 21n 6 30e

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43 Thorn. See Torun.
20 Thornaby, mun. bor., N. Riding, Eng.; shipbuilding, engineering; p. 21,233; 54 34n 1 20w
19 Thornbury, par., Glouca., Eng.; p. 2,493; 51 37n 2 30w
21 Thorne, par., W. Riding, Eng.; farming implements; p. 6,076; 53 38n 0 58w
16 Thorney, par., L of Ely, Camb., Eng.; p. 2,165; 52 39n 0 05w
27 Thornhill, vil., Dumfries, Scot.; p. 1,121; 55 15n 3 46w
27 Thornhill, vil., Perth, Scot.; p. 448; 56 11n 4 07w
18 Thornton, urb. dist., Lancs., Eng.; p. 10,144; 53 16n 2 50w
34 Thouars, tn., France; 46 58n 0 16w
38 Thourout, tn., Belgium; woollens, linens; p. 11,000; 51 4n 3 06e
53 Thrace, dist., Balkans; mountainous; drained by R. Maritza; tobacco; 41 10n 26 0e
16 Thrapston, par., Northants, Eng.; p. 1,662; 52 25n 0 32w
17 Three Bridges, Sussex, England; 51 8n 0 10w
97 Three Rivers, tn., Que., Canada; exp., grain, cattle; lumber, woodpulp; p. 35,450; 46 21n 72 35w
45 Thurgau, can., Switzerland; a. 386 sq. m.; dairying, fruit; textiles; cap. Frauenfeld; p. 136,628; 47 38n 9 00e
40 Thuringia, st., Germany; a. 4,537 sq. m.; forested; oats, potatoes, live-stock; potash; cap. Weimar; p. 1,609,300; 50 50n 11 0e
40 Thuringian Forest, mts., Germany; wooded; 50 36n 11 0e
33 Thurles, urb. dist., Tipperary, I.F.S.; p. 4,796; 52 41n 7 50w
25 Thurso, bor., Caithness, Scot.; p. 2,946; 58 36n 3 31w
121 Tiaro, vil., Queens., Austral.; 25 45s 152 40e
115 Tibagy, tn., Brazil; 24 30s 50 50w
80 Tibati, vil., Fr. Eq. Africa; 6 22n 12 30e
27 Tibbermuir, par., Perth, Scot.; p. 2,769; 56 24n 3 32w
11 Tibbu, dist., Libya; 23 30n 18 30e
80 Tiber, R., Italy; 245 m. long; 41 42n 12 17e
61 Tiberias. See Tubariya.
76 Tibesti, dist., Fr. W. Africa; 20 40n 17 0e
72 Tibet, terr., China; a. 463,200 sq. m.; plateau lying between Himalayas and Kwenlun Mts., mostly 11,000 ft. high; sources of Ganges, Brahmaputra, Indus, Yang-tze-kiang, Hwang-ho; some agriculture, barley, pulses; fruits; sheep, yaks; gold, borax, salt; wool spinning; cap. Lhasa; p. 2,000,000 (est.); 28 39n 79 to 101e
61 Tibneh, vil., Trans.-Jordan; 32 10n 35 42e
120 Tibooburra, vil., N.S.W., Australia; 29 23s 142 2e
54 Tichtoserak, tn., Russia; 65 35n 30 40e
45 Ticino, can., Switzerland; a. 1,085 sq. m.; olives, fruits, cereals, wine; cap. Bellinzona; p. 155,895; 46 25n 8 45e
21 Tickhill, urb. dist., W. Riding, Eng.; p. 2,297; 53 26n 1 07w
105 Ticonderoga, vil., N.Y., U.S.A.; 43 50n 73 30w
109 Ticul, tn., Mexico; 20 22n 89 47w
10 Tidikelt Oasis, Algeria; 27 0n 2 00e
73 Tiehling, tn., Manchuria; 42 19n 123 49e
38 Tiel, tn., Netherlands; on R. Waal; farm implements; paper; p. 12,370; 51 53n 5 26e
72 Tien Shan or Tau, mts., Siberia; length, 1,650 m.; 40 0n 73 0e
74 Tien-tsin, cy., China; univ.; cottons, silks; exp., wool, skins, soya beans; p. 1,388,747; 39 5n 117 5e
113 Tierra del Fuego, arch., S. America; a. 28,000 sq. m; separated from mainland by Magellan's Str.; 54 0s 68 0w
115 Tiete, tn., Brazil; 22 8s 47 49w
102 Tiffin, cy., Ohio, U.S.A.; milling, brewing, foundries; p. 18,428; 41 5n 83 10w
57 Tiflis, tn., cap. Transcaucasian S.F.S. Rep., Russia; univ.; exp., tobacco, cotton, silk, carpets; p. 405,909; 41 45n 44 57e
26 Tighnabruaich, par., Argyll, Scot.; p. 1,525; 55 55n 5 13w
62 Tigris, R., Iraq; 1,150m. long; 37 42n 40 30e
60 Tihamma, dist., Arabia; 17 30n 42 30e
56 Tikhvin, tn., Russia; 59 36n 33 31e
10 Tikiri, vil., Morocco; 30 45n 6 20w
38 Tilburg, tn., Netherlands; tobacco, woollens, leather; p. 78,459; 51 34n 5 6e
96 Tilbury, tn., Ont., Canada; p. 1,992; 42 17n 82 18w
17 Tilbury in Thurrock, urb. dist., Essex, Eng.; docks; p. 16,826; 51 28n 0 22e
114 Tilcara, tn., Argentina; 23 5s 65 5w
27 Tillicoultry, bor., Clack., Scot.; coal, shawls, tartans; p. 2,953; 56 9n 3 44w
41 Tilsit, tn., Germany; on R. Memel; machinery; chemicals; foundries; distilling; p. 57,286; 55 5n 21 52e
96 Tilsonburg, tn., Ont., Canada; p. 3,385; 42 53n 80 46w
56 Timan Mts., Russia; 65 30n 51 0e
127 Timaru, bor., S.I., New Zealand; milling; wool; skins; p. 16,475; 44 24s 171 14e
88 Timbo, tn., Fr. W. Africa; 10 40n 11 45w
120 Timboon, vil., Vic., Australia; 38 30s 143 0e
93 Timiskaming L., Que., Canada; 47 37n 80 20w
52 Timisoara, tn., Rumania; tobacco; petroleum; paper; p. 91,866; 45 48n 21 17e
93 Timmins, tn., Ont., Canada; gold; p. 14,200; 48 30n 81 30w
32 Timoleague, vil., Cork, I.F.S.; p. 323; 51 38n 8 47w
71 Timor, I., East Indies; a. 12,350 sq. m.; divided between Portugal and Netherlands; fishing; exp. copra; Port. cap. Dell; Neth. cap. Kupang; p. 1,000,000 (est.); 10 0s 125 0e
71 Timor Sea, East Indies; 10 5s 126 30e
78 Tina, B., Egypt; 31 13n 32 45e
33 Tinahely, vil., Wicklow, I.F.S.; p. 392; 52 48n 6 29w
74 Ting-chow, tn., China; 26 35n 116 30e
88 Tingere, vil., Fr. Cameroons; 7 40n 13 16e
121 Tingha, tn., N.S.W., Australia; 29 57s 151 14e
74 Ting-tse Harb., China; 36 40n 121 0e
68 Tinnevelly, tn., Mad., India; rice, cotton, oil-seeds; p. 53,783; 8 45n 77 40e
114 Tinogasta, vil., Argentina; 27 40s 68 40w
121 Tinonee, vil., N.S.W., Australia; 31 58s 152 22e
19 Tintagel Castle, Cornwall, Eng.; traditional birthplace of King Arthur; 50 41n 4 45w
19 Tintagel Hd., Cornwall, Eng.; 50 41n 4 45w

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19 Tintern Abbey, Monmouth, Eng.; on R. Wye; 51 42n 2 40w
113 Tintina, tn., Argentina; 26 50s 63 0w
27 Tinwald, par., Dumfries, Scot.; p. 721; 55 8n 3 34w
88 Tiong, vil., Fr. W. Africa; 10 30n 6 00w
33 Tipperary, co., I.F.S.; a. 1,661 sq. m.; flat; cereals dairying; p. 140,946; 52 37n 7 50w
33 Tipperary, par., Tipperary, I.F.S.; butter; p. 6,645; 52 28n 8 11w
18 Tipton, urb. dist., Staffs, Eng.; coal, cement, engineering; p. 35,814; 52 32n 2 03w
47 Tirana, tn., and cap.; Albania; olives; p. 30,808; 41 19n 19 48e
50 Tirano, tn., Italy; 46 13n 10 18e
57 Tiraspol, tn., Russia; on R. Dniester; milling tobacco; p. 30,000; 46 58n 29 33e
126 Tirau, tn., N.I., New Zealand; p. 550 37 59s 175 46e
62 Tire, tn., Turkey; raisins, tobacco, cotton; p. 18,747 38 0n 27 48e
60 Tireboli, tn., Turkey; 41 1n 38 58e
52 Tirgoviste, tn., Rumania; p. 22,482; 44 54n 25 34e
38 Tirlemont, tn., Belgium; machinery, woollens, leather; p. 20,662; 50 49n 4 56e
52 Tirnovo, tn., Bulgaria; copper goods; p. 12,750; 43 1n 25 41e
53 Tirnovojik, tn., Bulgaria; 41 59n 27 32e
68 Tiruchendur, tn., Mad., India; 8 30n 78 5e
68 Tirupati, tn., Mad., India; 13 40n 79 27e
68 Tiruvannamalai, tn., Mad., India; p. 21,912; 12 18n 79 10e
19 Tisbury, par., Wilts, Eng.; p. 921; 51 4n 2 03w
10 Tisint, vil., Morocco; 29 56n 7 12w
46 Tisya, R., Hungary; trib. of R. Danube, 500 m. long; 48 3n 23 0e
10 Tit, vil., Algeria; 27 0n 1 08e
112 Titicaca L., S. America; a. 3,200 sq. m.; 130 m. long; highest lake in world, 12,800 ft. above sea-level; 15 30s 69 30w
102 Titusville, tn., Pa., U.S.A.; p. 8,055; 41 40n 79 45w
58 Tiumen, tn., U.S.S.R.; leather, carpets; p. 50,500; 57 28n 65 30e
19 Tiverton, mun. bor., Devon, Eng.; lace; p. 9,610; 50 54n 3 29w
109 Tiztla, tn., Mexico; 17 35n 99 20w
109 Tizimin, tn., Mexico; 21 0n 88 12w
109 Tlacotalpan, tn., Mexico; 18 38n 95 48w
109 Tlaxcala, st., Mexico; a. 1,534 sq. m.; farming; cap. Tlaxcala; p. 204,424; 19 20n 98 20w
109 Tlaxcala, tn., Mexico; 19 18n 98 20w
109 Tlaxiaco, tn., Mexico; 17 18n 97 47w
10 Tlemsen, tn., Algeria; textiles, carpets, ostrich feathers; p. 46,360; 34 50n 1 00w
113 Toay, tn., Argentina; 36 45s 64 40w
111 Tobago I., Br., W. Indies; a. 114 sq. m.; administered by Trinidad; rubber, cotton, tobacco; 11 13n 60 34w
30 Tobercurry, tn., Sligo, I.F.S.; p. 829; 54 3n 8 44w
120 Tobermory, tn., Queens, Australia; 27 20s 143 36e
26 Tobermory, bor., Argyll, Scot.; p. 771; 56 37n 6 04w
58 Tobolsk, tn., U.S.S.R.; on R. Irtish; p. 15,000; 58 50n 68 30e
112 Tocantins, R., Brazil; length 1,500 m.; 12 0s 48 20w
73 Tochigi, tn., Japan; 36 30n 139 40e
113 Tocopilla, tn., Chile; p. 15,305; 22 0s 70 15w
121 Toenmwal, tn., N.S.W., Australia; 35 47s 145 35e
54 Todal, tn., Norway; 62 50n 8 50e
44 Todi, Mt., Switzerland; 46 45n 8 55e
21 Todmorden, mun. bor., W. Riding, Eng.; cottons, machinery, iron; p. 22,222; 53 43n 2 06w
39 Toftlund, tn., Denmark; 55 12n 9 03e
88 Togo, W. Africa; a. 33,700 sq. m.; former German colony, now administered under mandates by Gt. Britain and France; dye-woods, rubber, cocoa; fruits; weaving, pottery, straw-plaiting; p. 730,500; 8 20n 0 50e
54 Tohmajärvi, tn., Finland; 62 16n 30 25e
55 Toijala, tn., Finland; 61 11n 23 40e
46 Tokaj, tn., Hungary; wines; 48 8n 21 27e
62 Tokat, tn., Turkey; leather; copper; p. 22,390; 40 15n 36 33e
126 Tokelau Is., Br., Pacific Oc.; administered under Western Samoa; 10 0s 169 0w
74 Tokio-Koto. See Ho-Kau.
73 Tokushima, spt., Japan; cottons; p. 97,022; 34 0n 134 45e
75 Tokuyama, tn., Japan; 34 8n 131 53e
75 Tokyo, cy. spt., cap.; Japan; univ., imperial pal.; silks, machinery, lacquer, pottery; p. 5,875,388; 35 43n 139 45e
73 Tolai, tn., Manchuria; 47 20n 131 10e
48 Toledo, tn., Spain; on R. Tagus; cath.; swords, cloth; p. 27,443; 39 50n 4 05w
102 Toledo, cy., Ohio, U.S.A.; port, L. Erie; grain, flour, lumber; engineering, farm implements; p. 290,718; 41 40n 83 31w
48 Toledo, Mts., Spain; 4,745 ft.; 39 35n 4 05w
112 Tolima, Mt., Colombia; 18,320 ft.; 4 40n 76 0w
109 Toliman, tn., Mexico; 20 51n 100 0w
17 Tolleshunt, par., Essex, Eng.; oysters; p. 1,721 51 46n 0 50e
71 Tolo, G., Dutch E. Indies; 2 30s 123 0e
49 Tolosa, tn., Spain; 43 7n 2 04w
109 Toluca, tn., Mexico; brewing, flour, cottons; p 36,500; 19 15n 99 48w
43 Tomashov, tn., Poland; 50 31n 23 22e
81 Tomat, tn., A.-E. Sudan; 14 10n 35 58e
103 Tombigbee R., U.S.A.; 32 0n 88 0w
71 Tomini, G., Dutch E. Indies; 0 31n 120 30e
25 Tomintoul, par., Banff, Scot.; p. 596; 57 15n 3 23w
59 Tomsk, tn., Siberian Area, U.S.S.R.; univ.; mining, tanning; p. 128,400; 56 30n 85 0e
109 Tonala, tn., Mexico;
104 Tonawanda, tn., N.Y., U.S.A.; p. 12,681; 42 58n 78 54w
17 Tonbridge, urb. dist., Kent, Eng.; on R. Medway; malting, brewing; p. 16,332; 51 12n 0 16e
39 Tönder, Denmark; p. 5,728; 54 56n 8 55e
116 Tonga Is., Pac. Oc., Br.; copra; cap. Nukualofa; p. 28,431; 15 0 to 23 0s 173 0 to 177 0w
126 Tongariro, Mt., New Zealand; 39 8s 175 39e
116 Tongatabu, I., Tonga Is., Pacific Oc.; 21 8s 175 16w

