CATALOGUE & . 17.23

OF THE REMAINS OF

# SIWALIK VERTEBRATA

CONTAINED IN

THE GEOLOGICAL DEPARTMENT

OF

## THE INDIAN MUSEUM,

CALCUTTA.

P<sub>ART</sub> I.
MAMMALIA.

BY

RICHARD LYDEKKER, B.A., F.G.S., ETC.

CALCUTTA:

PRINTED BY THE SUPERINTENDENT OF GOVERNMENT PRINTING, INDIA. 1885.

Some of the following specimens may belong to H. antilopinum.

C. 166. The distal extremities of the radius of opposite sides; from Niki. Probably associated with No. C. 151.

Collected by Mr. Theobald.

C. 228. A carpal bone; from Jabi.

Collected by Mr. Theobald.

C. 164. The bones of a fore-foot; from Jabi. This specimen is profig. bably associated with No. C. 151, and is figured in the 'Pal. Ind.' op. cit. pl. xiii., fig. 3.

Collected by Mr. Theobald.

- C. 167. The proximal half of the tibia; from Niki. Probably associated with No. C. 151. Collected by Mr. Theobald.
- C. 224. Distal extremity of the tibia; from the Potwar district,
  Punjab.

  Collected by Mr. Theobald.
- C. 168. Three specimens of the astragalus; from Niki.

  Collected by Mr. Theobald.
- C. 222. An astragalus; from the Potwár.

Collected by Mr. Theobald.

C. 225. The calcaneum; from the Potwar.

Collected by Mr. Theobald.

- C. 197. Two specimens of the distal extremity of the metatarsus; from Jabi.

  Collected by Mr. Theobald.
- C. 165. A considerable number of the bones of a hind-foot; from Niki. Probably associated with No. C. 151.

  Collected by Mr. Theobald.

C. 169. Two specimens of the first median phalangeal; from the Puniab.

Collected by Mr. Theobald.

- C. 170. Two specimens of a first lateral phalangeal; from the Pun-
- jab. Collected by Mr. Theobald.
- C. 223. A second phalangeal; from the Potwár.

  Collected by Mr. Theobald.

## Hipparion, sp.

C. 273. Part of the right maxilla with three cheek-teeth, which have Fig. been cut and polished; from Perim Island. Figured in the 'Pal, Ind,' ser. 10, vol. iii., p. 15 (1884).

Collected by Mr. Fedden, 1883.

#### Family RHINOCEROTIDÆ.

## Genus RHINOCEROS, Linn.

'Syst. Nat.,' ed. 12, vol. i., p. 104 (1766).

A. Rhinoceros proper.

## Rhinoceros sivalensis, Falc. and Caut.

'Fauna Antiqua Sivalensis,' pt. 8, pl. lxxiii. (1847).

C. 20. The cranium with the cheek-teeth much worn; from Nan-Fig. owal. The third right true molar is figured in the 'Pal. Ind.' ser. 10, vol. i., pl., iv., fig. 2.

Collected by Mr. Theobald.

C. 21. The anterior portion of the cranium, with the crowns of the teeth hammered off; from the Siwalik Hills.

A. S. B. Collection (No. S. 269).

- C. 22. The occipital portion of the cranium; from Jabi, Punjab.

  Collected by Mr. Theobald.
- C. 235. Part of the cranium, showing the much-worn molars; from the Siwalik Hills. By exchange with the Rurki Museum.
- C. 28. Fragment of the left maxilla, containing the much-worn pm. 2 and pm. 3; from the Punjab. Collected by Mr. Theobald.
- C. 32. The right maxilla, showing all the cheek-teeth, except pm. 1, in a much-worn condition; from Asnot, Punjab.

  Collected by Mr. Theobald.
- C. 26. The third right upper premolar; from the Punjab. Figured Fig. in the 'Pal. Ind.' op. cit. vol. ii., pl. v., fig. 6.

  Collected by Mr. Theobald.
- C. 27. The much-worn associated left pm. 2 and pm. 3; from the Punjab.

  Collected by Mr. Theobald.
- C. 31. A much-worn early left upper premolar: from the Punjab.

  Collected by Mr. Theobald.
- C. 38. The first right upper premolar; from the Punjab.

  Collected by Mr. Theobald.
- C. 39. An abnormal left upper premolar, provisionally referred to Fig. this species; from Padri. Figured in the 'Pal. Ind.' op. cit. vol. i., pl. vi., fig. 9. Collected by Mr. Theobald.

