## HAND-LIST

OF THE

## EDENTATE, THICK-SKINNED <br> AND

## RUMINANT MAMMALS

IN THE

## BRITISH MUSEUM.

BY
Dr. J. E. GRAY, F.R.S., F.L.S., \&c., Keeper of the Zoological Department.
dforty-two 解哣es of Skulls, sic.

LONDON:
PRINTED BY ORDER OF THE TRUSTEES OF THE BRITISH MUSEUM.
1873.
$1363 f$. Animal, unstuffed; very young, with skull. Pale brown, back and sides of head with a few indistinct black streaks.
S. penicillatus, P. Z. S. 1861, p. 62, pl. 11.

West Africa. Born at the Zool. Gardens. 57, 8, 3, 1.
1363 g . Animal, stuffed; very young, rather pale. $56,12,30,7$.
1363 h . Animal, stuffed; very young, rather pale. 57, 3, 5, 1 .
1363 i. Animal, stuffed; very young, blackish. 67, 10, 5, 21.
W. Africa. Born at the Zool. Gardens.

1363 e. Skin, unstuffed; wanting much hair.
Potamochœrus penicillatus, Du Chaillu, Travels, fig.
$1363 e$. Skull of " $e$."
Gaboon. 71, 5, 27, 6. Presented by M. du Chaillu.
1363 b. Skeleton; female. Skull with only a very slight marginal keel on the sheath of the upper canines.
Cameroons River. Zool. Soc.
1363 c. Skull; male. Process of sheath of canine cut off. Wanting canines and cutting-teeth.
Interior Africa. Baikie. 65, 5, 3, 4.
1363 d . Skull. Wanting cutting-teeth and upper canines.
Interior Africa. Baikie. 65, 5, 3, 4.

Tribe 2. SUINA, Gray, Cat. Carniv. \&c. p. 328; Ann. \& Mag. Nat. Hist. 1873, June.
Ears rounded in the domestic, elongate, drooping, not pencilled at the end. The concavity in the skull in front of the orbits with a ridge on the lower part, from the front of the zygomatic arch. Cutting-teeth $\frac{6-6}{6-6}$ The front grinders close on the back of the upper canines, which in males are free and bent outwards and upwards. The sheath of the upper canines of the males spread out, with a ridge or crest across their upper surface, and of the females often slightly bent up at the end.

## 1. Wild Swine. Ears moderate, hairy.

1. EUHYS, Gray, Cat. Carniv. \&c. p. 339 ; Ann. \& Mag. Nat. Hist. 1873.

Head elongate, twice as long as high at the occiput. Cheeks and throat covered with long projecting hairs. Lower canines of the males elongate, slender, convex on the sides and rounded in front. The front false grinders near the base of the canines separated from the other grinders by a rather broad diastema. Sheath of the upper canines in the males with an elongated ridge, which has a straight top.

1. Euhys barbatus.

Sus barbatus, Gray, Cat. Carniv. \&c. p. 339. Müller, Verhand. i. p. 42, t. 30 ; female animal, t. 31 , and skull of female.

712 a. Skull; adult male. Wanting cutting-teeth and some canines.
S. barbatus, Müller, Verh. t. xxxi., t. 4 \& 5.

Borneo.
Presented by J. Brooke, Esq.
712 b. Skull ; young, female. Lower jaw broken.
Sus timorensis, Müller, Verhandl.
Borneo. 47, 5, 11, 1.
Presented by Sir E. Belcher.
2. AULACOCHGERUS, Gray, Ann. \& Mag. Nat. Hist. 1873.

Head conical, about one and a half times as long as high at the occiput. Male with a very high keel across the base of the sheath of the upper canines, which is thicker behind. The lower canines triangular, flat on the sides and keeled in front.

This genus has some alliance, in the large size of the sheath of the upper canines of the males, with Potamochœerus.

