

AN ILLUSTRATED CATALOGUE

OF THE

ASIATIC HORNS AND ANTLERS

IN THE COLLECTION OF THE

INDIAN MUSEUM.

BY

T. BENTHAM.

CALCUTTA :

PUBLISHED BY ORDER OF THE TRUSTEES AND SOLD BY THE SUPERINTENDENT,
INDIAN MUSEUM, NATURAL HISTORY SECTION.

1908.

PRICE TWO RUPEES.



CALCUTTA :

PRINTED BY THACKER, SPINK AND CO

PREFACE.

My object in asking Mr. Bentham to prepare this catalogue of the horns and antlers in the collection of the Indian Museum and recommending its publication to the Trustees has been twofold. In the first place, a catalogue of the kind seemed likely to be of use to sportsmen, who frequently write to the Museum for information regarding horns and antlers, and in the second I thought that it might serve as an appeal to those in a position to help the Museum by giving us specimens. The greater part of our collection of Mammals consists of the gifts of naturalists and sportsmen of a bygone generation; it is now rare for us to obtain specimens of the Ungulates except by purchase from dealers. Assistance given us increases our power of assisting the amateur, and we are often placed in the somewhat ridiculous position of being unable to answer inquiries about some common animal, simply because we cannot refer to specimens so common that no one has taken the trouble to collect them. The exact distribution of many of the Indian species is still unknown, and can only be properly investigated by the examination of large numbers of examples from a large number of localities.

As this work is intended primarily for sportsmen and field naturalists, although I trust that it will not prove devoid of interest even to museum zoologists, measurements are given in inches and tenths of inches instead of centimetres and millimetres; but a table for converting the one into the other is given at the end of Mr. Bentham's introductory note. There are other "anachronisms," for which I must accept the responsibility and as regards which adverse criticism must be expected. No attempt has been made to bring the nomenclature of the Ungulates "up to date." In the babel of names that now rages round many of the common animals the safest course to take has seemed to me, in the circumstances, to adopt, without deviation therefrom, the nomenclature of some standard work readily accessible to naturalists. I have therefore recommended Mr. Bentham to follow that of the late Dr. W. T. Blanford's volume on the Mammals in the "Fauna of British India and Ceylon." No great difficulty has been experienced in bringing the nomenclature of extra-Indian Ungulates represented in the collection (to which Dr. Blanford himself contributed so large a share) into harmony with that of this invaluable work. I have also advised Mr. Bentham to ignore many of the "species," "sub-species" and "varieties" into which some of the common Mammals have recently been divided. Some of these

“species,” etc., are merely revivals from the classification of a less scientific age, many are founded on imperfect evidence and are due rather to a theory that animals must vary locally than to the examination of a sufficient number of specimens; even in the few cases in which a large number of examples of each species from a large number of localities have been examined, the student of human nature *plus* zoology may doubt whether it is beneficial to the study of the latter that minute differences should be recognized by the giving of new names to which their author can append his own in perpetuity. The term “blanket name” has recently been coined by those who believe in the system of multiplying species indefinitely, to mean names (such as *Mus rattus* and *Nemorhædus sumatraensis*), which they regard as representing not single species but groups of allied forms. The names used in this catalogue are in many cases “blanket names.”

With this qualification, the collection of horns and antlers in the Museum is nearly complete so far as the Fauna of the Indian Empire is concerned, while numerous heads of interesting species from other Oriental countries are also included. Of the species recognized by Blanford as Indian only Fea’s Barking-deer (*Cervulus feæ*) is not represented. It has, therefore, been possible to give photographs of the horns or antlers of all the Indian Cervidæ and Bovidæ but one. Care has been taken to choose well-developed horns of known *provenance* whenever possible. Such photographs may not be devoid of value even in the eyes of those who regard “blanket names” with contempt.

N. ANNANDALE,

Superintendent, Indian Museum.

CALCUTTA,
August 23rd, 1908.)

INTRODUCTION.

IN 1890 Mr. Sclater, then Deputy Superintendent of the Indian Museum, wrote the second part of the Catalogue of Mammals contained in this institution. This volume contains an account of the Bovidæ and Cervidæ, with which the present work also is concerned. It does not, however, go into the measurements of the skulls and horns of these two groups. I have therefore been asked by the Superintendent, Dr. N. Annandale, to prepare a catalogue giving measurements of the fine collection of horns of Asiatic Ungulates exhibited on the walls of the Mammal gallery, so that the book might be of use to sportsmen and others. This has accordingly been done, some 450 specimens having been measured.

Most of the species are found within Indian limits. All are found within the Oriental Region with the exception of two or three species from Palæarctic Asia, from which continent all the specimens here described have been obtained. The European, American and African collection is too small and incomplete for special notice.

The collection contains two types, both of species which, unfortunately, do not occur in Indian limits. There are several records, notably a specimen of *Budorcas taxicolor* from the Mishmi Hills and a specimen of *Nemorhadus sumatraensis* presented by Col. Phayre. There are two records of *Bos frontalis*, but it is difficult to know whether these are pure bred or hybrids, since there is very little history attached to them, besides which it has long been disputed as to whether *Bos frontalis* occurs wild in Indian limits. Several authors take it that this species is identical with *Bos gaurus*.

The specific identity of *Ovis cycloceros* and *Ovis vignei* has now been more or less fully established and they are therefore included under one species, viz., *Ovis vignei*.

T. BENTHAM.

NOTICE CONCERNING MEASUREMENTS, etc.

Length is in inches.

The length of horns is in all cases measured along the outside curve, in deer above the burr.

Circumference is measured at base of horn, in deer above the first tine.

All horns with a core have a tendency to shrink when kept for some years.

NOTE.—The numbers on the plates refer to the serial numbers in the tables.

TABLE FOR CONVERTING INCHES INTO CENTIMETRES

Inches.	Centimetres.	Inches.	Centimetres.	Inches.	Centimetres.
·06	·15	2·5	6·25	7·5	18·75
·125	·3	3	7·5	8	20
·25	·6	3·5	8·75	8·5	21·25
·5	1·25	4	10	9	22·5
·625	2·1	4·5	11·25	9·5	23·75
·66	1·66	5	12·5	10	25
·875	2·2	5·5	13·75	10·5	26·25
1	2·5	6	15	11	27·5
1·5	3·75	6·5	16·25	11·5	28·77
2	5	7	17·5	12	30

ERRATUM.

PAGE 35, below plate. For " $\frac{1}{7}$ th scale" read " $\frac{1}{11}$ th scale."

BOS GAURUS, Hamilton Smith.

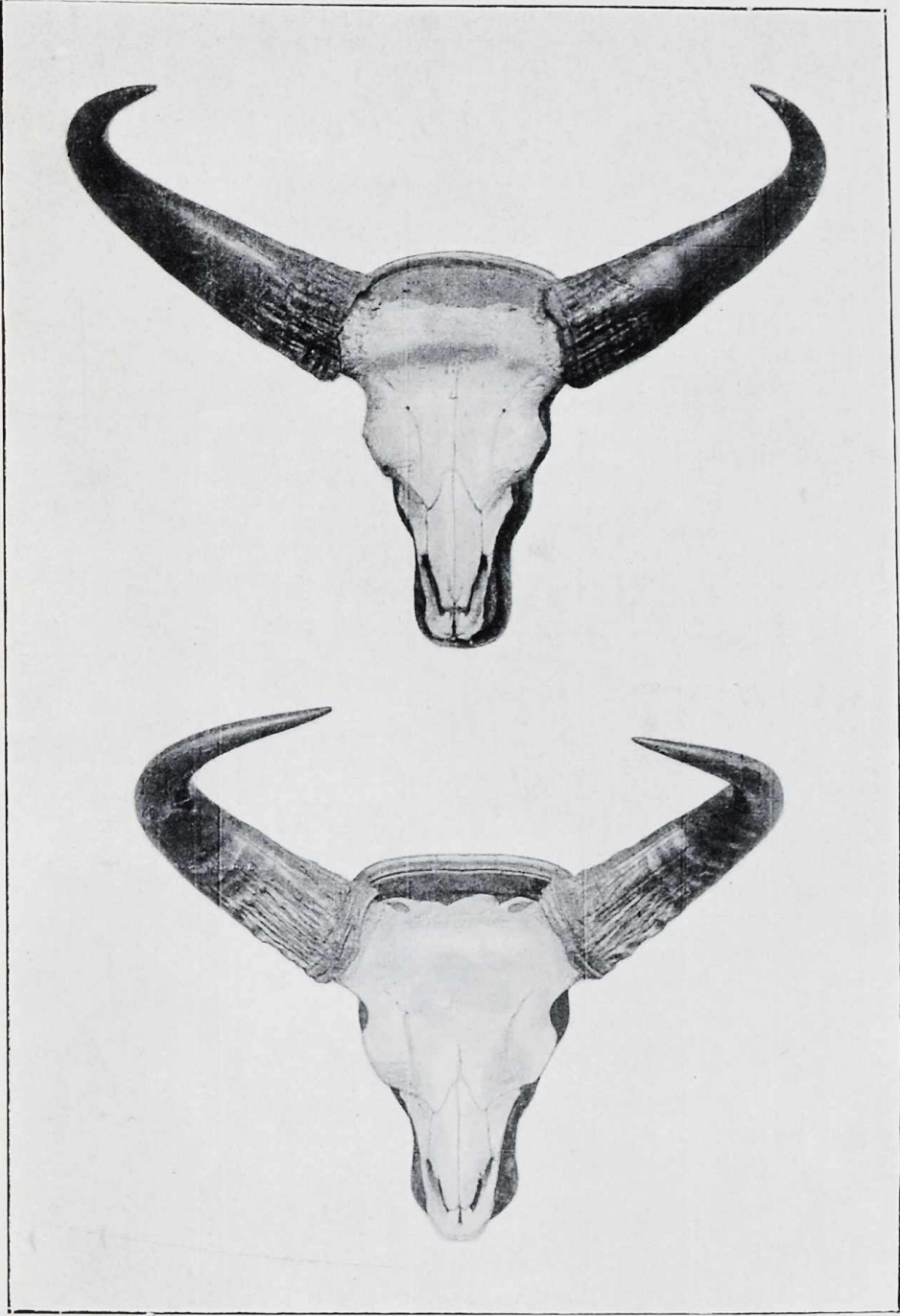
(THE GAOUR OR "BISON.")

No.	Sex.	Locality.	Donor.	Date.	Basal length of skull.	Breadth of skull.	Length of horn.	Circumference at base.	Tip to tip.
1	♂	?	W. T. Blanford ...	1868	19	8·5	20	10·5	4·7
2	♀	Assam ...	Col. Jenkins ...	1844	19·5	9	19	12·4	12·7
3	♂	?	?	19·5	8·3	15·5	10·8	9
4	♂	Chaibassa ...	Maj. Tickell ...	1842	20	9	25·8	15·3	27
5	♂	Gauhati, Assam ...	Maj. Pollock ...	1870	21·9	10·3	19·4	11·2	13·8
6	♂	Malacca ...	Dr. Maingay ...	1863	?	?	23·4	17	20·6
7	♂	Burma ...	Col. Phayre ...	1861	?	?	32	18	22
8	♂	Gauhati, Assam ...	Maj. Pollock ...	1870	19·05	8	20·5	13	20·25
9	♂	?	Col. Guthrie ...	1862	19·75	10	?	?	?
10	♀	Assam Hills ...	Col. Jenkins ...	1848	20·5	11·75	?	?	?
11	♂	Chittagong ...	J. A. Campbell ...	1879	?	?	19·75	12	5·5
12	♂	Ditto ...	Ditto ...	1879	19·75	10	31·5	19	15·75
13	♂	Ditto ...	Ditto ...	1879	?	...	21	14	21·5
14	♂	?	Purchased ...	1847	19·5	10·5	29·25	16·5	20·75
15	♂	Chittagong Hill Tracts	J. T. Jarbo ...	1881	?	?	22·75	12·75	6·75

Distribution.—The peninsula of India, in forest tracts, from the Vindhyan Hills along the north of the Nerbudda (*Jerdon*); southward through Kandeish and the Western Ghats to Tinnevely (*Elliot*); eastward through the Central Provinces and Chota Nagpore almost to Midnapore (*Jerdon*); the Nepal Terai (*Hodgson*); Assam; Tipperah and Chittagong Hills; southwards through Burma (*Blyth*); to Malay Peninsula (*Cantor* and *Maingay*), but not recorded from any of the islands; Ceylon.

Record Head.—Length 46 in. Circumference 20·5 in. Tip to tip 33 in. From Malay States. (*Cf.* Lydekker, *Game Animals of India*, etc., p. 56.)

Cf. Blanford, *Fauna of British India*, Mammalia, p. 484.



4

12

Bos gaurus, $\frac{1}{10}$ th scale.

BOS FRONTALIS, Lambert.

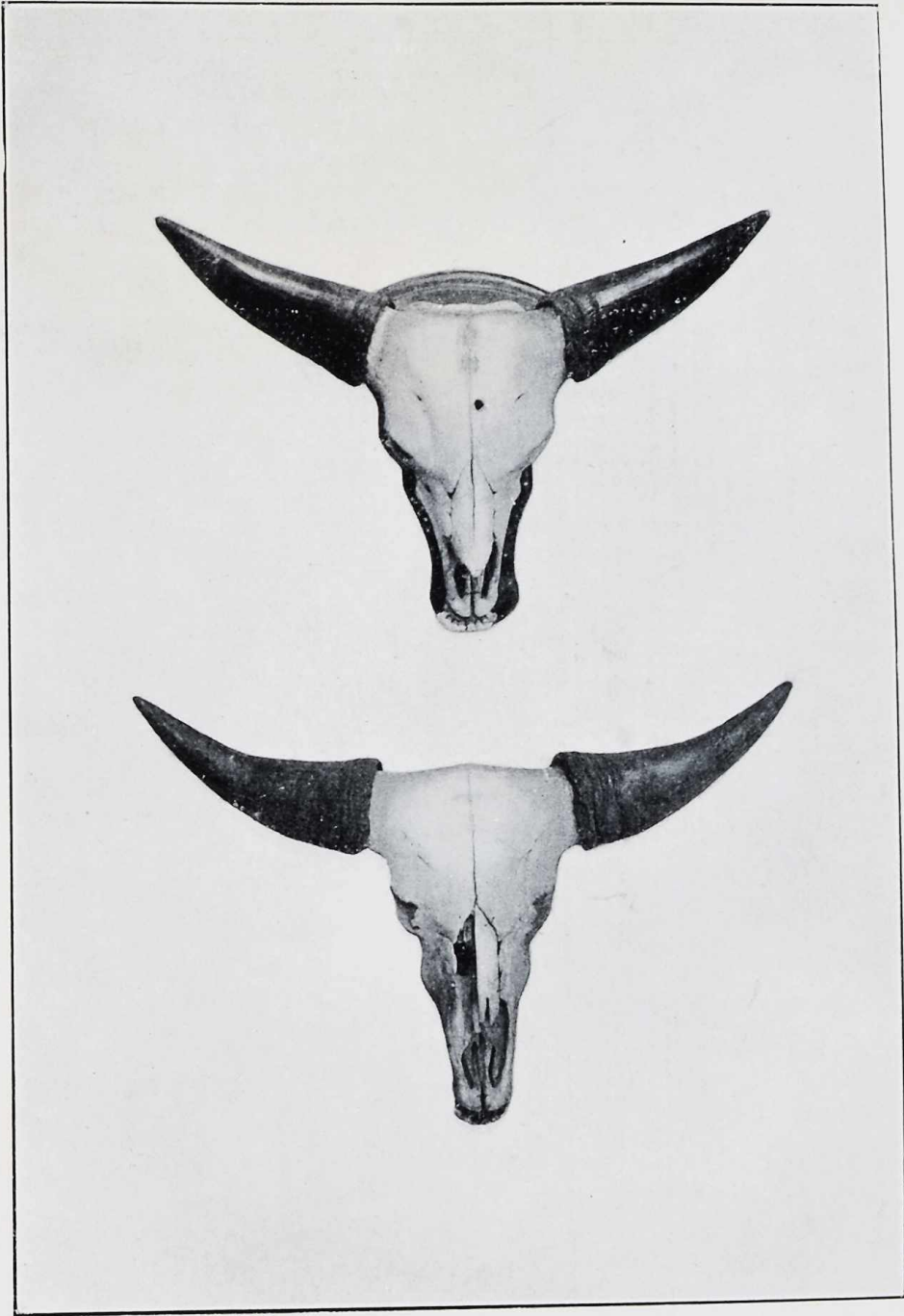
(THE GAYAL OR MITHAN.)

No.	Sex.	Locality.	Donor.	Date.	Basal length of skull.	Breadth of skull.	Length of horn.	Circumference at base.	Tip to tip.
1	♂	Chittagong Hill Tracts	J. T. Jarbo ...	1879	20·5	10	22	14·75	24
2	♂	Chittagong ...	R. W. Frith ...	1850	17·75	9·5	15	14·75	13·5
3	♂	Ditto ...	Ditto ...	,,	18·5	8	10·75	13·5	28
4	♂	Ditto ...	Ditto ...	,,	17·5	8·75	...	...	...
5	♂	Ditto ...	Ditto ...	1850	19·25	9	...	...	...
6	♂	...	...	...	...	...	14·5	13·5	13·75
7	♂	...	...	...	...	...	18·5	13·75	32
8	♂ Juv.	...	Calcutta Zool. Gardens, E. Blyth.	1857	20·25	8·25	17·25	15·75	38·25
9	...	...	Calcutta Zool. Gardens.	1893	...	...	18·25*	17	... "Pure bred."

Distribution:—Akyab northwards through Arakan and the Chittagong Hills; through Tipperah and Manipur to the Naga Hills; Daffla Hills.

Cf. Blanford, *Fauna of British India*, Mammalia, p. 487.

* Record.



2

8

Bos frontalis, $\frac{1}{10}$ th scale.

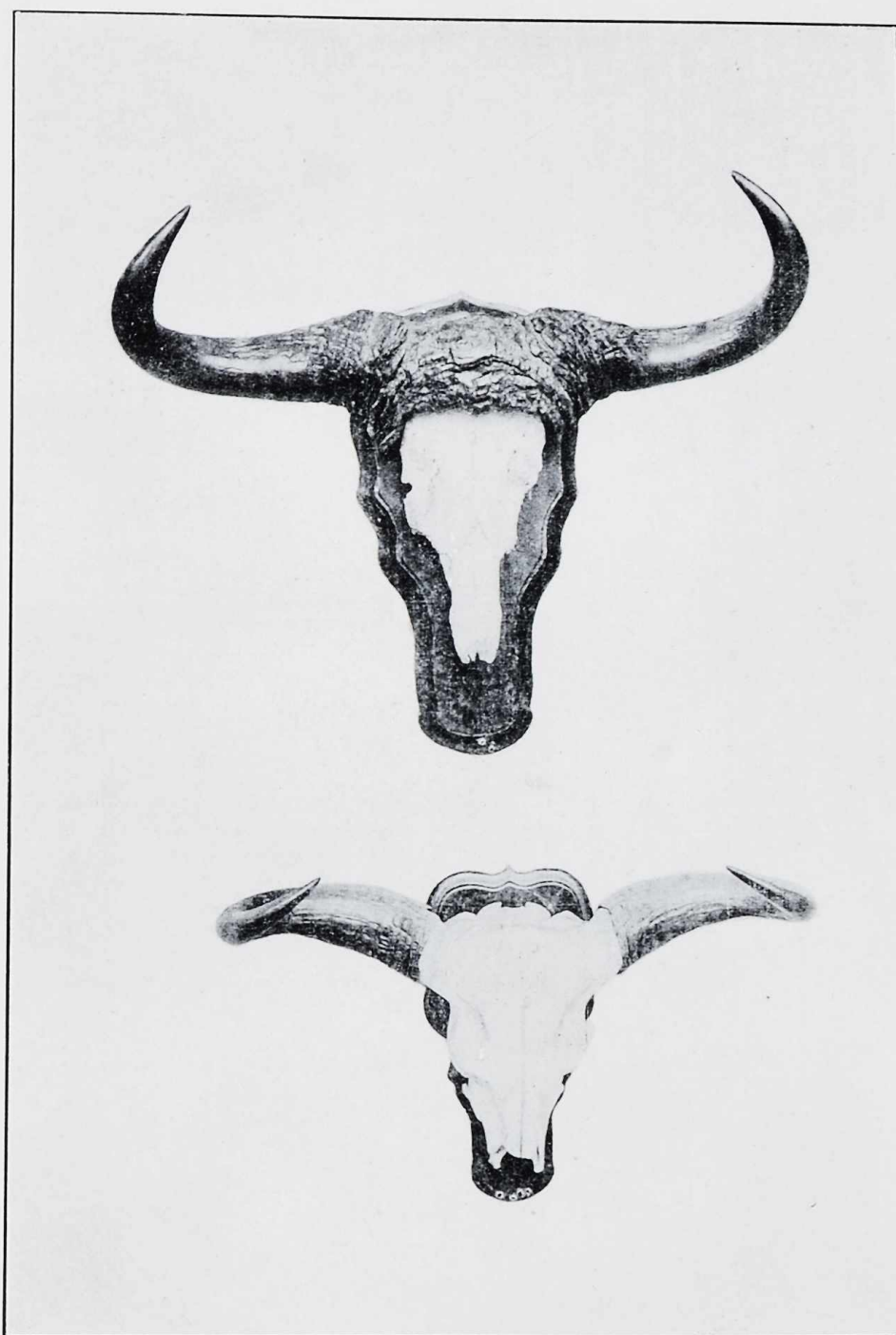
BOS SONDAICUS, Schlegel.

(THE BANTING.)

No.	Sex.	Locality.	Donor.	Date.	Basal length of skull.	Breadth of skull.	Length of horn.	Circumfer- ence.	Tip to tip.
1	♂	Burma ...	Prince of the Netherlands.	1837	?	?	23·5	16	15·5
2	♂	Java ...	The Batavian Society.	1844	?	?	31*	21·5	30
3	♂	Upper Pegu ..	Col. Phayre ...	1849	18·75	8	21·5	12·5	19·5
4	♂	Burma ...	Zool. Gardens ...	1885	17	6·25	7	6·75	14·75
5	♂	Upper Pegu ...	Col. Phayre ...	1850	?	8·5	36·5	12	22·75 "Hybrid"

Distribution:—Arakan through Burma and the Malay Peninsula; Java, Bali, and Borneo.
Cf. Blanford, *Fauna of British India*, Mammalia, p. 489.

* Record.



2

5

Bos sondaicus, $\frac{1}{2}$ th scale.

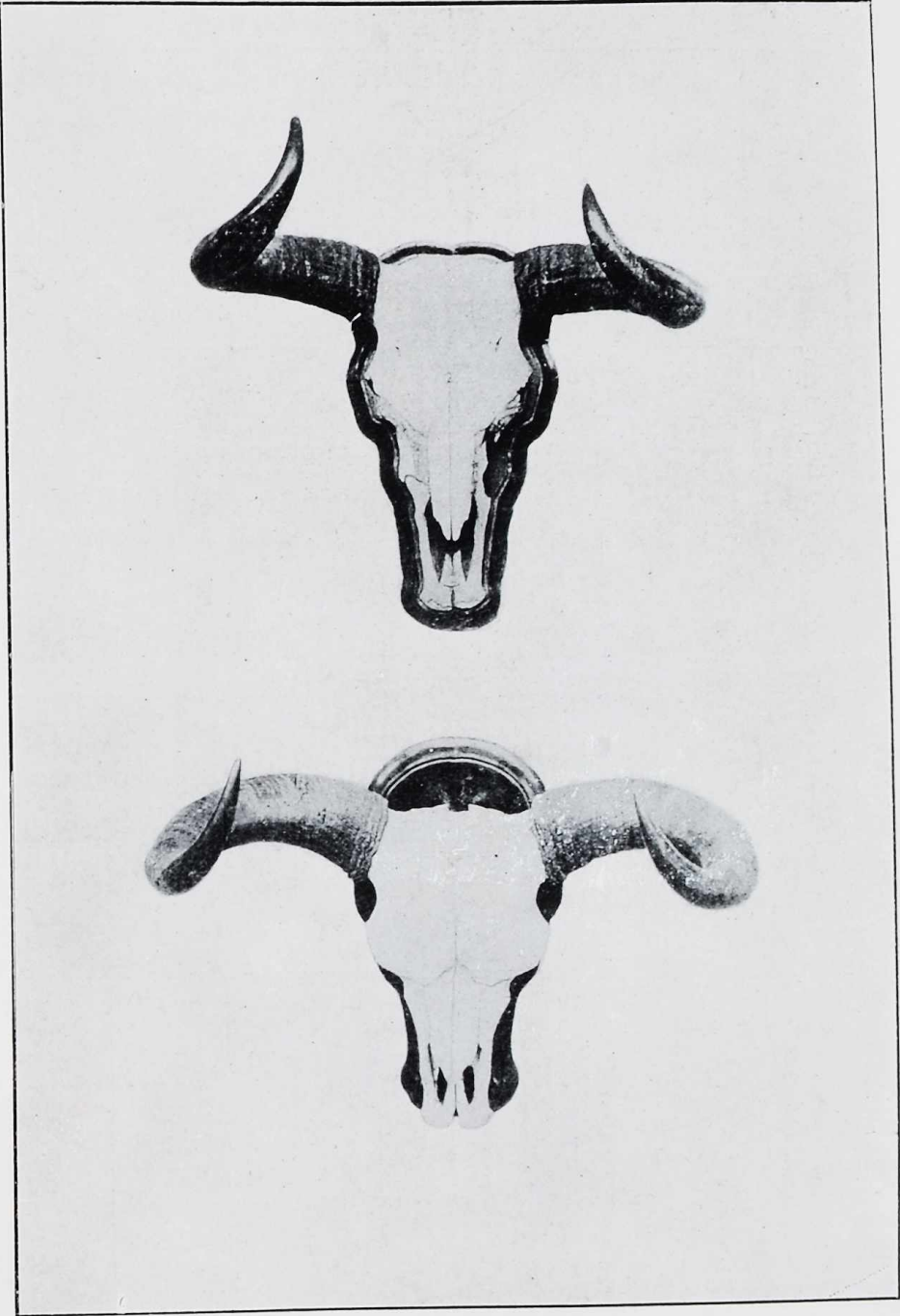
BOS GRUNNIENS, Linnæus.

(THE YAK.)