- C. 54. The associated left upper pm. 2 and pm. 3; from Lehri, Punjab. Collected by Mr. Theobald.
- C. 77. The second right upper premolar; from the Punjab. Figured Fig. in the 'Pal. Ind.' op. cit. vol. ii., pl. v., fig. 3.

  Collected by Mr. Theobald.
- C. 23. Two specimens of the first or second upper true molar; Fig. from the Punjab. One specimen is figured in the 'Pal. lnd.' op. cit. vol. i., pl. v., fig. 5, and vol. iii., pl. i., fig 7.

  Collected by Mr. Theobald.
- C. 23a. The first or second right upper true molar; from the Punjab. Fig. Figured in the 'Pal. Ind.' op. cit. vol. ii., pl. v., fig. 1.

  Collected by Mr. Theobald.
- C. 24. Two imperfect first or second upper true molars; from the Punjab.

  Collected by Mr. Theobald.
- C. 29. A much-worn first or second left upper true molar; from the Punjab.

  Collected by Mr. Theobald.
- C. 30. A similar specimen to the last; from Niki, Punjab.

  Collected by Mr. Theobald.
- C. 33. An imperfect third right upper true molar; from Sind (P var. intermedius).

  Collected by Mr. Fedden.
- C. 35. Two specimens of the outer wall of an upper true molar; from the Salt-Range.

  Collected by Mr. Wynne.
- C. 37. The germ of a first or second left upper true molar; from the Fig. Punjab. Figured in the 'Pal. Ind.' op. cit. vol. ii., pl. v., fig. 5.

  Collected by Mr. Theobald.
- C. 41. The associated third upper true molars; from Jabi. One Fig. specimen is figured in the 'Pal. Ind.' op. cit. vol. ii., pl. v., fig. 4 (erroneously quoted as C. 11 in description of plate).

  Collected by Mr. Theobald.
- C. 43. A third right upper true molar, with a double crochet; from the Punjab.

  Collected by Mr. Theobald.
- C. 51. The inner portion of a left upper true molar, perhaps belonging to this species; from Lehri. Figured in the Pal. Ind. op. cit. vol. i., pl. iv., fig. 1 (under the name of R. palaindicus).

- C. 46. The right and left maxillae of a young individual, provisionally Fig.

  referred to this species, and showing the last three milk-molars; from Jabi. The left side figured in the 'Pal, Ind.'

  op. cit.'vol.ii., pl. vi., fig 2.

  Collected by Mr. Theobald.
- C. 40. An early upper milk-molar; from Asnot.

Collected by Mr. Theobald.

- C. 48. Three specimens of second upper premolars agreeing with No. C. 46; from Sind.

  Collected by Mr. Fedden.
- C. 52. The fourth right upper milk-molar; from the Punjab.

  Collected by Mr. Theobald.
- C. 53. The third right upper milk-molar; from the Punjab.

  Collected by Mr. Theobald.
- C. 56. The symphysis and the left ramus of the mandible, showing Fig.

  entire molar series and the sockets of a pair of canines 1; from the Punjab. Figured in the Pal. Ind.' op. cit. vol. ii., pl. vi., fig. 3.

  Collected by Mr. Theobald.
- C. 55. Cast of the symphysis of the mandible. The original is from the Siwalik Hills, and is in the British Museum. It is figured in the 'F.A. S.' pl. lxxiv., fig. 4 (as R. palaindicus). Purchased.
- C. 58. Cast of part of the left ramus of the mandible, showing pm. 4 and the three true molars. The original is from the Siwalik Hills, and is in the British Museum. It is figured in the F. A. S.' pl. lxxiv., fig. 3 (as R. palwindicus). Purchased.
- C. 61. Part of the right ramus of the mandible, with pm. 4 and the three true molars; from the Punjab. The ramus has a depth of 3'9 inches at m. 2, and thereby agrees with No. C. 56.

  Collected by Mr. Theobald.
- C. 250. The symphysis and one ramus of the mandible agreeing with No. C. 56; from Perim Island.

Captain Searle's Collection.

- C. 251. Part of the mandible of a young individual, provisionally referred to the present species; from Perim Island.

  Captain Searle's Collection.
- C. 45. Part of the mandible of a young individual, provisionally referred to this species; from Sind.

Collected by Mr. Fedden.