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70 **Tongking, prov., Fr. Indo-China**; a. 40,530 sq. m.; rice, sugar-cane, tobacco, coffee, cotton, silk; coal, tin, limestone; chief tn. Hanoi; p. 8,182,962; 21 30ʀ 105 0ᴇ
70 **TongKing, G., Fr. Indo-China**; 20 0ʀ 108 0ᴇ
38 **Tongres, tn., Belgium**; p. 11,525; 50 47ʀ 5 28ᴇ
24 **Tongue, par., Sutherland, Scot.**; p. 1,350; 58 28ʀ 4 25ᴡ
27 **Tongueland, par., Kirk., Scot.**; p. 704; 54 42ʀ 4 03ᴡ
108 **Tonichi, tn., Mexico**; 28 38ʀ 109 41ᴡ
105 **Tonis River, N.J., U.S.A.**; 39 56ʀ 74 11ᴡ
66 **Tonk, tn., India**; p. 30,374; 26 3ʀ 75 50ᴇ
75 **Tootari, tn., Japan**; 35 35ʀ 134 10ᴇ
121 **Toowoomba, tn., Queens., Australia**; flour milling, tanning, brewing, wine; p. 26,145; 27 31ʀ 151 53ᴇ
107 **Topeka, cy., cap. Kan., U.S.A.**; flour, engineering, machinery; p. 64,120; 39 0ʀ 95 45ᴡ
108 **Topia, tn., Mexico**; 25 20ʀ 105 10ᴡ
19 **Topsham, par., Devon, Eng.**; p. 3,235; 50 41ʀ 3 27ᴡ
19 **Tor B., Devon, Eng.**; 50 26ʀ 3 33ᴡ
48 **Tordesillas, tn., Spain**; 41 30ʀ 5 00ᴡ
62 **Torlak, tn., Bulgaria**; 43 34ʀ 26 14ᴇ
84 **Torne Träsk, L., Sweden**; 68 15ʀ 19 40ᴇ
84 **Tornio, tn., spt., Finland**; timber; 65 55ʀ 24 10ᴇ
96 **Toronto, tn., cap. Ont., Canada**; on L. Ontario; univ., caths.; shipping and rly. centre; exp.—grain, fruit, cattle, lumber; foundries, distilleries; p. 631,207; 43 40ʀ 79 25ᴡ
25 **Torphins, par., Aberdeen, Scot.**; p. 1,132; 57 7ʀ 2 37ᴡ
19 **Torquay, mun. bor., spt., Devon, Eng.**; resort; p. 49,165; 50 28ʀ 3 34ᴡ
48 **Torre, tn., Portugal**; 41 12ʀ 7 07ᴡ
48 **Torrelaguna, tn., Spain**; 40 49ʀ 3 33ᴡ
48 **Torrelavega, tn., Spain**; 43 22ʀ 4 05ᴡ
120 **Torrens, L., S. Australia**; 31 0ʀ 137 45ᴇ
108 **Torreon, tn., Mexico**; p. 50,000; 25 30ʀ 103 32ᴡ
48 **Torres Novas, tn., Portugal**; 39 28ʀ 8 31ᴡ
122 **Torres Str., Australia**; between Queensland and New Guinea, 90 m. wide,; 10 15ʀ 142 30ᴇ
48 **Torres Vedras, tn., Port.**; sulphur baths; Wellington's lines, 1810–11; 39 5ʀ 9 15ᴡ
49 **Torrevieja, tn., Spain**; 37 58ʀ 0 40ᴡ
105 **Torrington, cy., Conn., U.S.A.**; metal plate work, machinery, woollens; p. 26,040; 41 48ʀ 73 8ᴡ
19 **Torrington, Great, mun. bor., Devon, Eng.**; gloves, tanning; p. 2,913; 50 57ʀ 4 09ᴡ
120 **Torrowangee, tn., N.S.W., Australia**; 31 18ʀ 141 29ᴇ
27 **Torryburn, par., Fife, Scot.**; p. 2,224; 56 4ʀ 3 34ᴡ
56 **Torshok, tn., Russia**; 57 3ʀ 34 57ᴇ
27 **Torthowald, par., Dumfries, Scot.**; p. 801; 55 5ʀ 3 31ᴡ
60 **Tortona, tn., Italy**; 44 56ʀ 8 53ᴇ
49 **Tortosa, tn., Spain**; cath.; paper, leather; 40 50ʀ 0 36ᴇ
49 **Tortosa, C., Spain**; 40 40ʀ 0 52ᴇ
111 **Tortuga I., W. Indies**; 20 5ʀ 72 45ᴡ
43 **Torun, tn., Poland**; on R. Vistula; grain, timber; p. 39,000; 53 0ʀ 18 39ᴇ
60 **Tossia, tn., Turkey**; 41 0ʀ 34 0ᴇ
114 **Tostado, tn., Argentina**; 29 0ʀ 61 45ᴡ
56 **Totma, tn., Russia**; 59 58ʀ 42 31ᴇ
19 **Totnes, mun. bor., Devon, Eng.**; cas. ruins; cider; p. 3,525; 50 26ʀ 3 41ᴡ
110 **Totonicapan, tn., Guatemala**; pottery, textiles; p. 40,000; 14 59ʀ 91 15ᴡ
121 **Tottenham, tn., N.S.W., Australia**; 32 15ʀ 147 21ᴇ
17 **Tottenham, urb. dist., Middx., Eng.**; p. 157,772; 51 36ʀ 0 05ᴡ
73 **Tottori, tn., p.** 45,335; Japan; 35 32ʀ 134 25ᴇ
88 **Touhah, tn., Fr. W. Africa**; 11 38ʀ 12 20ᴡ
34 **Toul, tn., France**; on R. Moselle; wines, brandy, earthenware, lace; 48 40ʀ 5 52ᴇ
35 **Toulon, spt., France**; naval stn., cath.; shipbuilding; exps.—fruits, olive-oil, wines; p. 133,263; 43 7ʀ 5 56ᴇ
35 **Toulouse, tn., France**; on R. Garonne; cath., univ.; tobacco, gunpowder, cannon, foundries, paper, leather, stained glass; p. 194,564; 43 36ʀ 1 23ᴇ
69 **Toungoo, tn., Burma, India**; 18 57ʀ 96 28ᴇ
34 **Touraine, old prov., France**; 47 18ʀ 0 40ᴇ
34 **Tourcoing, tn., France**; textiles, carpets, cement; p. 81,972; 50 46ʀ 3 10ᴇ
38 **Tournai, tn., Belgium**; on R. Schelde; carpets, textiles, embroideries; p. 35,898; 50 37ʀ 3 23ᴇ
34 **Tours, tn., France**; on R. Loire; cath.; iron, steel, wines, leather, textiles; p. 78,585; 47 23ʀ 0 41ᴇ
84 **Touws River, C. of Good Hope, S. Afr.**; 33 30ʀ 20 45ᴇ
16 **Towcester, par., Northants, Eng.**; boots; p. 2,383; 52 9ʀ 1 00ᴡ
25 **Towie, par., Aberdeen, Scot.**; p. 668; 57 13ʀ 2 56ᴡ
122 **Townsville, tn., spt., Queens., Australia**; soap, beer; p. 31,800; 19 17ʀ 146 48ᴇ
21 **Towton, par., W. Riding, Eng.**; p. 78; 53 51ʀ 1 15ᴡ
19 **Towy, R., Carmarthen, Wales**; 51 55ʀ 3 55ᴡ
18 **Towyn, urb. dist., Merioneth, Wales**; resort; lead; p. 3,803; 52 36ʀ 4 05ᴡ
75 **Toyama, tn., Japan**; p. 83,325; 36 36ʀ 137 20ᴇ
75 **Toyama B., Japan**; 37 0ʀ 137 30ᴇ
62 **Trabzon.** See Trebizond.
48 **Trafalgar, C., Spain**; scene of Nelson's victory (1805); 36 10ʀ 6 05ᴡ
10 **Traghen, tn., Libya**; 25 56ʀ 14 48ᴇ
32 **Tralee, urb. dist., spt., co. tn., Kerry, I.F.S.**; exps.—grain, butter; p. 10,536; 52 16ʀ 9 42ᴡ
33 **Tramore, tn., Waterford, I.F.S.**; p. 1,644; 52 10ʀ 7 10ᴡ
48 **Trancoso, tn., Portugal**; 40 48ʀ 7 25ᴡ
27 **Tranent, bor., E. Lothian, Scot.**; coal; p. 4,526; 55 57ʀ 2 57ᴡ
121 **Trangie, tn., N.S.W., Australia**; 32 1ʀ 147 58ᴇ
51 **Trani, tn., Italy**;
68 **Tranquebar, tn., Mad., India**; 11 3ʀ 79 50ᴇ
57 **Transcaucasian Socialist Federal Soviet Republic, U.S.S.R.**; a. 71,255 sq. m.; federation including Georgia, Armenia and Azerbaijan; see separate entries; cap. Tiflis; p. 7,110,800; 41 18ʀ 44 45ᴇ
60 **Transjordan, Br. mandate, Asia**; a. 19,000 sq. m. (est.); largely desert, but some fertile lands; wheat, grapes; cap. Amman; p. 300,000 (est.); 31 0ʀ 36 30ᴇ
83 **Transkei, dist., C. of Good Hope, S. Afr., native reserve**; a. 16,351 sq. m.; inland mountainous; cereals, fruits; cattle, sheep; p. 1,000,000 (est.); 32 15ʀ 28 15ᴇ
83 **Transvaal, prov., Un. of S. Africa**; a. 110,450 sq. m.; mts. in E. Drakensberge, tableland largely high veld, good pastures; chief rivers—Limpopo, Vaal, Olifants; agriculture, maize, tobacco; sheep, wool, cattle; minerals—gold (Witwatersrand), diamonds, coal, copper, tin; mnfs.—engineering, brewing, pottery; cap. Pretoria; largest tn. Johannesburg; p. 3,301,016; 22 15 to 28 0ʀ 24 20 to 32 10ᴇ
52 **Transylvania, dist., Rumania**; a. 22,312 sq. m.; plateau; chief mts.—Transylvanian Alps, Carpathians; cereals, tobacco; sheep, cattle, horses; various minerals; chief tns.—Cluj, Brasov; p. (with Banat) 5,546,696; 46 20ʀ 24 0ᴇ
52 **Transylvanian Alps, Rumania**; 8,000 ft.; 45 20ʀ 24 0ᴇ
51 **Trapani, tn., spt., Italy**; alabaster, coral, mother-of-pearl articles; exps.—olive-oil, wines; p. 71,515; 38 1ʀ 12 33ᴇ
27 **Traquair, par., Peebles, Scot.**; p. 536; 55 35ʀ 3 03ᴡ
121 **Traralgon, tn., Vic., Australia**; 38 12ʀ 146 32ᴇ
50 **Trasimeno, L., Italy**; 43 9ʀ 11 50ᴇ
68 **Travancore, st., India**; rice, coconuts, pepper, tapioca, hard woods; cap. Trivandrum; p. 5,095,973; 9 00ʀ 77 0ᴇ
102 **Traverse City, tn., Mich., U.S.A.**; p. 12,539; 44 45ʀ 85 42ᴡ
47 **Travnik, tn., Yugoslavia**; 44 18ʀ 17 40ᴇ
18 **Trawsfynydd, par., Merioneth, Wales**; p. 1,417; 52 55ʀ 3 55ᴡ
48 **Traz-os-Montes, prov., Portugal**; a. 4,163 sq. m.; p. 435,138; 41 30ʀ 7 00ᴡ
47 **Trebinje, tn., Yugoslavia**; 42 46ʀ 18 21ᴇ
62 **Trebizond, tn., spt., Turkey**; on Black Sea; caravan centre; exps.—tobacco, carpets, hides; p. 24,587; 40 54ʀ 39 42ᴇ
19 **Tredegar, urb. dist., Monmouth, Eng.**; coal, iron ore; p. 23,195; 51 46ʀ 3 15ᴡ
18 **Tregaron, tn., Cardigan, Wales**; p. 1,497; 52 14ʀ 3 56ᴡ
19 **Tregony, par., Cornwall, Eng.**; p. 475; 50 16ʀ 4 53ᴡ
113 **Treinta y Tres, tn., Uruguay**; p. 7,000; 33 3ʀ 54 8ᴡ
55 **Trelleborg, tn., Sweden**; p. 13,014; 55 20ʀ 13 10ᴇ
18 **Tremadoc, tn., Caernarvon, Wales**; 52 57ʀ 4 07ᴡ
18 **Tremadoc B., Caernarvon, Wales**; 52 50ʀ 4 12ᴡ
43 **Trembowla, tn., Poland**; 49 19ʀ 25 41ᴇ
46 **Trencin, tn., Czechoslovakia**; p. 11,798; 48 54ʀ 18 2ᴇ
70 **Trengganu, st., Unf. Malay St.**; a. 5,500 sq. m.; copra; fishing; tin; p. 179,000; 15 15ʀ 103 0ᴇ
70 **Trengganu, tn., Malay Pen.**; p. 13,900; 5 15ʀ 103 0ᴇ
18 **Trent, R., England**; 170 m. long; chief tribs.—Dove, Derwent, Soar; with Ouse forms Humber; 50 45ʀ 2 15ᴡ
114 **Trenque Lauquen, tn., Argentina**; 35 59ʀ 62 44ᴡ
18 **Trentham, par., Staffs, Eng.**; farming; p. 3,141; 52 58ʀ 2 11ᴡ
50 **Trentino, Italy**; district on S. Alps drained by R. Adige, ceded by Austria to Italy after Great War, now forms dep. of Venezia Tridentina (q.v.).
50 **Trento, tn., Italy**; silk; Council of Trent met here; p. 62,500; 46 5ʀ 11 8ᴇ
102 **Trenton, cy., cap. N.J., U.S.A.**; on Delaware R.; pottery, earthenware, iron and steel ware, machinery, woollens; p. 123,356; 40 6ʀ 74 40ᴡ
96 **Trenton, tn., Ont., Can.**; p. 6,276; 44 8ʀ 77 36ᴡ
104 **Trenton Falls, tn., N.Y., U.S.A.**; 43 16ʀ 75 10ᴡ
113 **Tres Punias, C., Angola**; 47 10ʀ 65 50ᴡ
19 **Tretower, vil., Brecon, Wales**; 51 54ʀ 3 10ᴡ
40 **Trèves, tn., Germany**; cath.; iron founding, dyeing; cottons, woollens, stained glass; p. 76,692; 49 45ʀ 6 40ᴇ
50 **Treviglio, tn., Italy**; 45 33ʀ 9 39ᴇ
50 **Treviso, tn., Italy**; cath.; pottery, silks, woollens; 45 40ʀ 12 17ᴇ
19 **Trevose Hd., Corn., Eng.**; 50 34ʀ 5 02ᴡ
121 **Trisbunna, tn., Tas., Australia**; 42 27ʀ 147 58ᴇ
68 **Trichinopoly, tn., Mad., India**; temples; cigars, hardware, jewellery; p. 141,640; 10 50ʀ 78 45ᴇ
68 **Trichur, tn., Cochin, India**; p. 27,897; 10 31ʀ 76 14ᴇ
121 **Trida, tn., N.S.W., Australia**; 33 1ʀ 145 2ᴇ
50 **Trieste, spt., Italy**; cath., cas., univ.; shipbuilding, iron founding; p. 249,574; 45 40ʀ 13 42ᴇ
53 **Trikkala, tn., Greece**; cottons and woollens; p. 8,700; 39 34ʀ 21 46ᴇ
31 **Trim, urb. dist., co. tn., Meath, I.F.S.**; cas., abbey ruins; p. 1,325; 53 34ʀ 6 47ᴡ
20 **Trimdon, par., Dur., Eng.**; coal; p. 5,410; 54 42ʀ 1 26ᴡ
16 **Trimingham, par., Norf., Eng.**; p. 259; 52 55ʀ 1 22ᴇ
68 **Trincomalee, spt., Ceylon**; good harbour; p. 10,000; 8 36ʀ 81 15ᴇ
17 **Tring, urb. dist., Herts, Eng.**; straw-plaiting; p. 4,364; 51 48ʀ 0 40ᴡ
114 **Trinidad, tn., Bolivia**; 14 35ʀ 65 5ᴡ
110 **Trinidad, tn., Cuba**; p. 13,851; 21 42ʀ 80 0ᴡ
107 **Trinidad, tn., Cal., U.S.A.**; p. 11,732; 37 10ʀ 104 36ᴡ
111 **Trinidad I., Br., W. Indies**; a. 1,862 sq. m.; hilly surface, highest in N.; Pitch Lake (natural asphalt), oil; sugar, cocoa, rum, coconut oil; cap. Port of Spain; p. 412,783; 10 25ʀ 61 15ᴡ
93 **Trinity B., Newfoundland**; 49 26ʀ 67 18ᴡ
10 **Tripoli, spt., Libya**; caravan centre; carpets, tobacco; p. 60,000; 32 50ʀ 13 10ᴇ
62 **Tripoli, spt., Syria**; p. 37,260; 34 52ʀ 35 45ᴇ
53 **Tripolitza, tn., Greece**; tapestries, leather; p. 14,400; 37 30ʀ 22 25ᴇ
69 **Tripura**, formerly Hill Tippera, Beng., India; a. 4,116 sq. m.; semi-independent native state; elephants, tigers and leopards are hunted; rice, tea; p. 382,450; 23 0ʀ 92 0ᴇ
7 **Tristan da Cunha, I., Br., Atlantic Oc.**; a. 45 sq. m.; mountainous, 8,000 ft.; potatoes; some fruit; cattle, sheep, geese, abundant fishing; p. 130; 37 6ʀ 12 20ᴡ
68 **Trivandrum, tn., Travancore, India**; observatory, place of pilgrimage, cantonment; cap. of Trav.; p. 72,784; 8 30ʀ 77 0ᴇ
46 **Trnava, tn., Czechoslovakia**; formerly Tyrnau; cloth, sugar; p. 23,971; 48 23ʀ 17 56ᴇ
45 **Trogen, vil., Switzerland**; 47 23ʀ 9 27ᴇ
94 **Trois Pistoles, tn., Que., Can.**; p. 1,837; 48 6ʀ 69 13ᴡ
65 **Troitsk, tn., Russia**; 54 8ʀ 61 50ᴇ
55 **Trollhättan, tn., Sweden**; water power; p. 15,018; 58 15ʀ 12 20ᴇ
83 **Trompsburg, tn., O.F.S., S. Africa**; 29 58ʀ 25 50ᴇ
54 **Troms, co., Norway**; a. 9,994 sq. m.; p. 97,830; 69 10ʀ 19 0ᴇ
54 **Tromsö, spt., Norway**; fishing, whale oil; p. 10,339; 69 40ʀ 18 40ᴇ
54 **Trondheim, spt., Norway**; formerly Nidaros; cath.; shipbuilding; exp.—lumber, wood pulp, copper, fish; p. 54,135; 63 25ʀ 9 40ᴇ
26 **Troon, bor., spt., Ayr, Scot.**; shipbuilding, farming; p. 8,544; 54 33ʀ 4 39ᴡ
55 **Trosa, tn., Sweden**; 58 53ʀ 17 33ᴇ
27 **Trossachs, The, Perth, Scot.**; tourist resort; 56 12ʀ 4 25ᴡ
56 **Trotsk.** See Gatchina.
24 **Trotternish, dist., I. of Skye, Inver., Scot.**; 57 33ʀ 6 17ᴡ
19 **Trowbridge, urb. dist., Wilts, Eng.**; cashmeres, tweeds, brewing; p. 12,011; 51 18ʀ 2 10ᴡ
69 **Troy (site of), Turkey**; ruined cy., rendered famous by the "Iliad" of Homer; anc. walls and cisterns; 39 59ʀ 26 14ᴇ
103 **Troy, tn., Ala., U.S.A.**; p. 6,841; 31 45ʀ 85 58ᴡ
102 **Troy, cy., N.Y., U.S.A.**; p. 72,763; 42 50ʀ 73 30ᴡ
52 **Troyan, tn., Bulgaria**; p. 4,098; 42 45ʀ 24 42ᴇ
34 **Troyes, tn., France**; on R. Seine; cath.; hosiery, iron, looms; p. 58,804; 48 17ʀ 4 04ᴇ
60 **Trucial Oman, region, Oman**; 23 30ʀ 53 0ᴇ
110 **Trujillo, tn., Honduras**; p. 2,000; 16 0ʀ 85 59ᴡ
112 **Trujillo, tn., Peru**; univ.; sugar; copper; p. 30,000; 8 00ʀ 79 0ᴡ
48 **Trujillo, tn., Spain**; birthplace of Pizarro; fruit, wine, oil; p. 11,500; 39 30ʀ 5 53ᴡ
112 **Trujillo, tn., Venezuela**; p. 12,415; 9 00ʀ 70 15ᴡ
95 **Truro, tn., N.S., Can.**; hosiery; p. 7,901; 45 22ʀ 63 19ᴡ
19 **Truro, mun. bor., Corn., Eng.**; cath.; tin smelting, shipping; p. 11,047; 50 16ʀ 5 03ᴡ
88 **Tsad, L.** See Chad, L.
72 **Tsaidam, Tsinghai**; elevated marshy and swampy desert; 38 0ʀ 95 0ᴇ
74 **Tsaochow, tn., China**; 35 25ʀ 115 35ᴇ
57 **Tsaritsin.** See Stalingrad.
72 **Tsasakin Khaw, dist., Mongolia**; 46 0ʀ 96 30ᴇ
74 **Tschchow, tn., China**; 35 28ʀ 112 38ᴇ
73 **Tsetsen, dist., Mongolia**; 46 50ʀ 13 30ᴇ
74 **Tsinan, tn., cap. Shantung, China**; rly. junc.; flour, cottons, silk, glass, precious stones; p. 300,000 (est.); 36 50ʀ 117 5ᴇ
74 **Tsingchow, tn., China**; 36 53ʀ 118 40ᴇ
72 **Tsinghai, prov., China**; 36 0ʀ 97 0ᴇ
74 **Tsing-hai-wei, tn., China**; 36 52ʀ 122 12ᴇ
73 **Tsingtao, treaty port, China**; salt, silk; p. 360, 464; 36 5ʀ 120 35ᴇ
72 **Tsinning, tn., China**; 34 30ʀ 105 50ᴇ
75 **Tsinju, tn., Korea**; 35 15ʀ 128 3ᴇ
69 **Tsin-ling-shan, Mts., China**; 33 55ʀ 109 5ᴇ
73 **Tsitsihar, tn., Manchuria**; p. 30,000; 47 20ʀ 124 0ᴇ
73 **Tso-chow, tn., China**; 39 22ʀ 113 0ᴇ
83 **Tsolo, tn., C. of Good Hope, S. Afr.**; 31 20ʀ 28 47ᴇ
87 **Tsoma, vil., C. of Good Hope, S. Afr.**; 32 8ʀ 27 40ᴇ
74 **Tsu, tn., China**; 33 5ʀ 118 25ᴇ
75 **Tsu, spt., Japan**; p. 65,971; 34 39ʀ 136 42ᴇ
74 **Tsuen-choo, tn., China**; 25 55ʀ 11 20ᴇ
74 **Tsung-ming, I., and tn., China**; 31 39ʀ 121 30ᴇ
72 **Tsun-I, tn., China**; 27 35ʀ 106 50ᴇ
75 **Tsuruga, treaty port; Japan**; p. 34,317; 35 9ʀ 136 12ᴇ
75 **Tsu-sima, tn., Japan**; 34 30ʀ 129 20ᴇ
30 **Tuam, par., Galway, I.F.S.**; cath.; p. 5,988; 53 31ʀ 8 32ᴡ
117 **Tuamotu Arch., Pac. Oc., Fr.**; pearl fisheries; p. 4,276; 17 0ʀ 144 0ᴡ
70 **Tuan-an, tn., Fr. Indo-China**; 16 35ʀ 107 30ᴇ
57 **Tuapse, spt., Russia**; petroleum; 44 21ʀ 39 2ᴇ
76 **Tuareg, tribe**; Fr. W. Africa; 20 30ʀ 6 00ᴇ
10 **Tuaret, tn., Algeria**; p. 20,994; 35 23ʀ 1 18ᴇ
127 **Tuatapere, tn., S.I., New Zealand**; p. 635; 46 8ʀ 167 41ᴇ
10 **Tuat Oases, Algeria**; dates, barley, wheat; 26 30ʀ 1 00ᴡ
61 **Tubariya (Tiberias), Palestine**; anc. tn., on S. of Galilee, 682 ft. below sea-level; medicinal springs; p. 6,950; 32 47ʀ 35 33ᴇ
40 **Tübingen, tn., Germany**; univ., cas.; printing, dyeing, chemicals, scientific instruments; p. 20,276; 48 34ʀ 9 00ᴇ
117 **Tubuai Is., Pac. Oc.**; Fr.; p. 3,000; 23 25ʀ 148 50ᴡ
112 **Tucacas, tn., Venezuela**; 10 30ʀ 68 30ᴡ
106 **Tucson, cy., Ariz., U.S.A.**; univ., rly. workshops; gold, silver and copper smelting; livestock; p. 32,506; 32 15ʀ 110 52ᴡ
113 **Tucuman, tn., Argentina**; breweries, sawmills, flour, sugar, livestock; p. 91,000; 26 48ʀ 66 2ᴡ
48 **Tudela, tn., Spain**; 41 35ʀ 4 33ᴡ
49 **Tudela, tn., cath., Spain**; on R. Ebro; 42 2ʀ 1 36ᴡ
87 **Tugela R., Natal, S. Afr.**; length 300 m.; 29 28ʀ 31 30ᴇ
10 **Tuguri, tn., Algeria**; rly. term.; dates; p. 12,000 (est.); 33 20ʀ 5 50ᴇ
126 **Tukituki, R., N.I., New Zealand**; 39 58ʀ 176 40ᴇ
42 **Tukums, tn., Latvia**; 56 58ʀ 23 8ᴇ
81 **Tukuyu, tn., Tang. Ter.**; 9 15ʀ 33 40ᴇ
109 **Tula, tn., Mexico**; 20 3ʀ 99 29ᴡ
57 **Tula, tn., Russia**; iron, coal; engineering, machinery, leather, flour; p. 199,500; 54 13ʀ 37 52ᴇ
109 **Tulancingo, tn., Mexico**; 20 5ʀ 98 21ᴡ
116 **Tulare, tn., Cal., U.S.A.**; p. 6,207; 36 12ʀ 119 20ᴡ
83 **Tulbagh, tn., C. of Good Hope, S. Afr.**; 33 18ʀ 19 8ᴇ
52 **Tulcea, tn., Rumania**; river port on Danube; grain, wool and fish; p. 20,108; 45 11ʀ 28 44ᴇ
89 **Tuli, tn., S. Rhodesia**; 21 55ʀ 29 25ᴇ
32 **Tulla, tn., Clare, I.F.S.**; p. 478; 52 53ʀ 8 47ᴡ
33 **Tullamore, urb. dist., co. tn., Offaly, I.F.S.**; farming, distilling, brewing; p. 4,924; 53 16ʀ 7 30ᴡ
121 **Tullamore, tn., N.S.W., Australia**; 32 18ʀ 147 32ᴇ
77 **Tullear, tn., Madagascar**; 23 10ʀ 44 0ᴇ
33 **Tullow, tn., Carlow, I.F.S.**; farming; p. 1,894; 52 47ʀ 6 44ᴡ
25 **Tullynessle, par., Aber., Scot.**; p. 830; 57 16ʀ 2 45ᴡ
59 **Tulun, tn., U.S.S.R.**; 54 20ʀ 100 20ᴇ
112 **Tumac Humac, Mts., Guiana, S. America**; 2,625 ft.; 2 20ʀ 55 0ᴡ
112 **Tumaco, spt., Colombia**; p. 8,000; 1 40ʀ 78 45ᴡ
121 **Tumbarumba, tn., N.S.W., Australia**; 35 48ʀ 148 2ᴇ
112 **Tumbez, tn., Peru**; 3 40ʀ 80 25ᴡ
68 **Tumkur, tn., Mys., India**; p. 14,509; 13 20ʀ 77 10ᴇ
121 **Tumut, tn., N.S.W., Australia**; 35 18ʀ 148 16ᴇ
63 **Tun, tn., Persia**; silk and tobacco; 34 2ʀ 58 7ᴇ