No.	Sex.	Locality.	Donor.	Date.	Basal length of skull	Breadth of skull.	Length of horn.	Circumference.	Tip to tip.
1	...	"Almora District" ...	Purchased ...	1892	19·65	8·75	24·3	11·75	11·5
2	...	Tibet ...	Lt.-Col. J. Fraser	1892	22·8	11·5	31·5	15	17·3
3	...	Chang Chenmo ...	W. Rutledge ...	1894	21·5	11	33·4	16	21·25
4	1862	?	?	26·75	11·8	18·75
5	...	Rondur, Tibet ...	Purchased (Rowland Ward).	1905	?	?	30·5	15·75	25·25
6	...	Bhutan ...	Capt. E. Smyth ...	1897	21·75	10·5	30·5	14·5	17·3

Distribution :—The hill ranges of Central Asia, never below 6,000 feet.

Record Head :—Length 39 in. Lucknow Museum (*cf.* Lydekker, *Game Animals of India*, etc., p. 79).
Cf. Blanford, *Fauna of British India*, Mammalia, p. 490.



2

3

Bos grunniens, $\frac{1}{11}$ th scale.

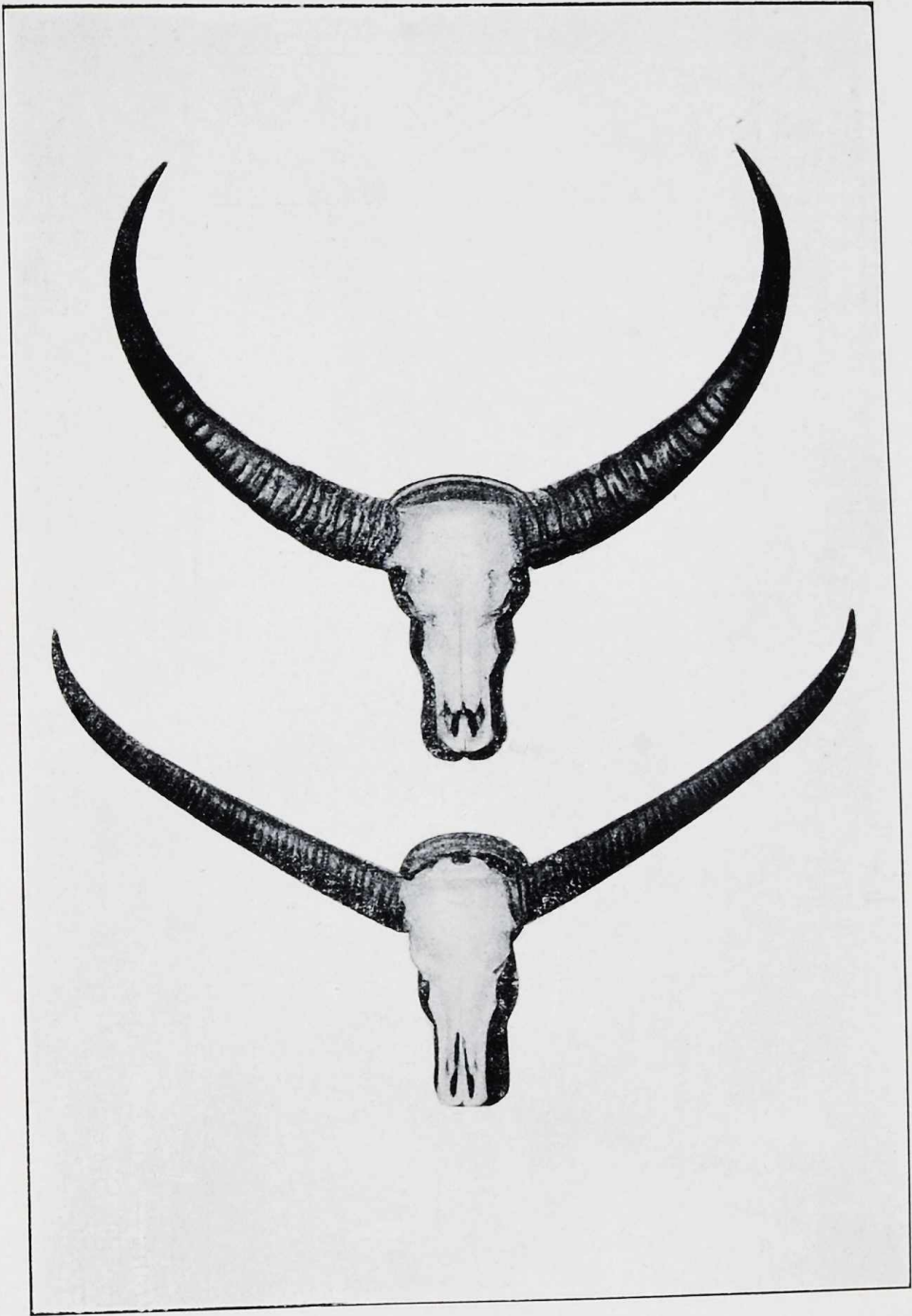
BOS BUBALUS, Linnæus.

(THE INDIAN BUFFALO.)

No.	Sex.	Locality.		Donor.	Date.	Basal length of skull.	Breadth of skull.	Length of horn.	Circumference.	Tip to tip.
1	♂	Kaliabar,	Central	J. Hamilton	1879	22·5	9	48·3	16·75	33·5
		Assam								
2	♂	Assam	...	Dr. Wallich	1816	24	9	49	16	48·75
3	♂	Ditto	...	Maj. Brodie	1848	24·5	9	42·5	18·5	40
4	♂	Ditto	...	Ditto	1848	21·5	8·5	35·8	16·5	25·75
5	♂	?	...	Ditto	1848	23	7·5	43	15·6	17
6	♂		?	?	24·5	9	31	18·5	27·4
7	♂		?	?	21·75	6·75	25·8	12·5	17·25
8	♂	Dibrugarh,	Assam	Sir J. Barlow	1856	23·3	7·25	41·3	18·6	23·5
9	♂	40·25	19·5	46·15
10	♂	Sadiya,	Assam	Col. Graham	1877	22·25	8·5	40·25	17·75	19·5
11	♀	Assam	...	Dr. Mouat	1859	21·75	7·75	52·4	13·5	23·5
12	♀	Ditto	...	Dr. Wallich	1860	24·8	7·5	46·6	12·75	72
13	♀	Ditto	...	Ditto	1860	22·5	7·25	52·75	12·5	30
14	♀	Ditto	...	Ditto	1860	23·8	8·5	47·75	13·4	45·5
15	♂	Ditto	...	Ditto	1860	24	9·25	53·75	18·25	40·5

Distribution:—Southward from the Ganges to the Godavery; westward to Mundla; the Nepal Terai; Purneah; the Sunderbunds and the valley of the Brahmaputra.

Record Head:—One horn, length 77 $\frac{3}{8}$ in. British Museum (*cf.* Rowland Ward, *Horn Measurements*, p. 223).
Cf. Blanford, *Fauna of British India*, Mammalia, p. 491.



2

12

Bos bubalus 7¹/₃th scale.

OVIS HODGSONI, Blyth.

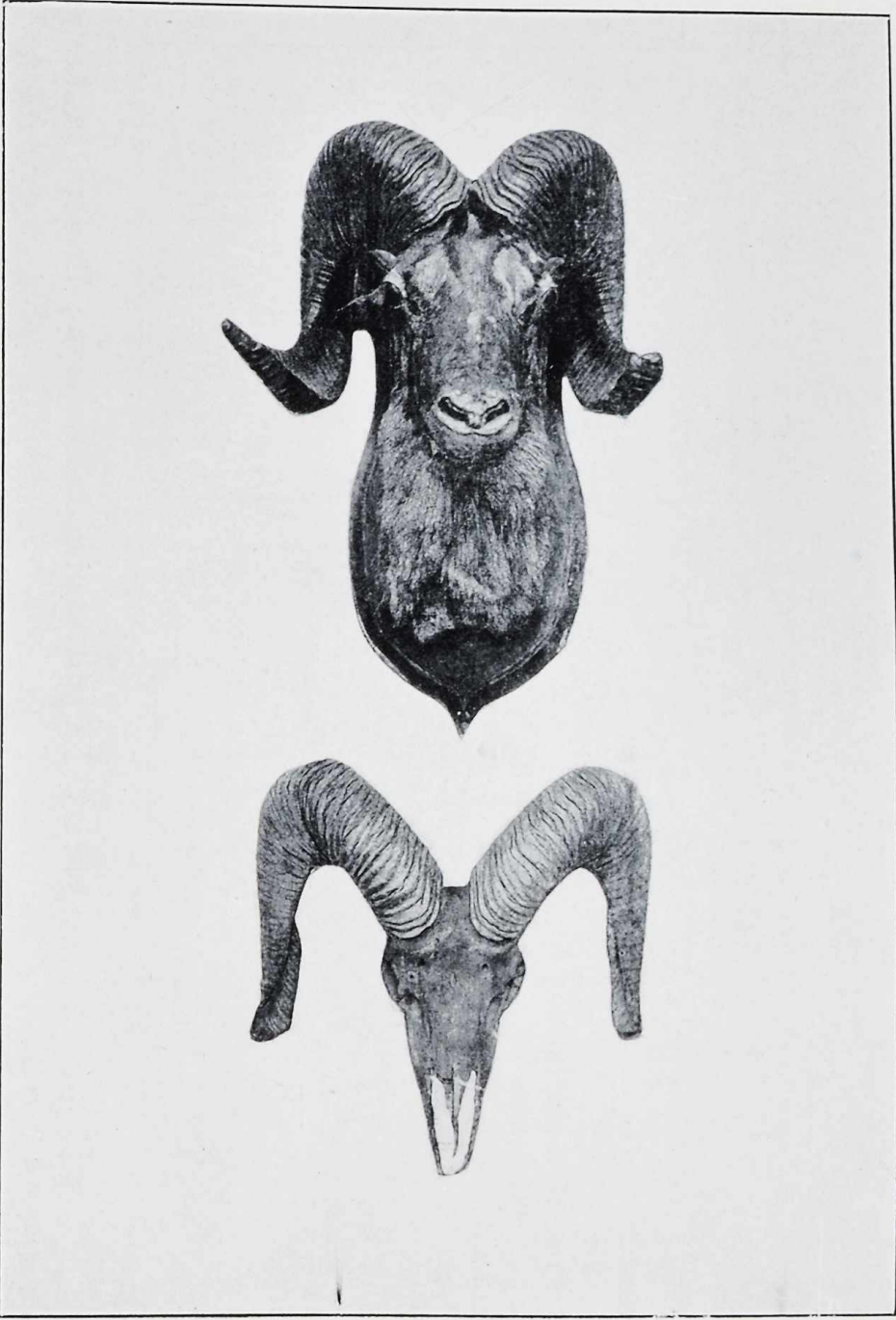
(GREAT TIBETAN SHEEP OR "OVIS AMMON.")

No.	Sex.	Locality.	Donor.	Year.	Basal length of skull.	Breadth of skull.	Length of horn.	Circumference.	Tip to tip.
1	♂	" Cachar " ...	G. T. Lushington	1862	10·8	6·25	41	16	17·5
2	♂	Ditto ...	Ditto ...	1862	?	?	42	16	18·75
3	♂	Ditto ...	Ditto ...	1862	?	?	33·25	16·75	21·25
4	♂	Nepal region ...	Capt. Mitchell ...	?	13	7	33·5	17	15
5	♂	Tibet ...	Capt. Smyth ...	1862	13	6·25	31·75	16	16·5
6	♂	" Cachar " ...	T. Lushington ...	1862	...	...	41	17·25	21·5
7	♂	Ditto ...	Ditto ...	1862	14·25	6	24·25	13·25	20·5
8	♂	?	?	?	13·5	6·25	28·75	17·5	20·75
9	♂	?	Purchased ...	1897	14	6·5	38	16	21
10	♂	?	Ditto ...	1897	14	6·8	43·5	16	20
11	♂	Chang Chenmo, Ladak	S J. Stone ...	1888	?	?	36·75	16	20·25

Distribution :—North of the snowy range of Himalayas; Ladak to the country north of Sikkim, altitude 12,000 to 15,000 ft.; E. Siberia.

Record Head :—Length 57 in. Circumference $18\frac{3}{4}$ in. Tip to tip 29 in. (*cf.* Lydekker, *Game Animals of India*, etc., p. 97).

Cf. Blanford, *Fauna of British India*, Mammalia, p. 494.



4

10

Ovis hodgsoni, $\frac{1}{10}$ th scale.

OVIS POLI, Blyth.

(MARCO POLO'S SHEEP.)

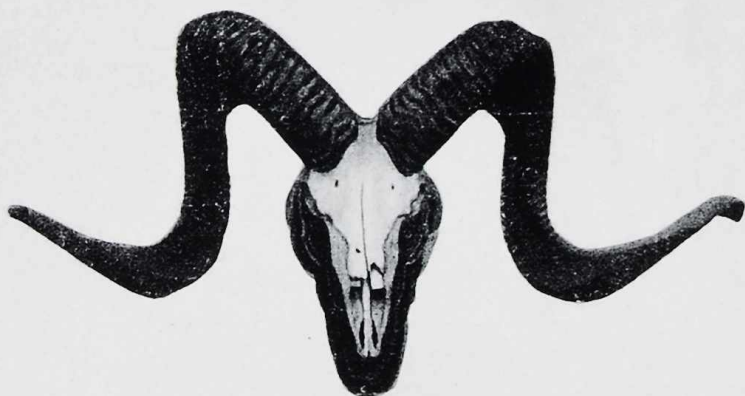
No.	Sex.	Locality.	Donor.	Year.	Basal length of skull.	Breadth of skull.	Length of horn.	Circumference.	Tip to tip.
1	♂	Near Kashgar ...	Dr. F. Stoliczka ...	1877	?	5	18·75	10·75	18·5
2	♂	Ditto ..	Ditto ...	1877	10·75	5·7	23·5	11	22·8
3	♂	British Baluchistan...	E. J. Jones ...	...	13·25	6·25	42·5	12·75	32
4	♂	Tagdanbash Pamir ...	W. A. Lockhart...	1886	15	6	56	15	44
5	♂	Hunza ...	Col. Biddulph ..	1879	...	6	68	16	52·5
6	♀	Thian Shan Mts. ...	Dr. F. Stoliczka ...	1874	...	...	12·25	5·75	15·25
7	...	Little Pamir ...	Lieut. Ossetinsky	1896	?	?	51·5	15·5	47·25
8	♂	Ditto ...	Ditto ...	1896	?	?	22	10	21·75
9	♀	Ditto ...	Ditto ...	1896	?	?	9·75	4·5	14·25
10	♀	Ditto ...	Capt. E. F. McSwiney.	1896	?	?	13·5	6·25	14·75
11	♂	Near Kashgar ...	Dr. F. Stoliczka ...	1877	?	?	32	12	34
12	♂	Ditto ...	Ditto ...	1877	?	?	33	12·5	31

Distribution:—The Pamir; Thian Shan Range; round Lake Issya; Eastern Turkestan to the Altai; Shim Shal Pamir; Hunza, N. Gilgit.

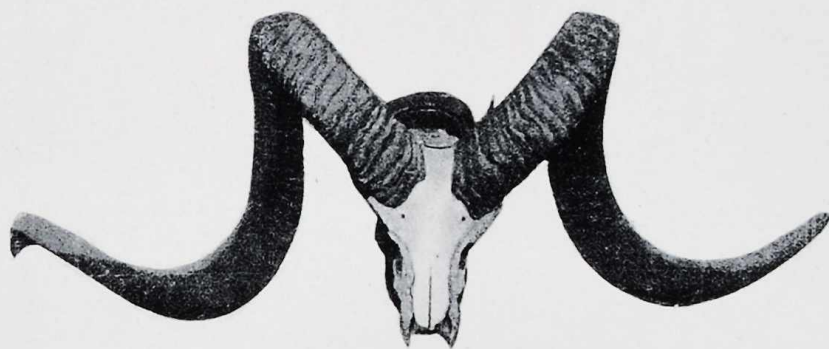
Record Head:—Length 75 in. Circumference 16 in. Tip to tip 54½ in. (*cf.* Rowland Ward, *Horn Measurements*, p. 194).

Cf. Blanford, *Fauna of British India*, Mammalia, p. 496.

4



5



Ovis poli, $\frac{1}{8}$ th scale.

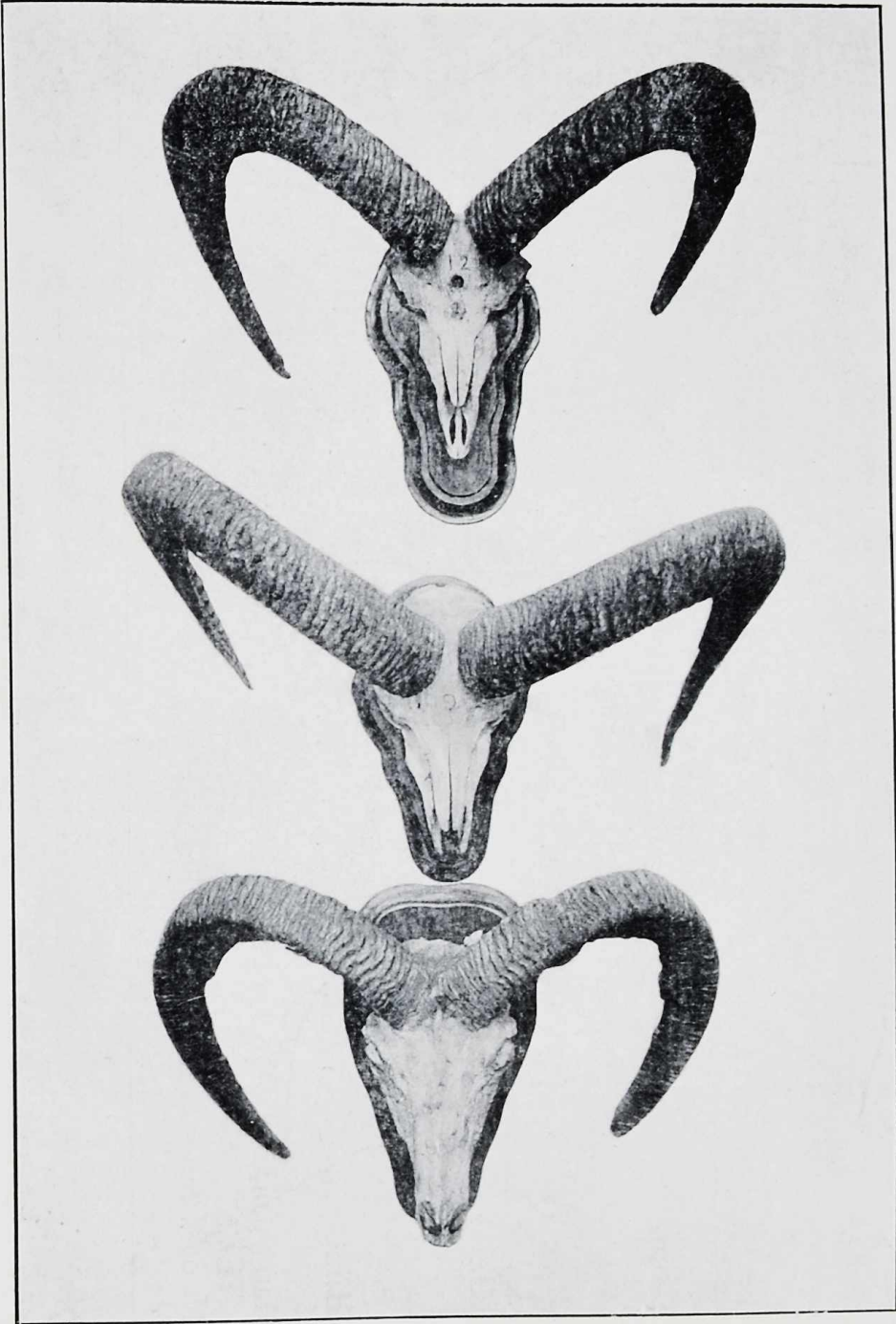
OVIS VIGNEI, Blyth.

(URIAL OR SHAPOO.)

No.	Sex.	Locality.	Donor.	Year.	Basal length of skull.	Breadth of skull.	Length of horn.	Circumference.	Tip to tip.
1	♂	Nepal ...	Capt. J. Manners-Smith.	?	?	?	24·5	11	16·5
2	♂ Juv.	Shiraz ...	?	?	?	?	12	6·75	8·5
3	♂	Khawja, Afghanistan	Genl. Lumsden ...	1884	?	?	17·75	10	20
4	♂	?	?	?	11	4	24	10·25	19·5
5	♂	?	?	?	8·5	4	15	8·5	18·25
6	♂	?	?	?	10	4·5	19·75	10·4	16·3
7	♂	?	?	?	?	?	11	7·5	15·75
8	♂	Shamiran Mts. ...	W. T. Blanford ...	1844	9·5	3·5	20·5	9	16·5
9	♂	Kashmir ...	H. Duvergne ...	1891	10·5	4·25	31	11·5	17·75
10	♂	?	?	?	9	3·75	21·75	8·5	12
11	♂	?	?	?	9·5	4·25	25·25	9·5	15
12	♂	British Baluchistan...	E. Jones ...	1853	9·25	4·5	30·5	15·25	15
13	♀	Punjab Salt Range...	W. Theobald ...	1853	9	4	27·5	10·75	12·75
14	♀	Ditto ...	Ditto ...	1853	8	3·75	5·5	3·75	4
15	♂	Punjab ...	W. T. Blanford ...	1844	8	4	26	9·75	13·5
16	♂	Afghanistan ...	Purchased ...	1871	8·75	3·5	4·25	3·75	4·5
17	♂	Jalk, Baluchistan ...	W. T. Blanford ...	1877	?	?	27	8·5	13
18	♂	Dizak, do. ...	Ditto ...	1872	8·5	3·25	16·25	8	20·75
19	♂	Khawja, Afghanistan	J. E. T. Aitchison	1886	10	4	21·75	10·75	19
20	♂ Juv.	British Baluchistan...	E. J. Jones ...	1889	9	3·9	2·25	3·6	3·5

Distribution :—Punjab Salt Range ; Suleiman Range ; Afghanistan and Baluchistan ; Nepal ; Ladak and Western Tibet at high elevations ; Persia.

Record Head :—Length 39·5 in. Circumference 11 in. (*cf.* Lydekker, *Game Animals of India*, etc., p. 104).
Cf. Blanford, *Fauna of British India*, Mammalia, p. 497.



12

9

17

Ovis vignei, $\frac{1}{10}$ th scale.

OVIS NAHURA, Gray.

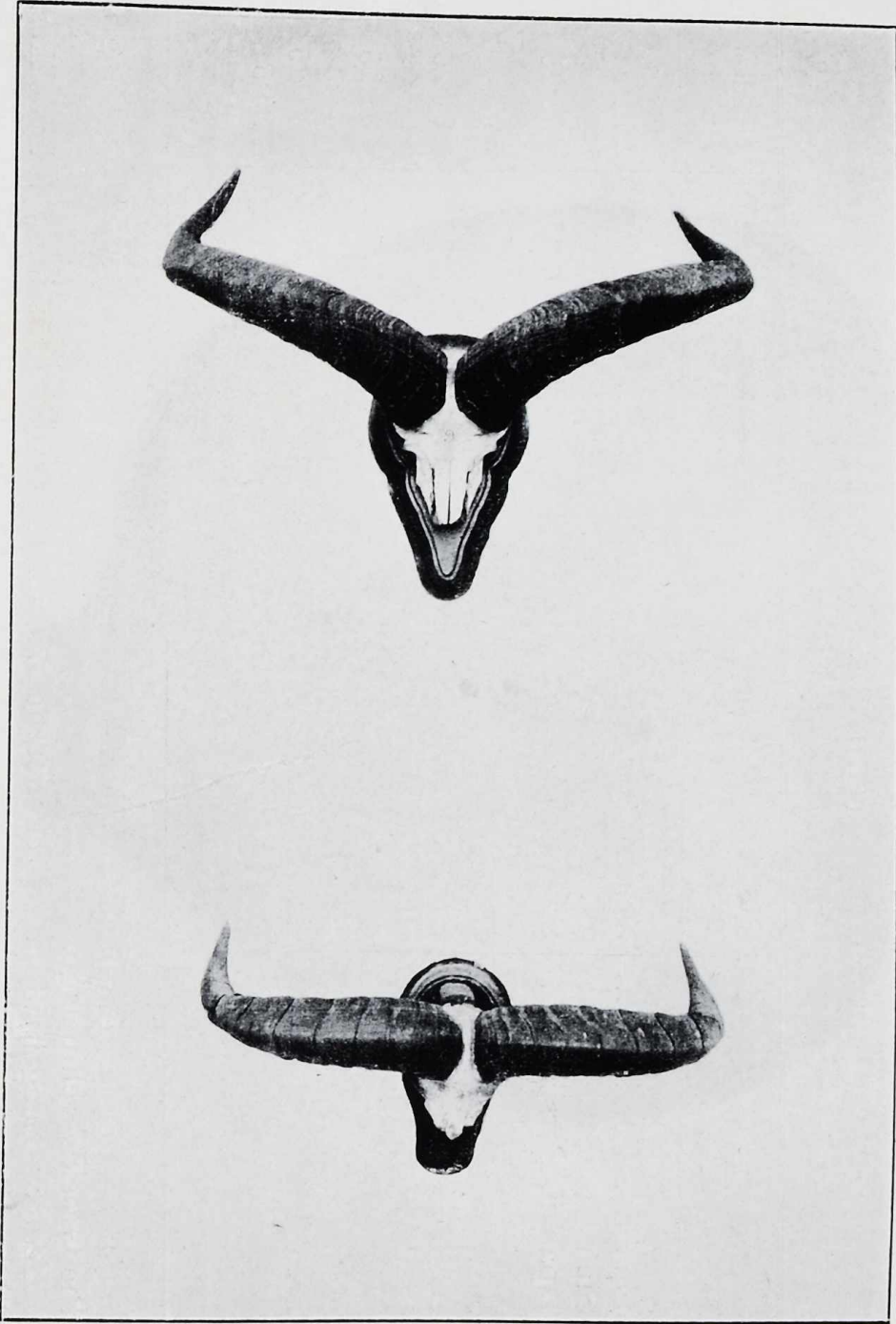
(THE BHARAL.)