## 1. Aulacocherrus vittatus.

Sus vittatus, Gray, Cat. Carniv. \&c. p. 331. Müller, Verhand. i. t. 29 (animal), t. 32, f. 5 (skull, male). Blainv. Ostéog. t. v. (skull).
Head, body and legs covered with black bristles. Bristles of forehead and neck white-tipped. Streak round angle of mouth and along the lower part of the cheek white.
1362 a. Animal, stuffed. Skull enclosed.
"Sus verrucosus," Franks.
"New Guinea." Franks. 43, 12, 27, 1.
1362 c. Skull ; adult male.
Sus vittatus, Wallace.
Amboyna. Wallace. 59, 4, 6, 6.
1362 d. Skull ; adult male.
Sus vittatus, Wallace.
Amboyna. Wallace. 59, 4, 6, 5.
1362 h. Skull; old male.
Batchian. Wallace. 61, 12, 11, 26.
1362 g . Skull; male. Wanting one upper grinder.
Java? Mus. Utrecht. 67, 4, 12, 213.
$1362 f$. Skull; female. Wanting a few cutting-teeth.
Java? Mus. Utrecht. 67, 4, 12, 213.
3. DASYCHEERUS, Gray, Ann. \& Mag. Nat. Hist. 1873, p.

Head elongate, conical, more than one and a half times the length of its height at the occiput. Nose with a large flat-topped wart on each side, over the angle of the mouth, with a tuft of elongate pale bristles on the lower part of each cheek.

Males with a short rounded compressed ridge near the sheath of the upper canines. Lower canines triangular, flat on the outer side and keeled in front.

## 1. Dasycherus verrucosus.

Sus verrucosus, Gray, Cat. Carniv. \&c. p. 330. Müller, Verhand. t. p. 107-t. xxviii. (animal), t. xxxii. (skull, male).

Head nearly twice as long as high. Black, under side and front of thighs pale.
712 c. Skull; adult male. Length 16 in. No upper canines. Impression on right side of orbits narrowed behind. Upper canines lost.
Müller, Verhand. t. iv. f. 3 \& 4.
Java. 55, 4, 2, 3.
712 d. Skull ; adult male. Lower jaw broken behind. Wanting some of the cutting-teeth.
S. verrucosus, var. ceramicus, Gray, Cat. Carniv. de. p. 330.

Ceram. Wallace. 55, 4, 14, 2.
$712 f$. Skull; adult male, perfect.
Sus larvatus, Jeude.
Java. $67,4,12,211$.
712 i. Skull; adult male, perfect.
Java. Mus. Utrecht. 67, 4, 12, 212.
136 a. Skull; adult male, rather broken in the nose, wanting most of the teeth.
S. vittatus, Wallace.

Borneo.
712 g . Skull; adult male. Wanting the upper and some of the lower cutting-teeth.
Java. 67, 4, 12, 216.
712 h . Skull; adult male. Wanting upper canines and some grinders. Java. 67, 4, 12, 214.

## 2. Dasycherus celebensis.

Sus celebensis, Gray, Cat. Carniv. dc. p. 331. Müller, Verhand. i. t. 28 (animal and skull).

The head about one and a half times as long as high at the occiput. Animal black above and below.
$1596 a$. Animal, stuffed, not in good state, black.
Skull of " $a$," wanting upper canines and some other teeth.
Celebes. Mus. Leyden. 47, 5, 10, 2.
1596 b . Animal, stuffed; young, pale brown.
Celebes. Mus. Leyden. 43, 12, 27, 2.
The adult specimen has very long black bristles, especially on the front of the back. The head has a round distinct wart on the upper part of the cheeks, in a line with the angle of the mouth. The ears are small and ovate. There is a tuft of long yellow bristles on the cheeks under each eye.

The young is covered with reddish brown very long bristles, which are long on the crown of the head and at the back of the lower part of the cheeks. Hoofs brownish. Ears ovate, short. The warts on the side of the nose are not at all apparent in the young stuffed specimens.
4. SUS, Gray, Cat. Carniv. \&c. p. 329 (part) ; Ann. \& Mag. Nat. Hist. 1873.
Head conical, about one and a half times as long as high at the condyles, without any, or only a very small wart on the side of the head. Ears ovate. The upper canines of the males recurved, with a more or less large keeled ridge across the sheath at their base. Lower canines of the males triangular, flat on the outer side and keeled in front.