MAP

17 **Tunbridge Wells**, mun. bor., Kent., Eng.; watering pl.; Tunbridge ware, farming, min. springs; p. 33,365; 51 8x 0 16x
74 **Tungnae**, tn., China; 23 0x 116 17x
74 **Tungchang**, tn., China; 36 50x 116 0x
72 **Tungchuan**, tn., China; 26 30x 103 20x
74 **Tunghai or Eastern Sea**, China; 26 0 to 33 0x 122 0 to 129 0x
74 **Tungkuan**, tn., China; 34 40x 110 5x
72 **Tungshin**, tn., China; 27 40x 109 0x
59 **Tunhwang**, tn., China; 40 20x 94 50x
10 **Tunis**, Fr. prot., N. Africa; a. 48,300 sq. m.; farming, wheat, barley, oats, oranges, lemons, olives, dates; iron, lead and zinc; phosphates; fisheries (tunny and sardines); carpets, rugs, woollens; wines; cap. Tunis; p. 2,410,692; 34 0x 9 30x
10 **Tunis**, cap., spt. Tunis, Afr.; univ.; silks, woollens, cereals, olive oil, cattle, hides, dates; ruins of Carthage in the vicinity; p. 185,996; 36 45x 10 15x
112 **Tunja**, tn., Colombia; p. 19,000; 5 30x 73 30w
113 **Tupiza**, tn., Bolivia; 21 26x 65 50w
70 **Turan**, tn., Fr. Indo-China; 16 0x 108 10x
63 **Turbat-i-Haidari**, tn., Persia; 35 20x 59 18x
63 **Turbat-i-Sheikh Jam**., tn., Persia; 35 13x 60 40x
52 **Turda**, tn., Rumania; p. 20,057; 46 35x 23 50x
59 **Turachansk**, tn., U.S.S.R.; 65 50x 87 0x
43 **Turek**, tn., Poland; 52 1x 18 30x
72 **Turfan**, tn., Sinkiang, China; 43 0x 89 30x
59 **Turfan Basin**, China; 42 0x 87 0x
50 **Turin**, cy., Italy; cath., univ., palaces; rly. and military centre; mnfs.—cottons, woollens, silk, leather, linen, aeroplanes, automobiles; 45 5x 7 38x
58 **Turkestan**, U.S.S.R.; extensive region, now divided between Kazak, Turkoman, Uzbek, Kirghis and Tadzhik Republics; 35 0 to 47 0x 54 0 to 80 0x
83 **Turkey**, republic, Europe and Asia; a. 294,338 sq. m.; comprises the whole of Asia Minor and a portion of European terr., R. of the Maritza R.; cattle, sheep, goats, horses; cereals, tobacco, figs, fruits; copper, silver; carpets, silks, mohair, meerschaum, wine, olive oil cap. Ankara, largest tn. Istanbul; p. 16,200,694; 36 0 to 42 0x 26 0 to 44 30x
58 **Turkoman Soviet Socialist Republic**, U.S.S.R.; a. 189,603 sq. m.; agriculture based on irrigation, fruit, cotton, wool; horse breeding; minerals—ozokerite, sulphates, petroleum; mnfs.—carpets, Astrakhan fur; cap. Ashkhabad (formerly Poltoratsk); p. 1,288,900; 39 0x 60 0x
111 **Turks Is.** See Caicos Is.
58 **Turku**, spt., Fin.; timber, grain trade; p. 66,200; 60 28x 22 16x
126 **Turnagain, C.**, N.I., New Zealand; 40 28s 176 37x
26 **Turnberry**, vil., Ayr, Scot.; cas. ruins; 55 19x 4 50w
110 **Turneffe I.**, Br. Honduras; 17 35x 87 55w
38 **Turnhout**, tn., Belgium; textiles and lace; p. 26,792; 51 21x 4 57x
52 **Turnu Magurele**, tn., Rumania; p. 17,351; 43 43x 24 52x
52 **Turnu Severin**, tn., Rumania; river port on Danube; grain, salt, petroleum; p. 18,337; 44 38x 22 40x
39 **Turø**, tn., Denmark; 55 2x 10 44x
25 **Turriff**, bor., Aber., Scot.; p. 2,298; 57 32x 2 28w
52 **Turtucaia**, tn., Rumania; p. 11,103; 44 0x 26 35x
103 **Tuscaloosa**, tn., Ala., U.S.A.; p. 20,659; 33 9x 87 31w
44 **Tuscan Apennines, Mts.**, Italy; 43 40x 12 0x
50 **Tuscany**, dept., Italy; a. 8,890 sq. m.; chief river Arno; wheat, maize, wine, olive-oil; copper, lead, mercury, marble; mineral springs; textiles, porcelain; p. 2,888,740; 43 20x 11 0x
72 **Tushetu**, dist., Mongolia; 45 30x 108 0x
68 **Tusla**, tn., Rumania; p. 3,157; 44 1x 28 38x
68 **Tuticorin**, spt., Mad., India; cotton spinning, salt; pearls; p. 44,522; 8 52x 78 10x
40 **Tuttlingen**, tn., Germany; cutlery and woollens; p. 16,281; 47 59x 8 49x
116 **Tutuila, I.**, Samoa Is., Pac. Oc., U.S.A.; copra; p. 7,809; 14 20s 170 40w
16 **Tuxford**, par., Notts, Eng.; hops, brewing; p. 1,191; 53 13x 0 54w
109 **Tuxpan**, spt., Mexico; petroleum; 20 58x 97 32w
48 **Tuy**, tn., Spain; cath., hot mineral springs; 42 3x 8 38w
70 **Tuyen-Kwang**, tn., Fr. Indo-China; 21 50x 105 1 0x
62 **Tuz Gol, L.**, Turkey; 38 35x 33 30x
47 **Tuzla**, tn., Yugoslavia; salt springs, coal, timber, live-stock, grain and fruit; p. 13,354; 44 33x 18 41x
66 **Tver**, tn., Russia; port on Volga R.; cath.; cotton, linen, machinery; p. 106,337; 56 52x 36 40x
27 **Tweed, R.**, Scotland; length 97 m.; salmon fisheries; 55 35x 2 00 to 3 40w
20 **Tweedmouth**, par., spt., Northumb., Eng.; machinery, iron, boats, fishery; p. 2,892; 55 46x 2 03w
17 **Twickenham**, mun. bor., Middx., England; on R. Thames; headquarters of English Rugby football; includes Teddington, q.v., Hampton, in which is the former royal residence of Hampton Court and Hampton Wick; p. c. 79,300; see Greater London.
27 **Twynholm**, par., Kirk., Scot.; p. 751; 54 52x 4 05w
43 **Tykotsin**, tn., Poland; 53 12x 22 48x
83 **Tylden**, tn., C. of Good Hope, S. Afr.; 32 5s 27 10x
107 **Tyler**, tn., Tex., U.S.A.; fruit, livestock, cotton; p. 17,113; 30 40x 94 30w
73 **Tymovsk**, tn., Siberia; 50 55x 142 30x
20 **Tyne, R.**, Northumb., Eng.; length 80 m.; 54 59x 1 52w
20 **Tynemouth**, co. bor., Northumb., Eng. (incorporating N. Shields); shipbuilding, ropes, sails, fisheries; p. 64,913; 55 1x 1 25w
27 **Tynron**, par., Dumf., Scot.; p. 315; 55 13x 3 53w
61 **Tyre**. See es Sur.
46 **Tyrnau**. See Trnava.
53 **Tyrnavo**, tn., Greece; 39 45x 22 20x
46 **Tyrol**, prov., Austria; mining; a. 4,882 sq. m.; p. 313,885; 47 18x 11 10x
104 **Tyrone**, tn., Pa., U.S.A.; p. 9,042; 40 39x 78 20w
31 **Tyrone**, co., N. Ire.; a. 1,260 sq. m.; surface hilly; oats, flax, cattle; coal, marble; linens, woollens; p. 132,775; 54 37x 7 10w
120 **Tyrrell, L.**, Vic., Australia; 35 20s 142 50x
51 **Tyrrhenian Sea**, Italy; 38 20 to 42 0x 9 40 to 16 0x
56 **Tyumen**, tn., Russia; p. 50,000; 57 23x 65 32x
81 **Tzana, or Tsana, L.**, Abyssinia; 12 0x 37 20x
47 **Tzari Brod**, tn., Yugoslavia; 43 0x 22 47x
81 **Tzavo**, tn., Kenya; 3 00x 38 25x

MAP

80 **Ubangi, R.**, Africa; chief N. trib. of Congo; 1,400 m. long; 3 00x 18 40x
80 **Ubangi Shari**, col., Fr. Eq. Africa; a. 236,363 sq. m.; p. 1,066,444; 5 20x 23 0x
48 **Ubeda**, tn., Spain; 38 2x 3 22w
70 **Ubon**, tn., Siam; 15 20x 104 50x
112 **Ucayali, R.**, Peru; trib. of Marañon R., 1,200 m. long; 7 30x 75 30w
17 **Uckfield**, par., Sussex, Eng.; malting, bricks; p. 3,357; 50 58x 0 06x
66 **Udaipur**, tn., Raj., India; royal palace, embroidery, cotton cloth; p. 34,789; 24 32x 73 45x
54 **Udd L.**, Sweden; 66 0x 17 50x
55 **Uddevalla**, tn., Sweden; p. 15,104; 60 10x 12 8x
50 **Udine**, tn., Italy; silks, linens; p. 38,077; 46 4x 13 15x
68 **Udipi**, tn., Mad., India; 13 20x 74 42x
25 **Udny**, par., Aber., Scot.; p. 1,547; 57 20x 2 13w
73 **Udski**, tn., Siberia, U.S.S.R.; 54 30x 134 20x
42 **Uexkill**, tn., Latvia; 56 50x 24 30x
56 **Ufa**, tn., Russia; iron and copper works, saw-mills, flour mills; p. 167,900; 54 46x 55 47x
81 **Uganda Prot.** (Brit.), East Africa; a. 93,981 sq. m.; plateau; chief river Nile; lakes, include parts of Victoria, Edward, Albert, Rudolf, and the whole of Kioga; cotton, rubber, coffee, ivory, hides and skins, tin; cap. Entebbe; commercial centre, Kampala; p. 3,593,534; 1 00s to 4 30x 29 30 to 35 0x
10 **Ugger**t, vil., Algeria; 29 48x 2 56w
83 **Ugie, tn.**, C. of Good Hope, S. Afr.; 31 15s 28 15x
56 **Uglich**, tn., Russia; 57 33x 38 23x
81 **Uhenge**, tn., Tang. Territory; 8 28s 34 30x
83 **Uitenhage**, tn., C. of Good Hope, S. Afr.; resort; fruit, wool; p. 9,350 (Eur.); 33 45s 25 25x
10 **Ujda**, tn., Morocco; 34 40x 2 00w
81 **Ujiji, tn.**, Tanganyika Terr.; p. 25,000; 4 57s 30 1x
66 **Ujjain**, tn., India; sacred cy. temples; p. 43,908; 23 16x 75 55x
60 **Ukair**, vil., Arabia; 25 48x 50 9x
83 **Ukamas**, tn., S.W. Afr.; 27 50x 19 47x
42 **Ukmerge**, tn., Lithuania; 55 14x 24 46x
57 **Ukraine**, Socialist Soviet Republic, U.S.S.R.; a. 174,372 sq. m.; fertile "black earth" region; agriculture, wheat, maize, barley, tobacco; sheep, pigs; minerals, coal, iron ore, manganese; mnfs., flour, sugar, brewing, chemicals, smelting; enormous hydro-electric plant at Dnepropetrovsk; cap. Kharkov; p. 31,301,400; 46 to 52x 26 to 40x
72 **Ulan Bator**. See Urga.
72 **Ulan Ude**, tn., Siberia; grain, tea; hides; p. 27,000; 51 58x 107 30x
11 **Ulcinj**. See Dulcigno
57 **Ulianovsk**, tn., Russia; formerly Simbirsk; river port on Volga; iron and copper foundries; flour mills; 54 20x 48 23x
72 **Ulhasutai**, tn., Mongolia; 48 0x 96 50x
191 **Uliadulla**, tn., N.S.W., Australia; 35 22s 150 28s
54 **Ullänger**, tn., Sweden; 63 0x 18 20x
24 **Ullapool**, vil., Ross and Cromarty, Scotland; 57 54x 5 09w
20 **Ullswater, L.**, Westmor., Eng.; resort; 54 35x 2 54w
40 **Ulm**, tn., Germany; cath.; cottons, woollens, linens, machinery, distilling; p. 62,472; 48 27x 10 0x
121 **Ulmarra**, tn., N.S.W., Australia; 29 38s 153 0x
31 **Ulster**, prov., N. Ire.; a. 8,613 sq. m.; six counties of N. Ire. and Tirconnell, Cavan, Monaghan of I.F.S.; mnfs., linen and iron goods; shipbuilding and distilling; p. 1,581,696; 54 30x 7 00w
83 **Ulundi**, tn., Natal, S. Afr.; 28 15s 31 25x
20 **Ulverston**, urb. dist., Lancs., Eng.; blast furnaces, iron, corn, brewing; p. 9,235; 54 13x 3 6w
121 **Ulverstone**, tn., Tas., Australia; p. 2,820; 41 7s 146 8x
40 **Ulzen**, tn., Germany; p. 11,809; 52 58x 10 35x
57 **Uman**, tn., Russia; iron foundries, flour mills; p. 50,500; 48 43x 30 15x
66 **Umarkot**, tn., Sind., India; 25 22x 69 46x
89 **Umbangin**, tn., S. Rhodesia; 19 40s 29 31x
127 **Umbrella Mts.**, S.I. New Zealand; 45 40s 169 5x
50 **Umbria, Dept.**, Italy; a. 3,377 sq. m.; mountainous, fertile valleys; p. 693,902; 42 50x 12 30x
54 **Umeå**, spt., Sweden; p. 11,138; 63 50x 20 20x
54 **Umeå. R.**, Sweden; 64 50x 18 20x
89 **Umfuli**, tn., S. Rhodesia; 18 18s 31 10x
89 **Umfuli, R.**, S. Rhodesia; 18 15s 20 20x
89 **Umnyati**, tn., S. Rhodesia; 19 0s 30 30x
89 **Umtali**, tn., S. Rhodesia; 18 53s 32 35x
89 **Umtasa**, tn., S. Rhodesia; 18 43s 32 40x
83 **Umtata**, tn., C. of Good Hope, S. Afr.; p. 2,302 (Eur.); 31 36s 28 47x
83 **Umvolozi, R.**, Natal, S. Afr.; 28 25s 32 0x
89 **Umvuma**, tn., S. Rhodesia; 19 20s 30 42x
89 **Umvungo, R.**, S. Rhodesia; 19 20s 29 0x
83 **Umzimkulu R.**, C. of Good Hope, S. Afr.; 30 40s 30 30x
83 **Umzimvubu, R.**, C. of Good Hope, S. Afr.; 31 33s 29 33x
83 **Umzinto**, tn., Natal, S. Afr.; 30 35s 30 32x
89 **Undi**, vil., Mozambique; 14 45s 32 42x
121 **Ungarie**, tn., N.S.W., Australia; 33 36s 146 58x
93 **Ungava Bay**, Que., Can.; length 150 m., breadth 130 m.; cod fishing when ice-free; 59 30x 67 30w
113 **Uniao da Victoria**, tn., Brazil; 26 20s 51 10w
60 **Unieh**, tn., Turkey; 41 8x 37 15x
104 **Union City**, Pa., U.S.A.; p. 19,544; 41 52x 79 52w
103 **Union City**, tn., Tenn., U.S.A.; p. 5,868; 36 26x 89 10w
126 **Union Is.** See Tokelau Is.
83 **Union of South Africa**, Africa; a. 472,550 sq. m.; chief physical features, veld, interior plateau; Drakensberge (Mont Aux Sources 11,170 ft.); chief rivers, Orange, Caledon, Limpopo; chief industries, agriculture often dependent on irrigation, maize, wheat, oats, barley, potatoes, sugar, cotton, tea, fruits, vines; pastoral farming, sheep, cattle, goats, wool, mohair; wattle bark, ostrich feathers; minerals, gold, diamonds, coal, copper, tin; various manufactures; inhabited by English, Dutch, Bantu, and Indian races; comprising provinces of Cape of Good Hope, Natal, Orange Free State, Transvaal; administrative cap. Pretoria, legislative cap. Cape Town; p. 1,828,175 (Eur.), 9,530,649 (est. total); 22 to 35x 16 30 to 33 0x
58 **Union of Soviet Socialist Republics**, a. 8,241,921 sq. m.; a federation of repss., namely, the Russian S.F.S. Rep., White Russia, Ukraine, Transcaucasia, Turkoman S.S. Rep., Uzbek S.S. Rep., Tadzhik S.S. Rep.; covers the greater part of former Russian Emp., of which Finland, Estonia, Latvia, Lithuania and Poland are now independent states, and Bessarabia is included in Rumania; see Russian S.F.S. Rep., etc.; cap. Moscow; p. 165,805,000; 33 to 70x 26 to 18x
83 **Uniondale**, tn., C. of Good Hope, S. Afr.; 33 38s 23 15x
104 **Uniontown**, Pa., U.S.A.; machinery and foundries; p. 19,544; 39 54x 79 44w
67 **United Provinces** (Agra and Oudh), India; a. 112,191 sq. m.; Himalayas on N. bay., drained by Ganges and Jumna; splendid irrigation; wheat, rice, millet, barley, maize cotton, sugar, oil-seeds; cap, Allahabad; p. 49,614,833; 23 48 to 31 0x 77 10 to 84 40x
12 **United Kingdom**, includes Great Britain and Northern Ireland.
91 **United States**, federal rep., N. America; a. 3,026,789 sq. m.; chief physical features, great lakes, largest fresh-water area in world; chief rivers, Mississippi-Missouri and tribs., Rio Grande del Norte, Colorado, Hudson, Susquehanna, Savannah, Columbia; chief mountains, Rocky Mts., Coast Ra., Sierra Nevada, Appalachian Mts.; Great Basin, great plains, Piedmont plateau, coastal plains; chief industries, agriculture, maize, wheat, oats, etc., potatoes, hay, alfalfa, cane and beet-sugar, cotton, tobacco; pastoral farming, ranching, dairying, sheep, wool, cattle, pigs, horses; lumbering, timber, wood pulp; fishing; minerals, coal, petroleum, natural gas, phosphate, iron ore, copper, lead, gold, silver, zinc, aluminium, mercury; various manufactures; motors, meat packing, iron and steel, machinery, oil refining, printing, textiles, clothing, paper, tobacco, flour, etc.; commerce; comprising 48 states and District of Columbia; cap. Washington, largest towns, New York, Chicago, Philadelphia; p. 122,775,046; 25 to 49x 67 to 125w
22 **Unst., I.**, Shetland Is., Scotland; 60 55x 0 57w
45 **Unterwalden**, can., Switzerland; dairying; fruit and live-stock; p. 15,027; 46 55x 8 15x
19 **Upavon, par.**, Wilts., Eng.; p. 767; 51 17x 1 49w
93 **Upernivik**, settlement, Greenland; 72 45x 55 0w
27 **Uphall**, vil., W. Lothian, Scot.; farming, paraffin; p. 12,497; 55 56x 3 30w
83 **Upington**, tn., C. of Good Hope, S. Afr.; 28 30s 21 15x
126 **Upolu I.**, pacific Ocean; 13 50s 171 35w
16 **Uppingham**, par., Rut., Eng.; public sch.; farming; p. 2,453; 52 36x 0 43w
55 **Uppsala**, co., Sweden; a. 2,052 sq. m.; p. 137,868; 59 0x 17 0x
55 **Uppsala**, cy., Sweden; cath., univ.; p. 30,190; 59 55x 17 30x
18 **Upton on Severn**, par., Worcs., Eng.; farming; p. 2,004; 52 4x 2 12w
58 **Ural Area**, division, U.S.S.R.; a. 653,400 sq. m.; Ural Mts. mostly within its borders; smelting, machinery; flour, tobacco; iron, copper, phosphates, precious stones; chief tn., Sverdlovsk; p. 6,800,000 (est.); 57 0x 64 0x
56 **Ural Mts.**, Russia; system forming bdy. between Europe and Asia, length about 1,600 m., Tolposis Mt. 5,430 ft.; rich in minerals; 60 0x 59 0x
57 **Ural R.**, Russia; rises in Ural Mts. flows S. to Caspian Sea; length 1,400 m.; 48 0x 51 35x
121 **Uralla**, tn., N.S.W., Australia; 30 38s 151 30x
57 **Urbach**, tn., Russia; 51 5x 46 57x
50 **Urbino**, tn., Italy; cath., pal., art collections, birthplace of Raphael; silks, cheese, olive oil; p. 20,300; 43 45x 12 39x
57 **Urda**, tn., Russia; 48 50x 48 57x
20 **Ure, R.**, N. Riding, Eng.; 54 6x 1 27w
108 **Ures**, tn., Mexico; 29 17x 110 30w
62 **Urfa**, tn., Turkey; archæological remains; cotton, grain; p. 29,098; 37 10x 38 56x
46 **Urfahr**, tn., Austria; 48 19x 14 20x
72 **Urga**, tn., Mongolia; p. 100,000; 48 0x 106 50x
45 **Uri**, can., Switzerland; dairying and stock-raising; p. 23,000; 46 48x 8 40x
62 **Urkhanla**, tn., Turkey; 39 58x 27 32x
63 **Urmia**, tn., Persia; 37 31x 45 2x
63 **Urmia, L.**; Persia, 37 30x 45 30x
25 **Urquhart, Moray.**, Scot.; 57 39x 3 11w
56 **Urshum**, tn., Russia; 57 11x 50 0x
108 **Urupan**, tn., Mexico; 19 28x 102 1w
112 **Urubamba, R.**, Peru; 12 0s 72 25w
75 **Urugawa**, tn., Japan; 44 0x 142 20x
113 **Uruguay, R.**, Brazil; length about 950 m.; 27 30s 52 30w
113 **Uruguay**, rep., S. America; a. 72,153 sq. m.; S. Uruguay forms W. bdy.; cattle and sheep rearing; wheat olives, grapes; gold; cap. Montevideo; p. 2,020,040; 30 0 to 35 0s 53 0 to 53 20w
113 **Uruguayana**, tn., Brazil; 30 0s 57 0w
72 **Urumtsi**, tn., Sinkiang; 43 23x 87 50x
81 **Urundi**, dist., Belg. Congo; 3 20s 30 0x
81 **Usambiro**, tn., Uganda; 3 02s 32 27x
41 **Usedom I.**, Germany; 54 0x 14 0x
62 **Ushak**, tn., Turkey; carpets; p. 16,967; 38 40x 29 28x
34 **Ushant, I.**, France; 48 29x 5 04w
62 **Ushnu**, tn., Russia; 37 2x 45 3x
19 **Usk**, urb. dist., Mon., Eng.; cas. ruins; wood turning, chairs, farming; p. 1,315; 51 42x 2 52w
18 **Usk, R.**, Brec., Wales; 51 57x 3 25w
47 **Uskub**. See Skoplje.
83 **Usküdar** (Scutari), tn., Turkey; on Bosporus; silks, cottons, muslin; p. 125,000; 41 0x 29 1x
57 **Usman, tn.**, Russia; 52 3x 39 47x
59 **Ust Maisk**, tn., U.S.S.R.; 60 45x 134 30x
56 **Ust Sysolk**, tn., Russia; 61 33x 50 40x
58 **Ust Yurt**, plateau; U.S.S.R.; 43 0x 55 0
56 **Ust Zylma**, tn., Russia; 65 28x 52 13x
51 **Ustica I.**, Italy; 38 43x 13 10x
59 **Ustyansk**, tn., U.S.S.R.; 71 0x 136 0x
56 **Ustyushna**, tn., Russia; 58 54x 36 15x
190 **Usumacinta R.**, Mexico; length 100 m.; 17 0x 91 15w
81 **Usuri, vil.**, Tang. Ter.; 4 35s 34 3x
73 **Usuri, R.**, Manchuria; 46 30x 134 0x
106 **Utah**, st., U.S.A.; a. 84,990 sq. m.; Gt. Salt L. in the N.; Mormons form 91 per cent. of the church

MAP

membership of st.; farming, wheat, maize, barley, rye, live-stock, sugar-beet and fruits; copper, silver, lead, gold and coal; fruit canning; cap. Salt Lake City; p. 507,847; 37 0 to 42 0x 109 0 to 114 0w
69 **Utaradit,** tn., Siam; 17 41x 100 1e
82 **Utengula,** tn., Tang. Terr.; 8 48s 33 48e
10 **Utica,** tn., N.Y., U.S.A.; maps, cottons, hosiery, boots and shoes; p. 101,740; 43 0x 75 12w
89 **Utkolok,** tn., U.S.S.R.; 57 30x 156 20e
83 **Utrecht,** tn., Natal, S. Afr.; 27 42s 30 15e
38 **Utrecht,** Netherlands; cath., univ.; printing, machinery, woollens, silks, velvets, cigars, glass; p. 153,884; 52 5x 5 08e
38 **Utrecht,** prov., Netherlands; a. 529 sq. m.; horticulture and farming; p. 405,944; 52 20x 5 10e
54 **Utsjoki,** vil., Finland; 69 55x 27 2e
18 **Uttoxeter,** urb. dist., Staffs., Eng.; farming machinery; p. 5,907; 52 54x 1 52w
54 **Uusikaarlepyy,** tn., Finland; 63 55x 22 30e
55 **Uusikaupunki,** tn., spt., Finland; 60 50x 21 25e
96 **Uxbridge,** tn., Ont., Can.; p. 1,325; 44 9x 79 9w
17 **Uxbridge,** urb. dist., Middx., Eng.; iron, bricks, market gardening; p. 31,880; 51 33x 0 29w