<sup>&</sup>lt;sup>1</sup> For the question as to the reference of the mandibles of the different species of Siwalik rhinoceroses, see 'Pal. Ind.' ser. 10, vol. ii., pp. 36-39.

C. 57. A lower canine; from the Punjab. Collected by Mr. Theobald.

#### Var. intermedius, Lyd.

'Pal. Ind.' ser. 10, vol. iii., p. 5 (1884).

- C. 34. The second left upper true molar; from Sind. Figured in the Fig. 'Pal. Ind.' op. cit. vol. ii., pl. v., fig. 2; and vol. iii., pl. i., fig. 3.

  Collected by Mr. Feddon.
- C. 265. Fragment of the left maxilla with the damaged m. 1 and m. 2; from Gandoi, Bugti Hills.

  Collected by Mr. Blanford, 1882.

#### Var. gajensis, Lyd.

'Pal. Ind.' ser. 10, vol. ii., p. 40 (1881).

C. 36. The hinder part of the cranium, and the first right upper Fig. true molar; from the Gáj group of Sind. Figured in the 'Pal. Ind.' op. cit. vol. ii., pl. vii., fig. 1, pl. v., fig. 7; and vol. iii., pl. i., fig. 4. Collected by Mr. Fedden.

## Rhinoceros palæindicus, Falc. and Caut.

'Fauna Antiqua Sivalensis,' pt. 8, pl. lxxiii. (1847).

- C. 59. Cast of the cranium of a young individual with the milk-dentition. The original is from the Siwalik Hills, and is in the British Museum. It is figured in the 'F. A. S.' pl. lxxiv., fig. 1; the right dentition is figured (from a cast) in the 'Pal. Ind.' ser. 10, vol. ii., pl. vii., fig. 3. Another specimen of the right upper milk-molars (in which mm. 3 has a distinct crochet) is figured in the 'Trans. R. Dublin Soc.' ser. 2, vol. iii., pl. iii., fig. 1. A. S. B. Collection.
- C. 25. Two little-worn upper premolars, provisionally referred to this species; from the Punjab. Collected by Mr. Theobald.
- C. 25a. A fourth right upper premolar, provisionally referred to this Fig. species; from the Punjab. Figured in the 'Pal. Ind.' op. cit. vol. ii., pl. vii., fig. 2, (quoted as C. 26).

Collected by Mr. Theobald.

C. 49. Cast of the second right upper true molar. The original is from the Siwalik Hills, and is in the British Museum (No. 39648). It is figured in the 'F. A. S.' pl. lxxv., fig. 4 (as a premolar), and in the 'Pal. Ind.' op. cit. vol. i., pl. iv., fig. 3, and vol. iii., p. 4. A less worn specimen is figured in the 'Trans. R. Dublin Soc.' op. cit. fig. 3.

Purchased.

C. 65. Cast of the symphysis and part of the right ramus of the mandible, showing the first three premolars, min. 4, m. 1, the canines and incisors. The original is from the Siwalik Hills, and is in the British Museum. It is figured in the 'F. A. S.' pl. lxxv., fig. 10 (as R. plutyrhinus).

Purchased.

- C. 66. Symphysis of a mandible, agreeing with the last in the number and size of the cutting-teeth, but slightly different in form; from the Siwalik Hills.
  No history.
- C. 44. Part of the right ramus of a mandible, provisionally referred to this species; from Pádri. The ramus is deeper than is R. sivalensis (No. C. 56); the depth at m. 2 being 4.6 inches.
  Collected by Mr. Theobald.
- C. 67. A lower canine; from the Siwalik Hills. A. S. B. Collection.
- C. 68. A lower incisor; from Lehri. Collected by Mr. Theobald.

## Rhinoceros platyrhinus, Falc. and Caut.

'Fauna Antiqua Sivalensis,' pt. 8, pl. lxxii. (1847).

C. 64. Cast of the cranium. The original is from the Siwalik Hills, and is in the British Museum. It is figured in the 'Pal. Ind.' ser. 10, vol. ii., pl. ix., fig. 2, the right dentition being figured (from a cast) in pl. viii. A detached upper true molar of the same species is figured in the 'Trans. R. Dublin Soc.' ser. 2, vol. iii., pl. iii., fig. 2.

A. S. B. Collection.

- C. 69. Cast of the third right upper true molar. The original is from the Siwalik Hills, and is in the British Museum; it is figured in the 'F. A. S.' pl. lxxv., fig. 12. Purchased.
- C. 70. The hinder half of the third right upper true molar; from the Siwalik Hills.

