the opportunity of becoming thoroughly acquainted with the ever-increasing literature in the respective fields.

The greatest burden to the research worker is the necessity of tracing a species through the maze of national, local and foreign literature bearing upon a particular subject. Only at very large institutions is most of this literature available for use. The worker in smaller institutions or remote localities is handicapped by not having thousands of publications readily accessible to him. A step toward the solution of the problem was made by David White, who maintained a private catalogue of paleobotanical nomenclature covering the Paleozoic Era during his lifetime. The work was never published; however, specialized catalogues of similar natures have been published by various authors in the past, but these soon become out of date. The time and cost of such work does not allow for private revision as often as desirable.

It seems that the establishment of a national or international bureau of registration for nomenclature of biological and paleontological names is necessary for the satisfactory conclusion of the problem. When once established, it should be made mandatory for every author to register at this bureau his new species or generic changes, together with references to the publications in which they appear. Failure to register would invalidate the work. In this way, authors could continue to publish their works in various wellknown or obscure publications, as at present, but all references to such works would become readily available to other workers by reference to the central bureau acting as a "clearing house." Workers in remote localities, where vast amounts of literature are not available, could obtain pertinent references by application to the bureau; and on the other hand, work which they accomplish would become recognized elsewhere immediately upon publication. Needless to say, countless hours of work would be saved the research worker who, under present conditions, must spend the greater part of his time tracking down references.

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## POLYCHAETE ANNELID WORMS IN THE GREAT LAKES

A NUMBER of years ago, O. L. Meehean<sup>1</sup> reported finding a minute (2.9 mm), transparent polychaete annelid worm in Duluth Harbor. In the summer of 1936 I found a single specimen of what is very probably the same worm in Lake Erie at a depth of 55 feet, in the open lake approximately 30 miles due east

1 O. Lloyd Meehean, Science, 70: 479, 1929.

of Put-in-Bay, and during this past summer I obtained additional specimens from the same locality. Since these worms have been found in both Lake Superior and Lake Erie, it is highly probable that they are quite generally distributed throughout the Great Lakes. Needless to say, the occurrence of a polychaete annelid in these lakes is a matter of interest, since the Polychaeta compose an almost exclusively marine group, of which very few species have been reported from North American fresh waters. In 1858, Leidy<sup>2</sup> described a sabellid polychaete from the Schuylkill River at Philadelphia, which he named Manayunkia speciosa. Later, with additional specimens from Egg Harbor River, N. J., he gave a more complete description. Early in the present century, Johnson<sup>3</sup> described nereids from California, and more recently Olga Hartman<sup>4</sup> has added others from the same region.

Comparison of my Lake Erie polychaetes with Meehean's description of his Lake Superior specimens leads me to think the worms are the same, an opinion with which Meehean agreed in conversation. He had previously referred his specimens tentatively and with some doubt to Leidy's species. The Lake Erie worms agree sufficiently with Leidy's description and figures to warrant placing them in the genus Manayunkia, but they differ so sharply in certain important features that it appears very doubtful whether they belong to the species Leidy described. For instance, he mentions and figures a pair of haemal loops in each segment which do not occur in the specimens from the Great Lakes. At the anterior end of these latter specimens there is an open collar which surrounds the base of the tentacles. Leidy states that the border of the head "projects dorsally into a rounded process," but he makes no mention of an open collar. The arrangement of the tentacles also differs. Leidy describes a pair of lateral lophophores, each of which bears a double row of tentacles. In the Lake Erie specimens there is a pair of lateral lophophores on each side of the head, the tentacles of which are not arranged in two regular rows in the manner described and shown by Leidy.

Leidy's well-sustained reputation for accuracy in observation and description lends weight to the significance of the discrepancies between his description of *Manayunkia speciosa* and the conditions found in the specimens from the Great Lakes. In view of the discrepancies and pending a more detailed description which is being prepared, I propose to designate the worms from Lake Erie as *Manayunkia eriensis*.

FREDERICK H. KRECKER

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<sup>&</sup>lt;sup>2</sup> Jos. Leidy, Proc. Phila. Acad. Nat. Sci., 1858, 90; 1883, 204

<sup>&</sup>lt;sup>3</sup> H. P. Johnson, Mark Ann. Vol.: 205, 1903. <sup>4</sup> Personal letter.