105 **Uxbridge,** tn., Mass., U.S.A.; p. 6,285; 42 3x 71 38w
113 **Uyuni,** tn., Bolivia; p. 5,000; 20 15s 67 10w
61 **Uzbek Soviet Socialist Republic,** Cent. Asia, U.S.S.R.; a. 68,000 sq. m.; plateau; agriculture based on irrigation, rice, cotton, fruits, silk, cattle, sheep; cap. Tashkent; p. 5,044,300; 39 20x 66 0e
47 **Uziel,** vil., Yugoslavia; 43 52x 19 50e
53 **Uzunköpri,** tn., Turkey; 41 15x 26 47e

83 **Vaalwater,** tn., Transvaal, S. Africa; 24 7s 28 32e
54 **Vaasa,** spt., Finland; shipbuilding; p. 25,600; 63 6x 21 50e
115 **Vaccaria,** tn., Brazil; 28 40s 51 0w
46 **Vacz,** tn., Hungary; p. 19,000; 47 47x 19 9e
55 **Väddö,** L., Sweden; 59 55x 19 20e
59 **Vadomsk,** tn., U.S.S.R.; 58 30x 119 0e
54 **Vadsö,** tn., Norway; 70 5x 29 45e
55 **Vadstena,** tn., Sweden; 58 30x 15 0e
45 **Vaduz,** tn., cap. Liechtenstein; p. 1,715; 47 10x 9 32e
56 **Vaigach I.,** Russia; 70 0x 59 0e
45 **Valais,** can., Switz.; a. 2,020 sq. m.; p. 137,198; 46 10x 7 35e
56 **Valdai Hills,** Russia; 1,150 ft.; 57 30x 32 30e
48 **Valdepeñas,** tn., Spain; hot mineral springs; wines; p. 25,000; 38 45x 3 25w
49 **Valderrobres,** tn., Spain; 40 52x 0 10e
83 **Valdesia,** vil., Trans., S. Africa; 23 10s 30 15e
113 **Valdez Fen.,** Argentina; 42 30s 63 30w
113 **Valdivia,** tn., Chile; commercial and industrial centre; brewing; p. 34,296; 39 50s 73 25w
103 **Valdosta,** tn., Ga., U.S.A.; p. 13,482; 30-53x 83 18w
115 **Valenca,** tn., Brazil; 22 50s 44 1w
35 **Valence,** tn., France; on R. Rhône; cath.; silks, hosiery; p. 34,275; 44 56x 4 53e
49 **Valencia,** prov., Spain; a. 4,150 sq. m.; p. 1,015,736; 39 40s 0 30w
49 **Valencia,** tn., Valencia, Spain; cath., univ.; linen, leather, cigars, silks; p. 320,199; 39 28x 0 21w
112 **Valencia,** tn., Venezuela; foundries, tanning, cottons, tobacco, coffee, sugar, beans; p. 37,000; 10 15s 68 20w
48 **Valencia,** tn., Cáceres, Spain; 39 6x 7 15w
49 **Valencia, G. of,** Spain; 39 24x 0 32e
34 **Valenciennes,** tn., France; chemicals, glass, coal, iron; p. 42,359; 50 21x 3 32e
52 **Valeni,** tn., Rumania; p. 4,227; 45 10x 26 3e
32 **Valentia I.,** Kerry, I.F.S.; p. 1,625; 51 54x 10 30w
50 **Valenza,** tn., Italy; p. 11,210; 45 2x 8 39e
51 **Valetta,** tn., port, cap. Malta, Mediterranean Sea; p. 23,000; 35 52x 14 30e
10 **Valez L.,** Morocco; 35 12s 4 20w
51 **Valguarnera,** tn., Italy; 37 30x 14 22e
47 **Valjevo,** tn., Yugoslavia; 44 16x 19 55e
42 **Valk,** tn., Estonia; 57 45x 26 5e
109 **Valladolid,** tn., Mexico; 20 30s 88 20w
48 **Valladolid,** tn., Spain; univ., cath., pal.; milling, pottery, cloth; p. 91,089; 41 38x 4 41w
55 **Valle,** tn., Norway; 59 15x 7 30e
18 **Valle Crucis Abbey,** Denbigh, Wales; 53 1x 3 15w
114 **Valle Grande,** tn., Bolivia; 18 22s 63 28w
106 **Vallejo,** tn., Cal., U.S.A.; milling; p. 14,476; 38 11x 122 15w
113 **Vallenar,** tn., Chile; 28 40s 70 40w
109 **Valles,** tn., Mexico; 21 58x 99 20w
107 **Valley City,** tn., N.D., U.S.A.; p. 5,268; 46 53x 97 50w
51 **Vallo,** tn., Italy; 40 15x 15 18e
50 **Vallombrosa,** tn., Italy; 43 47x 11 35e
49 **Valls,** tn., Spain; 41 18x 1 11e
47 **Valona,** spt., Albania; p. 9,100; 40 30x 19 29e
113 **Valparaiso,** tn., spt., Chile; chief port, commercial centre; univ., naval academy, pal.; locomotives, rolling stock, sugar refining, fish canning, clothing, cigars; p. 193,205; 33 0s 71 30w
48 **Valverde,** tn., Spain; 37 35x 6 47w
62 **Van,** tn., Turkey; farm produce, vineyards; p. 22,000; 38 28x 43 15e
62 **Van, L.,** Turkey; a. 1,426 sq. m.; 38 30x 42 45e
103 **Van Buren,** tn., Ark., U.S.A.; p. 5,182; 35 30x 94 25w
118 **Van Diemen, C.,** N. Terr., Australia; 11 0s 130 25e
118 **Van Diemen Gulf,** N. Terr., Australia; 100 m. long; 12 0s 132 0e
75 **Van Diemen Strait,** Japan; 30 45x 131 0e
87 **Van Reenens Pass,** O.F.S., S. Africa; 28 20s 29 26e
83 **Van Wyks Vlei,** tn., C. of Good Hope, S. Africa; 30 25s 21 50e
98 **Vancouver,** tn., spt., B.C., Can.; terminus of transcontinental rlys.; lumbering, shipbuilding, fishing, oil and sugar refining; p. 246,593; 49 7x 122 47w
106 **Vancouver,** tn., Wash., U.S.A.; dairying, milling, fruit, lumbering, canning; p. 15,766; 45 39x 122 30w
98 **Vancouver I.,** B.C., Can.; a. 13,500 sq. m., mountainous, with forests; coal, fisheries. cap. Victoria; 49 30x 126 0w
55 **Vänern L.,** Sweden; largest lake in Sweden; 58 50x 13 20e
54 **Vännas,** tn., Sweden; 64 0x 19 45e
34 **Vannes,** spt., France; cath.; shipbuilding, oysters, ropes, leather p. 22,413; 47 39x 2 47w

MAP

124 **Vansittart Bay,** W. Australia; 14 0s 126 15e
126 **Vanua Levu. I.,** Fiji Is., Pac. Oc.; a. 2,130 sq. m.; 16 30s 179 10e
54 **Varanger Fiord,** Norway; 70 0x 31 0e
46 **Varazdin,** tn., Yugoslavia; woollens, coal; p. 13,645; 46 20x 16 21e
55 **Varberg,** tn., Sweden; p. 8,561; 57 10x 12 30e
35 **Var,** dept., France; a. 2,333 sq. m.; wines, olives, paper, silk; p. 377,104; 43 20x 6 20e
39 **Varde,** tn., Denmark; p. 6,514; 55 38x 8 30e
54 **Vardö, I.,** Norway; 70 20x 31 10e
34 **Varennes,** tn., France; 49 15x 5 01e
50 **Varese,** tn. Italy; silk, paper, leather, wines; p. 24,000; 45 50x 8 50e
54 **Varjag Njargga,** dist., Norway; 70 30x 29 30e
55 **Värmland,** co., Sweden; a. 7,427 sq. m.; p. 269,945; 59 50x 13 0e
52 **Varna,** spt., Bulgaria; on Black Sea; grain, butter, leather, wines; p. 60,563; 43 12x 27 57e
66 **Vasht, tn.,** Persia; 28 15x 61 12e
52 **Vaslui,** tn., Rumania; p. 15,388; 46 37x 27 41e
115 **Vassouras,** tn., Brazil; 22 10s 43 40w
54 **Västerbotten,** co., Sweden; a. 22,755 sq. m.; p. 204,035; 65 0x 18 0e
55 **Västervik,** tn., Sweden; p. 12,611; 57 45x 16 35e
50 **Vasto,** tn., Italy; olives, silks, wines; p. 14,000; 42 8x 14 42e
24 **Vaternish, dist., I.** of Skye, Scotland; 57 33x 6 35w
50 **Vatican City.** See Rome.
8 **Vatna Jökull,** Iceland; elevated snowfield; 59 30x 17 0w
55 **Vättern, L.,** Sweden; 58 20x 14 20e
35 **Vaucluse,** dept., France; wheat, fruit, potatoes, linen, silks, pottery; 44 5x 5 20e
38 **Veendam,** tn., Netherlands; p. 13,348; 53 8x 6 52e
111 **Vega, tn.,** Haiti; 19 18x 70 30w
98 **Vegreville,** tn., Alta., Can.; p. 1,659; 53 30x 112 2w
39 **Veile,** tn., Denmark; p. 23,094; 55 43x 9 33e
46 **Vel Beckerek,** tn., Y.-slav.; p. 32,800; 45 20x 20 30e
47 **Veles,** tn., Yugoslavia; maize, silk; p. 22,000; 41 17x 20 37e
49 **Vélez Rúbio,** tn., Spain; 37 42x 2 05w
48 **Velha,** tn., Portugal; 40 40x 8 30w
56 **Veliki, Ustyug,** tn., Russia; 60 47x 46 3e
56 **Velikiye Luki,** tn., Russia; 56 23x 30 31e
56 **Velish,** tn., Russia; 55 33x 31 2e
50 **Velletri,** tn., Italy; cath.; wine; p. 26,000 41 41x 12 46e
68 **Vellore,** tn., Mad., India; p. 50,210; 12 55x 79 8e
56 **Velsk,** tn., Russia; 60 55x 42 5e
109 **Venado,** tn., Mexico; 22 58x 101 3w
48 **Vendas Novas,** tn., Portugal; 38 48x 8 26w
35 **Vendée,** dept., France; grain, wine, coal, salt; 46 40x 1 13w
42 **Venden,** tn., Latvia; p. 7,692; 57 19x 25 21e
34 **Vendôme,** tn., France; leather goods, cottons; 47 47x 1 04e
55 **Venersborg,** tn., Sweden; p. 8,942; 58 25x 12 25e
44 **Venetian Alps,** Italy; 46 0x 12 0e
50 **Veneto,** dept., Italy; a. 9,818 sq. m.; p. 4,121,739; 45 33x 12 0e
50 **Venezia Giulia,** dept., Italy; a. 3,355 sq. m.; p. 978,095; 45 30x 14 0e
50 **Venezia Tridentina,** dept., Italy; a. 5,371 sq. m.; p. 659,493; 46 20x 11 0e
112 **Venezuela,** rep., S. America; a. 352,051 sq. m.; principal physical features—Sierra de Merida (15,400 ft.), Sierra Pacaraima (Roraima 8,530 ft.); R. Orinoco and tribs.; Lake Maracaibo; forests, llanos; pearl fishing; products, coffee, cocoa, sugar-cane, maize, cotton, indigo, rubber, balata, tobacco; minerals—petroleum, gold, copper, coal, asphalt; cap. Caracas; chief port Maracaibo; p. 3,026,878; 1 00 to 12 0x 60 0 to 73 0w
68 **Vengurla,** tn., Bom., India; p. 10,170; 15 57x 73 42e
50 **Venice,** tn., spt., Italy; situated on 117 islands in lagoons at head of Adriatic, formed by about 150 canals; viaduct 21 m. long, connects mainland; cath., Palace of the Doges, Rialto Bridge and Bridge of Sighs; glassware, mosaics, gold, silver work, embroidery, lace, damasks, shipbuilding; p. 256,144; 45 23x 12 20e
50 **Venice, G. of,** Italy; 45 20x 13 0e
38 **Venlo,** tn., Netherlands; brewing, needles, leather, tobacco; p. 22,179; 51 21x 6 10e
83 **Ventersburg,** tn., O.F.S., S. Africa; 28 5s 27 15e
83 **Ventersdorp,** tn., Transvaal, S. Africa; 26 30s 26 48e
50 **Ventimiglia,** spt., Italy; cath.; p. 16,000; 43 48x 7 38e
17 **Ventnor,** urb. dist., I. of Wight, Eng.; resort; p. 5,112; 50 35x 1 12w
42 **Ventspils,** tn., spt., Latvia; p. 17,253; 57 25x 21 35e
109 **Vera Cruz,** tn., spt., Mexico; textiles; p. 70,000; 19 11x 96 13w
109 **Vera Cruz,** prov., Mexico; a. 27,880 sq. m.; cotton, sugar, maize, tobacco, coffee and rum; cap. Jalapa; p. 1,376,865; 20 20x 97 0w
50 **Vercelli,** tn., Italy; cath.; cottons, woollens, machinery; p. 32,350; 45 21x 8 22e
88 **Verde, C.,** Fr. W. Africa; 14 40x 17 30w
40 **Verden,** tn., Germany; soap; p. 10,073; 52 55x 9 17e
34 **Verdun,** tn., France; centre of offensive during Gt. War; cath.; machinery, hardware; p. 16,540; 49 12x 5 26e
83 **Vereeniging,** tn., Transvaal, S. Africa; coal; p. 3,404 (Eur.); 26 43s 28 0e
49 **Vergara,** tn., Spain; 43 7x 2 26w
56 **Verkhne Uralsk,** tn., Russia; 53 57x 59 27e
59 **Verkhni Kolimsk,** tn., U.S.S.R.; 65 30x 150 0e
59 **Verkhoyansk,** tn., U.S.S.R.; 67 0x 134 0e
98 **Vermilion,** tn., Alta., Can.; p. 1,270; 53 21x 110 40w
102 **Vermont,** st., U.S.A.; a. 9,564 sq. m.; Green Mts. (4,000 ft.); Lake Champlain on W. border; R. Connecticut on E. border; chief industries—farming and dairying, stock-raising, lumbering; hay, grain, potatoes, fruit, maple, sugar and tobacco, marble and limestone; cap. Montpelier; p. 359,611; 42 45 to 45 0x 71 30 to 73 30w
55 **Vernamo,** tn., Sweden; 57 10x 14 10e
98 **Vernon,** tn., B.C., Canada; p. 3,937; 50 18x 119 21w

MAP

50 **Verona,** tn., Italy; on R. Adige; mediæval remains; paper, silk, iron goods, furniture; p. 153,631; 45 27x 11 1e
53 **Verria,** tn., Greece; 40 33x 22 17e
42 **Verro,** tn., Estonia; 57 51x 27 1e
34 **Versailles,** tn., France; pal., mus.; p. 66,859; 48 48x 2 04e
83 **Verulam,** vil., Natal, S. Africa; 29 38s 31 5e
38 **Verviers,** tn., Belgium; woollens, glass; p. 41,384; 50 36x 5 52e
55 **Vest-Agder,** co., Norway; a. 2,794 sq. m.; p. 81,116; 58 30x 7 00e
54 **Vester Norriand,** co., Sweden; a. 9,858 sq. m.; p. 278,503; 63 0x 18 0e
54 **Vesteralen Is.,** Norway; 69 15x 12 40e
55 **Västerås,** tn., Sweden; p. 30,578; 59 40x 16 30e
55 **Vestfold,** co., Norway; a. 903 sq. m.; p. 134,081; 59 20x 10 20e
55 **Vestmanland,** co., Sweden; a. 2,609 sq. m.; p. 161,708; 59 50x 16 20e
51 **Vesuvius,** active volcano, Italy; most recent eruption 1906; observatory; 40 45x 14 25e
56 **Vetluga,** tn., Russia; 57 51x 45 33e
96 **Veuve,** tn., Ontario, Can.; 46 25s 80 20w
45 **Vevey,** tn., Switzerland; resort on L. Geneva; chocolate watches, machinery; p. 13,132; 46 27x 6 51e
55 **Vexjo,** tn., Sweden; p. 9,699; 56 55x 14 55e
38 **Vianden,** tn., Luxemburg; 49 57x 6 12e
112 **Vianna,** tn., Brazil; 3 00s 44 55w
48 **Vianna do Castello,** tn., Port.; p. 10,520; 41 41x 8 50w
50 **Viareggio,** spt., Italy; p. 28,000; 43 52x 10 12e
56 **Viazma,** tn., Russia; 55 20x 34 28e
39 **Viborg,** tn., Denmark; cath.; cloth; distilling, iron founding; p. 16,635; 56 25x 9 20e
50 **Vicenza,** tn., Italy; woollens, cottons, silks; pottery; p. 60,000; 45 34x 11 32e
35 **Vichy,** tn., France; mineral springs; p. 22,267; 46 8x 3 28e
103 **Vicksburg,** tn., Miss., U.S.A.; on R. Mississippi; machinery, furniture; p. 22,943; 32 16x 90 50w
120 **Victor Harbour,** tn., S. Australia; p. 3,450; 35 31s 138 32e
114 **Victoria,** tn., Argentina; 32 30s 60 10w
113 **Victoria,** tn., Brazil; p. 29,000; 20 25s 40 30w
88 **Victoria,** spt., Fr. W. Africa; 10 48x 14 40w
121 **Victoria,** state, Australia; a. 87,884 sq. m.; mountainous territory, chief mts.—Great Dividing Range, Australian Alps (Mt. Bogong 6,508 ft.); R. Murray rises in st. and forms N. boundary; R. Goulburn, Loddon, Ovens (tribs.); farming and dairying, stock-raising; wheat, oats, barley, potatoes, grapes; minerals—gold, coal, tin; mnfs.—machinery, hardware, textiles, wine; cap. Melbourne; p. 1,820,360; 37 0s 145 0e
98 **Victoria,** cap. B.C., Can.; sawmills, cement, chemicals, fish canning; p. 39,082; 48 20x 123 2w
109 **Victoria,** tn., Mexico; p. 14,860; 23 43x 99 13w
89 **Victoria,** tn., S. Rhodesia; 20 6s 31 2e
82 **Victoria Falls,** R. Rhodesia; on R. Zambezi; discovered by Livingstone in 1855; nearly twice as high as Niagara, but broken by wooded islands; 18 0s 25 47e
98 **Victoria I.,** Franklin, Can.; 70 0x 105 0w
116 **Victoria I.,** Pacific Ocean (Br.); 6 48s 160 41w
81 **Victoria, L.,** Cent. Africa; a. 26,000 sq. m.; depth 240 ft.; alt. 3,720 ft.; 1 00s 33 0e
118 **Victoria, R.,** N. Terr., Australia; 15 25s 130 0e
99 **Victoria Str.,** Franklin, Can.; 69 0x 101 0w
112 **Victoria da Conquista,** tn., Brazil; 15 10s 41 0w
118 **Victoria Downs,** sta., N. Terr., Australia; 16 30s 131 20e
83 **Victoria West,** tn., C. of Good Hope, S. Africa; 31 25s 23 33e
114 **Vicuna,** tn., Chile; 29 30s 70 45w
52 **Vidin,** tn., Bulgaria; on R. Danube; p. 18,307; 43 49x 22 54e
113 **Viedma,** tn., Argentina; p. 5,000; 41 0s 63 0w
113 **Viedma, L.,** Argentina; 49 50s 71 0w
111 **Viegues, I.,** W. Indies; a. 126 sq. m.; p. 10,500; 18 0x 65 20w
49 **Viella,** tn., Spain; 42 41x 0 46e
46 **Vienna,** cy. and cap., Aust.; on R. Danube; cath., imperial palace, univ., Ringstrasse, town hall, opera house, art gallery; silks, iron and steel, furniture, ornamental leather, breweries; p. 1,865,780; 48 12x 16 23e
35 **Vienne,** dept., France; a. 2,711 sq. m.; grain, wine, cutlery, arms; p. 303,072; 46 30x 0 30e
35 **Vienne,** tn., France; on R. Rhone; cath.; textiles, gloves, hardware; p. 25,468; 45 31x 4 52e
83 **Vierfontein,** tn., O.F.S., S. Africa; 27 15s 26 39e
40 **Viersen,** tn., Germany; velvets, silks, damask; p. 32,169; 51 35x 6 23e
45 **Viesch,** tn., Switzerland; 46 24x 8 07e
52 **Vietovo,** tn., Bulgaria; 43 40x 26 19e
71 **Vigan,** tn., Philippine Is.; p. 20,000; 17 36x 120 30e
50 **Vigevano,** tn., Italy; cath.; silks; p. 30,000; 45 19x 8 57e
48 **Vigo,** spt., Spain; flour, sugar; petroleum, leather; fishing; p. 33,001; 42 10x 8 40w
55 **Viipuri,** tn., Finland; p. 56,300; 60 42x 28 55e
68 **Vijayawagar,** tn., Madras, India; 15 15x 76 57e
48 **Vila Nova de Gaia,** tn., Port.; 41 5x 8 38w
42 **Vilelka,** tn., Poland; 54 42x 25 29e
54 **Vilhelmina,** tn., Sweden; 64 35x 16 45e
47 **Vilika Plana,** tn., Yugoslavia; 44 20x 21 0e
112 **Villa Bella,** Brazil; 10 30s 64 0w
112 **Villa Bella.** See Matto Grosso.
112 **Villa Bella.** See Parentins.
76 **Vila Cisneros,** tn., Rio de Oro; 24 0x 26 0w
113 **Villa del Pilar,** tn., Paraguay; p. 6,000; 27 0s 58 10w
113 **Villa Dolores,** tn., Argentina; p. 6,000; 31 45s 65 20w
114 **Villa Maria,** tn., Argentina; p. 17,000; 32 12s 63 10w
113 **Villa Mercedes,** tn., Argentina 33 30s 65 30w
48 **Villa Nova de Portimao,** tn., Portugal; 37 8s 8 31w
114 **Villa Nueva,** tn., Argentina; 32 30s 63 17w
48 **Villa Real,** tn., Portugal; 41 18x 7 49w
48 **Villa Real de S. Antonio,** tn., Spain; 37 10x 7 28w
113 **Villa Rica,** tn., Paraguay; farming; tobacco, oranges p. 26,000; 25 45s 56 30w
48 **Villa Velha,** tn., Portugal; 39 38x 7 45w