1. Sus papuensis, Lesson, Voy. Coquille, t. viii. (animal and skull, pretty, but very badly represents the species).
Poreula papuensis, Gray, Cat. Carniv. \&c. p. 339.
949 a. Animal, stuffed; adult female ?
Sus papuensis, Gray, List Mam. 1843, p. 135.
New Guinea, 1843.
Presented by the Earl of Derby.
949 b. Animal, stuffed ; young male.
949 b . Skull of above. $50,7,20,134$.
South Coast of New Guinea, Touton Island. 50, 9, 6, 15. Presented by Capt. Stanley.
The adult specimen received from the Earl of Derby lived long in confinement, and was sent as a male, but it has no external appearance of so being, and the canines are small and scarcely exposed. The head is without any warts on the cheeks, the ears are ovate and moderate. The tail is elongate, slender, naked except for a few bristly hairs at the end. The skin is nakedish, with scattered very slender bristles, which are longer on the back and sides, but longest and most abundant at the front of the shoulders and at the outside of the upper arms, where they are blacker. There are numerous hairs on the inner side of the front of the fore legs; a number of very short erect hairs over the upper part of the nose and front of the chin, where they are longer, making in fact a blackish muzzle, which is also to be seen in the young specimen. Length to base of tail, 59 in . Tail, 12 in.

The young specimen has much more abundant and longer hair, pale yellowish brown, the longer black hair forming a broad central vertebral line and three indistinct lines on the sides, and on the sides of the head. The skull of this animal, which is also said to be a male, but exhibits no external mark of being so, is evidently that of a young animal, with the hinder grinders in each jaw not developed, and indeed only slightly marked. The central cutting-teeth are small, lobed at the end. The hinder lateral cutting-teeth are rather elongate and slightly bent outwards.

It appears to me rather to belong to the genus Sus than Porcula.
2. Sus timorensis, Gray, Cat. Carniv. \&c. p. 335. Müller, Verhand. i. t. 31, f. 1-3 (animal and skull, female.)
Head and body covered with very long black bristles, which are white at the end. Cheeks not warty.
1501 c. Skull; young male?
Wild pig, Wallace.
Macassar. Wallace. 59, 6, 4, 4,

1501 b. Skull ; male, rather larger than " $c$."
Wild pig, Wallace.
Ternate. Wallace. 61, 12, 11, 25.
1501 a. Skull; young female? Changing teeth.
Sus timorensis, Müller, Verhand. t. 31, f. 2, 3 ?
"Young female Babirussa," Wallace.
Wallace.
3. Sus leucomystax, Gray, Cat. Carniv. \&c. p. 333. Temminck, Faun. Java, t. 20 (animal and skull, female). Swinhoe, P.Z. S. 1870, p. 640, figs. 1, 2 (head).
Animal black. Streak from angle of mouth, throat, under side of neck, belly and inside of legs white ; female. Hoofs black.
1595 a. Skin, unstuffed; male.
Sus leucomystax, Swinhoe, P. Z. S. 1870, p. 640, p. 1, 2 (head).
1595 b. Skull of " $a$." Canines elongate.
Sus taivanus, Swinhoe, P. Z. S. 1864, p. 382, 1870, p. 419.
Shanghai. Swinhoe. 70, 2, 10, 38.
May not this be the old boar of Sus taivanus? It is doubtful whether it is the same as the one described by Temminck.
4. Sus tarvanus, Swinhoe, P. Z. S. 1864, p. 383, 1870, p. 641, f. 3, 4 (head).

Porcula taivana, Swinhoe, P. Z. S. 1862, p. 360.
Ears small, rounded. Hoofs black.
1594 a. Animal, stuffed; young female?
Sus taivanus, Swinhoe, P. Z. S. 1870, p. 642, fig. 2, 3 (head and teeth).
$1594 a$. Skull of " $a$ "; female?
Formosa. Swinhoe. 69, 2, 10, 88.
1594 b. Skin, unstuffed ; young female. Reddish; sides and neck and under part of body whitish.
Formosa. Swinhoe. 72, 2, 10, 41.
1594 h. Skull; male.
Formosa. Swinhoe. 69, 2, 10, 85.
1594 i. Skull; female.
Formosa. Swinhoe. 69, 2, 10, 87.
$1594 j$. Skull ; female.
Formosa. Swinhoe. 69, 2, 10, 84.
1594 k . Skull; young female.
Formosa. Swinhoe. 69, 2, 10, 86.
1594 l. Skull, without lower jaw ; young. Back molars not developed.
Wild pig, Collingwood.
Formosa, S.W. part. 68, 10, 9, 1. Pres. by R. T. Collingwood, Esq.
1595 m . Lower jaw of a very old animal; female. Grinders much worn. Sent as belonging to " $l$."
Wild pig, Collingwood.
Formosa, S.W. part. 68, 10, 9, 1. Pres. by R. T. Collingwood, Esq.
A. Domestic varieties, with moderate bristles.

