

STUDIES ON FRESH WATER SPONGES FROM AUSTRALIA. No. 2.

By

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THROUGH the courtesy of the Trustees of the Australian Museum, Sydney, Australia, I have been privileged again to examine four additional small specimens of fresh water sponges which have been added to their collections since the publication of "Studies" number 1¹.

A NEW RECORD OF OCCURRENCE FOR AUSTRALIA.

Ephydatia crateriformis (Potts).

Two of the four sponges studied have been identified as *Ephydatia crateriformis*, a species which previously has been reported from India, the Dutch East Indies, China, the Philippine Islands and the United States of America. The extension of its range to Australia is therefore not unexpected, and it gives us pleasure to record this discovery. The species is a very variable one and there are decided differences between the more primitive forms and the ones in which the rotules are more perfectly developed. These specimens represent the more primitive form and in many cases the rotules of the gemmule specules are not nearly so well perfected as they are in some of the other specimens from other parts of the world.

1. The first specimen consisted of very small bits of sponge forming thin layers over small plant growths or leaves. The Museum label records only the following facts: "Heathcote Creek at Lilyvale, New South Wales. Collected by M. E. Gray, May 16, 1932." (Gee's No. 55054.)

2. The second specimen consisted of short, less than 3 centimetres, cylindrical growths with rounded or very thin, pointed ends. There were also one or two small pads of sponge in the package. It came from "Waterfall Creek, at falls, near Sydney, N.S.W., June 12th, 1934. Australian Museum No. Z 2684." (Gee's No. 55055.)

Skeleton Spicules.—The skeleton spicules vary from around 255 to as much as 323 microns in length and from 7 to 16 microns in thickness. They are rather slender, usually curved, and terminate in sharp points at both ends. They are covered with minute spines which are scattered irregularly over the entire surface except at the extreme tips of the spicule.

Gemmules.—The gemmules were not abundant.

Gemmule Spicules.—These spicules average about 5 microns in thickness, the extremes ranging from 4 to 7 microns. In length they range from about 110 to 122 microns. They are straight or slightly curved. Many of them have quite irregularly formed rotules, though in the more typical ones the rotules are fairly well developed by the spines around the end of the spicule. The tips of the larger spines at the end of the spicules are slightly curved inward toward the centre of the shaft. Most of the spines are simple, sharp pointed and perpendicular to the shaft.

¹ Records of the Australian Museum vol xviii, No. 9, 10 June, 1933.