No.	Sex.	Locality.	Donor.	Year.	Basal length of skull.	Breadth of skull.	Length of horn.	Circumference.	Tip to tip.
1	♂	Himalayas ...	Capt. Smyth ...	1860	?	?	23	10·75	16
2	♂	?	Ditto ...	1860	10·5		24·5	10·75	...
3	♂	?	Ditto ...	1860	?	...	15	8·75	19
4	♂	Near Tam Sanju Valley of Kuen-lun Mts.	Dr. F. Stoliczka ..	1874	8	4·5	28·25	10·5	20
5	♂	Himalayas ...	Capt. Smyth ...	1860	10	3·25	19	10·75	25
6	♂	?	?	?	?	?	18	9·5	23
7	♂	?	?	?	?	?	8·5	5	13·5
8	♂	?	Purchased ...	?	?	...	6·75	3·5	10·25
9	♂	Himalayas ...	?	?	?	5	32	12·5	25·25
10	♂ Juv.	?	?	?	?	3·75	4·25	4·25	4·5
11	♂	Sang-Jokh-la Pass, Tibet.	S. J. Stone ...	1888	?	4	22·75	10·2	27
12	♂	N. of Nilang, Garhwal	Ditto ...	1888	?	4·5	23	11·5	27

Distribution :—The whole of the Himalayas, from Ladak to Sikkim; the Kuen-lun Range and the Altyn Tagh; Moupin, E. Tibet.

Record Head :—Length 32·5 in. (cf. Lydekker, *Game Animals of India*, etc., p. 160).

Cf. Blanford, *Fauna of British India*, Mammalia, p. 499.



9

2

Ovis nahuva, $\frac{2}{10}$ th scale.

CAPRA ÆGAGRUS, Gmelin.

(THE PERSIAN IBEX.)

No.	Sex.	Locality.	Donor.	Year.	Basal length of skull.	Breadth of skull.	Length of horn.	Circumference.	Tip to tip.
1	♂	Ispahan, Persia ...	Shaik Harri ...	1875	?	?	11·5	4·75	6
2	♂	Sind ...	W. T. Blanford ...	1875	?	?	13	4	7·5
3	♂	Ispahan, Persia ...	Sir O. B. St. John.	1886	9·5	4·25	35·25	7·75	9
4	♂	Sind ...	Karachi Mus. ...	1879	10	4	39·75	7·25	3
5	♂	Afghanistan ...	Sir A. Burnes ...	1844	...	3·75	31·75	7·5	14·75
6	♂	Sind ...	Karachi Mus. ...	1879	...	...	37	8·25	12·25
7	♂	.....	.....	...	9·75	3·5	31·25	6·5	11·5
8	♂	Near Shiraz ...	Sir O. B. St. John	1886	?	?	43·3	9	24·25
9	♂ Juv.	Sind ...	A. E. Watson, Esq.	1876	?	?	14·25	3·5	5·5
10	♂	Ditto ...	Ditto ...	1876	?	?	34·5	8·5	21·5
11	♂	Shiraz ...	Persian Collection	1876	?	?	40	9	22

Distribution :—Persia, Afghanistan and Baluchistan ; the Pubb and Suleiman Ranges ; Asia Minor and the Caucasus ; the Greek Archipelago.

Record Head :—Length 53 in. Circumference 7·6 in. Tip to tip 8·75 in. (*cf.* Lydekker, *Game Animals of India*, etc., p. 112, and Rowland Ward, *Horn Measurements*, p. 148).

Cf. Blanford, *Fauna of British India*, Mammalia, p. 502.



11

8

Capra agagrus, $\frac{1}{2}$ th scale.

CAPRA SIBIRICA, Mayer.

(KASHMIR AND TIBET IBEX.)

No.	Sex.	Locality.	Donor.	Year.	Basal length of skull.	Breadth of skull.	Length of horn.	Circum- ference.	Tip to tip.
1	♂	?	Purchased ...	1871	9·75	4	19	9·3	10·25
2	♂	?	Ditto ...	1871	8·75	4·5	21·75	9·25	10·5
3	♂	Thian Shan Mts. ...	Dr. F. Stoliczka...	1874	10·25	5·25	34·75	9·5	9·25
4	♂	Purchased ...	1871	11·25	5	30·5	8·75	14·5
5	♂	Thian Shan Mts. ...	Dr. F. Stoliczka...	1874	13·5	5·4	31·75	9·5	13·25
6	♂	Near Kashgar ...	Ditto ...	1874	?	?	33·25	10·25	11
7	♂	Bunji Gilgit ...	S. J. Stone ...	?	?	?	38·25	10·75	21·25
8	♂	Near Kashgar ...	Dr. F. Stoliczka...	1874	?	?	46·5	11·75	19·25
9	♂	Kalsi, Ladak ...	N. Elias ...	1879	?	?	37·75	10·25	13·25
10	♂	No history ...	?	?	?	?	30	10	13·5

Distribution :—The Himalayas from the Gilgit district (Scully), eastward to Nepal, but not east of Nepal; also the higher ranges of Tibet (Hodgson), the Thian Shan (Severtzoff) and the Altai and Saján Ranges, but not extending east of Ladak (Radda).

Record Head :—Length 57·4 in. (*cf.* Lydekker, *Game Animals of India*, etc., p. 120).

Cf. Blanford, *Fauna of British India*, Mammalia, p. 503.



6

7

Capra sibirica, $\frac{1}{3}$ th scale.

CAPRA FALCONERI, Hügel.

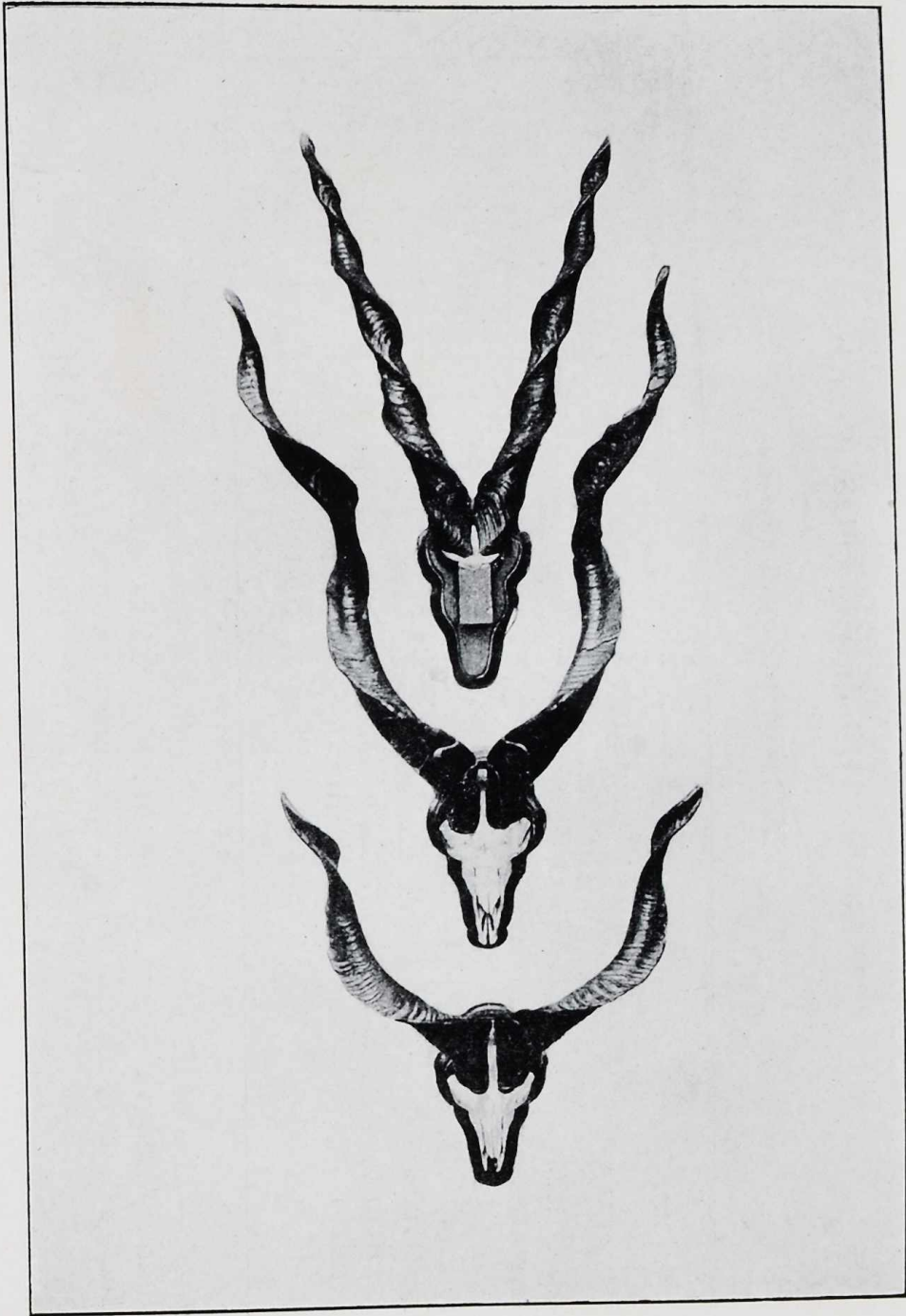
(THE MARKHOR.)

No.	Sex.	Locality.	Donor.	Year.	Basal length of skull.	Breadth of skull.	Length of horn.	Circumfer- ence.	Tip to tip.
1	♂	Gilgit	... W. T. Blanford ...	1879	10	3·75	20·5	9·5	13·75
2	♂	Kashmir	... W. Theobald ...	1878	?	?	23·75	9·5	15·25
3	♂	Baluchistan	... W. D. Oldham ...	1891	?	?	32·4	11·25	15·5
4	♂	Bunji Gilgit	... S. J. Stone ...	1884	12·25	5·25	44·25	10·75	25·5
5	♂	Ditto	... Ditto ...	1884	11·75	4·75	32·75	10·5	25
6	♂	Gilgit	... W. T. Blanford ...	1879	10·75	5	26·25	9	21·5
7	♂	Bunji Gilgit	... S. J. Stone ...	1884	9·75	5·25	30·25	10·5	25·5
8	♂	Gilgit	... Dr. Scully ...	...	?	?	44	11·75	34
9	♂	Ditto	... Capt. J. Manners- Smith.	1900	?	?	45	10·75	37·75
10	...	Ditto	... Sir A. Burnes ...	1840	11·5	4·75	33·5	10·25	One horn
11	♂ Juv.	Ditto	... Capt. J. Manners- Smith.	1901	7·5	3	5	3·4	3·6

Distribution :—Afghanistan and the Tibetan Himalayas ; the Pir Panjal in Kashmir ; the Himalayas from Gilgit to the Beas River ; the Suleiman Range ; Ladak.

Record Head :—Length 63 in. (*cf.* Lydekker, *Game Animals of India*, etc., p. 126).

Cf. Blanford, *Fauna of British India*, Mammalia, p. 505.



3

4

5

Capra falconeri, $\frac{1}{10}$ th scale.

HEMITRAGUS JEMLAICUS, Smith.

(JHARAL OR TEHR.)

No.	Sex.	Locality.	Donor.	Year.	Basal length of skull.	Breadth of skull.	Length of horn.	Circumference.	Tip to tip.
1	♂	Nepal ...	?	?	?	?	7·75	7·75	6·25
2	♂	Near Mussoorie ...	Miss Millman ...	1873	11·25	4·25	12·75	8·75	5
3	♂	?	Capt. Smyth ...	1862	8·5	4·5	9·75	5·75	8·5
4	♂	Pir Panjal, S. Slope...	N. Elias ...	1879	?	?	9·5	8·5	4·75
5	♂	Himalayas ...	Dr. T. C. Jerdon...	1888	10	4·75	12	7·5	6·75
6	♂	Ditto ...	B. H. Hodgson ...	1844	10·75	4·5	10·5	8·5	8
7	♂	Ditto ...	Ditto	1844	?	?	13	9	9
8	♂	Ditto ...	Ditto	1844	?	?	10·5	8·3	6·6

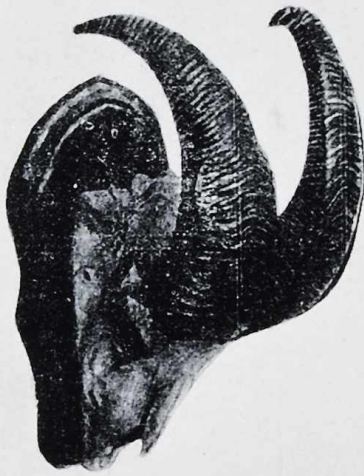
Distribution :—The whole of the Himalayas from 6,000 ft. upwards.

Record Head :—Length 15·5 in. Circumference 8·25 in. (*cf.* Lydekker, *Game Animals of India*, etc., p. 135).

Cf. Blanford, *Fauna of British India*, Mammalia, p. 509.



5



7

Hemitragus jemlaicus, $\frac{1}{2}$ th scale.

HEMITRAGUS HYLOCRIUS, Blyth.

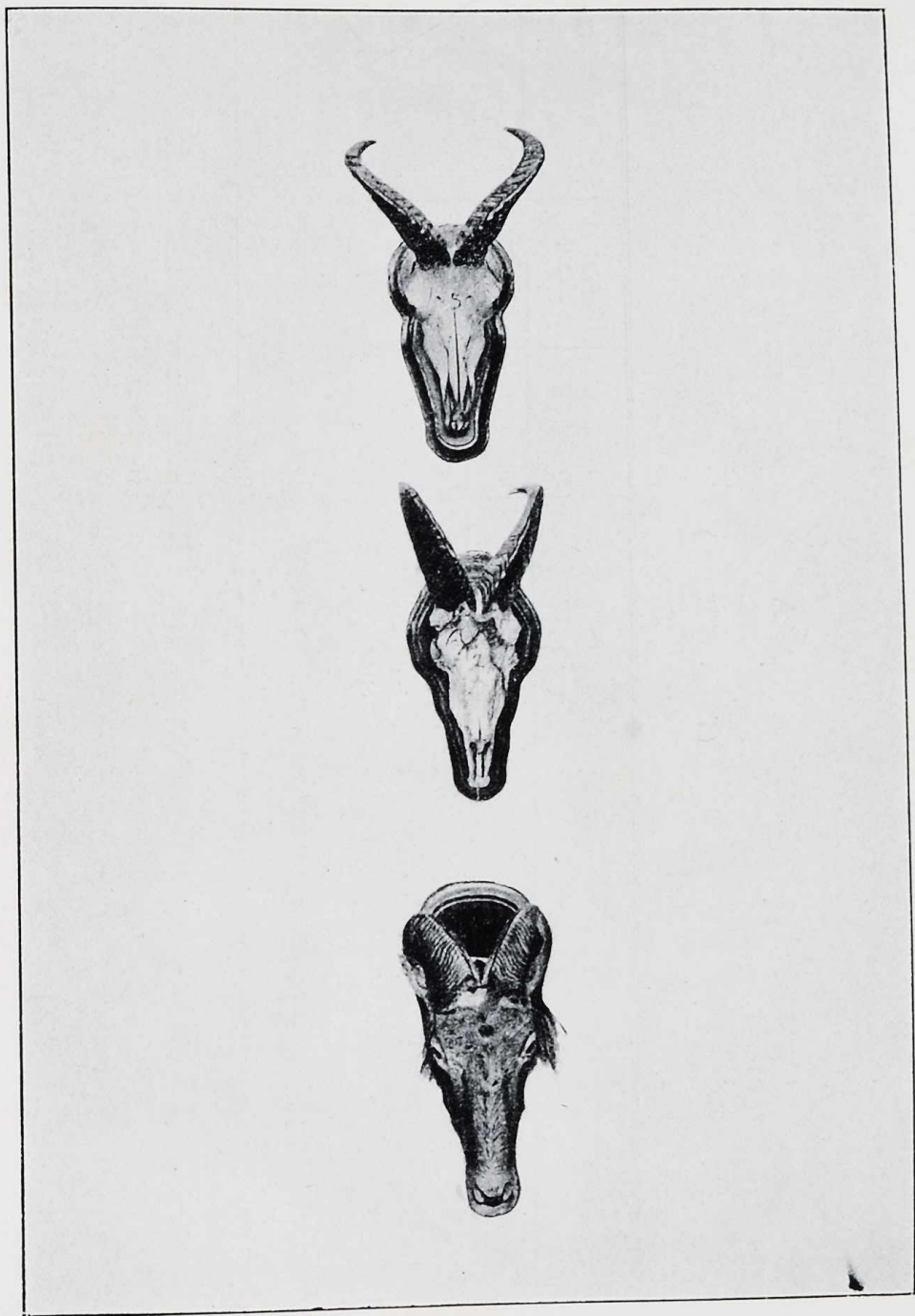
(THE NILGIRI WILD GOAT.)

No.	Sex.	Locality.	Donor.	Year.	Basal length of skull.	Breadth of skull.	Length of horn.	Circumference.	Tip to tip.
1	♀	Nilgiri Hills ...	Madras Museum...	1879	8.5	3.75	8.25	5.75	3
2	♀	S. Malabar ...	Dr. T. C. Jerdon...	...	9	3.75	9.75	7.25	4.25
3	♀	Nilgiri Hills ..	L. C. Stewart ...	...	10	3.25	8.75	6	3.25
4	♂	Travancore ...	Rev. J. Baker ...	...	9.75	4	15.75	8.75	6.75
5	♂	Deviculam, Travancore.	A. W. Turner ...	1889	9.5	4.25	14	8.25	4.5
6	♂	Nilgiri Hills ...	Madras Museum...	1879	10	4	13.8	8.5	5.75

Distribution :—The Nilgiris and Western Ghats of Cochin and Travancore.

Record Head :—Length 17.5 in. Circumference 9.85 in. (*cf.* Lydekker, *Game Animals of India*, etc., p. 138).

Cf. Blanford, *Fauna of British India*, Mammalia, p. 511.



5, p. 34.

2, p. 34

1, p. 32.

Hemitragus hylocrius, and *H. jemlaicus*, $\frac{1}{4}$ th scale.

NEMORHÆDUS BUBALINA, Hodgson.

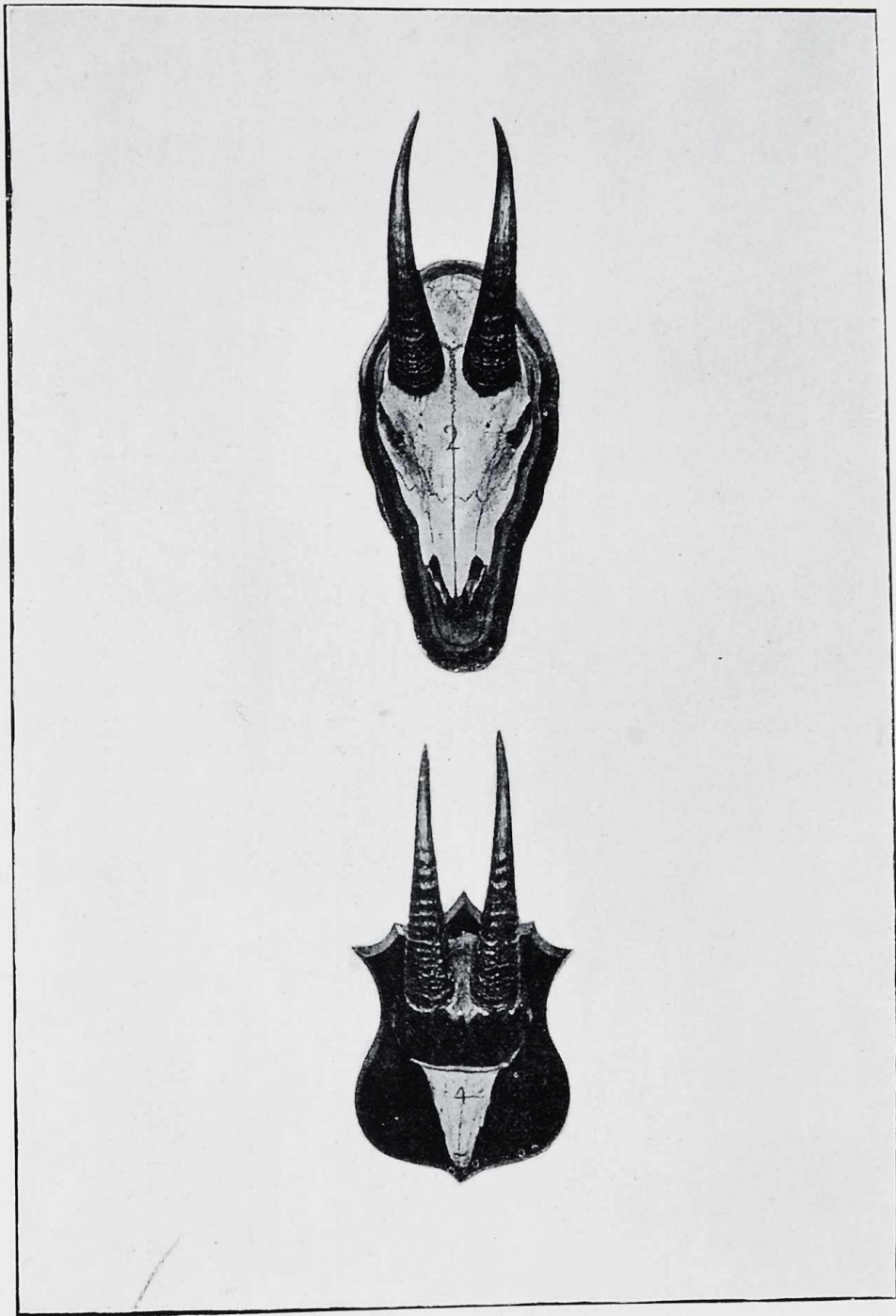
(THE SEROW.)

No.	Sex.	Locality.	Donor.	Year.	Basal length of skull.	Breadth of skull.	Length of horn.	Circumference.	Tip to tip.
1	♂	Sikhim ...	L. Mandelli ...	1877	11	3·7	7·6	5	4·5
2	♂	Sanda Valley, Yunnan	Yunnan Collection	1868	11·3	4	8·8	5·5	2·25
3	♂	Ditto ...	J. Anderson ...	1868	7·75	4·3	7·5	5	2·8
4	♂	Ditto ...	Ditto ...	1868	?	?	7·6	5	4·5
5	♂	Ditto ...	Ditto ...	1868	...	...	9·5	5	2·5
6	♂	Sikhim ...	L. Mandelli ...	1877	11·25	3·5	7·75	4·5	2·25

Distribution :—The Himalayas from Kashmir to the Mishmi Hills ; obtained by Anderson in Yunnan.

Record Head :—Length 13·5 in. Circumference 8·75 in.

Cf. Blanford, *Fauna of British India*, Mammalia, p. 514, and Pocock, *P. Z. S.*, 1908, p. 173.



2

4

Nemorhadus bubalina, $\frac{1}{4}$ th scale.

NEMORHÆDUS GORAL, Hodgson.

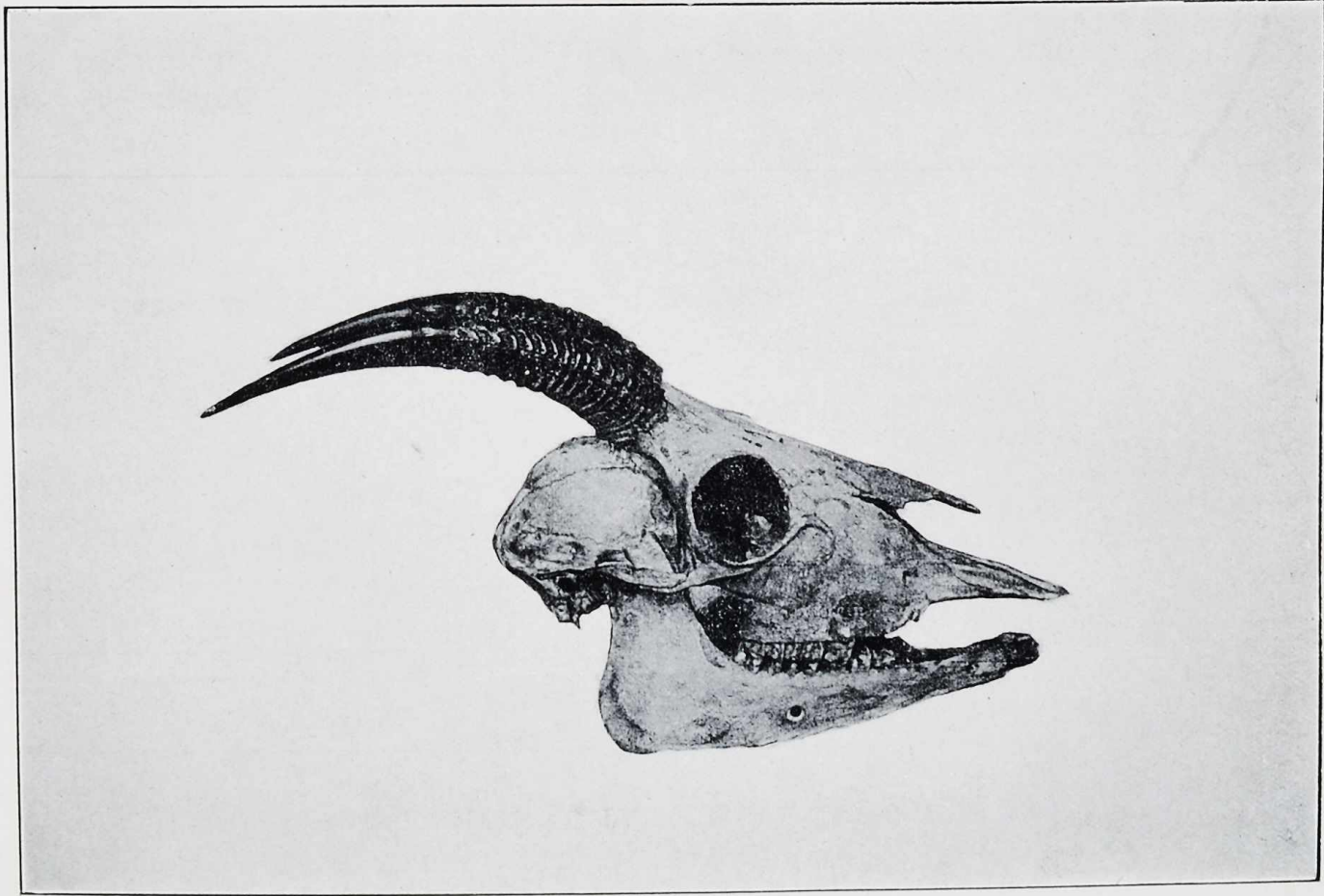
(THE GORAL.)