MAP

48 Villa Viçoso, tn., Portugal; 38 46N 7 27W
50 Villafranca, tn., Italy; 45 22N 10 50E
49 Villafranca, tn., Aragon, Spain; 41 23N 1 40E
48 Villafranca, tn., Leon, Spain; 42 36N 6 49W
48 Villagarcia, tn., Spain; 42 35N 8 45W
109 Villagean, tn., Mexico; 24 28N 99 39W
49 Villajoyosa, tn., Spain; 38 30N 0 15W
109 Villaldama, tn., Mexico; 26 25N 100 30W
48 Villalon, tn., Spain; 42 5N 5 03W
108 Villanueva, tn., Mexico; 22 15N 102 59W
49 Villanueva, tn., Spain; 39 28N 1 59W
51 Villarosa, tn., Italy; 37 39N 14 21E
48 Villarrubia, tn., Spain; 39 14N 3 35W
112 Villavicencio, tn., Colombia; 4 20N 74 20W
48 Villaviciosa, spt., Spain; fishing; p. 21,000; 43 30N 5 26W
96 Ville Marie, tn., Que., Can.; p. 1,049; 47 25N 79 30W
38 Villefranche, tn., France; cottons, wines; p. 18,188; 45 59N 4 43E
49 Villena, tn., Spain; silk, salt, brandy; p. 16,000; 38 36N 0 48W
45 Villeneuve, tn., Switzerland; 46 24N 6 55E
36 Villers Cotterets, tn., France; 49 15N 3 05E
84 Villiersdorp, tn., C. of Good Hope, S. Africa; 34 0S 19 17E
40 Villingen, tn., Germany; p. 13,982; 48 4N 8 24E
42 Vilna. See Wilno.
38 Vilvoorden, tn., Belgium; p. 13,250; 50 56N 4 24E
59 Vilyuisk, tn., U.S.S.R.; 63 40N 120 50E
35 Vimmerby, tn., Sweden; 57 40N 15 50E
36 Vimy, vil., France; 50 22N 2 48E
102 Vincennes, tn., Ind., U.S.A.; milling, glass, steel-works; p. 17,564; 38 52N 87 35W
105 Vineyard Haven, tn., Mass., U.S.A.; 41 27N 70 38W
70 Vinh, tn., Fr. Indo-China; 18 55N 105 35E
47 Vinkovci, tn., Yugoslavia; 45 20N 19 0E
57 Vinnitsa, tn., Russia; p. 72,800; 49 13N 28 26E
111 Virgin Is., W. Indies; a. 133 sq. m.; mountainous group partly Brit. and partly U.S.A.; bay rum, sugar, cotton, tobacco; p. 22,000; 18 30N 64 30W
102 Virginia, st., U.S.A.; a. 42,627 sq. m.; maize, wheat, oats, potatoes, apples; tobacco, cotton; cattle, sheep, pigs, wool; coal; mnfs.—engineering, paper, wood pulp, glass, cottons; cap. Richmond; p. 2,421,851; 36 30 to 39 30N 75 0 to 83 40W
120 Virginia, tn., Minn., U.S.A.; p. 11,963; 47 30N 92 40W
113 Virgins C., Chile; 52 20S 68 30W
46 Virovitica, tn., Yugoslavia; 45 50N 17 10E
38 Virton, tn., Belgium; 49 33N 5 31E
42 Virts, L., Estonia; 58 20N 26 10E
35 Visby, spt., cap. of Gotland, Swed.; cath.; p. 10,467; 57 38N 18 20E
47 Visegrad, tn., Yugoslavia; 43 47N 19 18E
56 Vishni Volochok, tn., Russia; p. 18,450; 57 34N 34 30E
45 Visp, tn., Switzerland; 46 18N 7 53E
42 Vistula, R., Poland; 650 m. long; 52 23N 20 20E
36 Vitebsk, tn., Russia; cath.; farm implements, footwear, glass; p. 127,300; 55 11N 30 12E
50 Viterbo, tn., Italy; p. 25,000; 42 24N 12 7E
126 Viti Levu L., Pacific Oc.; largest of Fiji group; 17 50S 177 30E
59 Vitim, tn., U.S.S.R.; 59 30N 112 30E
49 Vitoria, tn., Spain; cath.; hardware, wine; mules, horses; p. 40,641; 42 50N 2 40W
51 Vittoria, tn., Italy; mineral springs; p. 32,000; 36 59N 14 30E
50 Vittorio, tn., Italy; p. 24,000; 45 58N 12 20E
53 Viza, vil., Turkey; 41 36N 27 47E
67 Vizagapatam, tn., Madras, India; p. 44,711; 17 40N 83 23E
108 Vizcaino, B. of, Mexico; 28 0N 114 50W
48 Vizeu, tn., Portugal; 40 40N 7 58W
68 Vizianagram, tn., Madras, India; p. 39,299; 18 3N 83 30E
51 Vizzini, tn., Italy; 37 11N 14 42E
38 Vlaardingen, tn., Netherlands; fisheries; p. 27,851; 51 54N 4 20E
56 Vladimir, tn., Russia; cath.; farm produce, fruit, tobacco, cottons; p. 35,000; 56 13N 40 17E
57 Vladimirovka, tn., Russia; 48 16N 46 2E
43 Vladimir Volinski, tn., Poland; 50 53N 24 20E
73 Vladivostok, spt., Siberia; dockyards; terminus of Trans-Siberian Rly.; p. 190,000; 43 10N 132 0E
110 Vleazu, mt., C. Rica; 10 0N 83 55W
38 Vlieland I., Netherlands; 53 15N 5 00E
43 Vlodava, tn., Poland; 51 32N 23 30E
47 Vlona. See Valona.
43 Vlotslavsk, tn., Poland; 52 38N 19 5E
53 Vodena, tn., Greece; rice, tobacco, cotton; leather; p. 25,000; 40 50N 22 5E
40 Vogels Berg, mt., Germany; 2,500 ft.; 50 30N 9 00E
50 Voghera, tn., Italy; silks; p. 21,000; 45 0N 9 00E
54 Voknavolozkaya, tn., Russia; 64 51N 30 28E
116 Volcano Is., Pacific Ocean; 24 50N 141 15E
54 Volden, tn., Norway; 62 10N 6 00E
57 Volga, R., 2,200 m. long; longest in Europe; connected by canals with Baltic, Black and White Seas, also with Dnieper, Dniester and Don rivers; ice-bound in winter; 49 30N 45 30E
43 Volhynia, co., Poland; 51 0N 26 30E
56 Volkinski, tn., Russia; 57 8N 53 47E
43 Volkovysk, tn., Poland; 53 8N 24 28E
53 Volkurust, tn., Trans., S. Africa; p. 2,495 (Eur.); 27 20S 29 57E
42 Volmar, tn., Latvia; p. 8,368; 57 32N 25 30E
53 Volo, spt., Greece; p. 30,000; 39 23N 22 59E
56 Vologda, tn., Russia; farm implements; leather; brewing; p. 72,400; 59 20N 39 56E
57 Voisk, tn., Russia; on R. Volga; ironworks, tanneries, milling; p. 36,000; 52 0N 47 20E
53 Vonitza, spt., Greece; 38 53N 20 55E
46 Vorarlberg, prov., Austria; a. 1,005 sq. m.; sheep, goats; textiles; p. 140,000; 47 15N 9 50E
57 Voroshilovgrad. See Lugansk.
39 Vordingborg, tn., Denmark; p. 5,607; 55 2N 11 55E
39 Vordingborg Bay, Denmark; 55 3N 11 25E
57 Voronej, tn., Russia; on R. Voronej; farming, milling, brewing; p. 212,400; 51 44N 39 5E
43 Voronovo, tn., Poland; 54 10N 25 20E
42 Voronya, tn., Estonia; 58 32N 27 16E
34 Vosges, dept., France; a. 2,303 sq. m.; mineral springs, coal, stone, textiles; p. 377,980; 48 14N 6 30E
34 Vosges, mts., France; slopes forested; vines, pasturage; 48 0N 7 00E
55 Voss, tn., Norway; 60 45N 6 20E
117 Vostok I., Pacific Ocean; 10 5S 142 22W
56 Votyak, aut. area, Russia; a. 12,142 sq. m.; p. 756,000; 57 35N 52 35E
57 Voznesensk, tn., Russia; cath.; distilling, brewing; p. 21,000; 47 37N 31 15E
47 Vranje, tn., Yugoslavia; p. 12,250; 42 31N 21 53E
52 Vratza, tn., Bulgaria; tanning; p. 15,672; 43 12N 23 32E
83 Vrede, tn., O.F.S., S. Africa; stockraising; p. 2,000; 27 30S 29 15E
87 Vredefort, tn., O.F.S., S. Africa; 26 58S 28 0E
83 Vredenburg, tn., C. of Good Hope, S. Africa; 32 55S 18 0E
84 Vredendal, tn., C. of Good Hope, S. Africa; 31 40S 18 30E
47 Vrsac, tn., Yugoslavia; milling, wine, brandy; p. 20,400; 45 10N 21 20E
83 Vryburg, tn., C. of Good Hope, S. Africa; stockraising; p. 2,500; 26 58S 24 45E
83 Vryheid, tn., Nat., S. Africa; coal, iron, copper, gold, silver, lead mines; p. 3,386 (Eur.); 27 45S 30 45E
53 Vurla, vil., Turkey; 38 20N 26 47E
89 Vurmele, vil., S. Rhodesia; 21 31S 30 25E
56 Vyatka, tn., Russia; farm implements, leather, matches; p. 62,097; 58 40N 49 33E
18 Vyrnwy, L., Montgomery, Wales; Liverpool water supply reservoir; 52 47N 3 30W
18 Vyrnwy, R., Montgomery, Wales; 52 44N 3 13W
56 Vytegra, tn., Russia; 61 3N 36 27E

88 Wa, tn., G. Coast; 10 5N 2 30W
102 Wabash, tn., Ind., U.S.A.; p. 8,840; 40 51N 85 55W
102 Wabash R., U.S.A.; length 550 m.; 38 30N 88 0W
107 Waco, cy., Tex., U.S.A.; univ.; cotton, woollens, saddlery, flour; p. 52,848; 31 30N 97 12W
80 Wadai, dist., Fr. Eq. Afr.; a. 170,000 sq. m.; generally desert region, and oases; ivory and ostrich feathers; p. 1,000,000; 12 30N 20 0E
76 Wadan, vil., Fr. W. Africa; 21 0N 11 0W
98 Waddington, Mt., B.C., Can; 13,260 ft.; 51 20N 126 30W
19 Wadebridge, par., Corn., Eng.; china clay; p. 2,460; 50 31N 4 49W
81 Wadelai, tn., Uganda Prot.; 2 40N 31 27E
68 Wadi, tn., Hyd., India; 17 0N 77 0E
79 Wadi Derr, dist. on right bank of Nile, Egypt; 22 33N 32 14E
79 Wadi el Arab, dist. on Nile, Egypt; 22 52N 32 40E
79 Wadi esh Sheikh, dist., on Nile, Egypt; 22 8N 31 25E
79 Wadi Halfa, tn. on right bank of Nile, Anglo-Egyptian Sudan; 21 55N 31 20E
79 Wadi Ibrim, dist. on R. Nile, Egypt; 22 45N 31 35E
76 Wagadugu, vil., Fr. W. Africa; 12 20N 1 30W
121 Wagga Wagga, tn., N.S.W., Australia; pastoral region, wine, tobacco, gold; p. 8,920; 35 8S 147 20E
99 Wager Bay, Keewatin, Can.; 65 30N 89 0W
125 Wagin, tn., W. Australia; 33 18S 117 26E
127 Waiau, tn., S.I., New Zealand; 42 40S 173 1E
127 Waiau, R., S.I., New Zealand; 46 0S 167 40E
127 Waian-ua (River), S.I., New Zealand; 42 40S 172 45E
74 Waichow, tn., China; 23 10N 114 28E
71 Waigeu I., Dutch E. Indies; 0 15S 131 0E
126 Waihi, bor., N.I., New Zealand; p. 3,150; 37 23S 175 52E
73 Waihwai, tn., China; 35 20N 114 15E
126 Waikare Moana (lake), N.I., New Zealand; 38 46S 177 5E
126 Waikato, R., N.I., New Zealand; length 175 m.; flowing thro' L. Taupe; 37 55S 175 30E
127 Waikawa Harb., S.I., New Zealand; 46 37S 169 9E
120 Waikerie, tn., S. Australia; 34 11S 139 58E
127 Waikouaiti, bor., S.I., New Zealand; p. 615; 45 38S 170 40E
126 Waimarino, tn., N.I., New Zealand; 39 11S 175 25E
127 Waimate, bor., S.I., New Zealand; p. 2,255; 44 44S 171 5E
16 Wainfleet, par., Lind., Eng.; p. 1,375; 53 7N 0 15E
126 Waipawa, bor., N.I., New Zealand; p. 1,190; 39 55S 176 46E
126 Waipu, tn., N.I., New Zealand; p. 555; 35 57S 174 28E
126 Waipukurau, bor., N.I., New Zealand; p. 1,925; 40 0S 176 33E
127 Wairarapa L., N.I., New Zealand; 41 10S 175 13E
127 Wairau, R., S.I., New Zealand; 41 37S 173 20E
126 Wairoa, bor., N.I., New Zealand; p. 2,490; 39 3S 177 26E
127 Waitaki R., S.I., New Zealand; 44 46S 170 31E
126 Waitangi, vil., N.I., New Zealand; 35 13S 174 0E
126 Waitara, bor., N.I., New Zealand; p. 1,810; 39 1S 174 13E
126 Waiuku, tn. dist., N.I., New Zealand; p. 865; 37 15S 174 45E
75 Wakamatsu, tn., Japan; p. 78,344; 37 30N 139 59E
75 Wakasa Bay, Japan; 35 45N 135 30E
127 Wakatipu, L., New Zealand; 45 10S 168 30E
75 Wakayama, spt., Japan; p. 117,437; 34 4N 135 2E
21 Wakefield, co. bor., W. Riding, Eng.; cath.; coal, iron, worsted, soap, machinery; p. 59,122; 53 41N 1 30W
83 Wakkerstroom, tn., Trans., S. Afr.; 27 23S 30 12E
52 Walachia, dist., Rumania; cereals, fruits; 44 40N 25 0E
38 Walcheren I., Netherlands; protected from the sea by dunes and dykes; cattle-raising, farming; cap. Middelburg; 51 30N 3 35E
38 Walcourt, tn., Belgium; 50 15N 4 27E
41 Waldeck, former prov., now part of Hesse-Nassau, Germany; 51 20N 8 50E
41 Waldenberg, tn., Germany; coal; mnfs.—porcelain, stone ware, firebricks, textiles; p. 44,111; 50 46N 16 20E
45 Waldenburg, tn., Switzerland; 47 23N 7 43E
18 Wales, Great Britain; a. 7,466 sq. m.; principality and div. of Gt. Britain, divided into 12 counties; large peninsula, projecting from W. of England into the Irish Sea and St. George's Chan.; practically whole surface mountainous, Snowdon 3,560 ft.; chief rivers—Severn, Wye, Usk, Dee, Towy, etc.; noted for picturesque and rugged scenery; industries, farming, oats, barley, root crops; cattle, sheep; minerals—coal, slate; smelting tin, copper, iron; fluenel; cap. Cardiff; p. 2,158,374; 51 25 to 53 25N 2 45 to 5 20W
121 Walgett, tn., N.S.W., Australia; 30 0S 148 7E
121 Walhalla, tn., Vic., Australia; 37 58S 146 30E
96 Walkerton, tn., Ont., Can.; p. 2,431; 44 10N 81 13W
123 Walla, tn., Queens., Australia; 25 7S 151 52E
106 Walla Walla, cy., Wash., U.S.A.; grain, fruit; farming implements; flour, leather; p. 15,976; 46 2N 118 18W
96 Wallaceburg, tn., Ont., Can.; p. 4,326; 42 35N 82 27W
121 Wallangarra, tn., Queens., Australia; 28 55S 151 46E
120 Wallaroo, tn., S. Australia; p. 3,097; 33 56S 137 34E
18 Wallasey, co. bor., Ches., Eng.; seaside resort; p. 97,465; 53 25N 3 05W
121 Wallendbeen, tn., N.S.W., Australia; 34 31S 148 11E
45 Wallenstadt, tn., Switzerland; 47 7N 9 22E
121 Wallerawang, tn., N.S.W., Australia; 33 28S 150 1E
17 Wallingford, mun. bor., Berks., Eng.; cas. ruins, old tn. hall; malting; p. 2,840; 51 36N 1 08W
20 Wallsend, mun. bor., Northumb., Eng.; shipbuilding, engineering, smelting, aluminium; p. 44,597; 54 59N 1 32W
17 Walmer, par., Kent, Eng.; cas., residence of Warden of Cinque Ports; p. 5,324; 51 12N 1 23E
21 Walney I., Lancs., Eng.; 54 5N 3 15W
18 Walsall, co. bor., Staffs., Eng.; coal, iron, leather, brushes; p. 103,059; 52 34N 1 58W
16 Walsingham, par., Norf., Eng.; p. 867; 52 55N 0 53E
16 Walsoken, urb. dist., Norf., Eng.; p. 4,058; 52 42N 0 10E
17 Waltham Abbey (or Waltham Holy Cross), urb. dist., Essex, Eng.; p. 11,016; 51 41N 0 01W
17 Waltham Holy Cross. See Waltham Abbey.
17 Walthamstow, mun. bor., Essex, Eng.; p. 132,965; 51 38N 0 00W
17 Walton, part of Frinton and Walton, urb. dist., Essex, Eng.; watering pl.; iron, bricks, tiles; p. 3,066; 51 24N 1 18E
83 Walvis Bay, spt. and Brit. terr., S.W. Afr.; a. 430 sq. m.; adm. by S.W. Afr.; fishing, 22 40S 14 25E
27 Wamphray, par., Dumf., Scot.; p. 390; 55 16N 3 22W
72 Wan, treaty port, China; on Yangtze-kiang; 31 2N 108 40E
120 Wanaaring, tn., N.S.W., Australia; 29 38S 144 7E
127 Wanaka, Lake, S.I., New Zealand; 44 30S 169 8E
68 Wandiwash, tn., Mad., India; 12 30N 79 36E
40 Wandsbek, tn., sub. of Hamburg, Germany; beer, brandy, tobacco; p. 39,606; 53 36N 10 5E
126 Wanganui (city), N.I., New Zealand; wool, grain, meat and dairy produce; p. 25,000; 39 54S 175 3E
17 Wandsworth, met. bor., London, England; dyes, paper, brewing, calico printing; p. 353,101; see London
126 Wanganui R., N.I., New Zealand; 39 40S 175 20E
121 Wangaratta, tn., Vic., Australia; 36 21S 146 18E
45 Wangen, tn., Switzerland; 47 14N 7 38E
89 Wankie, tn., S. Rhodesia; coal; 18 5S 27 0E
20 Wansbeck, R., Northumb., Eng.; 55 10N 1 32W
17 Wantage, urb. dist., Berks, Eng.; birthpl. of Alfred the Great; p. 3,424; 51 36N 1 26W
121 Waratah, tn., Tas., Australia; 41 24S 145 29E
40 Warburg, tn., Germany; 51 30N 9 10E
121 Warburton, tn., Vic., Australia; 37 43S 145 41E
119 Warburton, R., S. Australia; 27 46S 137 30E
87 Warden, tn., O.F.S., S. Afr.; 27 50S 29 0E
67 Wardha, tn., C.P., India; 20 38N 78 44E
17 Ware, urb. dist., Herts, Eng.; malting, bricks; p. 6,171; 51 49N 0 02W
19 Wareham, mun. bor., Dor., Eng.; bricks, brewing; p. 2,057; 50 41N 2 06W
38 Waremme, tn., Belgium; 50 43N 5 15E
40 Warendorf, tn., Germany; p. 10,363; 51 57N 12 45E
10 Wargla, tn. in oasis, Algeria; dates; 31 50N 5 10E
55 Warholm, tn., Sweden; 59 28N 18 22E
121 Warialda, tn., N.S.W., Australia; 29 30S 150 32E
126 Warkworth, tn., dist., N.I., New Zealand; p. 460 36 23S 174 42E
20 Warkworth, par., Northumb., Eng.; p. 1,042; 52 4N 1 18W
83 Warmbad, tn., S.W. Afr.; 28 28S 18 40E
19 Warminster, urb. dist., Wilts, Eng.; malting, engineering; p. 5,176; 51 12N 2 10W
40 Warnemünde, spt., Germany; seaside resort; 54 9N 12 4E
38 Warneton, tn., Belgium; 50 46N 2 56E
120 Warracknabeal, tn., Vic., Australia; 36 15S 142 26E
121 Warragill, tn., Vic., Australia; 38 11S 145 52E
121 Warrego, R., N.S.W., Australia; 25 30S 146 50E
121 Warren, tn., N.S.W., Australia; 31 44S 147 14E
104 Warren, tn., Pa., U.S.A.; natural gas, petroleum; oil refineries, engines, pianos; p. 14,863; 41 40N 79 30W
121 Warrenpoint, urb. dist., Down, N. Ire.; p. 2,234; 54 6N 6 15W
83 Warrenton, tn., C. of Good Hope, S. Afr.; 28 8S 24 51E
120 Warri Warri, vil., N.S.W., Australia; 20 0S 141 58E
18 Warrington, co. bor., Lancs, Eng.; wirework, cotton, soap, brewing; p. 79,322; 53 23N 2 38W
120 Warrnambool, tn., Vic., Australia; p. 8,100; 38 19S 142 30E
43 Warsaw (Warszawa), cy., cap. Poland; on Vistula R.; rly. centre, cath., univ.; iron and steel works; mnfs.—boots, hosiery, sugar, tobacco; p. 1,178,000; 52 15N 21 1E
43 Warszawa, co., Poland; a. 11,315 sq. m.; rye, oats, barley, potatoes; cap. Warsaw; p. 2,114,886; 51 30 to 53 21N 18 25 to 22 0E
43 Warszawa. See Warsaw.
41 Warthe, R., Germany; length 450 m.; 52 38N 15 10E
121 Warwick, tn., Queens., Australia; p. 7,000; 28 10S 151 59E
16 Warwick, mun. bor., co. tn. War., Eng.; on R. Avon; cas.; farming implements; p. 13,459; 52 17N 1 35W
16 Warwick, co., England; a. 902 sq. m.; slightly undulating; minerals, livestock, fruit; p. 1,634,782; 51 55 to 52 23N 1 10 to 1 59W
106 Wasatch Mts., Utah, U.S.A.; 39 0N 111 30W
45 Wasen, tn., Switzerland; 46 49N 8 36E