  A. S. B. Collection.
- C. 47. Cast of a fragment of the left maxilla of a young individual, provisionally assigned to this species, and showing mm. 2 and mm. 3. The original is from the Siwalik Hills, and is in the British Museum. The cast is figured in the 'Pal. Ind.' op. cit. vol. ii., pl. vii., fig. 4. Purchased.
- C. 71. Third right upper milk-molar, provisionally assigned to this species; from the Siwalik Hills.

A. S. B. Collection (No. S. 854).

C. 72. Second right upper milk-molar, provisionally referred to this Fig. species; from the Siwalik Hills. Figured in the 'Pal. Ind.' op. cit. vol. i., pl. vi., fig. 10, and noticed in vol. ii., p. 53.

A. S. B. Collection.

## , Genus ACERATHERIUM, Kaup.

'Isis,' 1832, p. 904.

#### Aceratherium perimense, Falc. and Caut.

Syn. Rhinoceros (A.?) perimensis, Falc. and Caut. R. planidens, and R. iravadicus, Lyd.

'Fauna Antiqua Sivalensis,' pt. 8, pl. lxxv. (1847).

- C. I. Cranium; from near Niki, Punjab. Figured in the 'Pal. Fig. Ind.' ser. 10, vol. ii., pl. i. Collected by Mr. Theobald.
- C. 73. Two fragments of the occiput; from Burma. Figured in Fig. the 'Pal. Ind.' op. cit. vol. i., pl. v., fig. 3 (as R. iravadicus).

  Collected by Mr. Blanford.
- C. 2. Part of the left maxilla, showing all the cheek-teeth except Fig. m. 3; from near Jabi, Punjab. Figured in the 'Pal. Ind.' op. cit. vol. ii., pl. ii. Collected by Mr. Theobald.
- C. 3. Four imperfect associated right upper true molars; from Niki, Fig. Punjab. One specimen (m. 3) figured in the 'Pal. Ind.' op. cit. pl. iii., fig. 5. Collected by Mr. Theobald.
- C. 9. Two specimens of pm. 4.; from Niki. The less worn specimen probably belonged to the same individual as No. C. 3.

  Collected by Mr. Theobald.
- C. to. Fragment of the left maxilla, containing pm. 3 and pm. 4;

  Fig. from Perim Island. Figured in the Pal. Ind. op. cit.

  vol. i., pl. vi., fig. 5, and noticed in vol. ii., p. 15.

  A. S. B. Collection (No. P. 30).
- C. 12. Three imperfect upper premolars; from Sind. One is figured Fig. in the 'Pal. Ind.' op. cit. vol. i., pl. vi., fig. 6.

  Collected by Mr. Fedden.
- C. 237. An early upper premolar; from the Punjab.

  Collected by Mr. Theobald.
- C. 7. Three specimens of upper first or second true molars; from Fig. the Punjab. One is figured in the 'Pal. Ind.' op. cit. vol. ii., pl. iii., fig. 3. Collected by Mr. Theobald.

- C. 8. Three specimens of first and second upper true molars; from the Punjab.

  Collected by Mr. Theobald.
- C. 11. Three upper molars; from the Punjab.

Collected by Mr. Theobald.

- C. 6. Two specimens of the third upper true molar; from the Punjab.

  \*\*Collected by Mr. Theobald.\*\*
- C. 13. Two imperfect first or second upper true molars; from Padri. Fig. Figured in the 'Pal, Ind.' op. cit. vol. i., pl. iv., figs. 7, 9; and described in text under the name of Rhinoceros planidens. Collected by Mr. Theobald.
- C. 74. A first or second left upper true molar; from Burma. Fi-Fig. gured in the 'Pal. Ind.' op. cit. vol. i., pl. v., fig. 1 (under the name of R. iravadicus), and vol. iii., pl. i., fig. 5. No history.
- C. 75. A first or second right upper true molar; found in a Pagoda Fig. in Burma. Figured in the 'Pal. Ind.' op. cit. vol. i., pl. v., fig. 2.

  Presented by Sir A. Phayre, K.C.S.I.
- C. 18. Fragment of the left maxilla of a young individual, contain-Fig. ing mm. 2 and mm. 3; from Asnot, Punjab. Figured in the 'Pal. Ind.' op. cit. vol. ii., pl. iii., fig. 2. Collected by Mr. Theobald.
- C. 76. Fragment of the right maxilla of a young individual, with Fig. mm. 2 and mm. 3; from Burma. Figured in the 'Pal. Ind.' op. cit. vol. i., pl. v., fig. 4, under the name of R. iravadicus, and referred to the present species in vol. ii., p. 23.

