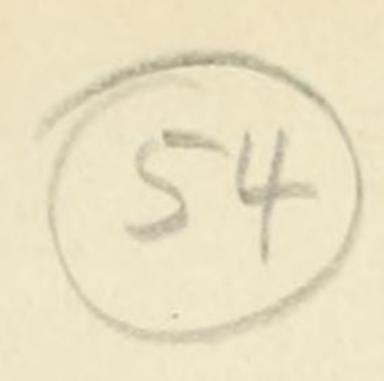
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## PROCEEDINGS

OF THE

## ACADEMY OF NATURAL SCIENCES

OF

## PHILADELPHIA.

1885.

COMMITTEE OF PUBLICATION:

JOSEPH LEIDY, M. D., EDW. J. NOLAN, M. D.,

GEO. H. HORN, M. D.,

D., THOMAS MEEHAN,

EDITOR: EDWARD J. NOLAN, M. D.

JOHN H. REDFIELD.

PHILADELPHIA:

ACADEMY OF NATURAL SCIENCES,

LOGAN SQUARE,

1886.

organisms. The principle that contained the germ of form was, however, yet as wholly unknown as that of the supposed diseasegerms of the atmosphere.

## MARCH 10.

The President, Dr. Leidy, in the chair.

Twenty-four persons present.

ceros and a Hippotherium.

The following papers were presented for publication:—

"New Genera and Species of Fossil Cockroaches from the Older American Rocks," by Samuel H. Scudder.

"A Revision of the North American Melicæ," by F. Lamson Scribner.

"A Review of the American Eleotridinæ," by Carl H. Eigenmann and Morton W. Fordice.

The deaths of Samuel Powell and Geo. Whitney, members, and of Benjamin Silliman, Jr., a correspondent, were announced.

Rhinoceros and Hippotherium from Florida.—Prof. Leidy directed attention to some fossil remains, recently received from Dr. J. C. Neal, of Archer, Florida, and obtained by him from the same deposit noticed in the Proceedings of 1884, p. 118. Dr. Neal writes that he had again examined the locality in company with Prof. L. C. Johnson, who reports that the deposit overlies the Vicksburg limestone of Eocene age. Dr. Neal adds that the deposit appears to be the portion of the border of a lagoon of post-Tertiary age, and that it is now about 100 feet by 50 feet in extent. He also remarks that he has anxiously looked for relics of man, but thus far in vain. The fossils are mingled together in the greatest confusion, are badly fractured, but not water-worn.

The remains submitted, besides several less characteristic fragments of a crocodile, a carnivorous animal about the size of a fox, and of a lama, consist of two well-preserved teeth of a Rhino-

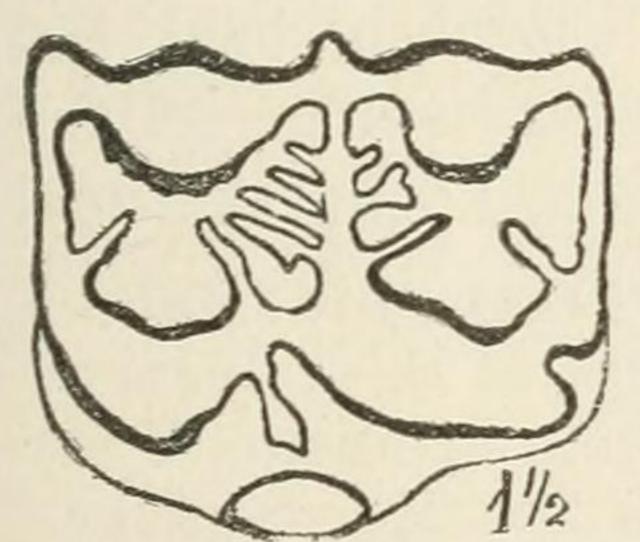
The tooth of the rhinoceros fortunately happens to be one of the most characteristic of the series, and presents differences sufficiently from those of the many extinct forms of this country to render it probable that it indicates another species. The specimen is the crown, but slightly worn, of a last upper molar of the left side. It is especially remarkable for the extent of production of the intermediate folds of the chief lobes of the crown, in comparison with their condition in known forms of the genus. The fold of the anterior lobe is directed backward about half the interval of the lobes, and extends from the base to the triturating border of the crown. Its upper portion is half cylindrical; its lower portion compressed from without inward, and half elliptical in the length. It has the shape of a knife with a

cylindrical handle and a wider half elliptical blade. The posterior fold, as long and wider than the former, curves forward and outward in advance of the free border of the anterior fold, coming into contact with the outer face of this below, but separated from it by an open crevice above. The meeting folds divide the interval of the lobes of the crown into an outer trilateral pit over two inches in depth, and an inner nearly rectangular recess about an inch and a half in depth. A well-produced basal ridge occupies the forepart of the crown; a feeble one, produced behind in a tubercle, the outer part of the crown; and a broad tubercle occupies the base of the interval of the lobes internally. The measurements of the specimen are as follows:—

Greatest transverse diameter at the anterior third, 56 mm. Greatest fore and aft diameter externally, 63 "Greatest fore and aft diameter internally, 55 "Greatest depth at the antero-external border, 63 "

The species may be distinguished by the name of Rhinoceros proterus. The subgenus, whether Aceratherium, Aphelops, or other, is of course only to be determined by the supply of other portions of the animal. The inferior molars and bones of a rhinoceros, indicated in the former communication on fossils from the same deposit, most probably also pertain to this species.

The extinct genus *Hippotherium*, a three-toed ancestor of our horses, was originally described from remains found in the Miocene and later Tertiary deposits of Europe. Remains of the same genus were first discovered in this country in the Ashley River phosphate beds of South Carolina, noticed in our Proceedings of 1853, p. 241, under the name of *Hipparion venustum*, and described in Holmes' post-Pliocene fossils, 1860, 105, pl. xvi, figs. 32, 33, as *Hippotherium venustum*. Since then a number of other species have been described by the speaker and Prof. Cope from remains found in various localities of this country. The



Hippotherium ingenuum.

tooth now under inspection is an upper molar, perhaps the fourth large one of the series. It indicates a small species, little more than half the size of the domestic horse, or of the Hippotherium gracile of Europe, and exhibits sufficient difference to assume that it indicates another species from those already described. The folding of the contiguous borders of the interior enamel islets of the worn triturating

surface is less complex than in H. venustum, and the internal islet is elliptical instead of circular. The species may be named Hippotherium ingenuum. The measurements of the tooth are as follows:—

Length at antero-internal corner of crown,
Breadth fore and aft of triturating surface,
Breadth transversely of triturating surface,
19 "
17 "