No.	Sex.	Locality.	Donor.	Year.	Basal length of skull.	Breadth of skull.	Length of horn.	Circumference.	Tip to tip.
1	♂	Sikhim ...	B. H. Hodgson ...	1862	8·5	3	7	3·5	4
2	♂ Juv.	Ditto ...	?	?	?	?	4·75	2	1·75
3	♂	Ditto ...	B. H. Hodgson ...	1862	8·75	3·25	5·75	3·5	3
4	♀	Ditto ...	Ditto ...	1862	?	?	6·25	3·5	2·75
5	♂ Juv.	Kashmir ...	W. Rutledge ...	1893	6·5	2·4	2·1	1·75	1·8
6	♀ Juv.	Ditto ...	Ditto ...	1893	7·5	3	5	3·25	2·75
7	♂ Juv.	Ditto ...	Ditto ...	1893	7·75	2·7	4·5	2·3	2·75

Distribution :—Himalayas from Kashmir to Bhutan, Siwalik Hills (Kinloch), Naga Hills (Butler).

Record Head :—Length 8·5 in. (*cf.* Lydekker, *Game Animals of India*, etc., p. 151).

Cf. Blanford, *Fauna of British India*, Mammalia, p. 516, and Pocock, *P. Z. S.*, 1908, p. 173.



1

Nemorhaedus goral, 3rd scale.

NEMORHÆDUS SUMATRAENSIS, Gray.

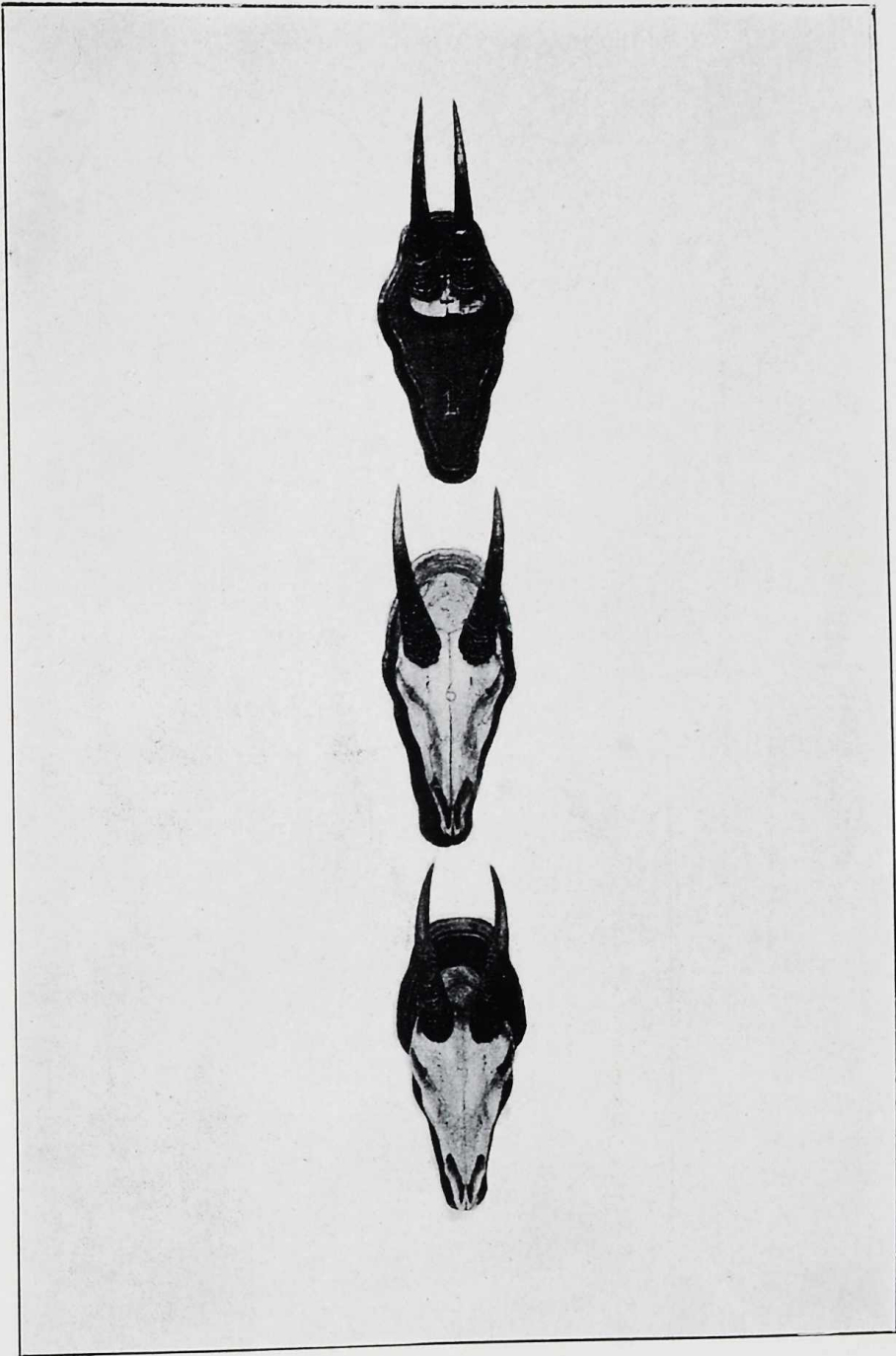
(THE KAMBING UTAN OR KAMBING GURUN.)

No.	Sex	Locality.	Donor.	Year.	Basal length of skull.	Breadth of skull.	Length of horn	Circumference.	Tip to tip.
1	♂	Arakan ...	Col. Phayre ...	1844	?	?	9·5 *	5·75	1·75
2		?	?	?	?	?	6·75	4·5	3·5
3	♂	Tenasserim ...	Maj. Berdmore ...	1861	11·75	4	6·75	4·5	...
4	♂	Chittagong Hill Tracts	J. T. Jarbo ...	1879	12·5	3·5	6·75	4·5	2·5
5	♂	Ditto ...	Ditto ...	1879	12·25	4	8	5	4
6	♂	Tenasserim ...	Maj. Berdmore ...	1861	13	4	8·5	5·25	4·25
7	♂	Province Wellesley ...	India Mus., London	?	12	3·75	8·5	5·25	2·75
8	♂	Tenasserim ...	Maj. Berdmore ...	1861	11	4	7	4·25	2·75
9	♂	Ditto ...	Ditto ...	1861	11·3	4·25	8·25	4·75	4·3
10	♀	Shillong, Assam ...	C. R. Cock ...	1879	11	4	8	5	4·25
11	♂	Assam ...	Ditto ...	1879	?	?	7·25	4·5	5·5

Distribution:—Assam, Burma, the Malay Peninsula and Sumatra.

Cf. Blanford, *Fauna of British India*, Mammalia, p. 514, and Pocock, *P. Z. S.*, 1908, p. 173.

* Record.



Nemorhædus sumatraensis, $\frac{1}{3}$ th scale.

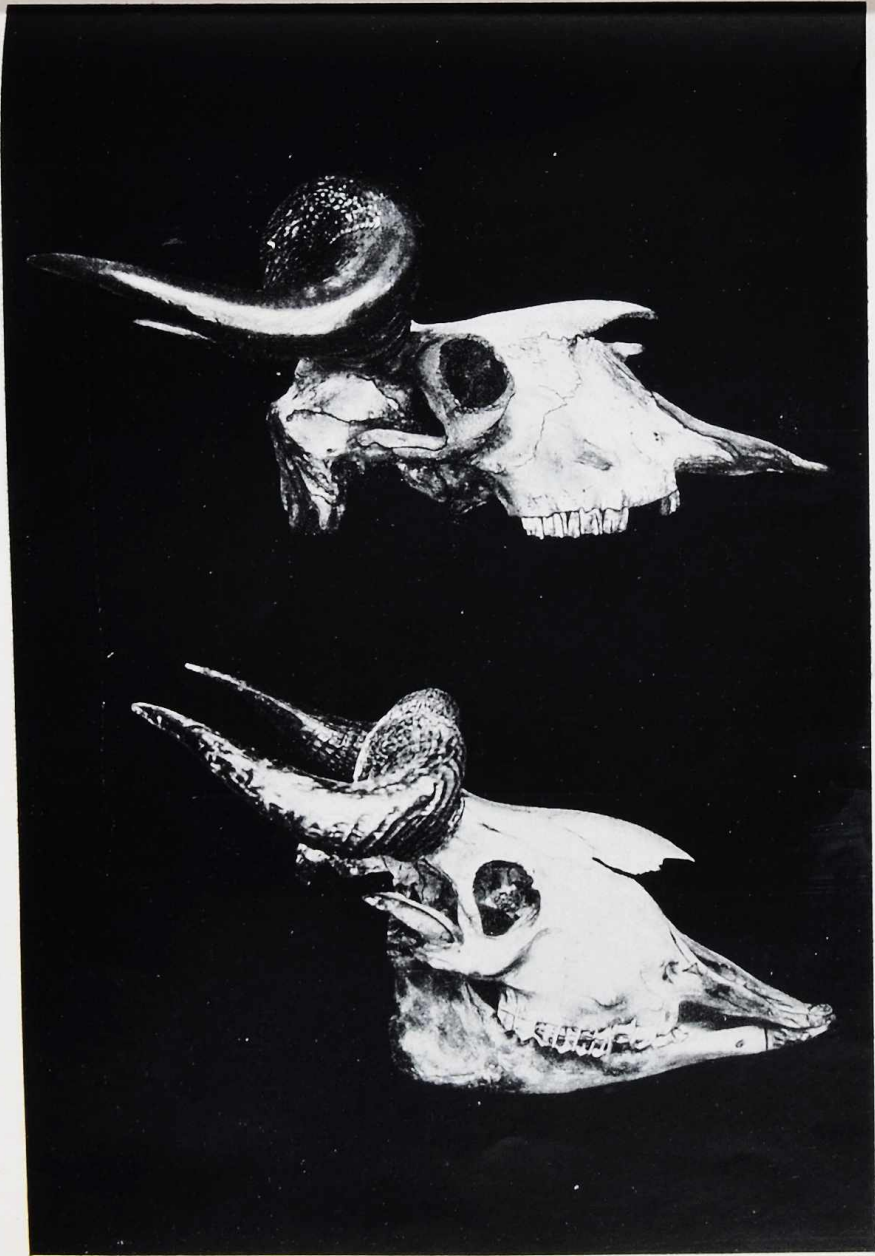
BUDORCAS TAXICOLOR, Hodgson.

(THE TAKIN.)

No.	Sex.	Locality.	Donor.	Year.	Basal length of skull.	Breadth of skull.	Length of horn.	Circumference.	Tip to tip.
1	♀	Mishmi Hills, Assam	F. Jenkins ...	1850	?	?	9·5	7·3	14·25
2	♂	Ditto ...	Ditto ...	1850	?	?	15·25	8·5	10·3
3	♂	Ditto ...	Ditto ...	1850	?	?	24·5*	11·5	12·8
4	♂	Ditto ...	E. T. Dalton ...	1856	?	?	22·4	11·8	10·5
5	♂	Ditto ...	Dy. Commissioner	1882	17·5	6	20·25	11·75	8·6
6	♂	A. R. Comber ..	1867	16·25	6·5	21·25	11·6	12·75
7	♂	Mishmi Hills, Assam	Maj. W. Brydon...	1884	14·76	5·5	15·6	9·8	7·25
8	♂	Assam ...	Lt.-Col. Graham	1879	?	?	20·75	10·3	9·25
9	♀	Mishmi Hills, Assam	F. Jenkins ...	1850	?	?	9·5	7·8	13·5
10	♂	Ditto ...	Ditto ...	1850	?	?	14·8	9·66	8·5
11	♂	Eastern Tibet ...	J. White ...	1906	13·25	5·75	13·75	9·75	6·25
12	♀	Mishmi Hills, Assam	Deputy Commis- sioner.	1882	...	5·25	12·5	8·75	11

Distribution :—The Mishmi Hills, Assam, through Eastern Tibet ; probably to China.
Cf. Hodgson, *Journal As. Soc., Bengal*, xix, p. 65, and Milne-Edwards, *Réch. des Mammifères*, p. 367.

* Record.

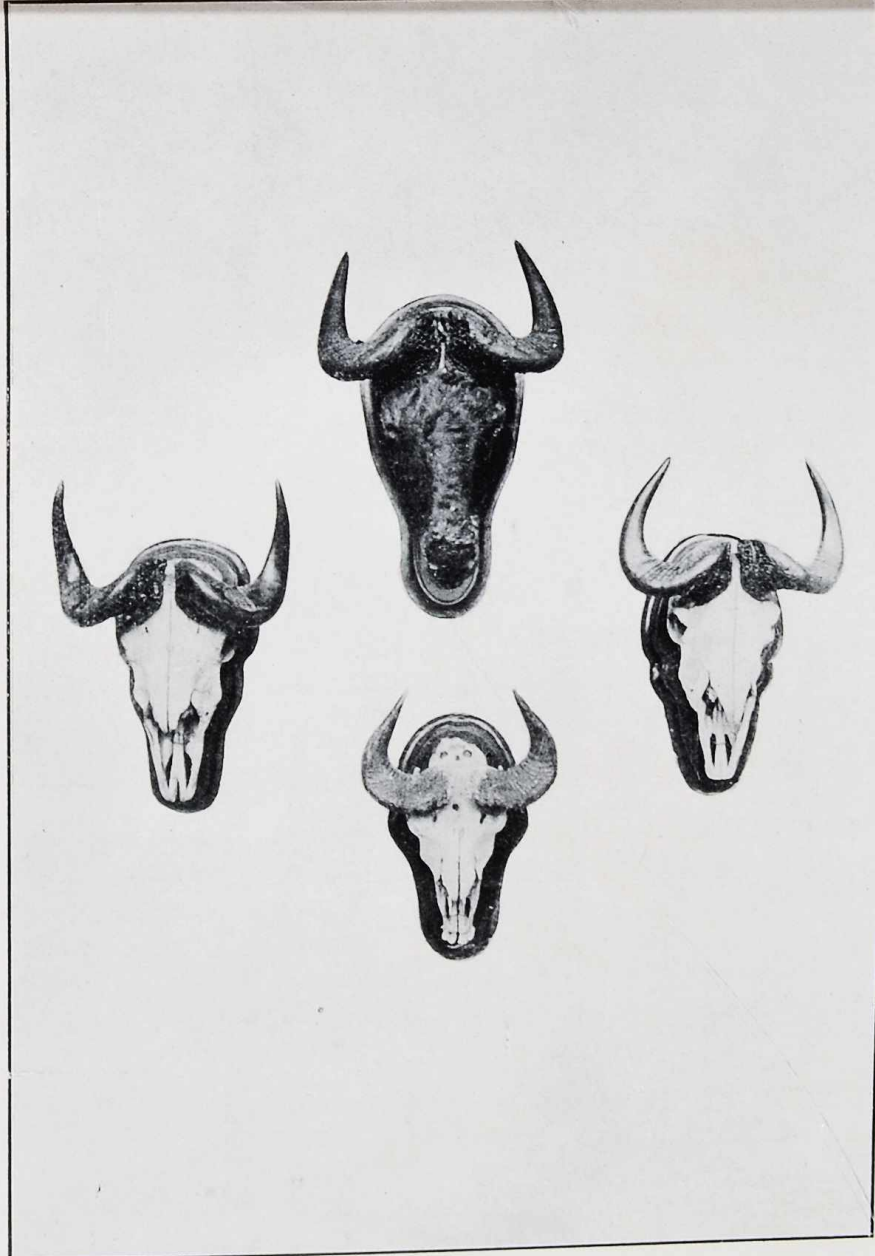


Budorcas taxicolor, $\frac{1}{17}$ th scale.

5

6

11



5

11

Budorcas taxicolor, $\frac{1}{17}$ th scale.

BOSELAPHUS TRAGOCAMELUS, Sclater.

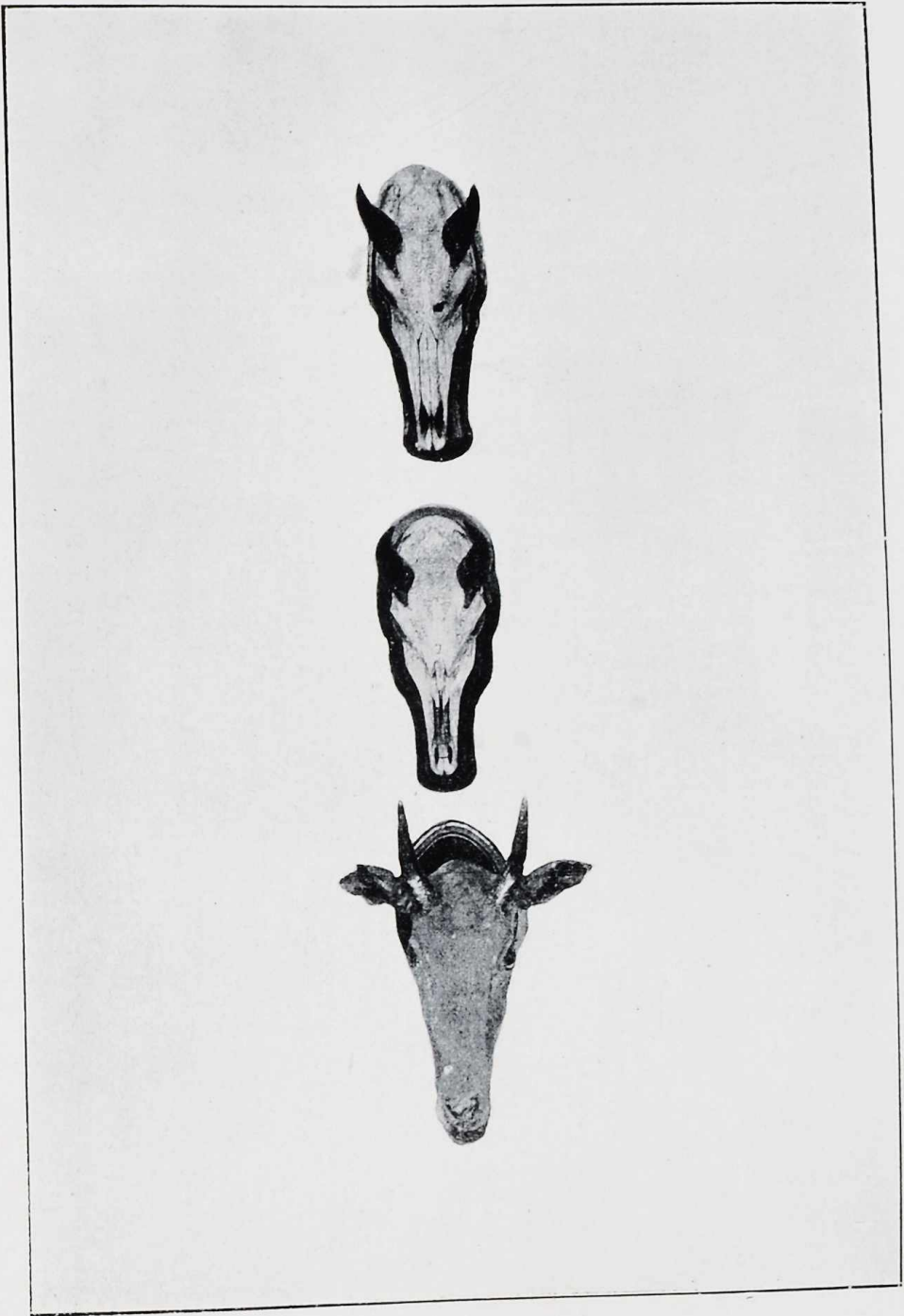
(THE NILGAL.)

No.	Sex.	Locality.	Donor.	Year.	Basal length of skull.	Breadth of skull.	Length of horn.	Circumference.	Tip to tip.
1	♂	?	S. Sherwill ...	1843	14.75	3.75	4.75	3	4
2	♂	Alwara, Jumna R. ...	J. Cockburn ...	1881	17.8	5	8.75	7.6	4.25
3	♀	Banda Dist. ...	Ditto ...	1881	16.25	4.25	...	...	...
4	♀	Ditto	Ditto ...	1881	15.8	4	...	...	...
5	♂	Cawnpore ...	Ditto ...	1872	15.5	4.3	7.25	7.25	4.6
6	♂	Ditto ...	A. S. B. ...	?	16.75	5.3	6.75	6.75	6.3
7	♂	Ditto	Ditto ...	?	16.8	5.25	6.75	6.5	4.4
8	♂	Ditto	Ditto ...	?	?	?	6.25	4.75	7.5

Distribution.—The Peninsula of India, from the foot of the Himalayas to Cape Comorin, excluding Lower Bengal and Ceylon.

Record Head.—Length 11.75 in. Circumference 9.5 in. (Not now in existence; cf. Lydekker, *Game Animals of India*, etc., pp. 166, 167.)

Cf. Blanford, *Fauna of British India*, Mammalia, p. 517.



Boselaphus tragocamelus, $\frac{1}{10}$ th scale.

TETRACERUS QUADRICORNIS, Gray.

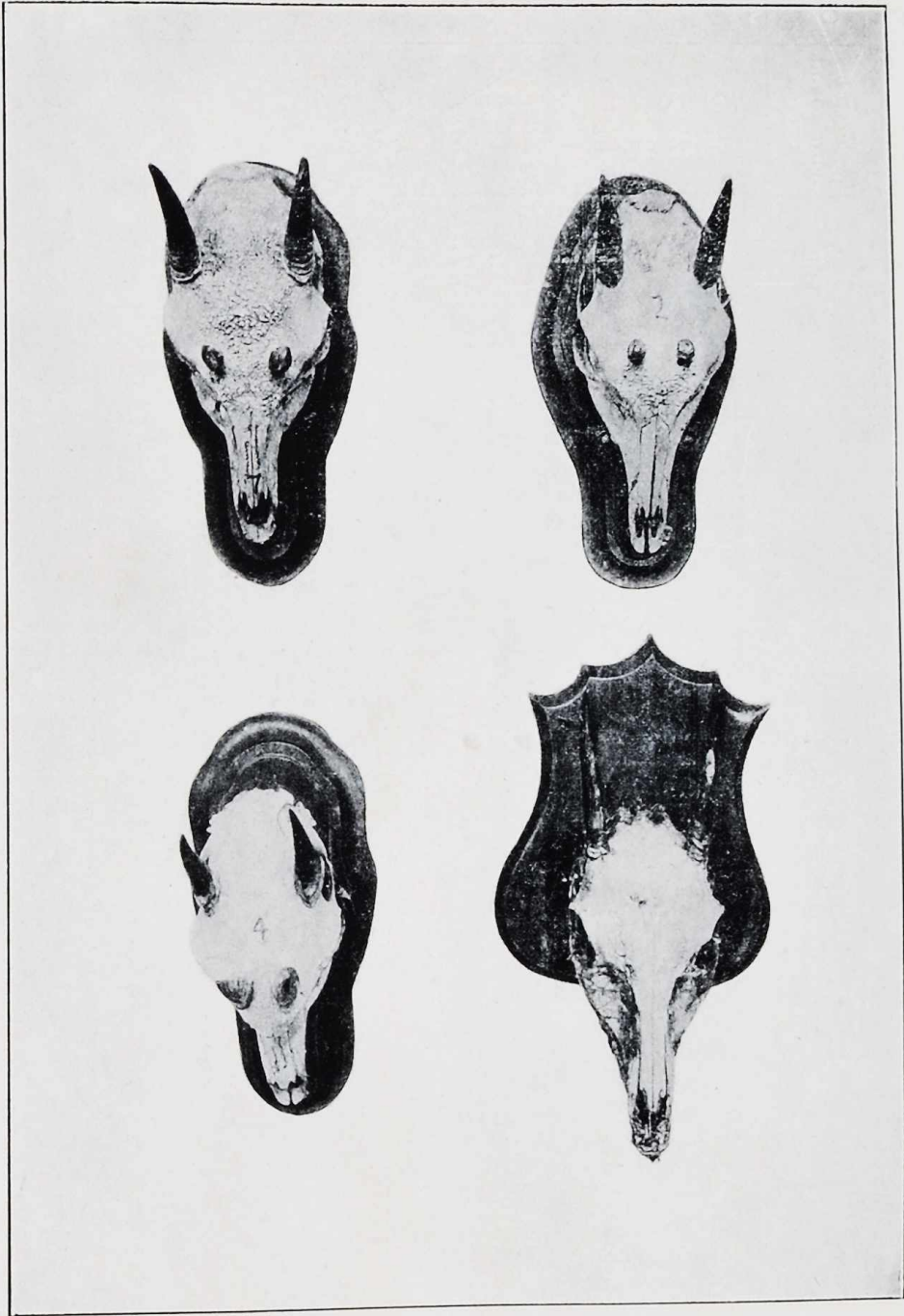
(THE FOUR-HORNED ANTELOPE.)

No.	Sex.	Locality.	Donor.	Year.	Basal length of skull.	Breadth of skull.	Length of horn, small and large.		Circumfer- ence, small and large.		Tip to tip, small and large.	
1	♂	S. India ...	Sir W. Elliot ...	1845	8	3·5	1·75	3·25	2·25	2	1·5	2
2	♂	Raniganj ...	Babu Mullick ...	1872	8	3·25	·5	2·5	1·5	2	1	2·5
3	♂	Asirgarh, C. P. ...	W. T. Blanford ...	1866	...	...	...	3·8	1·5	2	1	2·75
4	♂	India ...	J. B. Lawson, Esq.	1844	7	3·25	1·75	3·25	...	2		1·75
5	♂	S. India ...	Sir W. Elliot ...	1845	7·5	3	1·5	2·75	1·75	2·25	1·5	4
6	♂	Ditto ...	Ditto ...	1845	7·75	3	...	2·25	...	1·75	...	2·25
7	♂	Ditto ...	J. Cockburn ...	1886	8·25	3·5	·5	3·25	1·25	2·25	1·5	2·75

Distribution:—Through the Peninsula of India, in wooded and hilly tracts, especially the Central Provinces; absent in the Ganges valley and Ceylon.

Record Head:—Length of large horn 5 in. (*cf.* Lydekker, *Game Animals of India*, etc., p. 172).

Cf. Blanford, *Fauna of British India*, Mammalia, p. 519.