  No history.
- C. 14. Two specimens of the upper incisor; from Asnot. One speci-Fig. men is much worn; the other is unworn, and figured in the 'Pal. Ind.' op. cit. vol. ii., pl. iii., fig. 4.

  Collected by Mr. Theobald.
- C.4. C.5. Two portions of the mandible, apparently belonging to Fig. the same individual as No. C. 3; from Niki.

  Collected by Mr. Theobald.
- C. 15. Fragment of the right ramus of the mandible, with m. 3 and part of m. 2; from Jabi. Collected by Mr. Theobald.
- C. 17. Fragment of the left ramus of the mandible, with one milk (?) molar; from Perim Island.

  A. S. B. Collection.

- C. 62. Part of the left ramus of the mandible, with two broken molars of huge size; from the Punjab. The ramus measures more than 5.5 inches in depth, in which respect it agrees with No. C.4. Collected by Mr. Theobald.
- C. 63. Part of the right ramus of the mandible, with pm. 3, pm. 4, and m. 1; from the Punjab. Collected by Mr. Theobald.
- C. 130. Part of the right ramus of a mandible with m. 3, provisionally assigned to the present species; from Perim Island.
  A. S. B. Collection.

C. 238. Part of the left ramus of the mandible of an immature in-Fig. dividual, showing m. i in alveolo; from the Punjab. Figured in the Pal. Ind., ser. 10, vol. ii., pl. iii., fig. 1.

Collected by Mr. Theobald.

- O. 249. Mandible provisionally referred to this species; from Perim Island.

  Captain Scarle's Collection.
- C. 19. The angle of a mandible, provisionally referred to this species; from Janori.

  \*\*Collected by Mr. Theobald.\*\*
- C. 16. A lower molar; from Niki. Collected by Mr. Theobald.
- C. 16a. A lower molar; from the Siwalik Hills. A. S. B. Collection.
- The following specimens are provisionally referred to this species on account of their large size; they were obtained from Perim Island and were presented by Captain Scarle in 1882:—
- C. 252. The tibia.
- C. 253. The femur.
- C. 254. Part of the innominate.
- C. 255. The sacrum.

#### Aceratherium blanfordi, Lyd.

'Pal. Ind.' ser. 10, vol. iii., p. 2 (1884).

var. major, Lyd. (op. cit.)

C. 268. Left maxilla, with three true molars; from Dera Búgti.

Fig. Figured in the 'Pal. Ind.' ser. 10, vol. iii., pl. i., fig. 1. This and the following specimens are the types.

Collected by Mr. Blanford, 1882.

C. 259. Second left upper true molar; from Gandoi, Bugti Hills. Fig. Figured in the 'Pal, Ind.' op. cit. pl. i., fig. 2.

Collected by Mr. Blanford, 1882.

- C. 262. Much-worn second right upper true molar; from Gandoi. Fig. Figured in the 'Pal. Ind.' op. cit. pl. ii., fig. 2.

  Collected by Mr. Blanford, 1882.
- O. 271. | Part of right ramus of the mandible; from Gandoi. Figured Fig. in the 'Pal. Ind.' ser. 10, vol. iii., p. 6, woodcut, fig. 2.

  Collected by Mr. Blanford, 1882.
- C. 272. Mandible without teeth; from Gandoi.

  Collected by Mr. Blanford, 1882.
- C. 260. First and second right upper milk-molars; from Gandoi. Fig. Figured in the 'Pal. Ind.' ser. 10, vol. iii., pl. i., fig 6. Collected by Mr. Blanford, 1882.
- C. 258. A right upper milk-molar (?); from Gandoi. Figured in the Fig. 'Pal. Ind.' op. cit. vol. iii., pl. ii., fig. 1.

  Collected by Mr. Blanford, 1882.
- C. 267. Part of right ramus of the mandible, with one milk-molar;
  Fig. from Dera Búgti. Figured in the 'Pal. Ind.' op. cit.
  vol. iii., pl. ii., fig. 3. Collected by Mr. Blanford, 1882.
- C. 50. Fragment of the left maxilla, showing pm. 4, m. 1, and m. 2

  Fig. from the Punjab. Figured in the 'Pal. Ind.' op. cit. vol. ii.,
  pl. vi., fig. 1. (as (?) R. palæindicus), and noticed in vol. iii.,
  p. 2.