1594 c. Skin, unstuffed; young female, red.
"Red pig of Formosan Savages," Swinhoe.
Formosa. Swinhoe. 72, 2, 10, 42.
1594 d. Skin, unstuffed; young, red.
"Red pig of Savages," Swinhoe.
1594 d. Skull of "d."
Formosa. Swinhoe.
1594 e. Skin, unstuffed; young, without skull. Blackish brown, with longer black hairs. Ears moderate, rather acute.
Formosa. Swinhoe. 70, 2, 10, 45.
1594 h . Animal, stuffed. Black, with white feet and white on the sides, the two sides being rather different. Ears small.
$1594 h$. Skull of " $1594 h$," old male, with recurved canines; two lateral. Hinder upper cutting-teeth absent, and the alveola on one side filled up.
Formosa. Zool. Gardens.
B. Domestic variety, with abundant long hair. Bred by the Formosan savages of the Eastern coast.
1594 f. Skin, unstuffed; young. No skull. White, varied with reddish brown hairs on the upper part of the head.
East coast of Formosa. Swinhoe. 70, 2, 10, 43.
1594 g . Skin, unstuffed; young, without skull. Black, with a white streak up the forehead, the four feet and the belly white.
"Chefoo Pig," Swinhoe.
Amoy, June, 1867. Swinhoe. 70, 2, 10, 44.
These pigs, bred by the savages of Formosa, differ from European domestic pigs in having moderate-sized rounded ears with a small acute point at the tip.
5. Sus mystaceus, Gray, Ann. \& Mag. Nat. Hist. 1873.

Brown, with scattered black bristles, which are more abundant on the muzzle, forehead, sides of cheeks and sides of the front part of the body. Crest and hinder part of body browner. Streak on each side of nose over angle of mouth, elongate. Whiskers on black cheeks, gullet, throat, chest, front of shoulders, the throat, thighs, and under side of body whitish. Skull, concavity on side broad and deep, only separated from the orbits by a very narrow ridge. The sheath of the upper canines with a keeled ridge and convex on the outside of it.
712 e. Animal, stuffed; male.
712 e. Skeleton of above.
Sus verrucosus. "Javan Pig." Zool. Gardens. Not Müller.
Java? 62, 1, 22, 2. Zool. Soc.
6. Sus cristatus, Gray, Cat. Carniv. \&c. p. 333.

Sus indicus, Gray, List Mam. p. 185. Blainv. Ostéog. t. v. (skull).
Crest over base of upper canines in males, moderate, rounded above, Hoofs white, rarely black varied.

1387 a. Skeleton; very old animal.
Domestic. Japan. Bartlett.
1387 b. Skull; young,
Domestic.
1387 c. Skeleton; adult male.
Domestic. Zool. Gardens.
Tribe_3. BABIRUSSINA, Gray, Cat. Carniv. \&c. p. 348; Ann. \& Mag. Nat. Hist. 1873.
Ears rounded, not pencilled at the end. Cutting-teeth $\frac{4-4}{6-6}$, the front grinders separated from the upper canines by a long diastema. The upper and lower canines of the male much elongated and recurved. The sheath of the upper canines elongate, arising from the outer side of the margin of the upper jaw, closely applied to but separated from the side of the nose, without any or only a very slight indication of a cross ridge. Canines not developed in the females, and their usual situation indicated by a sharp-edged ridge just above the lower margin of the upper jaw in front of the grinders. The males have a deep cavity on each side of the roof of the hinder upper part of the inner nostrils: this concavity is absent in the females, where this part is only slightly concave. I cannot find any exit from these pits, which are very deep. The bullæ of the ears are oblong and elongate. No such concavity in the back of the nasal cavity of any of the pigs that I have examined, but there is a deep pit on each side of the centre of the hinder part of the nasal cavity in the Phacochoerus, which is small in the young and larger in the more adult skulls. In the adult skulls there is a very deep concavity on each side of the roof of the inner nostrils, in front of these pits which are separated from each other by a thin erect longitudinal plate. These concavities are scarcely perceptible in the skulls of the very young animals. The bullæ of the ears of the skulls of the very young Phacochorus are large, nearly hemispherical, and very prominent, but in the adult skulls they are small and scarcely separated from the rest of the skull.
8. BABIRUSSA, Gray, Cat. Carniv. \&c. p. 349; Ann. \& Mag. Nat. Hist. 1873, p.
Intermaxillary bones moderate, scarcely produced behind. Canines of the males elongate, convex at the sides. The lower ones rounded, scarcely keeled in front, in the females wanting in the upper jaw, only short conical and slightly recurved in the lower jaw.