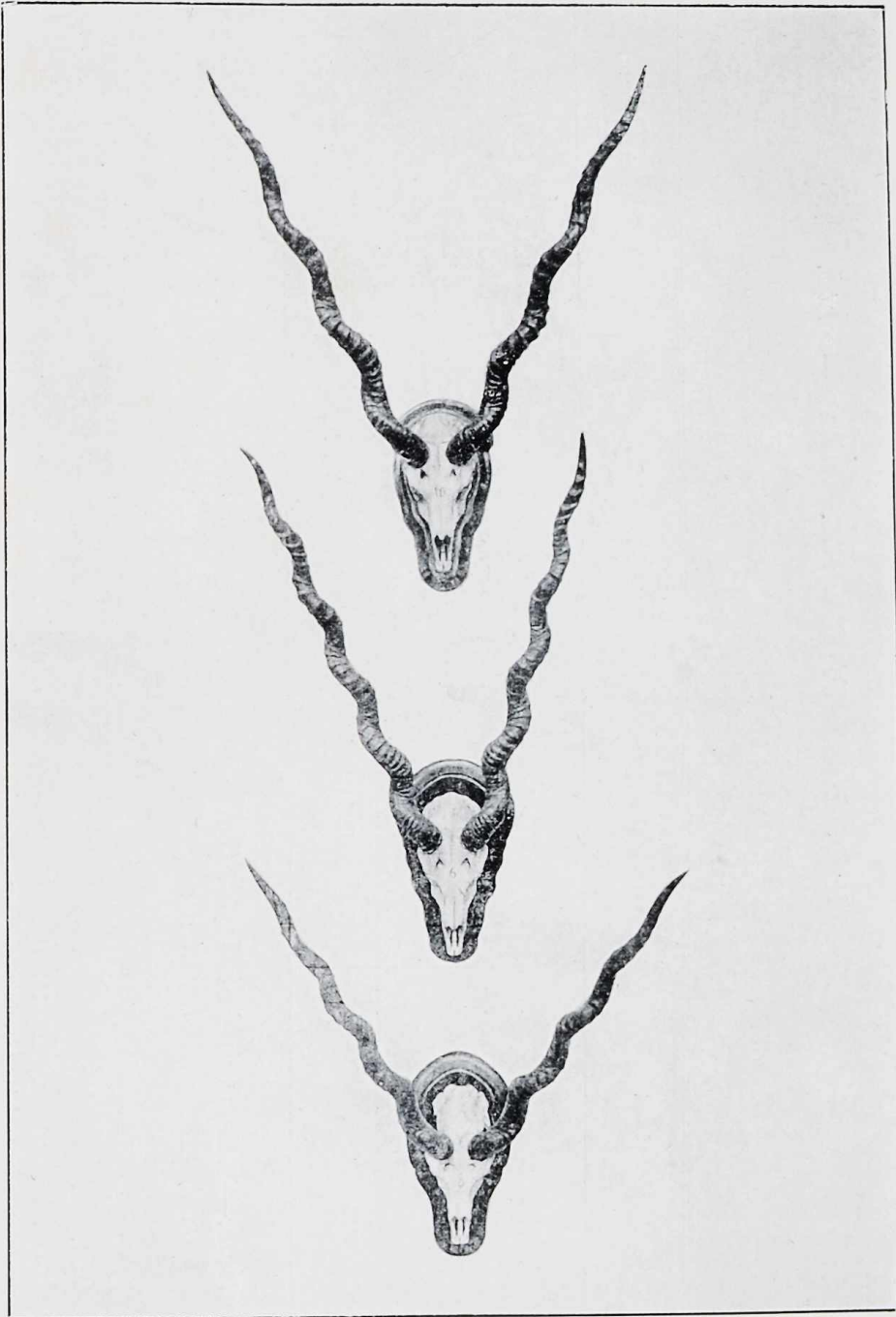


Tetracerus quadricornis, 4th scale.

ANTILOPE CERVICAPRA, Pallas.

(THE INDIAN ANTELOPE OR BLACK BUCK.)

No.	Sex.	Locality.	Donor.	Year.	Basal length of skull.	Breadth of skull.	Length of horn round curve.	Circumfer- ence.	Tip to tip.
1	...	Banda District ...	J. Cockburn ...	1879	8.75	3.5	25.25	4.75	14.25
2	...	?	W. Rutledge ...	1870	9.5	3.5	*27.25	4.75	11.75
3	...	Banda District ...	Ditto ..	1881	8.75	3.25	30.5	4.5	16
4	...	?	J. J. Attanass ...	...	9.5	3.5	*10.5	4.75	...
5	...	No history ...	?	?	9.25	3.5	28.75	5	6
6	...	Karnal District, Punjab.	S. J. Stone ...	1891	9.75	3.75	19.25	4.75	18
7	...	Banda District ...	J. Cockburn ...	1881	9	3.5	36	5	17.75
8	...	Karnal „ Punjab	S. J. Stone ...	1891	8.75	3.5	27	4.25	21.75
9	...	Banda District ...	Rajah R. Mullick	1870	8.5	3.25	30.5	4.75	11.8
10	...	Punjab ...	S. J. Stone ...	1891	9.25	3.75	17.75	4.75	23
11	...	Ditto ...	Ditto ...	...	8.6	3.8	31.8	4.75	21.5
12	...	Banda District ...	J. Cockburn ...	1881	...	...	31.3	5.25	12.5
13	...	?	J. J. Attanass ...	1842	9.75	3.5	22.5	4.8	15.25
14	...	Doon of Assam ...	F. Jenkins ...	..	...	..	29.25	4.9	13
15	...	Banda District ...	J. Cockburn ...	1881	8.8	3.25	30.25	4.25	7.9
16	...	?	?	?	?	3.25	20.25	3.5	13
17	...	Agra ...	J. Cockburn ..	1879	9	3.75	22.75	5	16.5
18	...	Banda District ...	Ditto ...	1881	9	3.75	30.3	5.25	14.5
19	...	Allahabad District ...	Ditto ...	1879	8.5	3	26.25	4	14.25
20	...	?	?	?	10.25	3.25	23.75	5	11.25



10

6

8

Antilope cervicapra, $\frac{1}{2}$ th scale.

ANTILOPE CERVICAPRA, Pallas—*contd.*(THE INDIAN ANTELOPE OR BLACK BUCK)—*contd.*

No.	Sex.	Locality.	Donor.	Year.	Basal length of skull.	Breadth of skull.	Length of horn round curve.	Circumference.	Tip to tip.
21	...	“ Bokhara ”	?	?	9·25	3·25	26·25	4·8	10·5
22	...	Allahabad	J. Cockburn	1879	?	3·5	23·75	4·75	15·5
23	...	Banda District	Ditto	1881	8·8	3·25	21·9	4·75	12·25
24	...	?	?	?	8·75	3·25	21	4·4	12·5
25	...	Banda District	J. Cockburn	1879	9·25	3·3	19·25	4·75	40
26	...	Chanda	Mrs. Turnbull	1837	8	2·5	9·75	...	...

Distribution:—The plains of India from the foot of the Himalayas to Cape Comorin and from the Punjab to Lower Assam; Lower Bengal at Midnapore and Orissa; unknown in Ceylon, the Malabar Coast and the Ganges Delta.

Record Head:—Length not round curve 28·25 in. Round curve 40·5 in. (*cf.* Rowland Ward, *Horn Measurements*, p. 95).

Cf. Blanford, *Fauna of British India*, Mammalia, p. 521.

PANTHOLOPS HODGSONI, Hodgson.

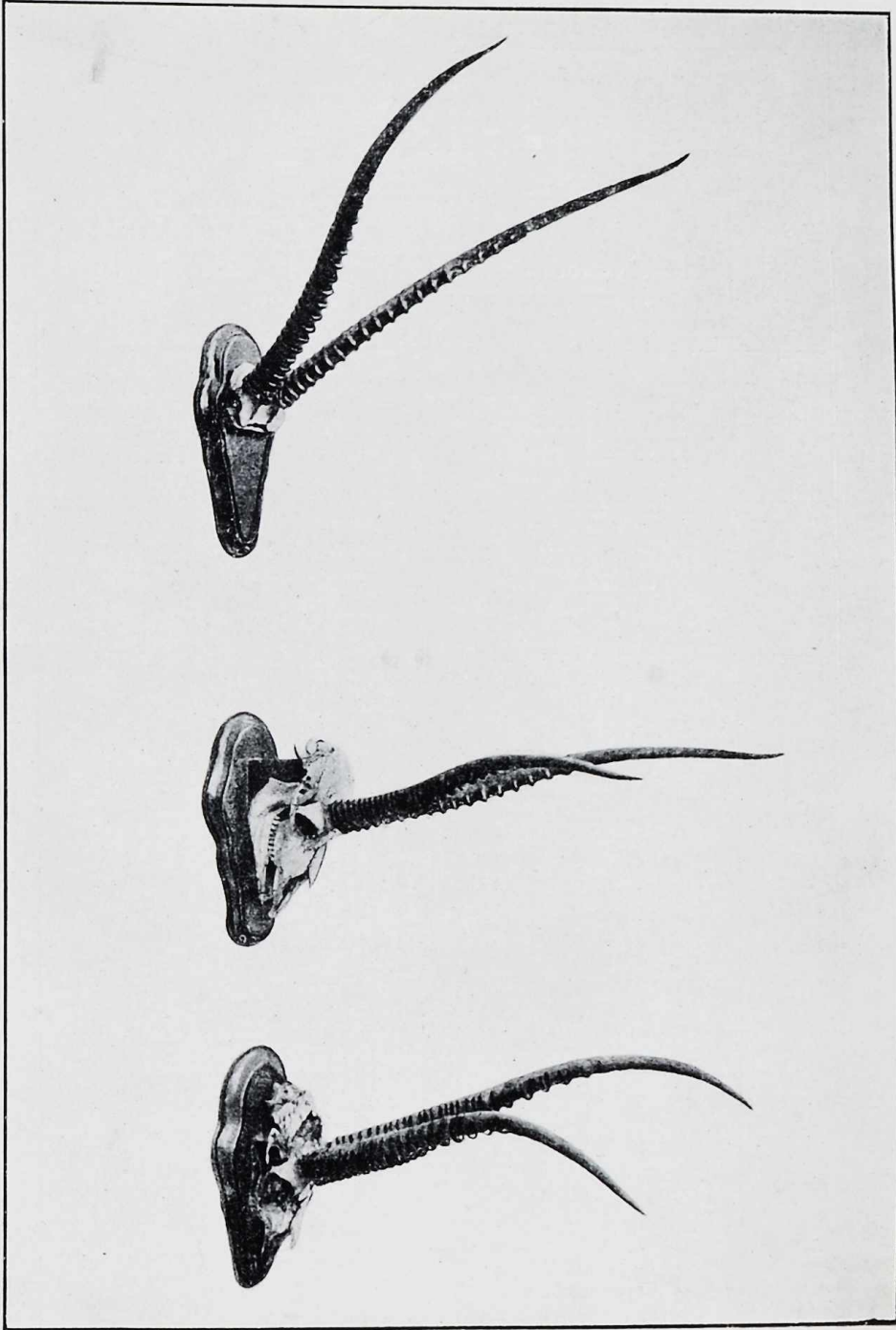
(THE CHIRU.)

No.	Sex.	Locality.	Donor.	Year.	Basal length of skull.	Breadth of skull.	Length of horn.	Circumfer- ence.	Tip to tip.
1	♂	Tibet	L. Mandelli	1877	?	?	26·3	5·25	15·5
2	♂	Ditto	Ditto	1877	10·5	3·75	23·5	4·75	14·25
3	♂	Ditto	Ditto	1877	?	?	23·5	5·5	11·75
4	♂	Ditto	Ditto	1877	?	?	23·25	5·75	12·5
5	♂	Kum Ladak	J. Biddulph	1873	?	?	24·25	5·5	14·5
6	♀	Yarkand	Dr. F. Stoliczka	1873	10	3	...	...	...
7	♂	"Almora Dist."	Purchased	1908	?	?	25·25	6	15
8	♂	Ladak	J. Biddulph	1873	10·25	3·5	22·5	5·25	12·25

Distribution:—Tibet from 12,000 to 18,000 ft., from Ladak eastward; also found in North Sikkim.

Record Head:—Length 27·75 in. Circumference 6·12 in. Cf. Rowland Ward, *Horn Measurements*, p. 102.

Cf. Blanford, *Fauna of British India, Mammalia*, p. 524, and Lydekker, *Game Animals of India*, p. 155.



Pantholops hodgsoni, $\frac{1}{2}$ th scale.

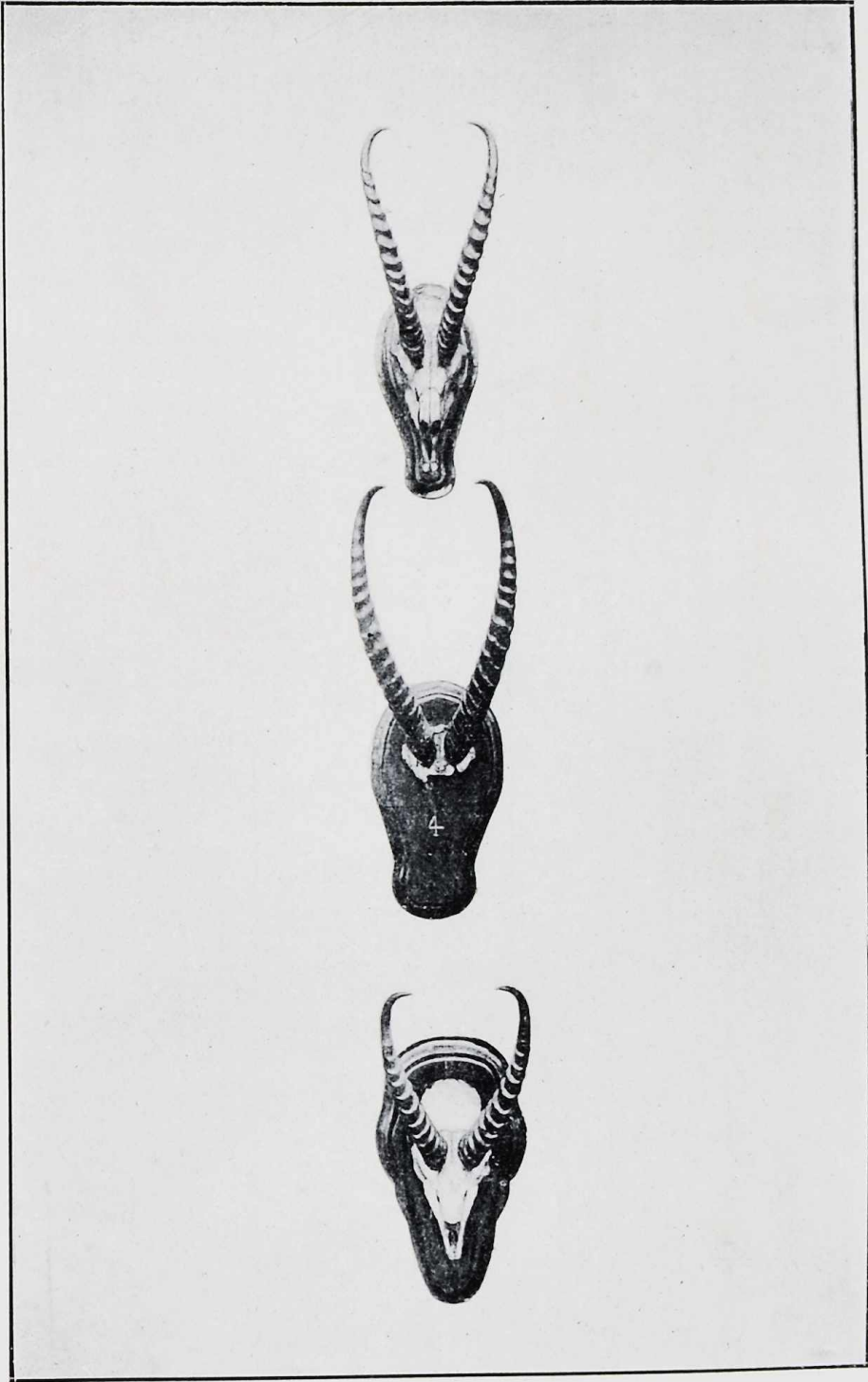
GAZELLA SUBGUTTUROSA, Blainville.

(THE PERSIAN GAZELLE.)

No.	Sex.	Locality.	Donor.	Year.	Basal length of skull.	Breadth of skull.	Length of horn.	Circumfer- ence.	Tip to tip.
1	♀	Yarkand	... Dr. F. Stoliczka...	1874	8.25	2.75	9.5	4.5	4.25
2	♂	Near Ispahan	... Sir O. St. John ..	1870	8	2.75	9.5	4.25	6.5
3	♂	Yarkand	... J. Scully ...	1875	6.75	2.5	9.5	4.5	4.5
4	♀	Ditto	... Ditto ...	1889	?	?	16*	5	3.75
5	♂	Kandahar	... T. Hutton ...	1846	?	2.5	11.5	4	2.75
6	♂	Ditto	... H. B. Lumsden ...	1859	?	?	10.5	4.25	1.8
7	♂	Kashgar	... Dr. F. Stoliczka ...	1874	8.25	2.5	11.25	4.5	3.25
8	♀	"Persian Gulf"	... J. Murray ...	1880	7.75	2	12.25	3.75	8.5
9	♂	Kuhak, Seistan	... A. H. McMahan...	1906	8	2.8	12.75	4.4	3.3
10	♂	Ditto	... Ditto ...	1906	7.9	2.75	11.1	4.35	3.5
11	♂	Ditto	... Ditto ...	1906	8	2.5	12.5	4.3	1.75
12	♂	Ditto	... Ditto ...	1906	7.75	2.7	15	4.5	1.25
13	♂ Juv.	Ditto	... Ditto ...	1906	7	2	5.1	3	Horns touch.
14	♂ Juv.	Ditto	... Ditto ...	1906	6	2	1.25	1.5	1.65
15	♂	...	... ..	...	8.5	2.75	13	5.25	2
16	♂	Yarkand	... Dr. F. Stoliczka ...	1874	8	2.5	10.5	4.25	3.25

Distribution:—The highlands of Persia and Afghanistan extending westward as far as Tiflis, northward all over Russian Turkestan, and eastward to Yarkand; not found on the shores of the Persian Gulf, being there replaced by *G. bennetti*.

Cf. Blanford, *Fauna of British India*, Mammalia, p. 528.



Gazella subgutturosa, $\frac{1}{3}$ th scale.

GAZELLA PICTICAUDATA, Brooke.

(THE GOA OR TIBETAN GAZELLE.)

No.	Sex.	Locality.	Donor.	Year.	Basal length of skull.	Breadth of skull.	Length of horn.	Circumfer- ence.	Tip to tip.
1	♂	?	No history	...	...	...	11.75	3.5	4.5
2	♂	Tibet	F. Jenkins	1846	?	2.75	13.25	3.5	8.75
3	♂	Do.	Do.	1846	?	...	13.3	3.75	5.25
4	♂	Kukchu near Ladak, 15,000 ft.	N. Elias	1879	7.75	2.5	11.75	3.75	4.75

Distribution:—The Tibetan plateau, 13,000 to 18,000 ft.

Record Head:—Length 14.75 in. (*cf.* Rowland Ward, *Horn Measurements*, Appendix, p. 5).

Cf. Blanford, *Fauna of British India*, Mammalia, p. 529.

1



2



3



Gazella picticandata, $\frac{1}{3}$ th scale.

GAZELLA BENNETTI, Gray.

(THE INDIAN GAZELLE.)

No.	Sex.	Locality.	Donor	Year.	Basal length of skull.	Breadth of skull.	Length of horn.	Circumfer- ence.	Tip to tip.
1	♂	Pubb Hills, Sind ...	Karachi Mus. ...	1879	?	?	10·5	3·75	6·5
2	♂	Sind ...	W. T. Blanford ...	1870	?	?	10·3	3·75	4·75
3	♂	Chanda, C. P. ...	Mus. Coll. ...	1867	?	?	9	4	6·25
4	♂	Sind ...	W. T. Blanford ...	?	?	?	5·25	3·25	2·25
5	♂	Allahabad Dist. ...	J. Cockburn ...	1879	6·5	2·5	7·75	3·75	3·25
6	...	? ...	Zool. Gardens ...	?	6·75	2·5	4·75	1·75	4·25
7	...	Banda Dist., U. P. ...	J. Cockburn ...	1879	7·5	2·8	9·25	3·5	2·75
8	...	? ...	Zool. Gardens ...	?	7·75	2·75	9·75	4·3	4·5
9	...	Allahabad Dist. ...	J. Cockburn ...	1879	?	2·5	9·25	4	4·8
10	...	? ...	? ...	?	?	?	7·5	3·75	4
11	...	Allahabad Dist. ...	J. Cockburn ...	1879	6·5	2·75	9·25	4	3·5
12	...	Banda Dist. ...	Ditto ...	1881	7·75	2·5	12	3·75	6
13	...	Banda ...	Ditto ...	1879	?	?	5·75	1·8	1·75
14	...	Pind Dadan Khan ...	W. Theobald ...	1853	8·25	2·75	10	4	3·75
15	...	Pubb Hills, Sind ...	Karachi Mus. ...	1879	8	2·5	7·5	3·75	2·5
16	♂	Maytina ...	Ditto ...	1879	8	2·5	10·75	4	4·5
17	♂	Ditto ...	1879	8	2·75	12	4·25	6·5
18*	♀	Jalk, Baluchistan, 3,000 ft.	W. T. Blanford ...	1872	7	2·25	5·25-7·5	1·75	3·25

Distribution :—North-Western and Central India through Baluchistan to Bushire; absent on Malabar Coast, in Ceylon, Lower Bengal and the Western Ghâts of the Bombay Presidency.

Record Head :—Length 15 in. Circumference 5 in. (*cf.* Lydekker, *Game Animals of India*, p. 202).

Cf. Blanford, *Fauna of British India*, Mammalia, p. 526.

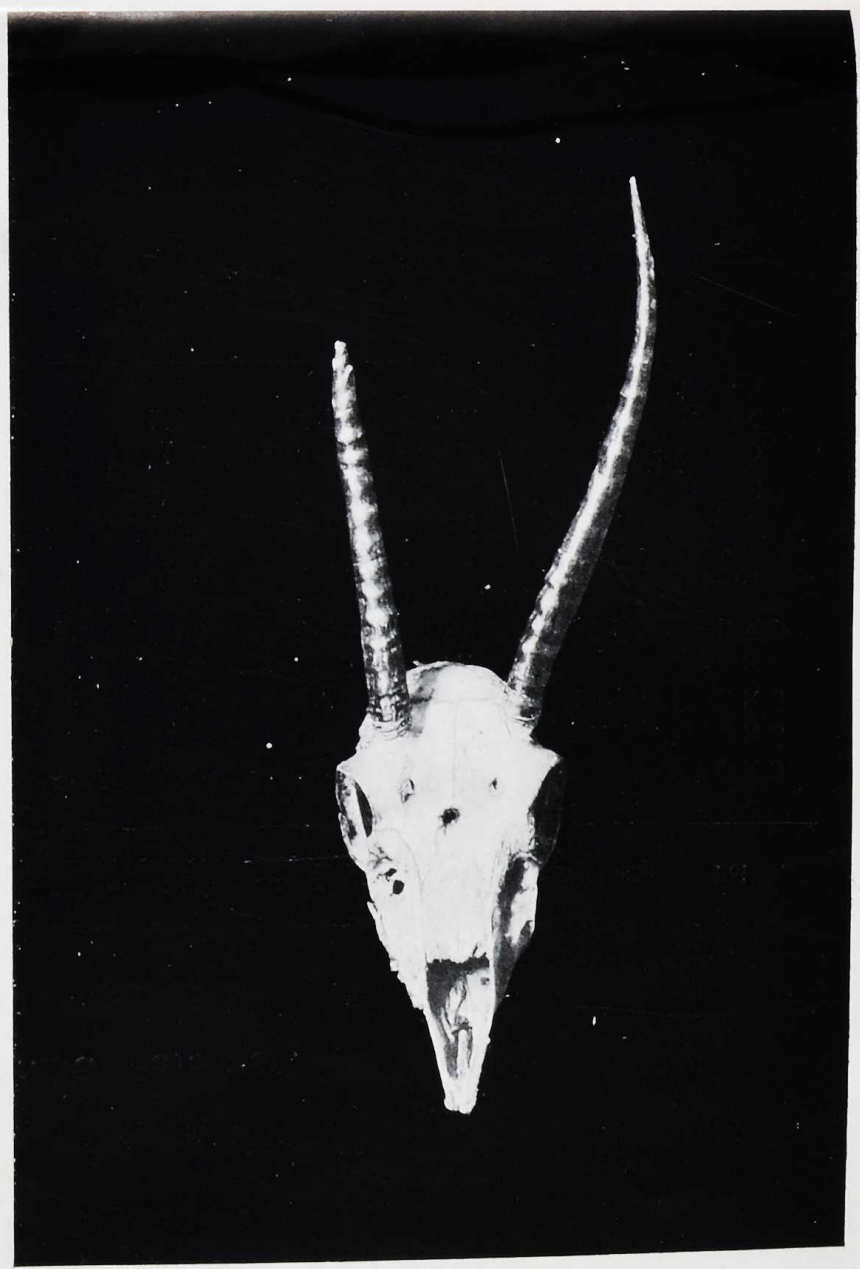
* Type of Blanford's *Gazella fuscifrons*.



Gazella bennetti, $\frac{1}{4}$ th scale.

1

2



Gazella bennetti, $\frac{1}{3}$ rd scale.
Type of Blanford's *G. fuscifrons*.

CERVUS CASHMEERIANUS, Falconer.