  Collected by Mr. Theobald.
- C. 42. A third right upper true molar, probably belonging to this species; from the Punjab.

  Collected by Mr. Theobald.

#### var. minor, Lyd. (op. cit.)

- C. 269. Left maxilla with all the cheek-teeth; from Gandoi. Figured Fig. in the 'Pal. Ind.' op. cit. pl. ii., fig. 4.

  Collected by Mr. Blanford, 1882.
- C. 266. Fragment of right maxilla, containing the three true molars, much obscured by matrix; from Gandoi.
  Collected by Mr. Blanford, 1882.

C. 270. Part of left ramus of mandible, associated with C. 269. Fig. Figured in the 'Pal. Ind.' op. cit. pl. ii., fig. 5.

Collected by Mr. Blanford, 1882.

## Aceratherium (?) sp.

C. 60. Cast of a cranium, with milk and permanent cheek-dentition in a broken condition. The original is from the Siwalik Hills, and is in the British Museum (No. 48932). It is noticed in the 'Pal. Ind.' ser. 10, vol., iii., p. 4.

Purchased.

- Specifically undetermined specimens belonging to Rhinoceros or According to
- C. 93. Fragment of the left ramus of the mandible, with one molar; from the Punjab.

  Collected by Mr. Theobald.
- O. 94. Fragment of the left ramus of the mandible, with two milk(?) molars; from the Punjab. Collected by Mr. Theobald.
- C. 95. Fragment of the right ramus of the mandible, with two molars; from the Punjab.

  Collected by Mr. Theobald.
- C. 96. Fragment of the right ramus of the mandible, with two molars; from the Punjab.

  Collected by Mr. Theobald.
- C. 97. Fragment of the right ramus of the mandible, with two molars; from the Punjab. Collected by Mr. Theobald.
- C. 98. Fragment of the right ramus of the mandible, with two Fig. molars; from the Siwalik Hills. The first tooth is figured in the 'Pat. Ind.' ser. 10, vol. i., pl. vi., fig. 7.

  A. S. B. Collection (Nos. S. 322-323).
- C. 99. Fragment of the right ramus of the mandible; from the Siwalik Hills.

  A. S. B. Collection.
- C. 78. Three specimens of first lower premolars; from Sind.

  Collected by Mr. Blanford.
- C. 79-86. Eight right lower molars; from the Punjab.

  Collected by Mr. Theobald.
- C. 87-91. Five left lower molars; from the Punjab.

  Collected by Mr. Theobald.
- C. 92. A right lower molar; from Khushálgarh, Punjab. Figured in Fig. the 'Pal. Ind.' ser. 10, vol. i., pl. vi., fig. 3.

  Presented by Lieutenants Garnett and Trotter,
- C. 261, C. 263, Several lower molars; from Gandoi, Búgti Hills.
  C. 264. Collected by Mr. Blanford, 1882.
- C. 236. A lower canine; from the Siwalik Hills.

  By exchange with the Rúrki Museum.
- C. 102. The glenoidal extremity of the scapula; from the Punjab.

  Collected by Mr. Theobald.
- C. 100. The distal extremity of the humerus; from Niki, Punjab.

  Collected by Mr. Theobald.

- C. 101. Two specimens of the proximal extremity of the humerus; from the Siwalik Hills.

  A. S. B. Collection.
- C. 107. Two specimens of the distal extremity of the radius from Sind.

  Collected by Mr. Fedden.
- C. 108. Proximal extremity of the ulna; from the Punjab.

  Collected by Mr. Theobald.
- C. 125. Three specimens of the cuneiform of the carpus; from the Punjab.

  Collected by Mr. Theobald.
- C. 126. The cunciform of the carpus; from the Siwalik Hills.

  A. S. B. Collection.
- C. 127. The cuneiform of the carpus; from the Punjab. This bone is more massive than the preceding.

Collected by Mr. Theobald.

- C. 226. The left cuneiform of the carpus; from the Punjab.

  Collected by Mr. Theobald.
- C. 128. Two specimens of the scaphoid; from the Siwalik Hills.

  A. S. B. Collection.
- C. 227. The magnum; from the Punjab. Collected by Mr. Theobald.
- C. III. The median right metacarpal, of a long type; from the Siwalik Hills.

