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156 [AUGUST,

The mouth is broad in ront, but not deeply cleft; its angle extending to the vertical of the anterior rim of the eye. The latter is small, subelliptical in shape, and situated near the upper surface of head; its horizontal diameter is contained about six times in the length of the side of head. The body is anteriorly broader than deep; it diminishes gradually in both height and depth towards the origin of the tail, which is quite compressed and very much reduced, and terminated by a slender caudal fin, rounded upon its posterior margin. The origin of the dorsal fin is situated a little in advance of the anus, but does not unite with the caudal, between which and the posterior extremity of its base, a space of three tenths of an inch is left; even the tips of its posterior rays do not reach the base of the caudal. The anal begins a little further back than the dorsal, is as deep as the latter is high, and extends likewise a little further behind; the tips of its posterior rays nearly reaching the base of the caudal. The pectorals are broad but short, the ventrals are imbedded in the membranous disk peculiar to that group of fishes.

D 14. A 13. C 3. 1. 5. 4. 1. 3. V 8. P 20 + 3.

The three inferior rays of pectorals are the stoutest, and situated under the hroat, connected with the disk, which is very large. The surface of the anterior portion of the said disk exhibits large pavement-like cells.

The ground color is greenish brown, with a mesh work of black lines all over the head and body. The inferior surface of head and belly are dull yellow.

From San Luis Obispo, Cal.

LOPHOBRANCHII.

49. Syngnathus brevirostris, G.—Greatest length six inches and a half; head forming about the eighth of it. Snout abbreviated, distance from anterior rim of eye to tip of snout, equal to remaining portion of head. Dorsal fin quite low, and thirteen twentieths of an inch long. Posterior margin of same fin nearly equidistant between tip of snout and extremity of caudal. Pectorals small. No anal fin. Abdominal pouch, for the reception of the eggs after their laying, very long. Caudal of medium size and rounded.

D 30. C 1. 4. 4. 1. P 12.

Ground color greenish, tessellated with brown.

From San Diego, Cal.

50. Syngnathus leptorhynchus, G.—Entire length six inches; head contained in it six times and a half. Snout elongated and slender. Dorsal fin very low, and six tenths of an inch long; its posterior margin nearer the extremity of caudal fin than to the tip of the snout. Pectorals small. A rudimentary anal. Caudal slender and rounded posteriorly.

D 32. A 1. C 1. 4. 4. 1. P 10.

Dorsal region greenish yellow; sides bluish; abdomen whitish. Tail beneath dull yellow.

San Diego, Cal.

The Committees to which were referred papers by Dr. Leidy, read Aug. 8th, by Prof. Baird and Mr. Chas. Girard, read Aug. 22d, and by Dr. Le Conte, read same date, severally reported in favor of publication in the Proceedings.

Synopsis of extinct Mammalia, the remains of which have been discovered in the Eocene Formations of Nebraska.

By JOSEPH LEIDY, M. D.

CARNIVORA.

Machairodus Primævus: Proc. Acad. Nat. Sc. 1851, v. 329; Owen's Report of a Geolog. Survey of Wisconsin, etc. 1852, 564; Ancient Fauna of Nebraska, 1853, 95.

2. DINICTIS FELINA: Proc. Acad. 1854, vii.

3. AMPHICYON VETUS:

Daphænus vetus: Proc. Acad. 1853, vi. 393.

- 4. HYÆNODON HORRIDUS: Proc. Acad. 1853, vi. 393.
- 5. HYENODON CRUENTUS: Ibid.
- 6. HYÆNODON CRUCIANS: Ibid.

SOLIDUNGULA.

7. Anchitherium Bairdii: Owen's Rep. 572; Anc. Fauna, 67. Palæotherium Bairdii: Proc. Acad. 1850, v. 121.

8. HIPPODON SPECIOSUS: Proc. Acad. 1854, vii. 90.

RUMINANTIA.

9. Poebrotherium Wilsoni: Proc. Acad. 1847, iii. 332; Owen's Rep. 571; Anc. Fauna, 19.

10. LEPTOMERYX EVANSI: Proc. Acad. 1853, vi. 394.
11. Merycodus necatus: Proc. Acad. 1854, vii. 90.

12. OREODON CULBERTSONII: Owen's Rep. 548; Anc. Fauna, 45.

Merycoidodon Culbertsonii: Proc. Acad. 1848, iv. 47. Oreodon priscus: Ibid. 1851, v. 238.

Cotylops speciosa: Ibid. 239.

Oreodon major?: Anc. Fauna, 55.

Merycoidodon major?: lbid.

13. OREODON GRACILIS: Proc. Acad. 1850, v. 239; Owen's Rep. 550.

Merycoidodon gracilis: Owen's Rep. 550.

14. Agriocherus antiquus: Proc. Acad. 1850, v. 121; Owen's Rep. 571; Anc. Fauna, 24.

MULTUNGULA.

15. ACERATHERIUM OCCIDENTALE.

Aceratherium: Proc. Acad. 1851, v. 331.

Rhinoceros occidentalis: Proc. Acad. 1880, v. 119; Ibid. 1851, v. 276; Owen's Rep. 552; Anc. Fauna, 81.

16. ACERATHERIUM NEBRASCENSE: Proc. Acad. 1851, v. 331.

Rhinoceros Nebrascensis: Ibid. 1850, v. 121; Owen's Rep. 556. Anc. Fauna 86.

17. TITANOTHERIUM PROUTII: Anc. Fauna 72.

Palæotherium, Prout: Am. Jour. Sc. Arts, 1847, iii. 248.

Palæotherium? Proutii, Owen, Norwood, and Evans; Proc. Acad. 1850. v. 66; Leidy: Ibid. 122; Owen's Rep. 551.

Rhinoceros? Americanus: Proc. Acad. 1852, vi. 2.

Palæotherium giganteum: Anc. Fauna 78.

Eotherium americanum: Proc. Acad. 392.

18. ENTELODON MORTONI.

Archæotherium Mortoni: Proc. Acad. 1850, v. 92; Owen's Rep. 558; Anc. Fauna 57.

Arctodon: Proc. Acad. 1851, v. 278.

Archæotherium (Entelodon?) Mortoni: Owen's Rep., refer. to Table X.

Archæotherium robustum: Owen's Rep. 572.

Archæotherium (Entelodon?) robustum: Anc. Fauna 66.

The above enumerated mammalia may be considered as well ascertained and distinct species. I am still uncertain whether Eucrotaphus* is distinct from Agriocharus; and have, therefore, not included it in the list. The specimens upon which the former genus was characterised, apparently indicate two distinct species; whereas, all the teeth which have been found of the latter, so far have indicated but one species.