MAP

16 Wash, The, England; arm of N. Sea; length 22 m., breadth 15 m.; 53 0N 0 05E
104 Washington, cy., D.C., cap. of U.S.A.; on R. Potomac; four univs., Carnegie Inst., White House, official residence of the President of the U.S.A., obelisk to the memory of George Washington, in centre of cy. stands the Capitol, where Congress meets; p. 486,869; 39 33N 77 0W
103 Washington, tn., N.C., U.S.A.; p. 7,035; 35 50N 76 39W
106 Washington, st., U.S.A.; a. 69,127 sq. m.; chief mts. Cascade; chief river, Columbia, and tribs.; wheat, barley, oats; horses, cattle, sheep; dairying, lumbering; salmon, oyster fisheries; coal, gold, copper, lead, marble; meat-packing, flour milling, fish canning; cap. Olympia; p. 1,563,396; 45 30 to 49 0N 117 0 to 124 35W
104 Washington, tn., Pa., U.S.A.; coal, petroleum; mnfs.—iron, tinplate, glass, carriages, flour; p. 24,545; 40 15N 80 15W
117 Washington I., Pac. Oc., Br.; 4 40N 160 20W
20 Wast Water, Cumb, Eng.; wild scenery; 54 27N 3 18W
19 Watchet, urb. dist., Som., Eng.; ironfounding; p. 1,936; 51 11N 3 19W
82 Waterberg, tn., S.W. Afr.; 20 29S 17 25E
102 Waterbury, cy., Conn., U.S.A.; watches; brass ware, rolling mills, iron foundries, electrical supplies, photographic materials and chemicals; p. 99,902; 41 33N 73 8W
83 Waterford, tn., C. of Good Hope, S. Afr.; 33 2S 24 59E
33 Waterford, co., I.F.S.; a. 717 sq. m.; dairying; p. 78,538; 51 56 to 52 22N 6 58 to 8 10W
96 Waterford, tn., Ont., Can.; p. 1,213; 42 59N 80 22W
33 Waterford, co. bor., co. tn., spt., Waterford, I.F.S. breweries, fisheries; p. 26,646; 52 15N 7 07W
33 Waterford Harb., I.F.S.; 52 8N 6 36W
102 Waterloo, tn., Iowa, U.S.A.; canning, packing, motor-cars, farming implements; p. 46,191; 42 30N 92 15W
38 Waterloo, vil., Belgium; battle, Napoleon defeated by Duke of Wellington, 1815; 50 45N 4 22E
18 Waterloo with Seaforth, urb. dist., Lancs, Eng.; p. 31,180; 53 29N 3 03W
102 Watertown, tn., Wis., U.S.A.; p. 10,613; 43 15N 88 45W
102 Watertown, tn., N.Y., U.S.A.; carriage and wagon works, steam engines, silk, farm implements; water-power; p. 32,205; 43 55N 75 59W
107 Watertown, tn., S.D., U.S.A.; machinery, meat-packing; p. 10,214; 44 57N 97 12W
105 Waterville, tn., Me., U.S.A.; cottons, woollens, riy. works; p. 15,454; 44 33N 69 40W
105 Watervliet, tn., N.Y., U.S.A.; arsenal; bells, iron goods, woollens and asbestos goods; p. 16,083; 42 42N 73 44W
17 Watford, mun. bor., Herts, Eng.; brewing, malting, ironfounding, paper, silk; p. 56,805; 51 40N 0 25W
21 Wath, urb. dist., W. Riding, Eng.; collieries, quarries; p. 13,653; 53 30N 1 17W
111 Watling I. (Br.), Bahama Is., W. Indies; 24 0N 74 32W
17 Watlington, par., Oxford, Eng.; lace; p. 1,386; 51 39N 1 00W
90 Watkins Pk., Greenland,. 69 45N 29 40W
107 Watsonville, tn., Cal., U.S.A.; p. 8,344; 36 55N 121 50W
25 Watten, par., Caith., Scot.; p. 908; 58 27N 3 18W
16 Watton, par., Norfolk, England; p. 1,331; 52 34N 0 56E
81 Wau, vil., Ang.-Eg. Sud.; 7 42N 28 2E
11 Wau, vil., Libya; 25 10N 18 20E
102 Waukegan, port, Ill., U.S.A.; on L. Michigan; mineral springs; mnfs.—steel, wire, brass; sugar refineries, pianos, motors; p. 33,499; 42 20N 87 50W
102 Wausau, tn., Wis., U.S.A.; on Wisconsin R.; mnfs.—lumber, paper, sawmill machinery, leather, etc.; water-power; silver-fox farms, dairying; p. 23,758; 45 1N 89 35W
16 Waveney, R., England; 52 28N 1 30E
126 Waverley, tn., dist., N.I., New Zealand; p. 640; 39 49S 174 37E
38 Wavre, tn., Belgium; tanning, brewing; mnfs.—lace and paper; 50 43N 4 36E
103 Wayeross, tn., Ga., U.S.A.; riy. works; naval stores, machinery, fruit canning; p. 15,510; 31 17N 82 25W
104 Waynesboro, tn., Pa., U.S.A.; p. 10,167; 39 46N 77 46W
66 Wazirabad, tn., Pun., India; mnfs.—steel and iron; 32 27N 74 8E
66 Waziristan, dist., N.W. Fron., India; 32 33N 70 0E
17 Weald, The, Sus., Eng.; dist. between N. and S. Downs, formerly forested; 51 5N 0 10E
20 Wear, R., Dur., Eng.; 54 54N 1 27W
18 Weaver, R., Ches., Eng.; 53 10N 2 31W
128 Weddell Sea, Antarctica; 67 0S 40 0W
120 Wedderburne, tn., Vic., Australia; 36 28S 143 38E
18 Wednesbury, mun. bor., Staffs, Eng.; coal, iron, pottery; p. 31,534; 52 33N 2 00W
121 Wee Waa, vil., N.S.W., Australia; 30 10S 149 25E
16 Weedon Beck, par.; Northants, Eng.; p. 2,020; 52 14N 1 05W
83 Weenen, tn., Natal, S. Afr.; 28 55S 30 6E
38 Weert, tn., Netherlands; 51 15N 5 42E
38 Weesp, tn., Netherlands; gin distilleries and chocolate; 52 19N 5 01E
41 Wehlau, tn., Germany; 54 37N 21 18E
40 Weiden, tn., Germany; p. 19,536; 49 42N 12 8E
74 Wei-hai-wei, spt., China; a. 285 sq. m.; formerly Br. terr. leased from China; coaling stn., treaty port; summer resort; p. 154,416; 37 30N 122 0E
40 Weilheim, tn., Germany; 49 36N 8 40E
40 Weimar, tn., cap. Thuringia, Germany; on R. Ilm; famous for association with German literature; palace; cabinet ware, cloth, leather, printing; p. 45,957; 51 0N 11 20E
43 Weinfelden, tn., Switzerland; 47 34N 9 07E
37 Weinheim, tn., Germany; leather, wine, machinery; p. 15,793; 49 36N 8 40E
40 Weissenbourg, tn., France; 49 2N 7 58E
40 Weissenfels, tn., Germany; coal, stone, machinery, ironware, paper, boots; p. 36,756; 51 12N 11 58E
MAP
43 Weissborn, Mt., Switzerland; 9,882 ft.; 46 5N 7 42E
69 Weiyiian, tn., China; 23 30N 100 40E
16 Welford, par., Northants., England; p. 694; 52 23N 1 04W
123 Welford, tn., Queens., Australia; 25 1S 143 40E
96 Welland, tn., on Welland Canal, Ont., Can.; p. 10,709; 43 0N 79 19W
96 Welland Canal, Ont., Can.; artificial waterway between L. Ontario and L. Erie; new canal opened in 1931; length 25 m. Port Colborne to Port Weller; 7 locks; transit for largest lake steamers; 43 0N 79 18W
16 Welland, R., Holl., Eng.; 52 52N 0 05W
80 Welle, R., Belg. Congo; 4 00N 24 0E
70 Wellesley, prov. See Penang.
122 Wellesley Is., Queens., Australia; 16 30S 139 30E
16 Wellingborough, urb. dist., Northants, Eng.; boots, shoes, brewing, iron ore smelting; p. 21,225; 52 19N 0 42W
121 Wellington, tn., N.S.W., Australia; 32 33S 148 58E
120 Wellington, tn., S. Australia; 35 20S 139 25E
18 Wellington, urb. dist., Salop, Eng.; mining, farm implements, iron founding; p. 8,185; 52 43N 2 31W
19 Wellington, urb. dist., Som., Eng.; public sch.; woollens, serges, bricks, tiles, iron; p. 7,128; 50 58N 3 14W
127 Wellington, cy., spt., cap. New Zealand; univ.; foundries, cold storage, soap, candles, boots, shoes; p. 108,500; 41 15S 174 46E
126 Wellington, prov., N.I., New Zealand; dairying; 39 0 to 41 35S 174 30 to 176 35E
84 Wellington, tn., C. of Good Hope, S. Afr.; p. 2,872 (Eur.); 33 35S 19 0E
107 Wellington, tn., Kan., U.S.A.; p. 7,405; 37 15N 97 25W
16 Wells, urb. dist., spt., Norf., Eng.; brewing, oysters; p. 2,305; 52 57N 0 51E
19 Wells, mun. bor., Som., Eng.; cath.; brushes, paper; p. 4,833; 51 12N 2 37W
46 Wels, tn., Austria; p. 16,418; 48 10N 14 0E
18 Welshpool, mun. bor., Mont., Wales; malting, flannel; p. 5,637; 52 40N 3 09W
18 Wem, urb. dist., Salop, Eng.; leather, malting; p. 2,157; 52 52N 2 43W
17 Wembley, mun. bor., Middx., England; scene of British Empire Exhibition, 1924, 1925; film studios; p. 48,546; see Greater London.
27 Wemyss, par., Fife, Scot.; p. 26,619; 56 10N 3 03W
26 Wemyss Bay, tn., Ren., Sc...; p. 24,530; 55 53N 4 54W
74 Wenchow, cy., treaty port, China; palace ruins; tea and timber; p. 678,376; 28 0N 120 30E
17 Wendover, par., Bucks, Eng.; straw-plait, lace; p. 2,366; 51 45N 0 45W
18 Wenlock, mun. bor., Salop, Eng.; coal, iron; p. 14,182; 52 37N 2 34W
20 Wensleydale, N. Riding, Eng.; 54 18N 2 10W
16 Wensum, R., Norf., Eng.; 52 44N 1 00E
120 Wentworth, tn., N.S.W., Australia; 34 3S 141 57E
18 Weobley, par., Here., Eng.; p. 625; 52 9N 2 51W
83 Wepener, tn., O.F.S., S. Afr.; 29 45S 27 7E
40 Wermigerode, tn., Germany; p. 19,636; 51 50N 10 45E
121 Werribee, tn., Vic., Australia; 37 56S 144 37E
121 Werris Cr., N.S.W., Australia; 31 20S 150 40E
40 Wertheim, tn., Germany; 49 46N 9 30E
40 Wesel, tn., Germany; metal ware, cement, pottery; sugar, flour; p. 24,136; 51 40N 6 36E
40 Weser, R., Germany; length 440 m.; 52 40N 9 08E
39 Wesermünde, tn., Germany; adjoins Bremerhaven; bricks and brewing; p. 7,491; 53 35N 8 34E
76 West Africa, Africa; a. 3,100,000 sq. m. (approx.); coastal plain, succeeded by plateau, 1,200–3,000 ft.; chief peak, Cameroon Pk., 13,300 ft.; chief rivers, Niger, Senegal, Congo, Ubangi; chief lake, Chad; Includes Br. colonies, Nigeria, Gold Coast, Sierra Leone and Gambia; French, Portuguese and Spanish poss. and Liberia; 5 60s to 23 30N 20 0W to 27 0E
18 West Bromwich, co. bor., Staffs, Eng.; collieries, iron smelting, hardware; p. 81,281; 52 31N 2 00W
27 West Calder, par., Midlothian, Scot.; p. 6,817; 55 49N 3 26W
104 West Chester, tn., Pa., U.S.A.; dairying; farm implements; p. 12,325; 39 57N 75 40W
113 W. Falkland, I., Falkland Is., Br.; 51 40S 60 0W
17 West Ham, co. bor., Essex, Eng.; Victoria Docks; shipbuilding, sugar refining, soap, jute works; p. 294,278; 51 33N 0 02E
20 West Hartlepool, co. bor., Dur., Eng.; p. 68,134; 54 41N 113 0W
111 West Indies, arch., Cent. America; extending from Florida to N. Venezuela; divided into 3 srps., Greater Antilles, Lesser Antilles, Bahamas; a. 100,000 sq. m. (est.); Cuba (largest island) and Hispaniola independent; Br. possessions, Jamaica, Windward Is., Leeward Is., Trinidad, Bahamas, etc.; U.S.A. possessions, Puerto Rico, part of Virgin Is.; Fr. Martinique, Guadeloupe, etc.; Dutch, Curaçao, etc.; products, sugar, tobacco, bananas, fruits, cotton, cocoa, coffee, ginger, sponges; p. 11,000,000 (est.); 10 to 23 30N 59 0 to 85 0W
26 West Kilbride, par., Ayr, Scot.; p. 2,946; 55 42N 4 52W
18 West Kirby. See Hoylake.
27 West Linton, par., Peebles, Scot.; p. 1,200; 55 45N 3 22W
27 West Lothian, co., Scotland; p. 81,426; 55 55N 3 35W
89 West Nicholson, tn., S. Rhodesia; 21 8S 29 32E
103 West Palm Beach, tn., Florida, U.S.A.; winter resort; grape fruit; 26 20N 80 7W
105 West Point, tn., N.Y., U.S.A.; military academy; 41 22N 74 2W
21 West Riding, co., Yorks., Eng.; p. 3,352,208; 53 46N 1 30W
105 West Springfield, tn., Mass., U.S.A.; p. 16,686; 42 10N 72 55W
102 West Virginia, st., U.S.A.; a. 24,170 sq. m.; surface mountainous; drained by R. Ohio and its tribs.; farming, wheat, maize, tobacco, oats, potatoes, fruit; live-stock; coal, petroleum, natural gas; mnfs., steel, glass, leather; railway works; cap. Charleston; p. 1,463,700; 37 10 to 40 25N 77 40 to 82 40W
105 Westbrook, tn., Me., U.S.A.; 10,807; 43 40N 70 23W
19 Westbury, par., Glouces., Eng.; p. 1,746; 51 50N 2 23W
MAP
19 Westbury, urb. dist., Wilts., Eng.; ironworks, woollen cloth, malting; p. 4,044; 51 15N 2 10W
17 Westerham, tn., Kent, Eng.; p. 3,162 51 16N 0 04E
125 Western Australia, st., Australia; a. 975,920 sq. m.; mountain ranges on W. coast, highest pk. Mt. Bruce 4,024 ft.; drained by rivers Ord, Fitzroy, Ashburton, Gascoyne, Murchison, and Swan; much desert; surface largely suitable for grazing; farming in fertile regions; wheat, oats, barley, fruit; cattle, sheep, horses; coal, gold, silver, lead, copper, tin; timber (karri and jarrah); chief exp., wheat, flour, wool, gold, pearls, fruit; cap. Perth; p. 38,946; 13 45 to 35 5S 113 0 to 129 20E
105 Westfield, tn., Mass., U.S.A.; cigars, paper, machinery bicycles, radiators; p. 19,775; 42 8N 72 45W
17 Westgate, par., Kent, Eng.; p. 5,096; 51 23N 1 22E
121 Westgate, tn., Queens., Australia; 26 37S 146 11E
127 Westland Bight, S.I. New Zealand; 43 0S 170 0E
127 Westland, prov., S.I. New Zealand; a. 4,881 sq. m.; p. 15,025; 43 30S 17 0E
87 Westleigh, tn., O.F.S., S. Afr.; 27 30S 27 44E
31 Westmeath, co., I.F.S.; a. 708 sq. m.; pastoral, farming; p. 56,796; 53 30N 7 30W
17 Westminster, cy., met. bor., London, England; contains many of finest buildings in London; Westminster School; p. 129,535; see London.
20 Westmorland, co., England; a. 786 sq. m.; hills with moorlands; minerals, lead, slate, granite; oats; cap. Appleby; p. 65,398; 54 29N 2 40W
83 Weston, tn., Natal, S. Afr.; 29 15S 30 1E
104 Weston, tn., W. Va., U.S.A.; p. 8,648; 39 0N 80 25W
19 Weston-super-Mare, urb. dist.; Som., Eng.; popular resort; fine pottery; p. 28,555; 51 21N 2 59W
40 Westphalia, prov., Germany; a. 7,804 sq. m.; largely forested; rivers, Ems, Weser, Lippe; hemp, flax, cereals; coal, iron; textiles, iron and steel; cap. Münster; p. 4,784,169; 51 45N 8 00E
30 Westport, urb. dist., Mayo, I.F.S.; cereals; p. 3,490; 53 48N 9 32W
127 Westport, bor., S.I. New Zealand; p. 3,910; 41 45S 171 36E
27 Westruther, Berwick, Scot.; p. 421; 55 45N 2 25W
19 Westward Ho., vil., Dev., Eng.; resort; 51 2N 4 15W
98 Wetaskiwin, tn., Alta., Can.; farming; p. 2,125; 52 59N 113 15W
20 Wetheral, par., Cumb., Eng.; p. 3,418; 54 54N 2 50W
21 Wetherby, tn., W. Riding, Eng.; malting, brewing; p. 2,126; 53 56N 1 23W
71 Wetter I., Du. E. Indies; 7 50S 126 30E
38 Wetteren, tn., Belgium; p. 17,857; 51 0N 3 53E
45 Wetterhorn, Mt., Switzerland; 46 37N 8 13E
40 Wetzlar, tn., Germany; cath.; iron-work, gloves, chemicals; p. 16,482; 50 34N 8 30E
33 Wexford, urb. dist., spt., co. tn., Wexford I.F.S.; farming produce, shipbuilding, cement, fishing; p. 11,870; 52 20N 6 28W
33 Wexford, co., I.F.S.; a. 901 sq. m.; surface generally level, highest peak, Mt. Leinster 2,610 ft.; mixed farming, fisheries; p. 95,812; 52 28N 6 36W
33 Wexford Harb., I.F.S.; 52 20N 6 25W
17 Wey, R., Sur., Eng.; 51 19N 0 30W
99 Weyburn, tn., Sask., Can.; p. 5,002; 49 38N 103 50W
19 Weymouth & Melcombe Regis, mun. bor., Dor., Eng.; resort; stone; p. 29,524; 50 37N 2 26W
10 Wezzan, tn., Morocco; 34 42N 5 32W
126 Whakatane, bor., N.I., New Zealand; p. 1,460; 37 58S 177 0E
74 Whampoa, China, tn.; 22 50N 113 30E
126 Whangarei, bor., N.I., New Zealand; p. 7,240; 35 43S 174 19E
127 Whangarei Harb., New Zealand; 35 48S 174 29E
21 Wharfe, R., W. Riding, Eng.; 53 52N 1 13W
102 Wheeling, cy., W. Va., U.S.A.; iron and steel work, pottery; p. 61,659; 40 3N 80 43W
20 Wherndale, Gt., Mt., W. Riding, Eng.; 2,310 ft. 54 14N 2 54W
27 Whitburn, bor., W. Lothian, Scot.; p. 2,440; 55 52N 3 41W
20 Whitby, urb. dist., spt., N. Riding, Eng.; resort; jet, boatbuilding; p. 11,441; 54 29N 0 37W
96 Whitby, tn., Ont., Can.; p. 5,046; 43 52N 78 58W
17 Whitchurch, par., Hants, Eng.; brewing, cheese; p. 2,461; 51 14N 1 20W
18 Whitchurch, urb. dist., Salop, Eng.; p. 6,016; 52 58N 2 42W
120 White Cliffs, N.S.W., Australia; 30 50S 143 7E
98 White Horse, tn., Yukon, Can.; 60 45N 135 10W
105 White Plains, tn., N.Y., U.S.A.; p. 35,830; 41 0N 73 50W
57 White Russia Soviet Socialist Republic, U.S.S.R.; a. 48,751 sq. m.; swampy, largely forested; chief rivers, Pripet, Beresina; potatoes, flax, live-stock; cap. Minsk; p. 5,439,400; 52 to 56N 28 0 to 32 0E
56 White Sea, Russia; arm of Arctic Oc., canal communication with Black S. and Caspian; 66 0N 40 0E
20 Whitehaven, mun. bor., spt., Cumb., Eng.; coal, iron, bricks, engineering; p. 21,159; 54 34N 3 35W
19 Whitesand B., Corn., Eng.; 50 20N 4 15W
121 Whitfield, tn., Vic., Australia; 31 0S 115 47E
27 Whitborn, bor., Wig., Scot.; p. 961; 54 44N 4 25W
20 Whitley and Monkseaton, urb. dist., Northumb., Eng.; resort; coal, limestone; p. 24,210; 55 1N 1 27W
106 Whitney, Mt., Cal., U.S.A.; 14,900 ft.; 36 30N 118 10W
17 Whitstable, urb. dist., Kent., Eng.; oysters, farming; p. 11,201; 51 21N 1 02E
27 Whittingham, par., E. Lothian, Scot.; p. 493; 55 58N 2 38W
16 Whittington, par., Derby, Eng.; coal, iron, steel; p. 8,124; 53 16N 1 25W
83 Whittlesea, tn., C. of Good Hope, S. Afr.; 32 14S 26 11E
121 Whittlesea, tn., Vic., Australia; 37 31S 145 7E
16 Whittlesey, urb. dist., I. of Ely, Eng.; brickmaking; p. 8,299; 52 35N 0 08W
121 Whitton, tn., N.S.W., Australia; 34 9S 146 11E
88 Whydah, tn., Fr. W. Afr.; 6 22N 2 27E
96 Wiarton, tn., Ont., Can.; p. 1,949; 44 44N 81 12W
107 Wichita, cy., Kan., U.S.A.; on R. Arkansas; meat packing, flour, riy. works, live-stock and grain; p. 111,110; 37 42N 97 15W