  A. S. B. Collection.
- C. 112. A similar bone; from the Punjab.

Collected by Mr. Theobald.

- C. 113. The median left metacarpal, of a shorter type; from Sind.

  Collected by Mr. Fedden.
- C. 114. The inner left metacarpal, probably belonging to the same species as the last; from Sind.

  A. S. B. Collection.
- C. 115. The outer left metacarpal of the same species; from Sind.

  \*\*Collected by Mr. Fedden.
- C. 116. An outer metacarpal; from Sind. Collected by Mr. Fedden.
- C. 103. Three specimens of the proximal extremity of the femur; from the Punjab.

  Collected by Mr. Theobald.
- C. 104. Two specimens of the distal extremity of the femur; from the Siwalik Hills.

  A. S. B. Collection.
- C. 105. Two specimens of the patella; from the Siwalik Hills.

  A. S. B. Collection.

- C. 106. Two imperfect specimens of the patella; from the Punjab.

  \*\*Collected by Mr. Theobald.
- C. 109. Two specimens of the distal extremity of the tibia; from the Siwalik Hills.

  A. S. B. Collection.
- C. 110. The distal extremity of the tibia; from Sind.

  Collected by Mr. Fedden.
- C. 117. Three specimens of the astragalus; from the Punjab.

  Collected by Mr. Theobald.
- C. 118. The astragalus; from the Punjab. This specimen is remarkable for its excessive transverse width.

Collected by Mr. Theobald.

- C. 119. Two specimens of the astragalus, of very small size; from the Punjab.

  Collected by Mr. Theobald.
- C. 120. Two very similar specimens; from the Punjab.

  Collected by Mr. Theobald.
- C. 121-122. The bones of the hind-foot of a very small, but adult form; from Niki. Associated with No. C. 100.

Collected by Mr. Theobald.

- C. 123. The calcaneum; from the Siwalik Hills. No history.
- C. 124. The calcancum; from the Siwalik Hills. A. S. B. Collection.
- C. 129. The cuboid; from the Siwalik Hills. A. S. B. Collection.
- C. 131. A first lateral phalangeal; from the Siwalik Hills.

  A. S. B. Collection.
- C. 132. Two specimens of first lateral phalangeals; from the Punjab.

  Collected by Mr. Theobald.
- C. 133. Two specimens of first lateral phalangeals; from Sind.

  Collected by Mr. Fedden.
- C. 134. Two specimens of a first median phalangeal; from Sind.

  Collected by Mr. Fedden.
- C. 135. Three specimens of first median phalangeals of a shorter type; from Sind.

  Collected by Mr. Fedden.
- C. 136. A second median phalangeal; from Sind.

  Collected by Mr. Fedden.
- C. 137. A third median phalangeal; from Sind.

  Collected by Mr. Fedden.

- C. 230-234. Sesamoids, from the Punjab and Sind.

  Collected by Messrs. Theobald and Fedden.
- C. 248. The axis vertebra; from the Punjab.

Collected by Mr. Theobald.

C. 239. An early cervical vertebra; from the Punjab.

Collected by Mr. Theobald.

C. 240. A cervical vertebra; from the Punjab.

Collected by Mr. Theobald.

C. 241. A cervical vertebra: from the Punjab.

Collected by Mr. Theobald.

#### Family CHALICOTHERIIDÆ.

#### Genus CHALICOTHERIUM, Kaup.

'Oss. Foss. de Darmstadt,' pt. 2, p. 4 (1833).

#### Chalicotherium sivalense, Falc. and Caut.

Syn. Anoplotherium sivalense, Falc. and Caut.

'Trans, Geol. Soc.,' ser. 2, vol. v., p. 502 (1840-read, 1837).

B. 129. Two fragments of the mandible, the first with one and the second with two cheek-teeth; from Sind.

Collected by Mr. Fedden.

B. 130. A lower molar; from the Punjab.

Collected by Mr. Theobald.

B. 311. Cast of anterior portion of the cranium. The original, which is the type, is from the Siwalik Hills, and is figured in the 'F. A. S.' pl. lxxx., fig. 1, and in 'Falconer's Palæontological Memoirs,' vol. i., pl. xvii., figs. 3, 4: it is preserved in the Museum of Marischal College, Aberdeen.

A. S. B. Collection.

- B. 312. Cast of the maxillæ. The original is from the Siwalik Hills, and is figured in the 'F. A. S.' op. cit. fig. 2, and in the 'Pal. Mem.' op. cit. figs. 1, 2; and is in the British Museum.