1. Babirussa alfurus, Gray, Cat. Carniv. \&c. p. 349.

Sus babirussa, Blainv. Ostéog. t. ii. (skeleton $\ddagger$ ) \& v . (skull and teeth).
$718 v$. Animal, stuffed; male.
$718 v$. Skeleton of " $v$."
Celebes. Zool. Soc. 71, 5, 19, 7.

The adult skulls present two varieties in the canines, but I do not find any other character to separate them.
I. The upper and lower canines very long and gradually arched. 718 i. Skeleton (imperfect); male. Skull partly cut away. Canines small. Upper grinders much worn.
Malacca? Zool. Society.
718 a. Skull; male. Wanting one canine.
Malacca.
718 b. Skull ; male, with part of skin.
Malacca. 38, 4, 16, 32.
718 c. Skull, with skin.
List Mam. p. 185.
Malacca.
Presented by Gen. Hardwicke.
718 d. Skull; male. Canines very large.
Malacca. 46, 3, 13, 3.
718 e. Skull; male, imperfect.
Malacca.
$718 f$. Skull; male, without canines, imperfect.
Hab. —?
718 g. Skull ; male. Canines large.
Malacca.
Presented by - Daniels, Esq.
718 h . Skull; male. Wanting canines and cutting-teeth.
Malacca. Zool. Society.
718 j. Skull.
Malacca. Zool. Society.
718 k. Skull; male. Canines large.
Borneo. Wallace. 59, 8, 16, 4.
718 q. Skull; male. Canines large, perfect.
Malacca. 67, 4, 12, 223. Jeude.
$718 p$. Skull ; male.
Malacca.
II. The upper and lower canines shorter, not more than three inches long, the upper ones being very much curved, sometimes nearly in a circle.
718 l. Skull ; adult. Canines very small.
Borneo. Wallace.
718 m . Skull ; male. Canines small. Hinder palatal cavity small.
Malacca. Jeude. 60, 8, 27, 7.
Females, upper canines not developed.
718 o. Skull ; female.
Malacca. Jeude, 67, 4, 12, 209.

605 d. Skull, without horns and lower jaw.
W. Atrica? 55, 5, 20, $4 . \quad$ Presented by Dr. W. B. Baikie. $605 e, f$. Skulls.
W. Africa. Baikie.
3. Bubalus centralis, Gray, Cat. Rum. Mam. p. 11.

1555 a. Skull; left horn and lower jaw wanting.
W. Africa. 65, 3, 30, 1. Baikie.
4. Bubalus reclinis, Gray, Cat. Rum. Mam. p. 12.

1602 a. Horns, on frontal bone.
Bubalus reclinis, Gray, Cat. Ungulata, B. M. t. ii. f. 3.
Africa? Mus. R. Society.
1602 b. Skull, with horns.
Africa. 72, 11, 11, 1. Blyth.
5. Bubalus Caffer, Gray, Cat. Rum. Mam. p. 12; Cat. Mam. Brit. Mus. Ungulata, t. ii. f. 1, 2 (skull and horns).
606 a. Animal ; stuffed; adult male.
S. Africa.

Presented by the Earl of Derby.
606 b. Animal ; stuffed. Calf.
S. Africa?

606 c. Animal ; skin; young.
S. Africa. Verreaux.

606 e. Skeleton; male.
S. Africa. 50, 11, 22. Zool. Society.

606 b. Skull, with horns.
S. Africa.

606 c. Skull, with horns.
S. Africa. $42,4,10,14$.