MAP
97 Wichita Falls, tn., Tex., U.S.A.; oil refineries; 33 56n 98 30w
25 Wick, bor., co. tn., spt., Caith., Scot.; fishing, boat building, sail-making; p. 7,548; 58 26n 3 06w
17 Wickford, par., Essex, Eng.; p. 1,475; 51 37n 0 31e
16 Wickham Market, par., Suff., Eng.; p. 1,259; 52 10n 1 20e
33 Wicklow, co., I.F.S.; a. 781 sq. m.; mountainous, pastoral, sheep; p. 57,583; 52 57n 6 21w
33 Wicklow, urb. dist., spt., co. tn., Wicklow, I.F.S.; cas.; chemicals; p. 3,027; 52 58n 6 03w
33 Wicklow, Mts. of, Wicklow, I.F.S.; Lugnaquillia 3,039 ft.; 53 0n 6 26w
19 Wickwar, par., Gloucester, England; p. 769; 51 35n 2 22w
125 Widgemooltha, tn., W. Australia; 31 30s 121 30e
18 Widnes, mun. bor., Lancs., Eng.; alkali, soap, iron, locomotives; p. 40,619; 53 22n 2 43w
43 Wieliczka, tn., Poland; famous salt mines; p. 6,000; 49 59n 20 3e
46 Wiener Neustadt, tn., Austria; machinery, pottery; p. 36,956; 50 22n 16 7e
38 Wieringen, tn., Netherlands; 52 53n 5 00e
40 Wiesbaden, tn., Germany; spa; saline springs; surgical instruments, chocolate; p. 109,755; 50 6n 8 15e
18 Wigan, co. bor., Lancs, Eng.; iron, coal, cottons, oil, chemicals; p. 85,357; 53 33n 2 38w
17 Wight, I. of, England; a. 147 sq. m.; resorts; yachting; cement; p. 88,400; 50 33n 1 15w
20 Wigton, par., Cumb., Eng.; p. 3,521; 54 50n 3 10w
26 Wigtown, bor., co. tn., spt., Wigtown, Scot.; good harbour; p. 1,261; 54 52n 4 26w
26 Wigtown, co., Scotland; a. 487 sq. m.; farming; p. 29,299; 54 54n 4 44w
38 Wijk, tn., Netherlands; 50 52n 5 40e
73 Wi-ju, tn., China; 40 0n 124 45e
120 Wilcannia, tn., N.S.W., Australia; 31 31s 143 20e
44 Wildspitze, pk., Austria; 46 52n 10 36e
40 Wilhelmshaven, spt., Germany; large docks and harb.; p. 25,403; 53 30n 8 08e
102 Wilkes Barre, cy., Pa., U.S.A.; locomotives, machinery, iron and steel; silks and cottons; anthracite coal; p. 86,628; 41 15n 75 55w
111 Willemstad, tn., Curaçao; 12 12n 69 6w
17 Willesden, mun. bor., Middx., Eng.; rly. works, industrial centre; p. 184,434; 51 32n 0 14w
102 Williamsport, cy., Pa., U.S.A.; resort; lumber, machinery, silks; p. 45,729; 41 20n 77 10w
121 Williamstown, spt., Vic., Australia; shipbuilding, rly. works; 37 52s 144 29e
105 Willimantic, tn., Conn., U.S.A.; silk, woollens, thread; p. 12,102; 41 41n 72 12w
16 Willingham, par., Lind., Eng.; p. 434; 53 22n 0 40w
45 Willisau, tn., Switzerland; 47 7n 8 00e
83 Williston, tn., C. of Good Hope, S. Afr.; 31 16s 20 38e
16 Willoughby, par., Lind., Eng.; p. 517; 53 14n 0 13e
120 Willoughby, C., S. Australia; 35 49s 138 4e
83 Willowmore, tn., C. of Good Hope, S. Afr.; 33 20s 23 30e
120 Willunga, tn., S. Australia; 35 15s 138 30e
102 Wilmar, tn., Minn., U.S.A.; p. 6,173; 45 0n 95 5w
104 Wilmington, cy., port., Del., U.S.A.; on R. Delaware; shipbuilding; gunpowder, machinery, iron and steel work; p. 106,597; 39 48n 75 35w
103 Wilmington, port., N.C., U.S.A.; machinery, leather, shipbuilding; p. 32,270; 34 14n 77 55w
120 Wilmington, tn., S. Australia; 32 38s 138 4e
16 Wilnecote, par., War., Eng.; bricks and tiles; p. 4,617; 52 36n 1 40w
42 Wilno, co., Poland; farming, forestry; rye, oats; 56 36n 26 1e
42 Wilno, tn., Poland; cath., univ.; gloves, buttons, timber; p. 197,000; 54 40n 25 20e
121 Wilson Prom., Vic., Australia; 39 8s 146 22e
27 Wilton, par., Rox., Scot.; p. 3,740; 55 27n 2 47w
19 Wilton, mun. bor., Wilts., Eng.; carpets, felt; p. 2,024; 51 5n 1 52w
19 Wiltshire, co., England; a. 1,961 sq. m.; undulating surface, includes Marlboro' Downs; contains Stonehenge and Salisbury Plain; cereals, cheese, bacon; carpets; p. 303,258; 51 20n 2 00w
38 Wiltz, tn., Luxemburg; 49 57n 5 55e
17 Wimbledon, mun. bor., Surrey, England; headquarters of English lawn tennis; p. 59,520; see Greater London.
19 Wimborne Minster, urb. dist., Dor., Eng.; noted minster and library; gram. sch.; buttons, hose; p. 3,896; 50 48n 1 59w
120 Wimmera, tn., Vic., Australia; 36 15s 142 0e
120 Wimmera, R., Vic., Australia.; 37 0s 142 0e
88 Winburg, tn., O.F.S., S. Afr.; 28 30s 27 4e
19 Wincanton, par., Som., Eng.; brewing, cheese; p. 1,711; 51 4n 2 23w
18 Winchcomb, par., Glo., Eng.; cas.; silk; p. 2,741; 51 57n 1 58w
17 Winchelsea, mun. bor., Sus., Eng.; p. 693; 50 55n 0 43e
97 Winchester, tn., Ont., Can.; p. 1,027; 45 7n 75 15w
17 Winchester, mun. bor., cy., Hants, Eng.; cath. coll. (founded by W. Wykeham 1387); formerly cap. of England; brewing, malting; p. 23,969; 51 4n 1 18w
102 Winchester, tn., Ky., U.S.A.; p. 8,223; 38 1n 84 15w
102 Winchester, tn., Va., U.S.A.; p. 10,855; 39 10n 78 15w
42 Windau. See Ventspils.
20 Windermere, urb. dist., Westmor., Eng.; on L. Windermere; p. 5,701; 54 24n 2 55w
20 Windermere, L., Lancs. and Westmor., Eng.; largest lake in England, length 10½ m.; 54 22n 2 51w
83 Windhoek, cap., S.W. Afr.; fruit, silver, copper, lead; 22 32s 17 10e
121 Windsor, tn., N.S.W., Australia; 33 38s 150 50e
95 Windsor, tn., N.S., Can.; p. 3,032; 45 0n 63 56w
96 Windsor, tn., Ont., Can.; farming, fruit, flour, canning; p. 63,108; 42 20n 83 0w
17 Windsor, mun. bor.; Berks, Eng.; royal cas., barracks, St. George's Chapel; brewing, tapestry; p. 20,287; 51 29n 0 37w
93 Windsor Locks, tn., Conn., U.S.A.; 41 55n 72 42w

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111 Windward Passage, W. Indies; 20 0n 74 0w
107 Winfield, tn., Kan., U.S.A.; p. 9,398; 47 10n 97 0w
121 Wingen, tn., N.S.W., Australia; 31 57s 150 21e
121 Wingham, tn., N.S.W., Australia; 31 51s 152 20e
96 Wingham, tn., Ont., Can.; p. 1,959; 43 55n 81 23w
96 Winnebago, tn., Ont., Can.; 44 0n 88 30w
88 Winnebah (Simpa), Gulf Coast; p. 10,990; 5 23n 0 35w
99 Winnipeg, cap., Man., Can.; caths., univ.; railway centre, chief grain market in the world, flour, brewing, cottons, farm implements; machinery; p. 218,785; 49 57n 97 17w
99 Winnipeg L., Man., Can.; a. 9,398 sq. m.; 52 30n 98 0w
99 Winnipegosis L., Man., Can.; a. 2,086 sq. m.; 52 30n 100 0w
102 Winona, Minn., U.S.A.; on R. Mississippi; medicines, shoes, furs, trade in grain and lumber; p. 20,850; 44 0n 91 42w
38 Winschoten, tn., Netherlands; p. 13,343; 53 9n 7 02e
16 Winslow, par., Bucks, Eng.; p. 1,532; 51 56n 0 53w
16 Winster, vil., Derby, England; 53 8n 1 37w
103 Winston-Salem, tns., N.C., U.S.A.; continuous towns; tobacco and cottons; p. 75,274; 36 6n 80 22w
45 Winterthur, Switzerland; railway centre, locomotive and machine works; cottons, wine; p. 54,042; 47 30n 8 43e
16 Winterton, par., Lind., Eng.; farm implements, bricks; p. 1,958; 52 43n 1 42e
123 Winton, tn., Queens., Australia; 22 20s 143 1e
127 Winton, bor., S.I. New Zealand; p. 915; 46 7s 168 20e
16 Wirksworth, urb. dist.; Derby, Eng.; lead, stone, cotton; p. 3,911; 53 5n 1 35w
18 Wirral, penin., Ches., Eng.; 53 18n 3 03w
16 Wisbech, mun. bor., I. of Ely, Eng.; market gardening, fruits, farming implements; p. 15,664; 52 41n 0 10e
102 Wisconsin R., U.S.A.; trib. of Mississippi; 43 10n 90 0w
102 Wisconsin, st., U.S.A.; a. 56,066 sq. m.; chief rivers, St. Croix, Chippewa and Wisconsin; farming, dairying, stock-raising; wheat, maize, barley, potatoes, sugar-beet, tobacco; timber; iron ore, zinc, lead; hardware, paper, textiles; cap. Madison; p. 2,939,005; 42 30 to 47 0n 87 0 to 93 0w
27 Winhaw. See Motherwell.
112 Wismar, tn., Br. Guiana; 6 00n 56 30w
39 Wismar, tn., spt., Germany; shipbuilding; sailcloth, paper; p. 26,016; 53 54n 11 25e
27 Wiston, par., Lanark, Scot.; p. 385; 55 34n 3 40w
17 Witham, urb. dist.; Essex, Eng.; farming; p. 4,367; 51 48n 0 37e
16 Witham, R., Kest., Eng.; 53 3n 0 07w
21 Withernsea, urb. dist.; E. Riding, Eng.; farming, fishing; p. 4,251; 53 44n 0 03e
18 Withnell, urb. dist., Lancs, Eng.; cotton, calico printing, stone, paper; p. 3,040; 53 42n 2 35w
17 Witney, urb. dist.; Oxford, Eng.; gloves, blankets; p. 3,409; 51 48n 1 29w
40 Wittenberg, tn., Germany, on R. Elbe; univ.; machinery, cloth; p. 23,457; 51 55n 12 40e
40 Wittenberge, tn., Germany; ry. works; textiles; p. 25,652; 53 0n 11 44e
39 Wittenburg, tn., Germany; 53 32n 11 3e
40 Wittstock, tn., Germany; 53 8n 12 30e
81 Witu, tn., Kenya; 2 20s 40 30e
19 Wivelscombe, par., Som., Eng.; brewing, slate; p. 1,265; 51 2n 3 17w
17 Wivenhoe, urb. dist.; Essex, Eng.; shipbuilding, oysters; p. 2,193; 51 51n 0 58e
16 Woburn, par., Beds., Eng.; Woburn Abbey (seat); lace, straw-plait; p. 1,062; 52 0n 0 37w
121 Wodonga, tn., Vic., Australia; 36 8s 146 53e
88 Wogodogu, tn., F.W.Afr.; 11 30n 1 30w
41 Wohlau, tn., Germany; 51 20n 16 38e
17 Woking, urb. dist., Sur., Eng.; malting, paper; p. 36,661; 51 18n 0 33w
17 Wokingham, mun. bor., Berks., Eng.; farming; p. 7,294; 51 25n 0 50w
40 Wolfenbüttel, tn., Germany; cas., library; machinery, copperware, cloth; p. 18,479; 52 10n 10 35e
41 Wolgast, spt., Germany; 54 5n 13 22e
98 Wollaston Pen., Franklin, Can.; 69 0n 110 0w
41 Wollin, tn., Germany; 53 52n 14 35e
83 Wolmaranstad, tn., Trans., S. Afr.; 27 28s 26 10e
120 Wolseley, tn., S. Australia; 36 19s 140 22e
99 Wolseley, tn., Sask., Can.; 50 28n 103 5w
20 Wolsingham, par., Dur., Eng.; woollens, coal; p. 3,535; 54 44n 1 52w
18 Wolverhampton, co. bor., Staffs, Eng.; ironworks, coal, cornmills, dyeing; p. 138,622; 52 35n 2 06w
18 Wolverley, par., Worce., Eng.; ironworks; p. 2,217; 52 25n 2 13w
16 Wolverton, urb. dist., Bucks, Eng.; railway works; p. 12,870; 52 5n 0 48w
96 Woman R., tn., Ont., Can.; 47 30n 82 35w
83 Wonderfontein, tn., Trans., S. Afr.; 26 23s 27 30e
125 Wonnerup, tn., W. Australia; 33 35s 115 29e
73 Wonsan. See Gensan.
121 Wonthaggi, tn., Vic., Australia; p. 7,000; 38 36s 145 31e
17 Wood Green, mun. bor., Middx., England; Alexandra Palace; p. 54,190; see Greater London.
16 Woodbridge, urb. dist.; Suff., Eng.; boats; p. 4,734; 52 6n 1 19e
121 Woodburn, tn., N.S.W.; Australia; 29 5s 153 20e
104 Woodbury, tn., N.J., U.S.A.; p. 8,172; 39 50n 75 8w
16 Woodhall Spa, urb. dist., Lind., Eng.; p. 1,372; 53 12n 0 02e
118 Woodroffe, Mt., S. Australia; 5,230 ft.; 26 16s 132 14e
25 Woodside, par., Aber., Scot.; paper; p. 7,698; 57 10n 2 08w
17 Woodstock, mun. bor., Oxford, Eng.; Blenheim Palace; gloves; p. 1,484; 51 51n 1 22w
94 Woodstock, tn., N.B., Can.; p. 3,259; 46 6n 67 45w
96 Woodstock, tn., Ont., Can.; woollens, farm machinery; p. 11,336; 43 8n 80 49w
126 Woodville, bor., N.I. New Zealand; p. 1,130; 40 20s 175 51e
107 Woodward, tn., Okla., U.S.A.; p. 5,056; 36 25n 99 25w

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20 Wooler, par., Northumberland, England; p. 1,577; 55 34n 2 00w
17 Woolwich, Lond., Eng.; royal arsenal, royal military academy; p. 146,944; 51 29n 0 04e
105 Woonsocket, cy., R.I., U.S.A.; cottons and woollens; p. 49,376; 52 0n 71 30w
121 Wooroorookа, tn., Queens., Australia; 28 37s 43 40w
74 Woosung, tn., China; 31 30n 121 30e
19 Wootton Bassett, par., Wilts., Eng.; farming; p. 2,112; 51 32n 1 53w
83 Worcester, tn., C. of Good Hope, S. Afr.; tanning, ostrich farming; wine, raisins; p. 4,782 (Eur.); 33 35s 19 16e
102 Worcester, tn., Mass., U.S.A.; univ., foundry and machine shop products, wire, motor cars, boots and shoes; p. 195,311; 42 15n 71 50w
18 Worcester, co. bor., co. tn., Worcs., Eng.; cath., gloves, porcelain; p. 50,497; 52 11n 2 13w
18 Worcester, co., England; a. 751 sq. m.; farming, pastoral; wheat, barley, fruit, hops; cattle, sheep; minerals, coal, iron, salt; mnfs., engineering, pottery, glass, carpets; p. 420,156; 52 0 to 52 30n 1 50 to 2 40w
20 Workington, mun. bor., Cumb., Eng.; iron, steel, shipbuilding, coal; p. 24,691; 54 39n 3 33w
16 Worksop, mun. bor., Notts., Eng.; coal; farming implements, chemicals; p. 26,286; 53 18n 1 07w
40 Worms, tn., Germany; on R. Rhine; cath., wine, chemicals, leather, tobacco, machinery; p. 51,346; 49 40n 8 20e
19 Worms Hd., Glam., Wales; 51 34n 4 18w
17 Worthing, mun. bor., Sus., Eng.; resort; grapes, tomatoes, flowers; p. 35,230; 50 49n 0 23w
60 Woshm, dist., Arabia; 24 40n 45 0e
77 Woso, tn., Fr. Eq. Africa; 1 30n 16 0e
19 Wotton-under-Edge, par., Glouc., Eng., woollens; p. 3,010; 51 38n 2 20w
16 Wragby, par., Lindsey, England; p. 463; 53 18n 0 18w
128 Wrangel I., Arctic Oc.; 71 0n 180 0e
98 Wrangell, Mt., Alaska; 16,140 ft.; 62 15n 143 30w
98 Wrath, C., Suther., Scot.; 370 ft.; 58 37n 5 00w
18 Wrekin, The, Salop., Eng.; 1,335 ft.; 52 41n 2 32w
43 Wreschen, tn., Poland; 52 20n 17 35e
18 Wrexham, mun. bor.; Denb., Wales; brewing, coal; p. 18,567; 53 2n 3 00w
98 Wrigley, tn., Mackenzie, Can.; 62 50n 23 30w
17 Wrotham, par., Kent, Eng.; hops; p. 4,610; 51 18n 0 18e
16 Wroxham, par., Norf., Eng.; p. 900; 53 2n 3 00w
74 Wuchang, cap. of Hupeh, China; on Yang-tze-Kiang R.; cotton-mills; 30 35n 114 20e
73 Wuchow, tn., China; river port, large export trade; p. 77,353; 23 30n 111 0e
74 Wuhu, treaty port, China; on Yang-tze-kiang R.; tea, silk; coal; p. 130,706; 31 30n 118 20e
88 Wukari, tn., Nigeria; 7 55n 9 45e
74 Wuning, tn., China; 29 20n 115 0e
40 Wuppertal. See Elberfeld-Barmen, includes Barmen, Elberfeld, Cronenberg, Ronsdorf, Vohwinkel, and several smaller towns and parts of districts in valley of R. Wupper; p. 408,602.
84 Wupperthal, tn., C. of Good Hope, S. Afr.; 32 15s 19 11e
88 Wurno, tn., Nigeria; 13 18n 5 27e
40 Württemberg, st., Germany; a. 7,530 sq. m.; Black Forest on W.; chief rivers, Danube, Neckar; farming, wheat, oats, rye, barley, potatoes; mnfs., textiles, paper, hardware, firearms, gunpowder; cap. Stuttgart; p. 2,580,235; 47 30n to 49 30n 8 20 to 10 25e
40 Würzburg, tn., Germany; on R. Main; cath., cas.; univ.; machinery, mathematical and other instruments, brewing; p. 101,003; 49 48n 9 56e
74 Wuting, tn., China; 37 40n 117 40e
74 Wuwhei, tn., China; 31 15n 117 56e
121 Wyalong, tn., N.S.W., Australia; 33 51s 147 15e
121 Wyandra, tn., Queens., Australia; 27 6s 146 1e
17 Wye, par., Kent, England; p. 1,390; 51 11n 0 56e 55 34n 2 00w
18 Wye, R., Here., Eng.; 51 56n 2 35w
45 Wyl, tn., Switzerland; 47 28n 9 08e
16 Wymondham, urb. dist., Norf., Eng.; brewing, brushes; p. 4,814; 52 34n 1 07e
124 Wyndham, tn., W. Australia; 15 29s 128 1e
127 Wyndham, tn. dist., S.I., New Zealand; p. 675; 46 19s 168 52e
121 Wynyard, tn., Tas., Australia; 40 59s 145 40e
100 Wyoming, st., U.S.A.; a. 97,914 sq. m.; pine forests in the hills; good pasture land; traversed by Rocky Mts. (Fremont Pk. 13,790 ft.); chief rivers, Green, Snake, Big Horn, Powder; Yellowstone Nat. Park; sheep, cattle; farming; cereals, fruit, vegetables; petroleum, coal, iron, copper; cap. Cheyenne; p. 225,565; 41 0 to 45 0n 104 0 to 111 0e

109 Xalapa, tn., Mexico; pottery; leather; p. 28,000; 19 29n 97 0w
53 Xanthi, tn., Greece; tobacco; p. 25,000; 41 9n 24 56e
112 Xapury, tn., Brazil, 10 30s 68 20w
53 Xerchori, tn., Greece; 38 49n 23 14e
112 Xingu, R., Brazil; 9 00s 53 20w

88 Yabassi, tn., Camer.; 4 30n 10 0e
73 Yablonoi Mts., Siberia, U.S.S.R.; 51 0n 110 30e
72 Ya-chow, tn., China; 30 20n 103 25e
62 Yafa. See Jaffa.
59 Yakutsk, tn., U.S.S.R.; cath.; furs; 62 0n 129 50e
59 Yakutsk A.S.S.R., U.S.S.R., a. 1,530,253 sq. m.; rye, barley; cattle, horses; gold; furs; cap. Yakutsk; p. 332,000; 55 0 to 70 0n 110 0 to 160 0e
98 Yale, tn., B.C., Can.; 49 40n 121 21w
125 Yalgoo, tn., W. Australia; 28 14s 116 48e
121 Yallourn, tn., coal, Vic., Australia; 38 10s 146 15e
120 Yalpunga, vil., N.S.W., Australia; 29 0s 142 0e
75 Yamada, tn., Japan; 34 22n 136 42e
73 Yamagata, tn., Japan; p. 69,934; 38 17n 140 29e
75 Yamaguchi, tn., Japan; p. 34,803; 34 50n 131 37e
62 Yamboli, tn., Bulgaria; farming; p. 23,037; 42 27e 26 33e
72 Yamdok-tse, L. (Palti,) Tibet; 29 0n 90 40e
69 Yamethin, tn., Burma, India 20 27n 96 8e