  A. S. B. Collection.
- B. 313. Cast of left ramus of the mandible. The original is from the Siwalik Hills, and is figured in the 'F. A. S.' op. cit. fig. 4, and in the 'Pal. Mem.' op. cit. figs. 6, 7: it is now in the British Museum.

  A. S. B. Collection.

C. 242. A lower molar; from Sind.

Collected by Mr. Fedden.

The family and generic position of the following specimens is uncertain:—

C. 229. A small carpal bone; from Jabi, Punjab.

Collected by Mr. Theobald.

C. 246. The first phalangeal of a perissodactyle, probably allied to Palaotherium; from the Punjab.

Collected by Mr. Theobald.

C. 247. The head of the femur and part of a metacarpal of a large perissodactyle; from the nummulitics (Eocene) of the Punjab.

Collected by Mr. Wynne.

Suborder PROBOSCIDEA.

Family ELEPHANTIDÆ.

Genus ELEPHAS, Linn.

'Syst. Nat.,' ed. 12, vol. i., p. 48 (1766).

A. Elephas proper (Euelephas, Falc.).

Elephas hysudricus, Falc. and Caut.

'Fauna Antiqua Sivalensis,' pt. 1, p. 41, pl. i. (1846).

- A. 341. Cast of the cranium. The original is from the Siwalik Hills, and is in the British Museum; it is figured in the 'F. A. S.' pls. iv., v. No history.
- A. 261. A young cranium, showing mm. 3 and mm. 4; from Rúpar.

  The third milk-molar has five ridges remaining; the second is complete, and has eleven ridges. The greater height and number of the ridges in mm. 4 readily distinguish this specimen from E. planifrons (No. A. 259).

Collected by Mr. Theobald.

- A. 271. A very similar specimen, with the corresponding teeth; from west of Jamu. The last milk-molar is in germ, and has eleven ridges.

  \*\*Collected by Mr. Theobald.\*\*
- A. 251. Part of a fourth upper milk-molar, with six ridges remaining; from the Siwalik Hills.

  A. S. B. Collection (No. S. 60)
- A. 286. Fragment of a milk-molar; from the Siwalik Hills.

  A. S. B. Collection (No. S. 58).

- A. 292. Part of the palate, showing m. 2 and m. 3; from the Siwalik Hills. The second molar has about twelve ridges remaining.

  A. S. B. Collection.
- A. 252. Fragment of an upper molar, showing eight or nine well-worn ridges, which are more approximated than usual; from the Siwalik Hills.

  A. S. B. Collection (No. S. 73).
- A. 294. The palatal region of the cranium, showing m. 2 and m. 3 of both sides; from the Markanda valley, Siwalik Hills.

  The second molars are worn and have eight ridges remaining; the third have fifteen ridges.

Presented by Col. Godwin-Austen, 1866.

A. 295. The palate with m. 2 and m. 3 of both sides; from the Punjab.

The second molars have eight ridges remaining.

Collected by Mr. Theobald.

- A. 276. Fragment of a late upper true molar; from the Siwalik Hills.

  A. S. B. Collection (No. S. 64).
- A. 272. Greater part of a third upper true molar, with seventeen ridges; from Rúpar. Collected by Mr. Theobald.
- A. 280. Fragment of an upper true molar, comprising ten ridges, denuded of cement; from the Siwalik Hills.

A. S. B. Collection.

- A. 282. Fragment of a late upper true molar; from Hoshiárpúr.

  Collected by Mr. Theobald.
- A. 284. Fragment of an upper true molar, with nine ridges remaining; from Hoshiárpúr. Collected by Mr. Theobald.
- A. 285. A very similar specimen; from the Siwalik Hills.

  A. S. B. Collection (No. S. 51).
- A. 287. Another very similar specimen; from the Punjab.

  Collected by Mr. Theobald.
- A. 289. Fragment of an upper true molar; from the Siwalik Hills.

  A. S. B. Collection.
- A. 243. Part of the right maxilla, with eleven ridges of m. 3; from the Kangra district. The tooth is much worn.

Collected by Mr. Theobald.

A. 348. Fragment of the right ramus of the mandible of a young individual, with a fragment of mm. 3 and the perfect mm. 4; from the Siwalik Hills. The fourth milk-molar has ten ridges; the cement has to a great extent weathered away.

By exchange with the Rúrki Museum.