606 d. Skull, with horns.
Africa? 48, 7, 13.
$606 i$. Skull, with horns.
Africa?
$606 f$. Horns on frontal bone.
S. Africa. 58, 5, 4, 9. Zool. Society.

606 g . Horns on frontal bone.
S. Africa. $52,2,15,10$.

606 h . Horns, half grown.
Algoa Bay. 71, 7, 3, 8.
3. ANOA, Gray, Cat. Rum. Mam. p. 12.

1. Anoa depressicornis, Gray, Cat. Rum. Mam. p. 13 ; Cat. Ungulata, B. M. t. iii. f. 1, 2 (skull, with horns).

607 a. Animal, stuffed ; male. Celebes.
607 b. Animal, stuffed ; female; in bad state. Celebes.
607 h . Skeleton; mounted. Celebes.
607 a. Horns on frontal bone. Celebes.

Presented by Gen. Hardwicke.
607 b. Skull, with horns. Celebes?
607 e. Skull; adult female. Celebes. Wallace.
$607 f$. Skull; young female. Mindanao. Wallace.
607 c. Horns on frontal bone. Celebes?
607 d. Horns on frontal bone. Celebes? Zool. Society.
607 g . Single horn; male. Celebes? 60, 8, 27, 10. Wallace.
4. BIBOS, Gray, Cat. Rum. Mam. p. 13.

1. Bibos frontalis, Gray, Cat. Rum. Mam. p. 13 ; Cat. Ungulata, Brit. Mus. t. iii. f. 3 (skull and horn).
608 a. Animal, stuffed ; young male.
India? 66, 7, 7, 4. Zool. Society.
608 d . Skeleton; imperfect. Nepal.

Presented by B. H. Hodgson, Esq. $608 e$. Skeleton of a young male.

India? 66, 8, 7, 4. Zool. Society.
$608 f$. Skeleton.
India? 68, 3, 21, 10. Zool. Society.
2. Bibos gaurus, Gray, Cat. Rum. Mam. p. 13.

609 a. Animal, stuffed; adult, male.
Nepal. Presented by B. H. Hodgson, Esq.
609 k . Skeleton; imperfect. Nepal.

Presented by B. H. Hodgson, Esq.
$609 \mathrm{l}, \mathrm{m}$. Skeletons; imperfect. Nepal.

Presented by B. H. Hodgson, Esq.
609 q. Skeleton.
E. Indies. Presented by Capt. W. C. Robinson.

609 a. Skull, with horns; male.
Nepal. 45, 1, 8, 99.
Presented by B. H. Hodgson, Esq.

694 d. Skin ; female.
India. $55,12,24,400$.
$694 f$. Horns.
Nepal. 45, 1, 8, 131.
694 g . Horns.
Nepal. 45, 1, 8, 130.

## 694 i. Horns.

India. 63, 5, 28, 3. Zool. Society.
$694 j$. Single horn, left side; young.
Nepal. 58, 6, 24, 176.
694 k. Horns ; young.
694 h . Skeleton; skull, with only the left horn developed.

- 60, 4, 23, 3. Zool. Society.

694 a. Skull, with horns.
Nepal. 45, 1, 8, 128.
694 b. Skull, with horns. Nepal.
694 c. Skull; female.
Nepal. 45, 1, 8, 197.
694 e. Skull, with horns.
Nepal. 45, 1, 8, 129.
694 l. Skull ; female.
Nepal. 45, 1, 8, 200.

Presented by the Earl of Derby.
Presented by B. H. Hodgson, Esq.
Presented by B. H. Hodgson, Esq.

699 b. Animal, stuffed; male.
$699 q^{2}$. Skull of " $b$."
Ceylon. 53, 4, 22, 1. Zool. Society.
699 c. Skin ; male; with young horns.
Nepal. 58, 6, 24, 19 . Pres
699 d. Skin ; male; with young horns.
Nepal. 58, 6, 24, $20 . \quad$ Presented by B. H. Hodgson, Esq.
699 e. A flat skin, without head or feet.
India.
Presented by Gen. Hardwicke.
$699 j$. Head and horns, with the skin.
India.
Presented by Edw. Cross, Esq.
699 . Head of female.
Himalaya. 43, 1, 12, 107.
699 a. Single horn.
India.
699 b. Horns, on frontal bone.
India.
699 c. Two single horns.
India.
699 d. Horns, on frontal bone.
India.
$699 e$. Horns, on frontal bone. India.
$699 f$. Horns, on frontal bone. India.
699 g . Horns, on frontal bone. India.
699 h . Horns, on frontal bone. India.
$699 i$. Single horn.
India.
699 o. Horns.
Nepal.
699 p. Horns.
Nepal.
699 q. Horns.
Nepal.
$699 r$. Horns. Nepal.

