ART. XXXII.—*Notice of a new genus of Annelids from the Lower Silurian*; by GEO. BIRD GRINNELL.

THE Museum of Yale College has recently received, from the rocks of the Cincinnati group, a series of fossils which are of unusual interest. The remains are shining black in color, and present a striking contrast to the associated fossils, Trilobites, Brachiopods, Crinoids, etc., which have assumed the color and constitution of the matrix. An examination of these black remains shows that they are the hard chitinous parts of Annelids.

While the presence of animals of this group in the Lower Silurian has been inferred from their "trails" and impressions in the rocks, no portions of their bodies have as yet been found preserved in the deposits of this age. The remains which first suggest themselves for comparison with these specimens are the Conodonts of Pander. Through the kindness of Professor Marsh, the writer has been enabled to examine a number of the original specimens of these fossils, collected by Pander himself near St. Petersburg; and a comparison makes it clear that they are quite unlike the remains referred to. They are widely different in color and form from the material under observation, while chemical tests show that their composition is by no means similar.

These Cincinnati fossils include a large number of specimens, and, as might be expected, there is a wide variation in their form. So little is at present known in regard to the jaws of Annelids, that any general conclusions drawn from the material at the command of the writer would be premature; and for the same reason it would be unwise to distinguish by a name each of the many forms which appear. Further study will doubt-

less furnish data for a more extended description, with numerous illustrations, which it is hoped will soon be completed.

Nereidavus varians, gen. et sp. nov.

The jaw selected as a type for the genus (fig. 1), is one of the largest and most perfectly preserved of those at hand. It is dark brown, with a coppery luster in some places, this coloring being due to the weathered condition of the specimen. It is hollow at the base and throughout the greater part of its length, and so strikingly resembles the jaw of the common *Nereis pelagica* Linn. of the Atlantic coast, as to render their near affinity almost certain. The denticulations, or teeth, are eight in number, but were probably more numerous originally, since the posterior portion of the specimen is wanting. The anterior tooth, which is the largest, is somewhat twisted outward, not lying in the same plane with its fellows. The length of the specimen is 5.6 mm., the depth beneath the fourth tooth 1.4 mm.

A second very perfect specimen, which may possibly belong with the jaw above referred to, is represented in fig. 2. It contains eighteen teeth, the anterior one quite long and stout, the next five mere slight protuberances, and only to be seen under the microscope, while the remaining teeth are sharp and strong. The length of the exposed portion of this individual is 2.8 mm.; depth under the first of the strong teeth, the seventh in the series, .22 mm. Since the base of this specimen is buried in the rock and cannot be seen, it is not altogether certain what it is. It bears some resemblance to one of the setæ of *Nereis Dumerilii*, Aud. and M. Ed., figured by Ehlers in his work entitled *Die Borstenwürmer*, pl. XX, fig. 31.

The specimens under consideration were collected by Professor A. G. Wetherby, near Cincinnati, Ohio. Through the energy and courtesy of this naturalist, a large suite of specimens has been secured and forwarded to New Haven, and to him the writer would express his grateful acknowledgments.

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