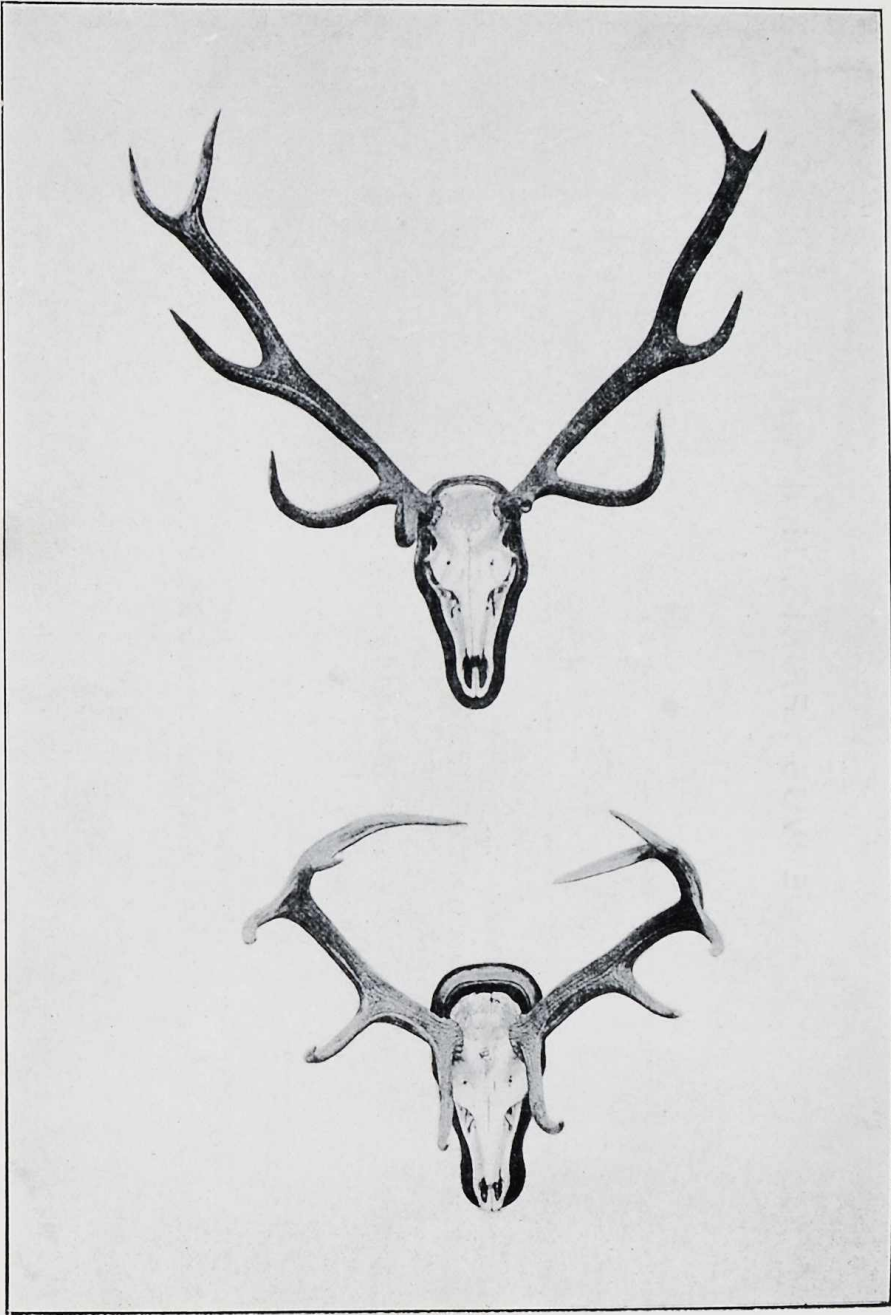
(THE KASHMIR STAG OR HANGUL.)

No.	Locality.	Donor.	Year.	Basal length of skull.	Breadth of skull.	Length of horn.	Circumference.	Widest inside.	Tip to tip.	Points.
1	Kashmir Valley ...	R. Lydekker ...	1878	15.25	5.75	33	6	23	5.5	5 × 5
2	?	No history ...	?	?	?	41	6.5	...	...	6 × 6
3	?	Do. ...	?	?	?	40.8	4.75	30.25	15.75	6 × 5
4	?	Do. ..	?	?	?	23.5	5.75	...	...	3 × 4
5	Upper Wurdwan, Kashmir.	S. J. Stone ...	1887	15.5	5.25	36.5	5.5	23.6	37.25	5 × 5
6	?	No history ...	?	?	?	27	4.25	24.25	25.75	5 × 4
7	Purchased ...	.....	1872	?	?	32.75	5.75	...	...	5
8	.....	R. C. Beavan ...	1865	?	?	34.75	6	...	...	6
9	Bokhara ..	Purchased ...	1872	?	?	29.5	5.5	...	...	5
10	Oxus R. nr. Balkh ...	C. E. Yate ...	1887	?	?	23	4.75	...	...	4

Distribution :—Kashmir pine forests between 9,000 and 12,000 ft.

Record Head :—Length 48.5 in. (*cf.* Lydekker, *Game Animals of India*, etc., p. 213).

Cf. Blanford, *Fauna of British India*, Mammalia, p. 535.



5

1

Cervus cashmeerianus, $\frac{1}{16}$ th scale.

CERVUS AFFINIS, Hodgson.

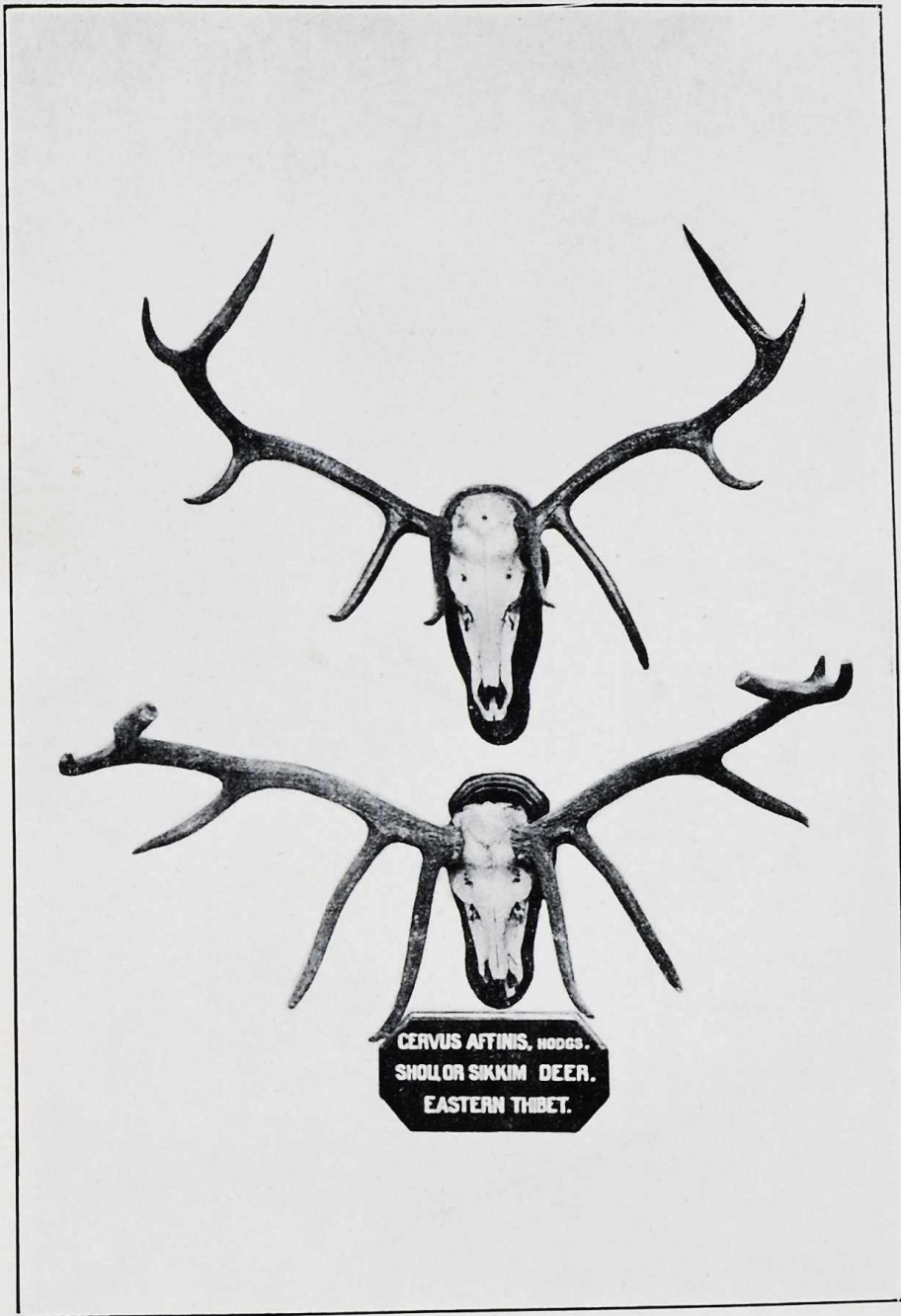
(THE SHOU.)

No.	Locality.	Donor.	Year.	Basal length of skull	Breadth of skull.	Length of horn.	Circumference.	Widest inside.	Tip to tip.	Points.
1	Near Phari, Tibet ...	Sir A. Eden ...	1882	17·25	6·25	43	7	41·25	46·25	5 × 6
2	Near Dhoulagiri, Tibet.	Barrackpore Menagerie.	1856	?	?	42	6·25	...	...	...
3	Near Phari, Tibet ...	A. Campbell ...	1851	16·75	5·75	37·75	6·75	36·75	40·25	5 × 5
4	Sikhim ...	J. Mandelli ...	1877	?	?	46·75	5·75	36·25	20	5 × 5

Distribution :—Eastern Tibet and the Chumbi Valley to Sikhim.

Record Head :—Length 55·75 in. Circumference 6·5 in. Tip to tip 17·25 in. (*cf.* Rowland Ward, *Horn Measurements*).

Cf. Lydekker, *Game Animals of India*, p. 218.



Cervus affinis, $\frac{1}{20}$ th scale.

CERVUS DYBOWSKII, Sclater.

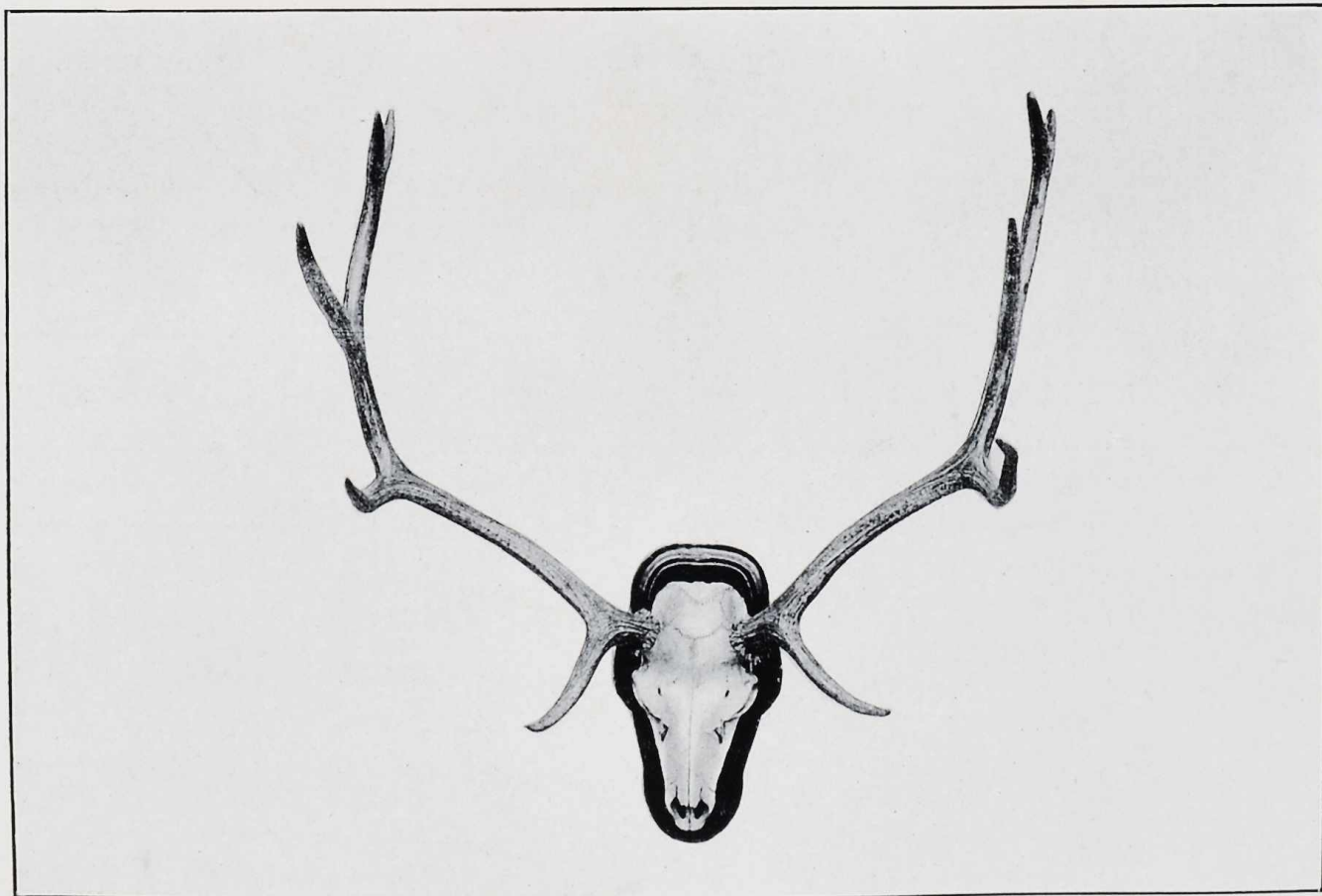
(THOROLD'S DEER.)

No.	Locality.	Donor.	Year.	Basal length of skull.	Breadth of skull.	Length of horn.	Circumference.	Widest inside.	Points.	Tip to tip.
1	"Darjeeling Bazaar"	A. M. Dunne ...	1888	15·25	5·75	32·25	4·75	33	5 × 5	31·75

Distribution :—Tibet.

Record Head :—Doubtful.

Cf. W. L. Sclater, *Journ. As. Soc. Bengal*, vol. lviii, p. 186 ; and Lydekker, *Deer of all Lands*, p. 91.



1

Cervus dybowskii, $\frac{1}{10}$ th scale.

CERVUS EUSTEPHANUS, Blanford.

(THE ALTAI WAPITI.)

No.	Locality.	Donor.	Year.	Length of horn.	Circumference.	Points.
* 1	Thian Shan Mts.	Dr. F. Stoliczka	1874	51·5, 50·1	10·9, 10·5	8 × 7

Distribution :—The Altai and Thian Shan Mountains.

Note :—Probably these two horns were not from the same animal.

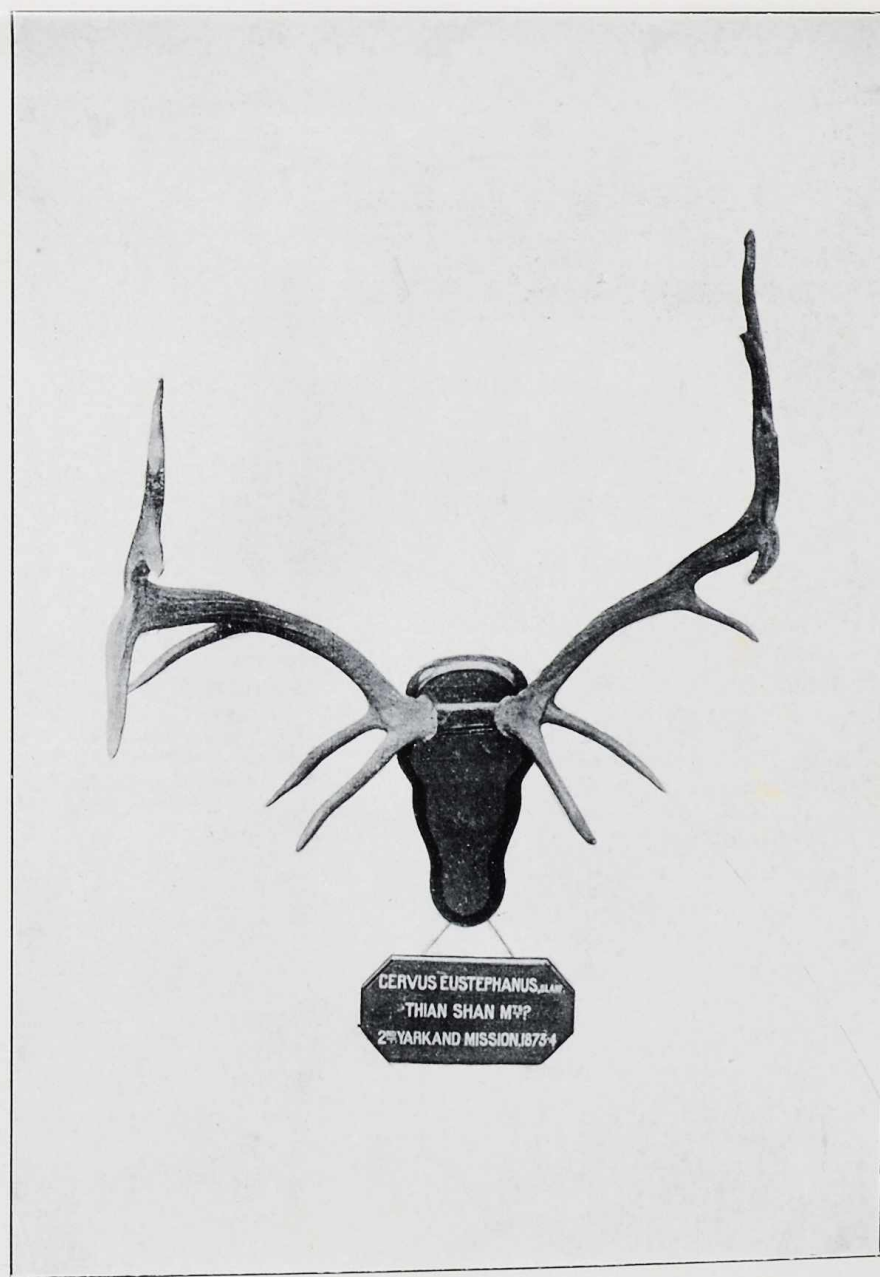
Cf. Blanford, *Proc. Zool. Soc.*, 1875, p. 637.

• Type of Blanford's *Cervus eustephanus*. Record.



Cervus eustephanus, $\frac{1}{12}$ th scale.

1



Cervus eustephanus, $\frac{1}{12}$ th scale.

1

CERVUS EUSTEPHANUS, BLAIR
THIAN SHAN M??
2ND YARKAND MISSION, 1873-4

CERVUS SIKA, Temminck.

(THE COMMON SIKA.)

No.	Locality.	Donor.	Year.	Basal length of skull	Breadth of skull.	Length of horn.	Circumference.	Widest inside.	Points.	Tip to tip.
1	Japan ...	Hakodate Museum	1884	11.75	4.25	23.5	4.25	18.75	4 × 4	20.25

Distribution:—Japan and Northern China.

Record Head:—Length 31.25 in. Circumference 5.25 in. Tip to tip 27.2 in. (cf. Rowland Ward, *Horn Measurements*, p. 25).

Cf. Lydekker, *Deer of all Lands*, p. 113.



CERVUS SIKA TEM
THE JAPANESE DEER
HAKODATE MUSEUM

Cervus sika, 1/3th scale.

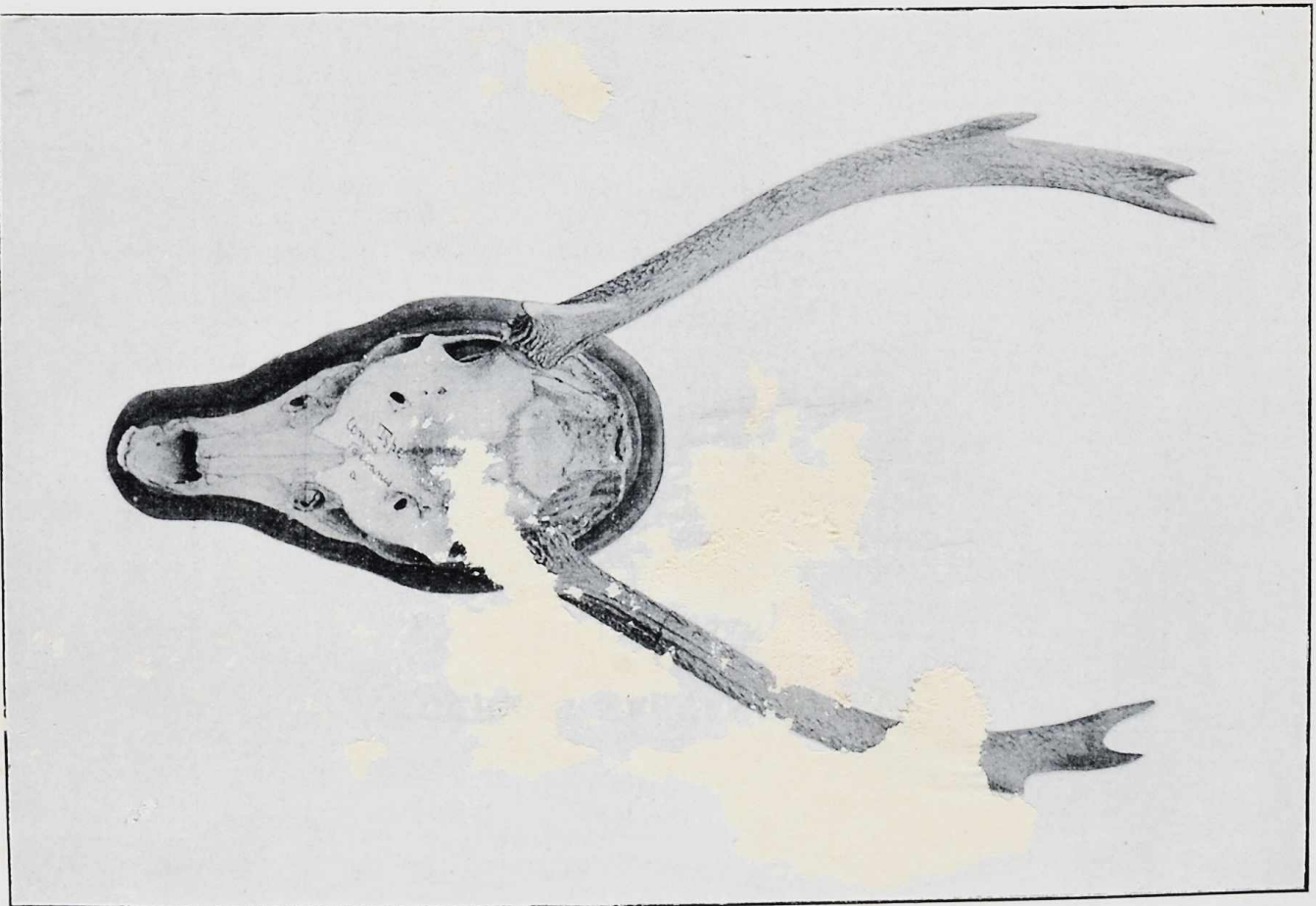
CERUS TAËVANUS, Blyth

(FORMOSAN, A.)

No.	Locality.	Donor.	Year.	Bas- length	sk	Length of horn.	Circumfe- rence.	Widest inside.	Tip to tip.	Points.
*1	Formosa ...	R. Swinhoe ...	1860	10·75	3·75	14	3·25	8·5	7	4 × 4

Distribution:—The Island of Formosa.
Cf. Blyth, *Journ. As. Soc. Bengal*, vol. xxix, p. 90.

* Type of Blyth's *Cercus taëvanus*.

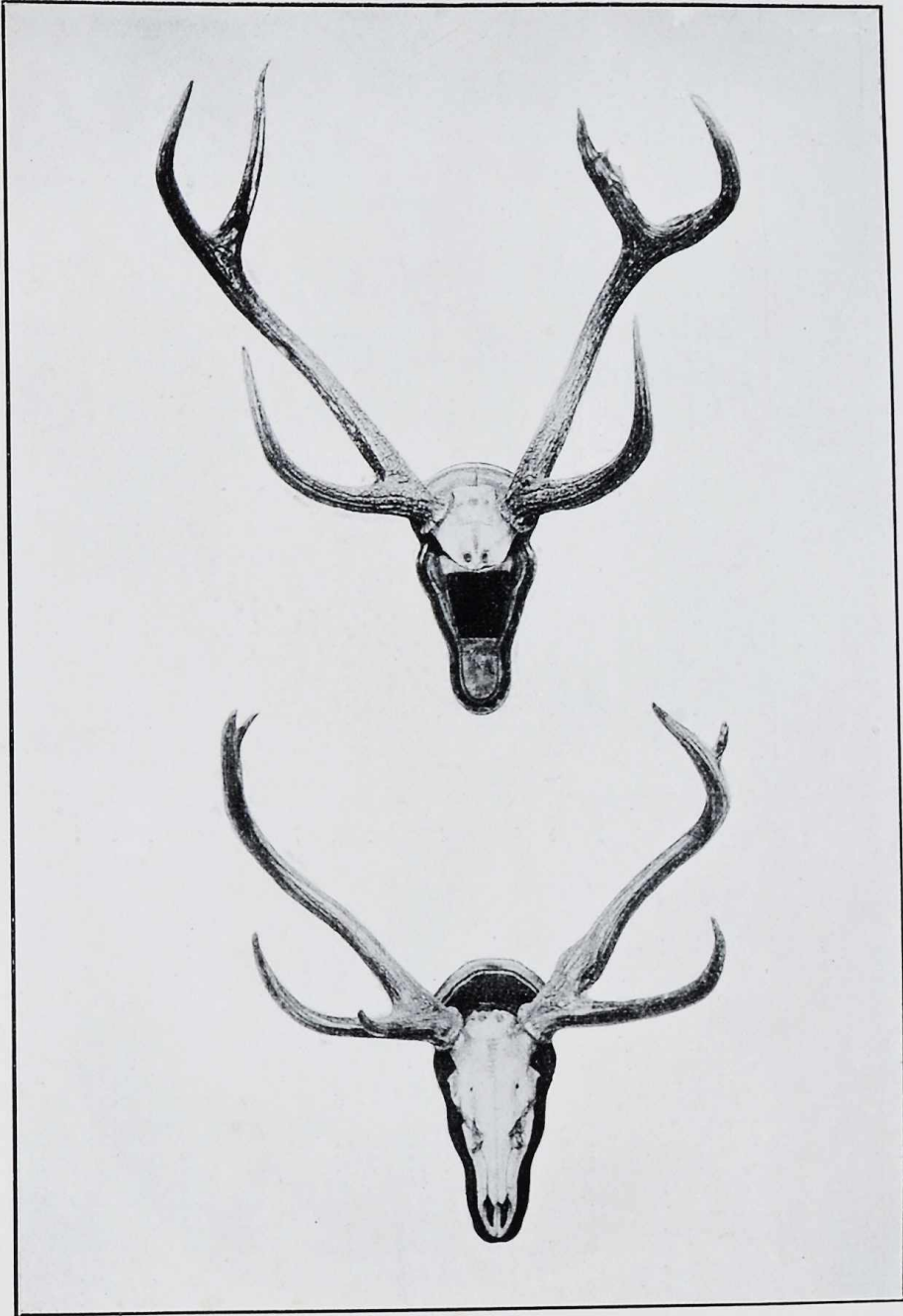


Ceruus latronum, 15th scale.