Presented by B. H. Hodgson, Esq.
Presented by B. H. Hodgson, Esq.
Presented by B. H. Hodgson, Esq.
Presented by B. H. Hodgson, Esq.
699 s . Single horn of the first year.
India.
699 t. Horns.
India.
699 u. Horns.
India.

699 v. Horns.
Himalaya. Presented by the Rev. R. Everest. 699 w. Horns, apex simple. India.
699 x. Horns, separate.
India.
$699 y$. Horns, very large.
Nepal. $45,1,8,107 . \quad$ Presented by B. H. Hodgson, Esq.
699 z. Horns.
Nepal.
Presented by B. H. Hodgson, Esq. $699 a-c^{2}$. Three pairs of large horns. Nepal.

Presented by B. H. Hodgson, Esq. $699 d^{2}$. Horns.

Nepal.
Presented by B. H. Hodgson, Esq.
$699 e^{2}$. Horns.
Nepal.
Presented by B. H. Hodgson, Esq. $699 t^{2}$. Horns.

Himalaya Mountains.
$699 u^{2}$. Single horn, very large.
Himalaya Mountains.
$699 v^{2}$. Horms.
Nepal.
Presented by B. H. Hodgson, Esq. $699 w^{2}-x^{2}$. Horns.

India. 58, 5, 4, 13. Zool. Society.
$699 z^{2}$. Horns, on frontal bone.
Assam. 67, 5, 15, 3.
$699 a^{3}, b^{3}$. Horns, on frontal bone.
Assam. 67, 5, 15, 4-5.
$699 c^{3}$. Single horn, left side, very large and heavy.
Ceylon. Capt. Lewis.
$699 f^{2}$. Horns.
Nepal. Presented by B. H. Hodgson, Esq.
$699 g^{2}$. Horns. Nepal.

Presented by B. H. Hodgson, Esq.
$699 h^{2}$. Horns. India.

Presented by B. H. Hodgson, Esq.
$699 i^{2}$. Horns. India.

Presented by B. H. Hodgson, Esq.
$699 j^{2}$. Horns, the beam not branched, India.
$699 \mathrm{k}^{2}$. Horns. India.

Presented by B. H. Hodgson, Esq.
$699 \mathrm{~s}^{2}$. Horns.
Himalaya Mountains.
$699 y^{2}$. Skeleton; male. India.
$699 l^{2}$. Skeleton, imperfect.
Nepal.
Presented by B. H. Hodgson, Esq.
$699 \mathrm{~m}^{2}$. Skeleton.
India.
$699 n^{2}$. Skull ; adult female. India.
$699 o^{2}, p^{2}$. Skulls; young females. India.
$699 c^{3}$. Skull, with horns.
Assam. 67, 5, 15, 6.
$699 d^{3}$. Skull; young.
India. 66, 8, 10, 6.
$699 p^{2}$. Skull, with horns.
India. Presented by B. H. Hodgson, Esq.
699 l. Skull of young male. Nepal. 45, 1, 8, 198.
699 m . Skull ; adult female.
Nepal. 45, 1, 8, 199.

Presented by Dr. Falconer.

Presented by B. H. Hodgson, Esq.
Presented by B. H. Hodgson, Esq.
2. Rusa hippelaphus, Gray, Cat. Rum. Mam. p. 77.