MAP

59 **Yamak**, tn., U.S.S.R.; 59 0*n* 154 10*e*
68 **Yanam** (Fr.), Mad., India; 16 43*n* 83 15*e*
60 **Yanbo**, tn., Arabia; 24 10*n* 38 0*e*
121 **Yandina**, tn., Queens., Australia; 17 0*s* 93 45*e*
69 **Yandoon**, tn., Burma, India; 17 2*s* 95 45*e*
79 **Yanezawa**, tn., Japan; 37 58*n* 140 10*e*
74 **Yang-chow**, tn., China; 32 30*n* 119 10*e*
81 **Ya..ghe**, vil., Ang.-Egypt. Sud.; 7 30*n* 31 50*e*
72 **Yang-tze-kiang, R.**, China; largest and chief commercial river of China; length 3,475 m.; nav. for about 1,800 m.; 29 30*n* 107 30*e*
53 **Yanina**, tn., Greece; p. 20,480; 39 45*n* 20 52*e*
43 **Yanov**, tn., Poland; 50 35*n* 22 24*e*
116 **Yap, I.**, Caroline Is., Pac. Oc., Jap.; a. 79 sq. m.; cable stn.; 9 30*n* 138 5*e*
112 **Yapura, R.**, Brazil; 2 15*s* 67 30*w*
123 **Yaraka**, tn., Queens., Australia; 25 0*s* 144 0*e*
56 **Yaransk**, tn., Russia; 62 12*n* 49 2*e*
16 **Yardley Chase**, Northants, Eng.; 52 10*n* 0 50*e*
16 **Yare, R.**, Norfolk, Eng.; 52 39*n* 1 12*e*
56 **Yarensk**, tn., Russia; 62 12*n* 49 2*e*
72 **Yarkand**, tn., China; wheat, rice, beans; mnfs.—carpets, textiles; p. 89,000 (est.); 38 30*n* 77 20*e*
72 **Yarkand R.**, Tibet; 39 30*n* 78 0*e*
20 **Yarm**, par., N. Riding, Eng.; farming; p. 1,717; 54 30*n* 1 20*w*
95 **Yarmouth**, spt., N.S., Canada; shipbuilding, fisheries; p. 7,055; 43 48*n* 66 7*w*
17 **Yarmouth**, par., I. of Wight, Eng.; p. 893; 50 43*n* 1 28*w*
16 **Yarmouth**, Gt., co. bor., spt., Norfolk, Eng.; resort; fishing; p. 56,769; 52 36*n* 1 43*e*
56 **Yaroslavl**, tn., Russia; cath.; cottons, leather and linen; p. 167,300; 57 40*n* 39 45*e*
121 **Yarrawonga**, tn., Victoria, Australia; 36 2*s* 146 0*e*
121 **Yarra Yarra R.**, Victoria, Australia; 37 50*s* 144 56*e*
27 **Yarrow**, par., Selkirk, Scot.; p. 450; 55 33*n* 3 01*w*
56 **Yarzevo**, tn., Russia; 55 5*n* 32 0*e*
42 **Yasbuni**, tn., Poland; 54 28*n* 25 21*e*
52 **Yasi**, tn., Rumania; cereals, salt, fruits, wine, cattle; petroleum; p. 185,000; 47 15*n* 27 25*e*
121 **Yass**, tn., N.S.W., Australia; 34 52*s* 148 51*e*
99 **Yathkyed L.**, Keewatin, Can.; 62 20*n* 98 0*w*
88 **Yaunde**, tn., Fr. Cameroons; 3 50*n* 11 30*e*
112 **Yavary, R.**, Brazil; 5 0*s* 72 10*w*
16 **Yaxley**, par., Hunts, Eng.; p. 1,792; 52 32*n* 0 17*w*
103 **Yazoo City**, Miss., U.S.A.; p. 5,379; 32 47*n* 90 20*w*
69 **Ye**, tn., Burma, India; 15 15*n* 97 50*e*
121 **Yea**, tn., Victoria, Australia; 37 12*s* 145 25*e*
61 **Yebnah**, vil., Palestine; 31 50*n* 34 45*e*
49 **Yecla**, tn., Spain; p. 19,020; 38 36*n* 1 05*w*
75 **Yedo**. See Tokyo.
120 **Yeelanna**, tn., S. Australia; 34 4*s* 135 51*e*
56 **Yegoryevsk**, tn., Russia; 55 58*n* 38 10*e*
57 **Yeisk**, tn., Russia; 46 39*n* 38 6*e*
66 **Yekaterinburg**. See Sverdlovsk.
57 **Yekaterinoslav**. See Dnepropetrovsk.
57 **Yelets**, tn., Russia; 52 42*n* 38 28*e*
57 **Yelisavetgrad**. See Zinovievsk.
22 **Yell, I.**, Shetland Is., Scotland; 60 45*n* 1 10*w*
74 **Yellow Sea**. See Hwang-hai.
98 **Yellowhead Pass**, Alta, Canada; 52 55*n* 117 30*w*
106 **Yellowstone L.**, Wyo., U.S.A.; in Yellowstone Nat. Pk.; 44 30*n* 100 30*w*
106 **Yellowstone Nat. Park**; a. 3,350 sq. m.; wild natural region, thickly forested, containing cañons, cataracts, hot springs, geysers; Yellowstone R. flows through park; Yellowstone Lake; sanctuary for various animals exterminated elsewhere; 44 30*n* 110 30*w*
106 **Yellowstone, R., U.S.A.**; length 1,100 m.; 46 0*n* 108 0*w*
60 **Yemen**, dist., Arabia; a. 75,000 sq. m. (est.); highest mt., J. Shaib, 11,000 ft.; barley, wheat, coffee; cap. Sana; p. 2,500,000 (est.); 15 40*n* 44 30*e*
74 **Yenan**, tn., China; 37 0*n* 109 10*e*
74 **Yen-ching**, tn., China; 33 0*n* 120 0*e*
74 **Yen-chow**, tn., China; p. 61,500; 35 35*n* 117 0*e*
63 **Yenije Vardar**, tn., Greece; 40 48*n* 32 26*e*
59 **Yenisei R., U.S.S.R.**; length 3,000 m.; ice-bound in winter; 67 0*n* 86 0*e*
73 **Yenki**, tn., Manchuria; 43 0*n* 129 10*e*
72 **Yen-ngan**, tn., China; 37 0*n* 108 0*e*
57 **Yenotayevsk**, tn., Rus.; 47 0*n* 47 0*e*
74 **Yen-ping-fu**, tn., China; 26 35*n* 118 10*e*
74 **Yen-shan**, tn., China; 37 5*n* 116 40*e*
19 **Yeovil**, mun. bor., Somerset, Eng.; dairying; gloves; p. 19,678; 50 57*n* 2 37*w*
108 **Yesca**, tn., Mex.; 21 40*n* 104 15*w*
19 **Yes Tor**, Devon, Eng.; 2,028 ft.; 50 40*n* 4 00*w*
69 **Yeu**, tn., Burma, India; 22 48*n* 95 23*e*
121 **Yeulba**, tn., Queens., Austral.; 26 40*s* 149 42*e*
63 **Yezd**, cy., Persia; caravan centre; p. 30,000; 31 58*n* 54 17*e*
67 **Yezdikhast**, tn., Persia; 31 32*n* 52 12*e*
75 **Yezo**. See Hokkaido.
74 **Yi-chow**, tn., China; 39 20*n* 115 10*e*
74 **Ying-chow**, tn., China; 33 0*n* 116 0*e*
54 **Ylivieska**, tn., Finland; 64 0*n* 24 40*e*
107 **Yoakum**, tn., Tex., U.S.A.; p. 5,656; 29 24*n* 97 5*w*
74 **Yochow**, tn., China; p. 4,200; 29 20*n* 113 0*e*
75 **Yokohama**, spt., Jap.; largely destroyed by earthquake, 1923; silks, tea; p. 704,290; 35 30*n* 139 38*e*
75 **Yokosuka**, spt., Japan; shipbuilding; docks; p. 182,871; 35 15*n* 139 45*e*
88 **Yola**, Nigeria; 9 13*n* 12 32*e*
75 **Yoneko**, tn., Japan; p. 33,632; 35 35*n* 103 30*e*
105 **Yonkers**, cy., N.Y., U.S.A.; carpets, sugar, hats; p. 134,646; 40 57*n* 73 50*w*
74 **Yong-sin**, tn., China; 27 0*n* 114 0*e*
34 **Yonne**, dept., France; a. 2,892 sq. m.; forests; cereals; wine, sugar, mining, glass; cap. Auxerre; p. 275,755; 47 45*n* 3 45*e*
34 **Yonne, R.**, France; length 120 m.; 48 0*n* 3 15*e*
135 **York**, tn., W. Australia; 31 52*s* 116 48*e*
21 **York**, co. bor., co. tn., York, Eng.; famous cath. (minster); rly. works; confectionery; p. 84,813; 53 58*n* 1 04*w*

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104 **York**, cy., Pa., U.S.A.; fam. impl., confectionery, tobacco; p. 55,254; 39 57*n* 76 45*w*
122 **York, C.**, Queens., Australia; 10 42*s* 142 33*e*
99 **York Factory**, Man., Can.; 57 3*n* 92 42*w*
20 **York Moors, N. Riding, Eng.**; 54 20*n* 1 10*w*
122 **York Peninsula**, Queens., Australia; 13 0*s* 142 30*e*
124 **York Sound, W.** Australia; 15 0*s* 125 10*e*
21 **York Wolds, E. Riding, Eng.**; 54 0*n* 0 30*w*
120 **Yorke Pen., S.** Australia; 34 30*s* 137 12*e*
120 **Yorke Town, S.** Australia; 35 1*s* 137 31*e*
21 **Yorkshire**, co., England; a. 6,066 sq. m.; largest county of England divided into the three "Ridings" for administrative purposes; Cleveland Hills (1,489 ft.), York Moors and York Wolds; rivers—Ouse Don, Derwent, Swale, etc.; farming, stock raising, fishing; mnfs.—woollens, cutlery, linens, ironwork, coal, iron and salt; p. 4,304,655; 54 0*n* 1 30*w*
99 **Yorkton**, tn., Sask., Canada; p. 5,027; 51 13*n* 102 40*w*
88 **Yoruba**, dist., Nigeria; 7 30*n* 4 00*e*
106 **Yosemite Nat. Park**, Col., U.S.A.; tourist resort; numerous cascades, fine scenery; 37 30*n* 120 0*w*
75 **Yosida**, tn., Japan; 33 0*n* 132 30*e*
33 **Youghal**, urb. dist., Cork, I.F.S.; pottery, bricks; p. 5,340; 51 57*n* 7 52*w*
121 **Young**, tn., N.S.W., Australia; 34 17*s* 148 19*e*
102 **Youngstown**, cy., Ohio, U.S.A.; iron and steel mnfs.; p. 170,002; 41 5*n* 80 40*w*
62 **Yozgad**, tn., Turkey; p. 10,998; 39 30*n* 35 0*e*
38 **Ypres**, tn., Belgium; centre of salient held by British during Gt. War from 1914–1918, was reduced to ruins and then rebuilt; Menin Gate, opened (1927) in memory of missing British troops; woollens, cottons, linen, lace; tanning, dyeing; 50 52*n* 2 52*e*
38 **Yssel Lake**. See Zuider Zee.
55 **Ystad**, spt., Sweden; on Baltic Sea; flour and sugar manf.; p. 11,444; 55 25*n* 13 45*e*
18 **Ystwyth, R.**, Cardigan, Wales; 52 23*n* 3 55*w*
74 **Yu, tn.**, China; 34 25*n* 113 0*e*
74 **Yüanchow Ki**, tn., China; 28 0*n* 114 30*e*
110 **Yucatan Str.**; connecting the G. of Mexico with Caribbean Sea; 21 30*n* 86 30*w*
109 **Yucatan**, st., Mex.; a. 15,938 sq. m.; henequen, maize, rice, cotton; p. 384,790; 21 30*n* 86 50*w*
74 **Yu-ching**, tn., China; 34 30*n* 116 0*e*
74 **Yu-choo**, tn., China; 35 45*n* 113 0*e*
74 **Yuen-kiang-hien**, tn., China; 29 0*n* 112 30*e*
47 **Yugoslavia**, king., Europe; a. 95,558, sq. m.; chief mts. Dinaric Alps (6,280 ft.); rivers—Danube, Drave, Save, Morava; farming, wheat, maize, barley, rye, oats; fruits, plums; livestock, sheep, cattle, pigs, goats; timber; coal, iron, copper, lead, chromium, salt, bauxite; brewing, distilling; flour, cottons, carpets; cap. Belgrade; p. 13,934,038; 41 0 to 46 0*n* 14 0 to 23 0*e*
74 **Yu-kau-hien**, tn., China; 32 30*n* 120 50*e*
98 **Yukon**, prov., Canada; a. 207,076 sq. m.; mountainous; coal, gold, silver, big game; cap. Dawson; p. 4,230; 64 0*n* 135 0*w*
90 **Yukon, R.**, Alas., N. America; length 2,050 m.; 66 0*n* 145 0*w*
72 **Yu-lin**, China; 38 25*n* 109 20*e*
106 **Yuma**, tn., Ariz., U.S.A.; 32 40*n* 114 36*w*
72 **Yu-min-hsian**, tn., China; 40 40*n* 97 30*e*
125 **Yuna**, tn., W. Australia; 28 0*s* 115 0*e*
74 **Yun-chun**, tn., China; 25 10*n* 118 0*e*
72 **Yung-chang**, tn., China; 38 0*n* 109 0*e*
74 **Yungchowfu**, tn., China; 26 0*n* 112 0*e*
74 **Yung-ning**, tn., China; 28 0*n* 150 0*e*
72 **Yung-shun**, tn., China; 29 0*n* 109 50*e*
74 **Yu-ning**, tn., China; 33 0*n* 114 15*e*
72 **Yun nan**, prov., China; a. 146,714 sq. m.; mountainous; rivers—Yang-tze-kiang, Mekong, Salween; farming; rice, maize; copper, lead, coal, zinc, silver; silk, leather goods; cap. Yun nan; p. 11,020,591; 25 0*n* 101 0*e*
72 **Yun nan, tn.**, China; silks; 25 0*n* 102 35*e*
120 **Yunta, tn., S.** Australia; 32 33*s* 139 30*e*
74 **Yün-yang, tn.**, China; 32 30*n* 111 0*e*
42 **Yurburg, tn.**, Lith.; 54 *n* 22 46*e*
112 **Yurimaguas, tn.**, Peru; 6 0*s* 76 15*w*
112 **Yurua, R.**, Brazil; 6 25*s* 70 0*w*
45 **Yverdun, tn.**, Switzerland; 46 46*n* 6 38*e*
45 **Yvoire**, France; 46 22*n* 6 19*e*

38 **Zaandam**, tn., Netherlands; paper; oil and sawmills; cement; p. 33,183; 52 26*n* 4 49*e*
62 **Zab, R.**, Iraq; 36 40*n* 44 20*e*
34 **Zabern**. See Saverne.
110 **Zacapa**, tn., Guatemala; p. 18,000; 14 55*n* 89 35*w*
108 **Zacatecas**, st., Mexico; a. 24,471 sq. m.; cereals, fruit, sugar; silver, gold, iron; p. 465,021; 23 20*n* 102 50*w*
108 **Zacatecas**, tn., Mexico; pottery; silver; p. 20,000; 22 45*n* 102 39*w*
108 **Zacoalco**, tn., Mexico; 20 10*n* 103 40*w*
62 **Zafaranboly**, tn., Turkey; 41 7*n* 32 45*e*
48 **Zafra**, tn., Spain; 38 26*n* 6 30*w*
78 **Zagazig**, tn., Egypt; p. 52,839; 30 34*n* 31 28*e*
10 **Zaghwan**, tn., Tunis; 36 28*n* 10 2*e*
53 **Zagora**, tn., Greece; 39 30*n* 23 2*e*
46 **Zagreb**, tn., Yugoslavia; cath., univ.; linen, carpets, tobacco, leather; p. 185,000; 45 51*n* 16 0*e*
63 **Zagros Mts.**, Persia; 34 0*n* 46 15*e*
47 **Zagubitza**, vil., Yugoslavia; 44 12*n* 21 47*e*
63 **Zahidan**. See Duzdab.
47 **Zajetcar**, tn., Yugoslavia; 43 50*n* 22 18*e*
62 **Zakatal**, tn., U.S.S.R.; 41 34*n* 46 36*e*
57 **Zakataly**, tn., Russia; 41 34*n* 46 36*e*
83 **Zak River, C.** of Good Hope, S. Africa; 31 50*s* 22 15*e*
53 **Zakynthos**. See Zante I.
46 **Zalaegerszeg**, tn., Hungary; p. 13,100; 46 53*n* 16 50*e*
48 **Zalamea**, tn., Spain; 38 40*n* 5 40*w*
52 **Zalau**, tn., Rumania; p. 8,154; 47 10*n* 23 3*e*
82 **Zambesi, R.**, Africa; 2,200 m. long; navigable for 1,700 m.; 18 0*s* 36 30*e*
71 **Zamboanga**, tn., Philippine Is.; rice, sugar; tobacco; timber; p. 47,000; 7 00*n* 122 0*e*

MAP

108 **Zamora**, tn., Mexico; 20 0*n* 102 22*w*
48 **Zamora**, tn., Spain; cath.; grain; wines; p. 21,537; 41 30*n* 5 45*w*
83 **Zand, R.**, O.F.S., S. Afr.; 28 0*s* 26 40*e*
38 **Zandvoort**, tn., Netherlands; 52 21*n* 4 31*e*
102 **Zanesville**, tn., Ohio, U.S.A.; textiles, pottery, machinery; p. 36,440; 40 0*n* 82 0*w*
53 **Zante**, tn., Greece; carpets; p. 11,500; 37 47*n* 20 53*e*
53 **Zante I.**, Greece; a. 277 sq. m.; p. 40,000; 37 48*n* 20 48*e*
125 **Zanthus**, vil., W. Australia; 30 50*s* 123 53*e*
81 **Zanzibar, I.**, Br. prot., E. Africa; a. 640 sq. m., 1,020 sq. m. (with Pemba); cloves, coconuts; copra, coconut oil, coir fibre, pottery; p. 137,741, 235,428 (with Pemba); 6 10*s* 39 20*e*
81 **Zanzibar**, tn., E. Africa; p. 45,276; 6 09*s* 39 12*e*
57 **Zaporozhe**, formerly Alexandrovsk. See Dnieprostroy.
47 **Zara**, tn., Italy; p. 18,604; 44 7*n* 15 18*e*
108 **Zaragoza**, tn., Mexico; 28 28*n* 101 0*w*
63 **Zarand**, tn., Persia; 30 48*n* 56 20*e*
42 **Zarasai**, tn., Lithuania; 55 43*n* 26 15*e*
57 **Zarev**, tn., Russia; 48 30*n* 45 20*e*
88 **Zara**, tn., Nigeria; 11 1*n* 7 41*e*
67 **Zaskar**, dist., India; 33 30*n* 77 0*e*
83 **Zastron**, tn., O.F.S., S. Africa; 30 5*s* 27 0*e*
43 **Zbaraz**, tn., Poland; 49 45*n* 25 48*e*
43 **Zdunska Volya**, tn. Poland; 51 34*n* 18 57*e*
38 **Zeebrugge**, spt., Belgium; in Gt. War German submarine base, destroyed by British 1918; 51 20*n* 3 12*e*
121 **Zeehan**, vil., Tas., Australia; 41 49*s* 145 18*e*
38 **Zeeland**, prov., Netherlands; a. 706 sq. m.; fishing; p. 247,541; 51 30*n* 3 50*e*
83 **Zeerust**, vil., Transvaal, S. Africa; 25 33*s* 26 5*e*
81 **Zeila**, tn., Brit. Somal.; p. 5,000; 11 20*n* 43 30*e*
38 **Zeist**, tn., Netherlands; p. 24,763; 52 5*n* 5 14*e*
60 **Zeitun**, tn., Turkey; 37 50*n* 36 40*e*
40 **Zeitz**, tn., Germany; textiles; p. 84,500; 51 4*n* 12 8*e*
47 **Zemun**, tn., Yugoslavia; on R. Danube; p. 28,100; 44 52*n* 20 32*e*
47 **Zenga**, tn., Yugoslavia; 45 0*n* 14 59*e*
47 **Zenica**, vil., Yugoslavia; 44 11*n* 17 38*e*
81 **Zeraba**, vil., Abyssinia; 13 20*n* 40 30*e*
40 **Zerbst**, tn., Germany; brewing; jewellery, machinery; p. 19,470; 52 0*n* 12 6*e*
45 **Zermatt**, vil., Switzerland; tourist centre; 46 1*n* 7 44*e*
45 **Zernetz**, vil., Switzerland; 46 42*n* 10 5*e*
22 **Zetland**. See Shetland Is.
38 **Zevenbergen**, vil., Netherlands; 51 30*n* 4 37*e*
61 **Ziadin**, tn., U.S.S.R.; 40 12*n* 65 50*e*
61 **Zichron Jacob**, vil., Palestine; 32 35*n* 35 0*e*
38 **Zierikzee**, spt., Netherlands; 51 40*n* 3 55*e*
62 **Zile**, tn., Turkey; p. 15,377; 40 18*n* 35 28*e*
53 **Zilliahovo**, vil., Greece; 41 1*n* 23 52*e*
46 **Zilina**, vil., Czechoslovakia; 49 10*n* 18 45*e*
44 **Zillerthal Alps**, Italy; 47 0*n* 11 40*e*
109 **Zimapan**, tn., Mexico; 20 45*n* 99 30*w*
89 **Zimbabye**, ruins, S. Rhodesia; 20 10*s* 31 7*e*
69 **Zimme**. See Chieng-mai.
52 **Zimnitza**, tn., Rumania; p. 10,933; 43 39*n* 25 26*e*
63 **Zinjan**, tn., Persia; 36 40*n* 48 32*e*
57 **Zinovievsk**, tn., Russia; brewing, distilling, smelting, tobacco; p. 90,600; 48 30*n* 32 8*e*
41 **Zitau**, tn., Germany; woollens; p. 88,353; 50 53*n* 14 50*e*
52 **Zlatitza**, tn., Bulgaria; 42 41*n* 24 9*e*
56 **Zlatoust**, tn., Russia; gold, iron; machinery; p. 94,100; 55 14*n* 59 41*e*
43 **Zloczow**, tn., Poland; p. 12,450; 49 50*n* 25 0*e*
46 **Znaim**, tn., Czechoslovakia; market gardening; p. 25,832; 48 50*n* 16 1*e*
89 **Zoa**, tn., Nyasaland; 15 25*s* 35 15*e*
86 **Zoekmakaar**, tn., Transvaal; 23 32*s* 28 48*e*
45 **Zofingen**, tn., Switzerland; 47 17*n* 7 56*e*
43 **Zolkiew**, tn., Poland; 50 2*n* 24 0*e*
89 **Zomba**, cap. Nyasaland; tobacco, cotton; 15 27*s* 35 20*e*
42 **Zoppot**, tn., Poland; 54 28*n* 18 35*e*
87 **Zoutpans Drift**, O.F.S., S. Africa; gold; 28 0*s* 25 30*e*
45 **Zug**, can., Switzerland; a. 92 sq. m.; p. 34,395; 47 10*n* 8 31*e*
45 **Zug**, tn., Switzerland; p. 11,155; 47 11*n* 8 30*e*
38 **Zuider Zee**, Netherlands; over 800 sq. m. of land reclaimed for cultivation by the completion of the 18-mile dyke on May 29, 1932; now entirely separated from the North Sea, area still under water named Yssel Lake; 52 30*n* 5 30*e*
63 **Zulfikar**, tn., Afghanistan; 33 26*n* 61 22*e*
41 **Züllichau**, tn., Germany; 52 5*n* 15 33*e*
83 **Zululand**, prov., Natal, S. Africa; a. 10,427 sq. m.; mountainous; R. Tugela forms S.W. boundary; cattle and sheep rearing; cereals, sugar, coffee, tea, gold and coal; 28 0*s* 31 30*e*
89 **Zumbo**, tn., Mozambique; 15 38*s* 30 20*e*
109 **Zumpango**, tn., Mexico; 19 44*n* 99 13*w*
59 **Zungaria**, mountainous dist., Chinese Rep.; 45 0*n* 88 0*e*
88 **Zungeru**, tn., Nigeria; 9 47*n* 6 10*e*
45 **Zurich**, can., Switzerland; a. 667 sq. m.; mnfs.—cotton and silk; p. 619,590; 47 27*n* 8 37*e*
45 **Zürich**, tn., Switzerland; on L. Zürich; cath., univ.; paper, silk weaving, cotton spinning; machinery; p. 250,574; 47 23*n* 8 32*e*
38 **Zütfen**, tn., Netherlands; paper; tanning; p. 19,733; 52 8*n* 6 11*e*
47 **Zvilainatz**, vil., Yugoslavia; 44 10*n* 21 12*e*
47 **Zvornik**, vil., Yugoslavia; 44 23*n* 19 7*e*
83 **Zwartkop**, vil., C. of Hood Hope, S. Africa; 30 5*s* 21 5*e*
40 **Zweibrücken**, tn., Germany; silk, leather, machinery; p. 15,783; 49 16*n* 7 20*e*
40 **Zwickau**, tn., Germany; coal; glass, motors, chemicals, machinery; p. 84,701; 50 44*n* 12 30*e*
38 **Zwolle**, tn., Netherlands; cottons; iron goods; boat building; p. 40,560; 52 30*n* 6 05*e*

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