CERVUS ARISTOTELIS, Cuvier.

(THE SAMBAR.)

No.	Locality.	Donor.	Year.	Basal length of skull.	Breadth of skull.	Length of horn.	Circumference.	Widest inside.	Points.	Tip to tip.
1	No history	J. Pybus	1847	?	?	30·5	6·75	16	3 × 3	14·25
2	Ditto	Ditto	1847	?	?	22·25	4·75	18·5	3 × 3	18
3	Ditto	Ditto	1847	?	?	23·5	4·75	13·75	3 × 3	11·25
4	Ditto	Ditto	1847	14·25	4·75	17	4	12·75	3 × 3	14·75
5	Assam	Col. Jenkins	1846	15	5·5	20·5	6	12·8	3 × 3	8·5
6	Arakan	Col. Phayre	1847	15	4·8	20·5	4·75	15·5	3 × 3	15·75
7	Ditto	Ditto	1847	?	?	23·5	4	16·8	3 × 3	13·5
8	Ditto	Ditto	1847	?	?	24·8	4·5	20·5	3 × 3	19·5
9	Assam	E. V. Westmacott	1866	14	4·75	22·75	4·6	...	...	...
10	No history	J. Pybus	1847	14·5	4·25	12·75	4·5	9·5	3 × 3	9·5
11	Ditto	Ditto	1847	14	?	23·5	4·5	8·25	3 × 3	8
12	Ditto	Ditto	1847	12·25	4·75	23·3	5·25	18·5	3 × 3	18·5
13	Ditto	Ditto	1847	?	?	29·75	6·25	...	3 × 3	...
14	Central India	S. R. Tickell	1846	?	?	19·5	4·5	21·5	3 × 3	19
15	?	?	?	?	?	34·75	6·75	...	3 × 3	...
16	Banda Dist.	J. Cockburn	1886	?	?	38·75	6·75	27·75	3 × 3	26
17	Coromandel Coast	Purchased	1848	?	?	43	10	..	5 × 4	...
18	Himalayas	J. J. Attanass	1843	16·75	5·3	26·5	5	18·5	3 × 3	11
19	?	?	?	?	?	29·8	6	19	3 × 3	16·25
20	Banda Dist.	J. Cockburn	1886	16·5	5·25	30·75	6	31	4 × 3	26·75
21	No history	J. Pybus	1847	?	?	31·75	6·5	24·25	3 × 3	14·75
22	Ditto	Ditto	1847	?	?	26·75	5·25	24·25	3 × 3	18
23	Assam	Raja R. Mullick...	1846	16	5	23·25	6	17·25	3 × 3	14·25
24	No history	J. Pybus	1847	?	?	25·5	5	20·8	3 × 3	19·5



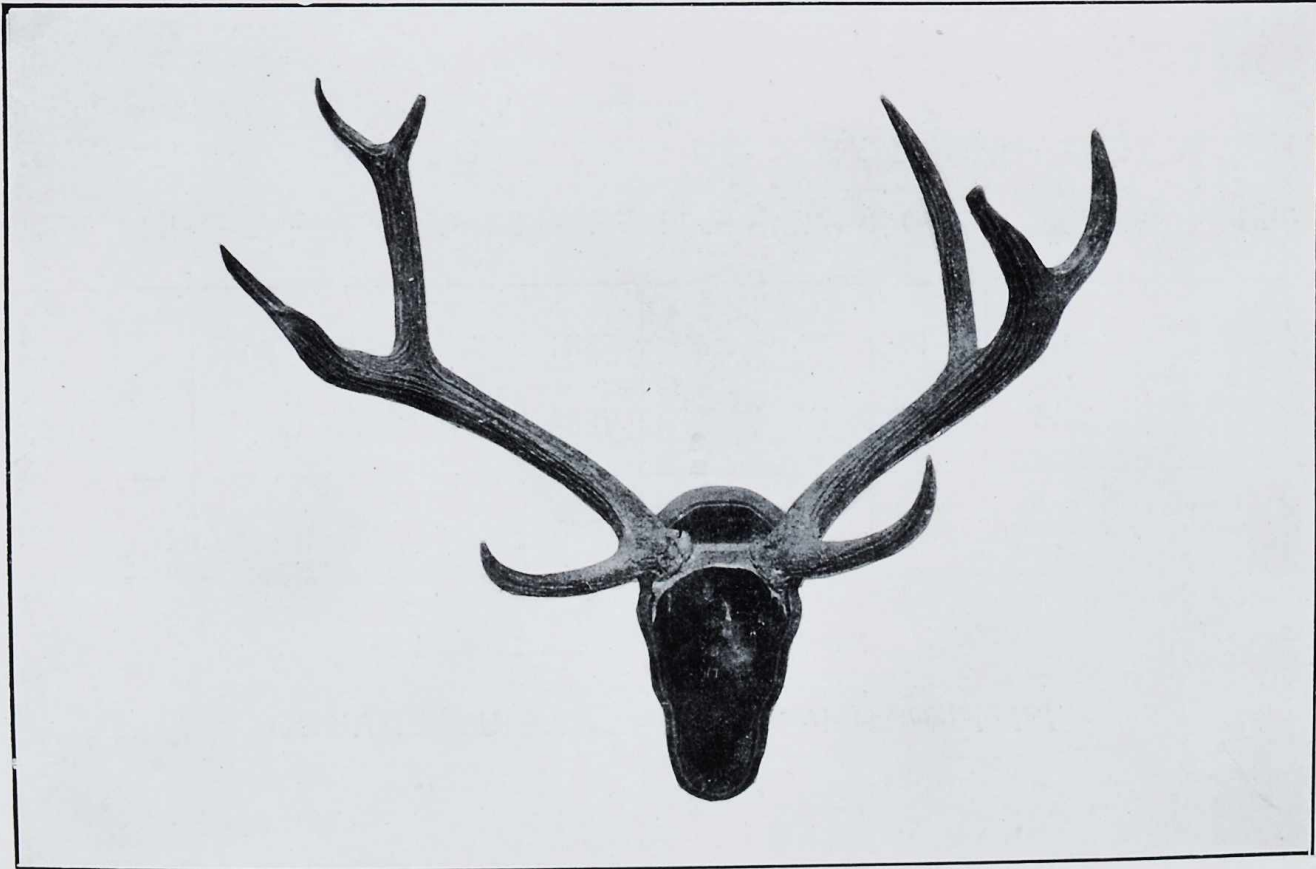
16

15

Cervus aristotelis, $\frac{1}{15}$ th scale.

CERVUS ARISTOTELIS, Cuvier—*continued.*(THE SAMBAR)—*continued.*

No.	Locality.	Donor.	Year.	Basal length of skull.	Breadth of skull.	Length of horn.	Circumference.	Widest inside.	Points.	Tip to tip.
25	Assam	H. Butcher	1879	?	5.25	25.75	5.25	29.5	3 × 3	29.3
26	Rewah, U. P.	Dr. Waller	1879	16.25	5.8	28.75	5	21.75	3 × 3	...
27	No history	J. Pybus	1847	15.5	6.25	31.5	6.25	31.75	4 × 3	13.75
28	Arakan	Sir A. Phayre	1874	?	?	17.75	5	12.25	3 × 3	9.25
29	Assam	H. Butcher	1879	?	?	22.25	4.75	15.5	3 × 3	15.75
30	No history	O. W. Malet, Esq.	1896	?	?	24.25	5.75	9.75	5 × 6	3.25
31	Ditto	Ditto	1896	?	?	15.25	4	10.25	3 × 3	13
32	Assam	H. Butcher	1879	?	?	24.25	5.8	15.75	3 × 3	15
33	No history	W. Masters, Esq.	1886	?	?	19.25	4	13.75	2 × 3	13.5
34	Almora	No history	?	15.25	4.75	30.25	5.25	15.25	9 × 7	15
35	Mirzapore	J. Coekburn	1886	...	...	40.75	6.75	...	3 × 3	...
36	Ditto	Ditto	1886	...	...	40	6.5	...	3 × 3	...
37	No history	.....	...	...	...	34.5	6.75	...	2	One horn only.
38	Ditto	.....	...	...	...	31.25	6	...	4	Ditto.
39	.....	R. C. Beavan	1865	...	...	26	5	...	4	Ditto.
40	.....	Zool. Gardens	1880	...	...	27.75	5.5	...	4 × 4	...
41	.....	Ditto	1881	...	...	26.5	5	...	3 × 3	...
42	Mirzapore	J. Cockburn	1886	...	...	28.75	7.25	...	3 × 3	...
43	.....	Zool. Gardens	1882	...	...	30.25	5.25	...	3 × 3	...
44	.....	Hon. Justice Norman.	...	...	...	27.75	7.5	...	3	One horn abnormal.



Cervus aristotelis, $\frac{1}{3}$ th scale.

CERVUS ARISTOTELIS, Cuvier—*concluded.*

(THE SAMBAR)—*concluded.*

No.	Locality.	Donor.	Year.	Basal length of skull.	Breadth of skull.	Length of horn.	Circumference.	Widest inside.	Points.	Tip to tip.
45	R. C. Beavan	1865	...	...	24·75	4·75	...	2	1 horn only.
46	Zool. Gardens ...	1882	...	...	26	4·25	...	3 × 3	Ditto.

Distribution:—Throughout the Oriental region in hilly forest tracts. Wanting in Sind, Rajputana, and the Punjab.

Record Head:—Length 50·12 in. Circumference 9·38 in. (*cf.* Lydekker, *Game Animals of India*, p. 226). *Cf.* Blanford, *Fauna of British India*, Mammalia, p. 543.

CERVUS UNICOLOR SWINHOU, Brooke.

(THE FORMOSA DEER.)

No.	Locality.	Donor.	Year.	Basal length of skull.	Breadth of skull.	Length of horn.	Circumfer- ence.	No. of points.
1	Formosa ...	Zool. Gardens ...	1882	?	?	15·25	3·15	3·3

Distribution :—The Island of Formosa.

Record Head :—Length just under 20 in. (*cf.* Rowland Ward, *Horn Measurements*, p. 12).

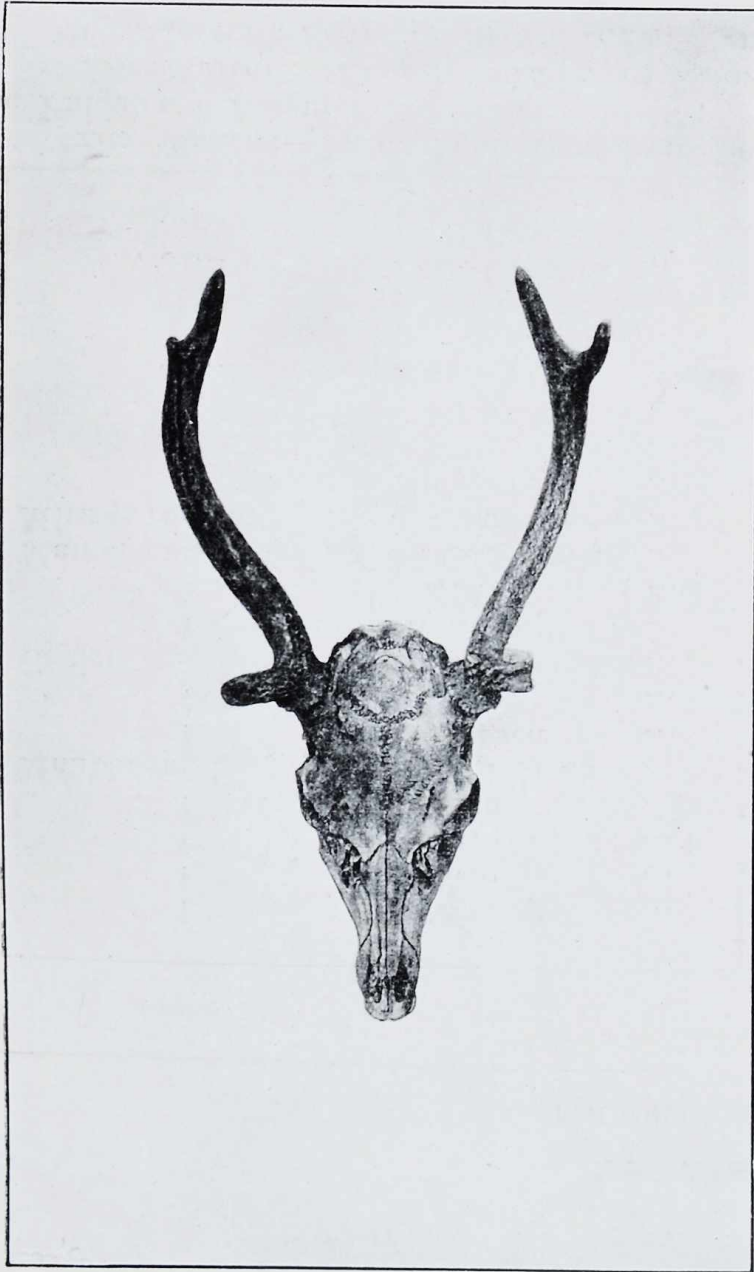
Cf. Lydekker, *Deer of all Lands*, p. 154.

CERVUS HIPPELAPHUS, Cuvier.

(THE JAVAN SAMBAR.)

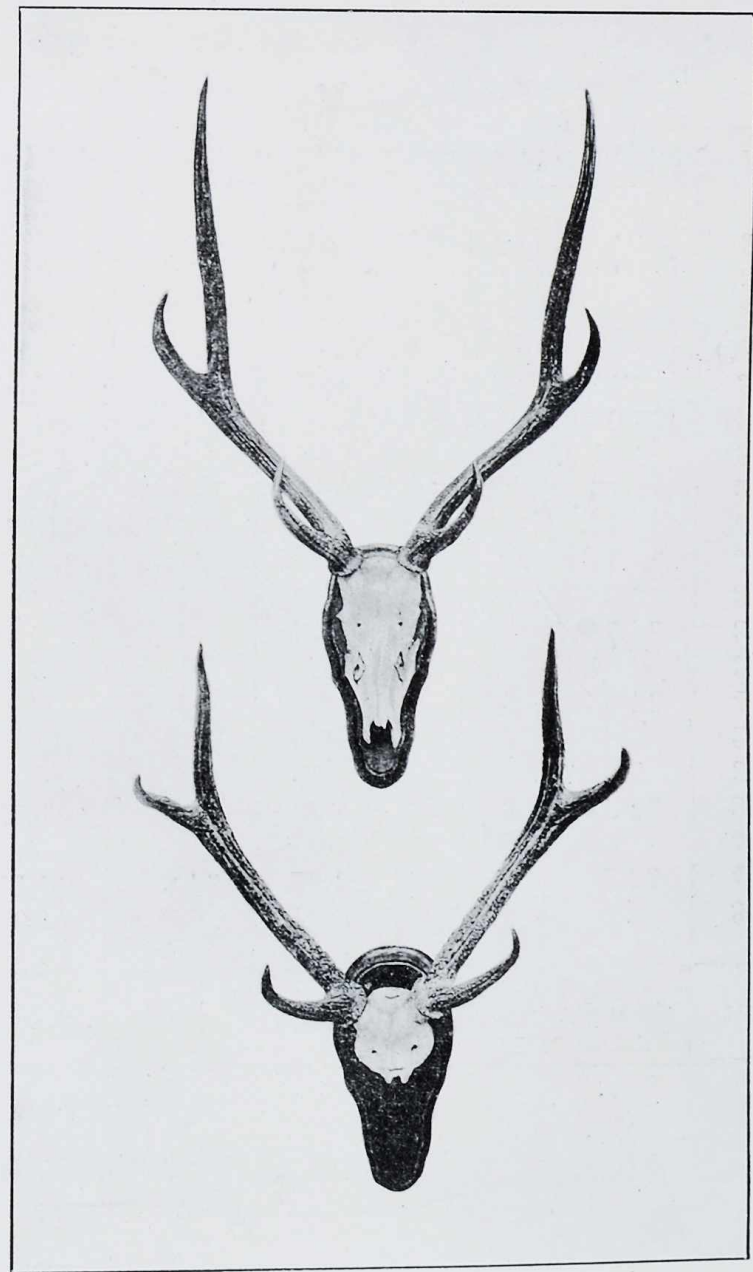
No.	Locality.	Donor.	Year.	Basal length of skull.	Breadth of skull.	Length of horn.	Circumfer- ence.	Tip to tip.
1	Moluccas	Zool. Gardens	1882	11	3·75	11·9	3·25	6·5
2	Ditto	Ditto	1882	?	?	8·3	2·75	7·25
3	Java	Batavian Society	1884	?	?	21·75	5·75	...
4	Ditto	Ditto	1884	?	?	28·5	5·5	16
5	Ditto	Ditto	1884	?	4·25	29·25	5·25	19·5
6	Ditto	Ditto	1884	?	?	28·25	4·75	13
7	Ditto	Ditto	1884	10	3·25	21·25	3·5	13·3
8	Mauritius	Willis Earle, Esq	1842	?	?	28	4·25	15·5
9	Ditto	Ditto	1842	?	?	31·25	5·5	9·5
10	Ditto	Y. Hugon, Esq.	1855	?	?	16·5	3	11·75

Distribution.—Java, the Celebes Islands, Timor and the Moluccas. Introduced into Mauritius.
Cf. Lydekker, *Deer of all Lands*, p. 162.



Cervus hippelaphus, $\frac{3}{4}$ th scale.

1



Cervus hippelaphus, $\frac{3}{4}$ th scale.

9

8

CERVUS AXIS, Erxleben.

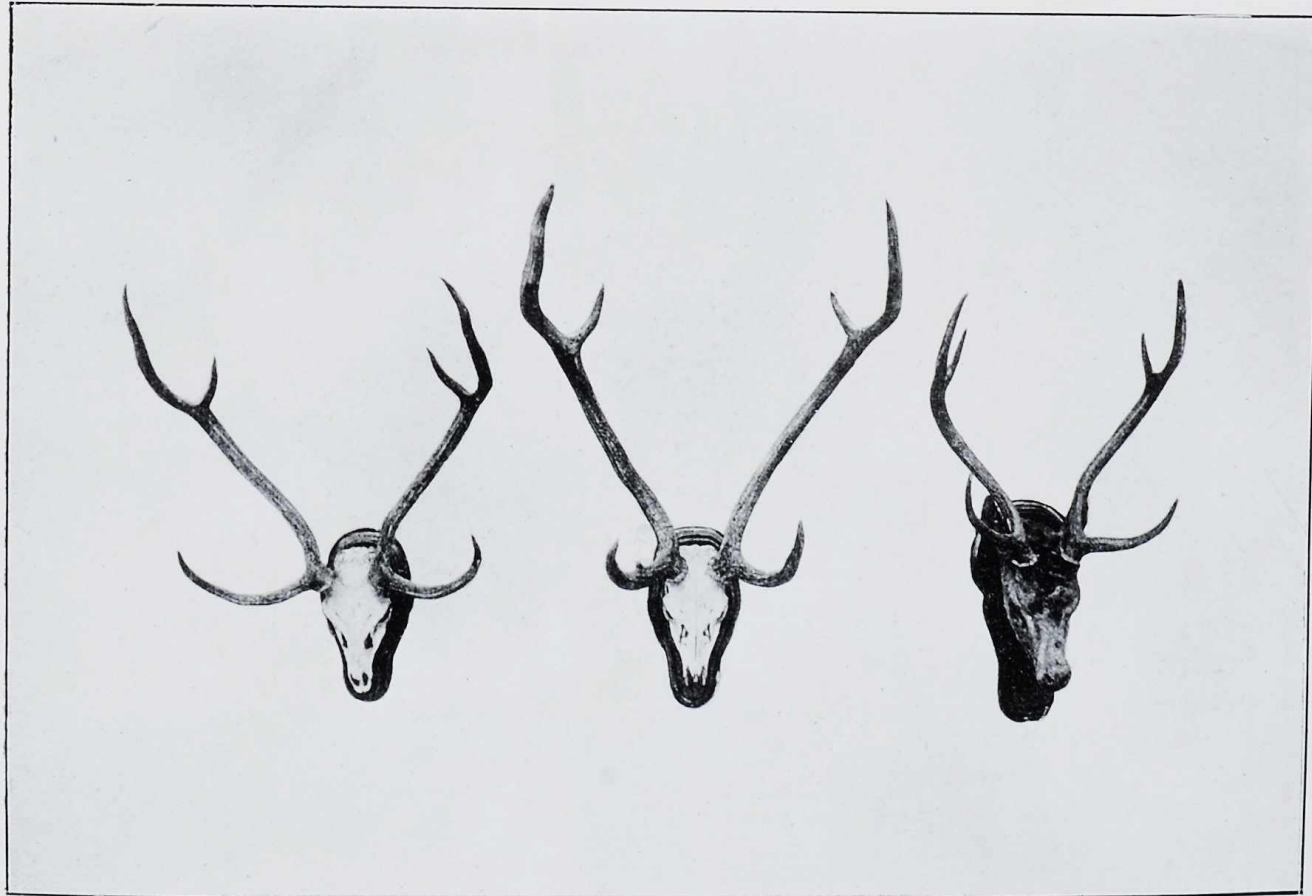
(THE SPOTTED DEER OR CHITAL.)

No.	Locality.	Donor.	Year.	Basal length of skull.	Breadth of skull.	Length of horn.	Circumference	Tip to tip.	Points.
1	?	No history ...	?	10·75	3·5	16·3	5·25	9·5	3 × 3
2	?	Ditto ...	?	11·25	3·75	29·75	3·75	22·75	4 × 3
3	?	Ditto ...	?	?	?	15·75	2·25	13	4 × 3
4	?	Ditto ...	?	11·25	4·25	30·25	3·75	17·75	3 × 3
5	Manbhoom, Bengal...	R. C. Beavan ...	1846	?	?	31	4·25	15·5	3 × 3
6	?	Purchased ...	1842	10·25	3·75	24·25	3·25	15	2 × 2
7	?	Ditto ...	1842	?	?	33	3·75	20·75	4 × 3
8	Ceylon	E. Higgins ...	1846	?	?	24	4	15·5	3 × 3
9	?	No history ...	?	?	?	27·5	4	16·75	3 × 3
10	?	Ditto ...	?	?	?	29·5	4·25	13·5	3 × 3
11	Manbhoom, Bengal...	R. C. Beavan ...	1845	9·75	3·75	17·75	3·25	12	3 × 3
12	Mirzapore Dist. ...	J. Cockburn ...	1886	10·75	4	34·75	4·75	19	4 × 3
13	?	No history ...	?	?	4·25	15·25	9·75	21·25	2 × 3
14	?	Ditto ...	?	?	?	29·5	4·25	16·5	5 × 5
15	?	Ditto ...	?	?	3·75	26·25	3	5·25	3 × 3
16	.....	No history ...	...	...	...	29	3·75	...	3 (Only one horn.)
17	.....	Zool. Gardens ...	1882	...	...	20·75	3·5	...	3 × 3
18	.....	Ditto ...	1880	...	...	19·5	3·5	...	3 × 2

Distribution:—Throughout India from the foot of the Himalayas to Cape Comorin and Ceylon. Absent in the Punjab and Assam.

Record Head:—Length 38·75 in. (*cf. Asian*, 13th April 1888).

Cf. Blanford, Fauna of British India, Mammalia, p. 546.



Cervus axis, $\frac{1}{13}$ th scale.

CERVUS PORCINUS, Zimmerman.

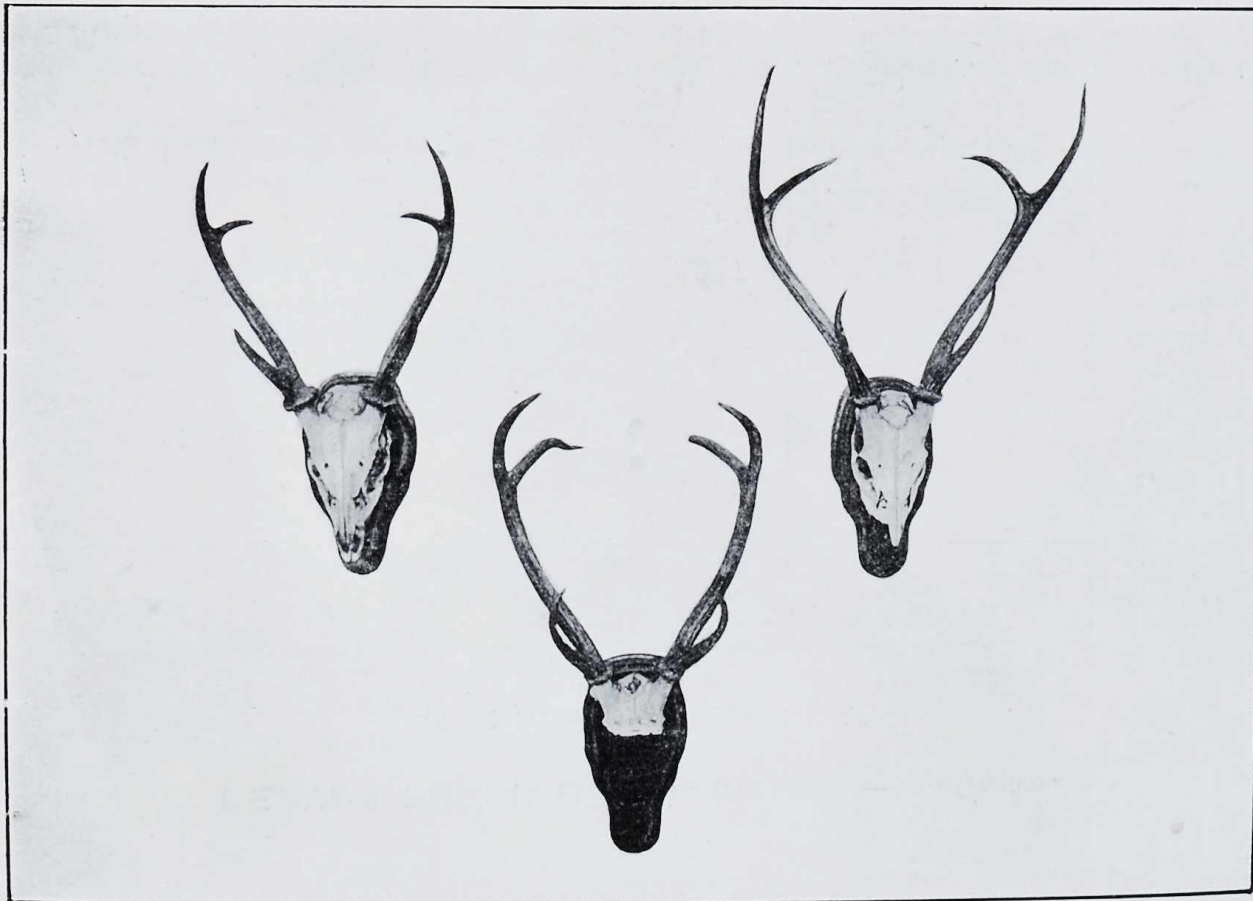
(THE HOG DEER.)