697 a. Animal, stuffed; female.
India. Zool. Society.
697 b. Animal, stuffed ; young. India.
697 c. Animal, stuffed ; male; with young horns.
Cervus Tunjuc, Vigors and Horsfield, Raffles' Memoir, p. 645.
Sumatra. 51, 9, 18, 10 Presented by Sir Stamford Raffles.
697 d. Animal, stuffed ; adult female.
Cervus Tunjuc, Vigors and Horsfield, Memoirs, p. 645.
Sumatra. 51, 9, 18, 11 . Presented by Sir Stamford Raffles.
$697 e$. A flat skin, without head or feet; female.
China, Hainan. 70, 2, 10, 31. Swinhoe.
$697 f$. A flat skin, without head or feet; male.
China, Hainan. 70, 2, 10, 30. Swinhoe.
697 g. Horns.
Nepal.
Presented by B. H. Hodgson, Esq.
$697 i, j$. Horns, on frontal bone.
India.
$697 k$. Horns, on frontal bone.
India.
697 m . Horns, on frontal bone.
India. $45,11,8,34$.

697 o. Horns, on frontal bone.
India.
697 p. Horns.
Nepal. 45, 1, 8, 114. Presented by B. H. Hodgson, Esq.
697 q. Horns.
India. 45, 12, 27, 3.
697 u. Horns.
Axis Pennantii, Gray, List Mam. B. M. 1843, p. 180.
India.
697 v. Horns.

## India.

697 h. Skull, with horns. India.
3. Rusa moluccensis, Gray, Cat. Rum. Mam. p. 77.

1427 a. Animal, stuffed; female. Java.
1427 b. Animal, stuffed; female. Java? 51, 12, 2, 1 . Zool. Society.
1427 c. Skin; female.
Java? 63, 12, 28, 13 . Zool. Society.
1427 d . Skin of the head.
1427 d. Skull of "d."
Batchian. 61, 12, 11, 28. Wallace.
1427 a. Skeleton; young male. Java? 64, 12, $20,2$.
1427 b. Skeleton. Java?
1427 c. Skeleton.
Java? 65, 12, 8, 30.
4. Rusa equinus, Gray, Cat. Rum. Mam. p. 77.

Animal, stuffed; young male.
Assam?
Skin ; adult male.
Assam?? 67, 7, 8, 24. Zool. Society.
Skin; male.
$68,3,21,5$.
5. Rusa Swinhoir, Gray, Cat. Rum. Mam. p. 77.

1414 a. Animal, stuffed; young male.
Formosa.
1414 b. Skin ; male.
Formosa. 68, 3, 21, 24.
$1414 a$. Horns of the first year.
Zool. Society Gardens. $63,5,13,8$.
1414 d. Horns; adult.
Cervus Swinhoii, Swinhoe, P. Z. S. 1870, p. 647, fig. 5.
Formosa. 70, 2, 10, 77. Swinhoe.
1414 e. Horns.
Formosa. 70, 2, 10, 78. Swinhoe.
1414 b. Skull ; male, without horns.
Formosa. 70, 2, 10, 69. Swinhoe.
1414 c. Skull; young female.
Formosa. 70, 2, 10, 70. Swinhoe.
6. Rusa marianus, Gray, Cat. Rum. Mam. p. 78.

655 a. Horns, on frontal bone.
Philippine Islands. 47, 3, 4, 22.
Presented by Capt. Sir Edward Belcher, K.C.B.
655 e. Horns, separate.

- 46, 7, 5, 2.

655 ? $f$. Horns, front snag very long.

- $64,10,1,4$.

655 b. Skull, with horns.
655 c. Skull, with horns.
655 d. Skull, with horns.

- $53,10,6,2$.

7. Rusa Peronir, Gray, Cat. Rum. Mam. p. 78.
a. Animal, stuffed; female.

Timor. 67, 1, 30, 2. Zool. Society.
8. Rusa Kuhlif, Gray, Cat. Rum. Mam. p. 79.
a. Animal, stuffed; male, with adult horns. Java. Leyden Museum.
b. Animal, stuffed; male, with young horns.

Java. 46, 2, 16, 1.
c. Skin; female.

Java. 71, 3, 3, 4. Zool. Society.
7. HYELAPHUS, Gray, Cat. Rum. Mam. p. 79.

1. Hyelaphus porcinus, Gray, Cat. Rum. Mam. p. 79 ; Cat. Mam. B. M., Ungulata, t. xxxii. f. 1 (skull), t. xxxiv. f. 2 (horn).

698 a. Animal, stuffed; male.
India. 47, 5, 17, 22.

Ceretorhinues niger, p. 48.
Ansers

