ON THE OLIGOCHÆTA FROM THE BLUE LAKE, MOUNT KOSCIUSKO.

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(Plates xlvi., xlvii.).

I have to thank the Trustees of the Australian Museum for giving me the opportunity of studying this small collection of Fresh-water Annelids, from the Blue Lake, Mt. Kosciusko, as they are, so far as I am aware, the first aquatic Oligochætes from the Australian continent that have been identified.

The tube received by me in March, 1906, contained a considerable number of small worms referable to three species :—

Family TUBIFICIDÆ.

- 1. Tubifex davidis, sp. nov.
- 2. Branchiura pleurotheca, sp. nov.

Family PHREODRILIDÆ.

3. Phreodriloides notabilis, gen. et sp. nov.

These were collected by Mr. Charles Hedley, under the direction of Prof. T. W. E. David, in the Blue Lake, which is situated at a height of 6000 feet above the sea, near the top of Mt. Kosciusko. The depth from which they were obtained is thirty-five feet; the bottom is of soft mud, and the temperature was 44° Fahr.

The worms had, apparently, been treated with osuric acid, which, unhappily, is ill-suited for these animals; for not only does it render the body wall rather opaque, so that the internal organs can only be studied with difficulty in entire specimens, even when stained and mounted in canada balsam, but it also appears to render the chætæ brittle, for, in the smaller specimens, they are broken off short at the level of the body wall. Hence the labour of identification is increased by the use of this reagent.