No.	Locality.	Donor.	Year.	Basal length of skull.	Breadth of skull.	Length of horn.	Circumference.	Tip to tip.
1	Malabar	W. Masters, Esq.	1842	8·25	3·25	18·75	3·25	15·25
2	Assam	H. Butcher	1879	...	...	15·25	3·25	11·25
3	Martaban	R. C. Beavan	1865	...	...	18	2·75	10·25
4	Calcutta	Zool. Gardens	1878	...	...	8·75	2·75	6·25
5	?	Purchased	1844	6·5	2·75	14·25	3	10
6	Assam	H. Butcher	1879	...	...	13·5	2·75	7
7	Do.	Ditto	1879	..	...	18·5	3·5	11
8	?	W. Masters, Esq.	1842	...	...	18·75	2·75	12·25
9	?	Ditto	1842	...	...	15·8	3·1	10
10	Assam	H. Butcher	1879	...	...	14·75	3·75	8·25
11	?	No history	?	...	...	13·25	2·75	8·25
12	Assam	H. Butcher	1879	...	...	8	2·6	6·2
13	Do.	Ditto	1879	...	...	11·25	2·8	9·25
14	Do.	Ditto	1879	...	...	14·75	2·75	10·3
15	Do.	Ditto	1879	...	...	14·75	3	8·5
16	Do.	Ditto	1879	...	...	10·8	2·75	7·75
17	?	No history	1879	...	...	7·25	1·75	...
18	?	Ditto	...	...	...	6·75	2	...
19	?	Ditto	...	...	...	15·5	2·75	...
20	?	Ditto	...	...	...	14·75	2·75	6·75
21	Assam	H. Butcher	1879	..	...	13·25	2·75	10·5
22	Martaban	R. C. Beavan	1865	...	...	20·5	3·25	8·25
23	.....	No history	...	..	...	14·5	2·75	6·5
24	Assam	H. Butcher	1879	...	...	16·5	2·75	8

1

5

22



22

Cervus porcinus, $\frac{1}{15}$ th scale.

CERVUS PORCINUS, Zimmerman—*continued.*(THE HOG DEER)—*continued.*

No.	Locality.		Donor.		Year.	Basal length of skull.	Breadth of skull.	Length of horn.	Circumference.	Tip to tip.
25	Assam	...	H. Butcher	...	1879	...	...	17·5	3·75	2·75
26	?	...	No history	...	...	...	...	14·75	2·75	...
27	?	...	Ditto	...	...	...	...	17·25	2·8	13
28	?	...	Ditto	...	...	...	...	18·25	3·6	5
29	Calcutta	...	Zool. Gardens	...	...	...	...	13·25	2·75	7·5
30	?	...	No history	...	...	..	5	15·25	3·25	9·5
31	Calcutta	...	Zool. Gardens	...	1877	7·25	2·5	8·5	2·75	8

Distribution :—Sind and the Punjab to Assam and thence to Burma. Common in the Terai. Introduced into Ceylon.

Record Head :—Length 23·25 in. Circumference 3·6 in. (*cf.* Lydekker, *Game Animals of India*, p. 242).

Cf. Blanford, *Fauna of British India*, Mammalia, p. 549.

CERVUS DUVAUCÉLI, Cuvier.

(THE SWAMP DEER OR BARASINGHA.)

No.	Locality.	Donor.	Year.	Basal length of skull.	Breadth of skull.	Length of horn.	Circumference.	Widest inside.	Points.	Tip to tip.
1	?	Purchased	.. 1858	15·5	4·5	25·5	5	17·75	7 × 7	17·75
2	?	Ditto	... 1858	?	?	22·25	4·5	16·75	5 × 5	17·75
3	Assam	H. Butcher	... 1879	?	?	20·75	4·75	18·5	7 × 6	13·75
4	Nerbudda	Raja R. Mullick	... 1850	10·75	3·75	4·25	2·75	...	2 × 2	3·75
5	?	Purchased	... 1858	14·5	4	13·5	4·75	19·25	6 × 5	23·5
6	?	Ditto	... 1858	?	?	15·75	3·5	12·5	5 × 6	10·75
7	Upper Bengal	T. Hardwicke	... 1822	?	4·75	28·5	5·25	20·5	7 × 6	14·25
8	Shillong, Assam	Purchased	... 1879	?	?	30·25	5·3	20·6	4 × 4	22·5
9	?	No history	... 1858	?	4·5	32·5	5·25	32·25	6 × 6	28·5
10	?	Ditto	... 1858	?	?	24	6·25	23·25	8 × 7	19
11	?	Ditto	... 1858	?	?	27·5	5·25	23·75	7 × 7	22·5
12	?	Ditto	... 1858	?	...	27·3	5·8	26·5	10 × 8	22·25
13	Assam	R. W. G. Frith	... 1842	?	4·75	27·25	5·25	22·75	7 × 7	20·5
14	?	No history	... 1858	?	?	27·25	5·25	28·5	10 × 10	21·4
15	Tezpur, Assam	H. Butcher	... 1879	...	?	30·25	5·5	24·5	6 × 7	18·75
16	Lakhimpur, Assam...	Ditto	... 1879	...	...	27·75	4·8	27·25	7 × 7	20·75
17	Calcutta	Zool. Gardens	... 1877	15·25	3·75	20·5	4	17	4 × 4	25·25
18	.....	No history	... ..	...	...	27·25	5·25	...	6	Single horn only.
19	.....	Ditto	... ..	...	...	24	4·75	...	5	Ditto.
20	... ..	Ditto	... ..	...	...	18	4·75	...	5	Ditto.
21	.....	Ditto	... ..	...	...	21·25	4·75	...	5 × 5	...

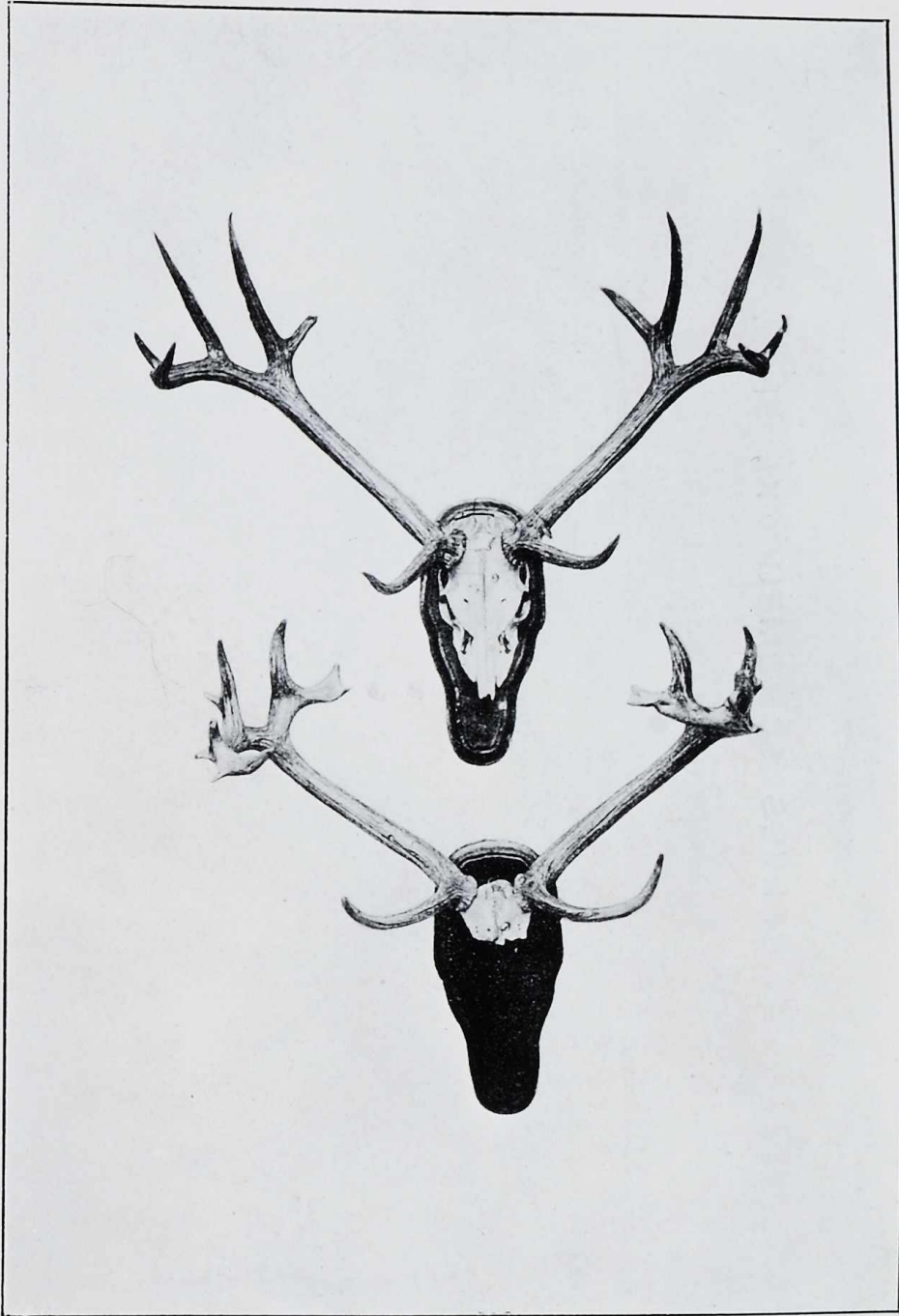
CERVUS DUVAUCELI, Cuvier—*continued.*(THE SWAMP DEER OR BARASINGHA)—*continued.*

No.	Locality	Donor.	Year.	Basal length of skull.	Breadth of skull.	Length of horn.	Circumference.	Widest inside.	Points.	Tip to tip.
22	Sirgoojah (Chota Nagpur).	J. Cockburn ...	1886	...	...	35·5	5	...	6 × 6	...
23	.....	Zool. Gardens ...	1883	...	...	16·75	4·25	...	4 × 4	...

Distribution:—The base of the Himalayas from Kyarda Doon to Bhutan; Assam, along the Brahmaputra valley to the Sunderbunds. Occurs also in the Central Provinces from Mandhla to Midnapore.

Record Head:—Length 41 in. Circumference 5·5 in. (*cf.* Rowland Ward, *Horn Measurements*, p. 17).

Cf. Blanford, *Fauna of British India*, Mammalia, p. 539.



9

15

Cervus durauceli, $\frac{1}{10}$ th scale.

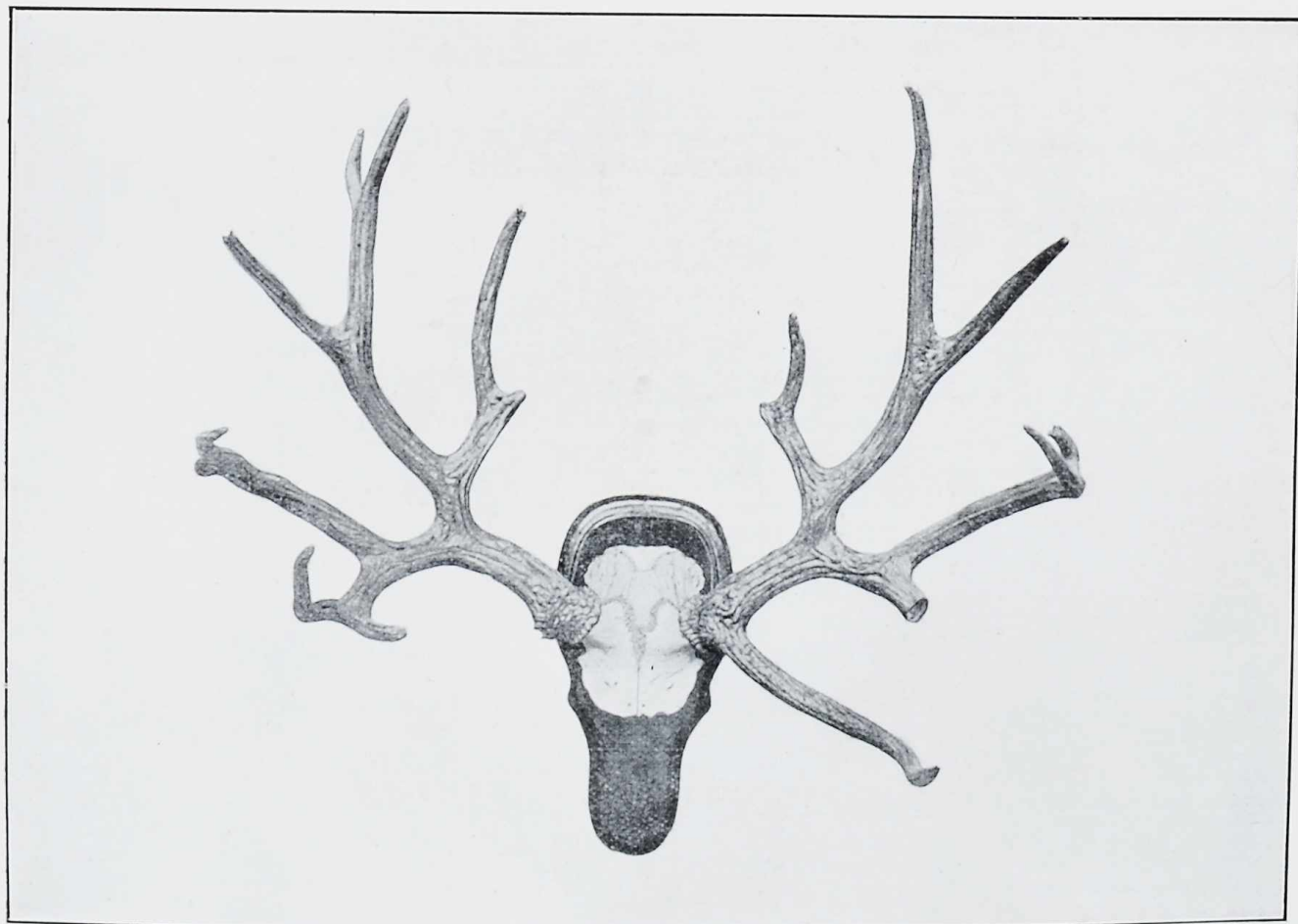
CERVUS SCHOMBURGKI, Blyth.

(SCHOMBURGK'S DEER.)

No.	Locality.	Donor.	Year.	Length of horn.	Circumference.	Widest inside.	Points.	Tip to tip.
1	Sanda Valley, Yunnan ...	J. Anderson	1878	30·25*	5·25	28·75	10 × 8	16·25

Distribution :—North Siam and Yunnan.
Cf. Lydekker, *Deer of all Lands*, p. 194.

*Record.



1

Cervus schomburgki, 1/4th scale.

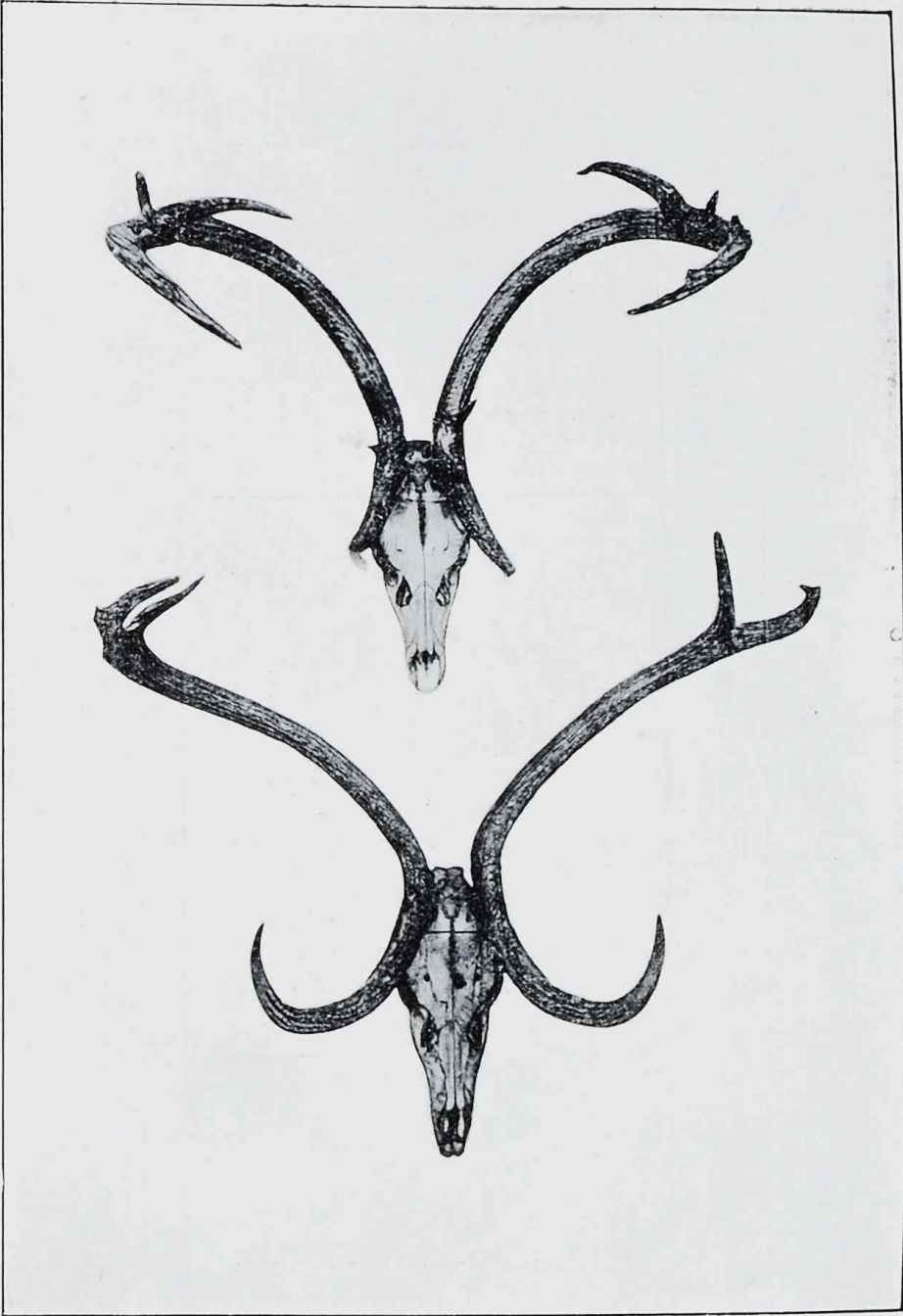
CERVUS ELDI, Beavan.

(THE THAMINE.)

No.	Locality.	Donor.	Year.	Basal length of skull.	Breadth of skull.	Length of horn.	Circumference.	Points.	Tip to tip.
1	Sitang R., Tenasserim.	Maj. Berdmore ...	1856	13·4	3·75	33·75	5·5	8 × 9	14
2	Manipur ...	Col. Guthrie ...	1861	?	?	22·25	3·75	2 × 2	17·25
3	Pegu ...	Sir A. Phayre ...	1847	12·5	3·75	19·75	4·75	5 × 5	22·75
4	Manipur ...	J. McClelland ...	1844	?	3·5	26·8	4·5	5 × 5	16·5
5	Martaban, Tenasserim	R. C. Beavan ...	1865	?	?	17·25	3·25	4 × 4	15·75
6	Penang ...	H. Lewis ...	1846	?	?	22·75	4·5	4 × 4	18·5
7	Manipur ...	J. McClelland ...	1844	11·9	3·75	33·75	4·75	5 × 4	26·75
8	Ditto ...	Purchased ...	1861	?	?	21·8	4	5 × 5	15·9
9	"Rangoon Bazaar" ...	Dr. Pritchard ...	1861	?	3·5	13·25	2·75	4 × 3	10
10	Pegu ...	Sir A. Phayre ...	1847	?	?	28·75	5·3	5 × 6	26·75
11	Manipur ...	J. McClelland ...	1844	12·25	3·75	32·25	4·25	7 × 6	27·25
12	Pegu ...	Sir A. Phayre ...	1847	12·4	3·75	31·9	5·25	5 × 4	20·25
13	Manipur ...	Purchased ...	1861	11·75	4·1	30·4	5·5	6 × 7	27·5
14	Pegu ...	Sir A. Phayre ...	1847	?	?	24·75	4·5	4 × 5	22·4

Distribution:—Manipur, southwards through Burma to the Malay Peninsula. Also found in Cambodia and Hainan.

Record Head:—Length 42 in. Circumference 5 in. (cf. Lydekker, *Game Animals of India*, etc., p. 255). Cf. Blanford, *Fauna of British India*, Mammalia, p. 541.



1

7

Cervus eldi, $\frac{1}{3}$ th scale.

CERVULUS MUNTJAC, De Blainville.

(THE BARKING DEER.)

No.	Locality.	Year.	Date.	Basal length of skull.	Breadth of skull.	Length of horn.	Circumfer- ence.	Tip to tip.
1	No history ...	?	?	7.5	2.25	3.25	1.75	3.5
2	Dibrugarh, Assam ...	Purchased ...	1879	7.75	2.75	5.25	2.25	4.3
3	... ..	A. Mason ...	1872	?	?	8.25*	3.25	2.5
4	Arakan	Sir A. Phayre ...	1896	?	?	2.5	1.5	3.25
5	Ditto	Ditto	1896	?	?	3.25	1.8	3.5
6	Nepal	B. H. Hodgson ...	1844	7	2.5	5	2.25	2.75
7	No history	?	?	8	2.3	...	...	...
8	Ditto	?	?	7	2.25	5.6	2.25	2.5
9	Shevaroy Hills, Madras...	Mrs. W. King ...	1888	8.25	2.25	2.5	1.75	3.25
10	Nepal	Raja R. Mullick ...	1852	7.8	2.25	5.25	2.25	2.75
11	No history	?	?	7.75	2.25	2.25	1.25	3.25

Distribution :—India, Nepal, Ceylon, Burma, the Malay Peninsula, Java, Banka, Borneo and Hainan.
Cf. Blanford, *Fauna of British India*, Mammalia, p. 532.

* Record.



Cerulus muntjac, $\frac{1}{4}$ th scale.

CERVULUS FEÆ, Thomas and Doria.

(FEA'S RIB-FACED DEER.)

No specimen in the Museum.

Cf. Thomas and Doria, *Ann. Mus. Civ. Gen.*, 2, 2a, vii, p. 92.**CERVULUS REEVESI, Swinhoe.**

(THE CHINESE MUNTJAC.)

No.	Locality.	Donor.	Year.	Basal length of skull.	Breadth of skull.	Length of horn.	Circumference.	Tip to tip.
1	Formosa ...	R. Swinhoe ...	1860	6·25	2	2	1·25	2·25

Distribution:—S. China to Ningpo ; Formosa.*Cf.* Lydekker, *Deer of all Lands*, p. 208.



1

Cervulus reevesi, ♂rd scale.

CAPREOLUS PYGARGUS, Gray.

(THE SIBERIAN ROE-DEER)

No.	Locality.	Donor.	Year.	Length of horn.	Circumference.	Tip to tip.	Points.
1	Kashgar ...	2nd Yarkand Mission ...	1878—91	12	4·75	2·75	3 × 3

Distribution :—From the Altai Range and the Mountains of Turkestan to Siberia; the Caspian province of Persia; in winter migrating to Manchuria and Corea.

Record Head :—Length 15 in. Circumference 4·75 in.

Cf. Scientific Results Second Yarkand Mission, 1878—91; and Lydekker, *Deer of all Lands*, p. 227.



Capreolus pygargus, 4th scale.

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- Part II.**—Revision of the Oriental Stratiomyidae. Description of an Oligochaete Worm allied to *Chatogaster*. The Fauna of Brackish Ponds at Port Canning, Lower Bengal, IV. Further Note on a Polyzoan from the Himalayas. Reports on a collection of Batrachia, Reptiles and Fish from Nepal and the Western Himalayas. The Fauna of Brackish Ponds at Port Canning, Lower Bengal, V. Notes on Oriental Diptera, I and II. Miscellanea.
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- Table of Contents, List of Plates, List of Authors, Errata and Corrigenda, and Index.

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- Part I.**—The retirement of Lieut.-Col. Alcock, with a list of his papers, etc., on Indian Zoology. The Fauna of Brackish Ponds at Port Canning, Lower Bengal, VII. Description of a New Dictyonine Sponge from the Indian Ocean. Notes on Freshwater Sponges, VIII. Remarkable cases of variation, I. Description of a new species of Lizard of the genus *Salea*, from Assam. The Fauna of Brackish Ponds at Port Canning, Lower Bengal, VIII. Description of a new Cavernicolous Phasgonurid from Lower Siam. Descriptions of new species of Marine and Freshwater Shells in the collection of the Indian Museum. Notes on Oriental Syrphidae, I. Description of a new variety of *Spongilla loricata*. Notes on Oriental Diptera, V. Miscellanea.
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- Part III.**—The Fauna of Brackish Ponds at Port Canning, Lower Bengal, X, XI. On some Oriental Solifugæ, with descriptions of new forms. The difference between the Takin (*Budorcas*) from the Mishmi Hills and that from Tibet, with notes on variation displayed by the former. On *Caridina nilotica* (Roux) and its varieties. Description of a new species of *Charaxes* from the Bhutan Frontier. First report on the collection of Culicidae and Corethridæ in the Indian Museum, with descriptions of new genera and species. Miscellanea.

Part IV.—Report on a collection of Aquatic Animals made in Tibet by Capt. F. H. Stewart, I.M.S., in 1907, I. Notes on Aculeate Hymenoptera in the Indian Museum, I. Indian Psychodidæ. Description of a new species of Mouse from the Madura District, Madras. Some Cleridæ of the Indian Museum. The Fauna of Brackish Ponds at Port Canning, Lower Bengal, XII. Description of a new species of Saw-Fish captured off the Burma Coast. A new Sting Ray of the genus *Trygon* from the Bay of Bengal. New Microlepidoptera from India and Burma. Notes on some Chrysomelid Beetles in the collection of the Indian Museum. Six new Cicindelinae from the Oriental Region. Description of a new Slug from Tibet.

Part V.—Revision of the Oriental Leptidæ. Revised and annotated Catalogue of Oriental Bombylidæ, with descriptions of new species.

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