undulately grooved with longitudinal striæ. Grooves narrower than the interstices Culices somewhat close with an irregular quincuncial arrangement, but on the youngest branches sometimes alternate, projecting, semicircular, the septa of the upper side being replaced by a transverse ridge. Septa six to nine, ordinarily eight, thin at base, rapidly narrowing. All round the calices an irregular series of ampullæ as large as the calices. No columella visible in the somewhat deep fossa. The diameter of the branches is about two millim., diminishing to half that measurement near the tips. At the base there is a thick cœnenchyma from the coalescence of the branches, and in this the calices are clustered irregularly, and the calices are complete circles in some few cases, and do not project so much as those on the branches. The diameter of the largest is scarcely half a millimetre.

This species possesses remarkable characters which distinguish it from any other. Such are the semicircular calices, and the ridge which separates the upper, or non-septate side from the cœnenchyma. The small number of the septa also distinguishes it, and makes a correction necessary in the definition, which says that there are always 12 tentacles in the gasterozoids.

These specimens were dredged in great numbers from a depth of 30 fathoms off Port Stephens, and the colour was a fresh pink. Type specimens in the Sydney Museum.

On Australian Fresh-water Sponges.

By William A. Haswell, M.A., B.Sc.

Two years ago I found a species of Fresh-water Sponge inhabiting a pond near Brisbane, and sent to this Society a note describing briefly the spiculation of the species, together with that of a species the spicules of which were first observed by Dr. Morris in the Sydney water from the Botany Reservoirs. Shortly afterwards I heard from a correspondent in Victoria that in lagoons near Bairnsdale he had seen fresh-water sponges and would

endeavour to procure specimens for me, and I consequently withdrew from my publication my previous note in the expectation of acquiring further material. Specimens of the Victorian species have not come to hand; but a few days ago Mr. E. P. Ramsay succeeded after a persevering search in finding large specimens of a species of *Meyenia* in the river Bell at Wellington.

Only one species of Australian Fresh-water sponge has been described, it is the species named by Bowerbank* *Spongilla Capewelli*, from Lake Hindmarsh, Victoria, a species differing considerably from both the New South Wales and the Queensland species.

Spongilla sceptroides, *sp. n.*

Sponge green, encrusting, smooth, moderately elastic, not crumbling. Skeletal spicules very slightly curved, fusiform, acute at both ends, ornamented with scattered minute projecting points, which only become visible under a fairly high power. Statoblast spherical, defended by long, slender, straight, cylindrical spicules which are armed with numerous acute spinules, chiefly aggregated round the extremities, where they form distinct heads, the intermediate shaft having but two or three very small spinules.

Found in a pond near Brisbane, growing on submerged branches and twigs.

Spongilla botryoides, *sp. n.*

Sponge yellowish, flat, encrusting. Skeletal spicules curved, fusiform, acute, usually with scattered, extremely minute projecting points. Statoblast protected by a crust of short, strongly curved spicules which are provided at each end with a head composed of numerous short blunt or subacute spines producing a somewhat botryoidal appearance; the intermediate curved shaft free from spines.

Found growing side by side with the preceding.

* A Monograph of the Spongillidæ, Proc. Zool. Soc., 1863.

Meyenia Ramsayi, *sp. n.*

Sponge massive, tubercular, or with finger like projections, the oscula being situated between the tubercles or projections ; rather brittle ; colour grass-green to greyish-yellow. Skeleton-spicules curved, fusiform, rather abruptly acute, perfectly smooth. Statoblasts spherical, protected by a layer of birotulate spicules, consisting of a stout cylindrical shaft armed with 1-10 acute and prominent spines, and terminal rotulæ, the edges of which are deeply dentate or spinous, the teeth—to the number of between 12 and 20—being irregular in size and acute.

Found by Mr. E. P. Ramsay in the Bell River at Wellington, growing in considerable masses attached to submerged timber.

This species is rather nearly related to *S. Meyeni*, from Bombay, which has the amphidiscs of a very similar form ; but the skeleton-spicules of that species are obsoletely spinous, and the spines on the shaft of the amphidisc are fewer.

Of the fifth Australian species of Fresh-water Sponge, which occurs in the Botany Reservoirs I have only a few spicules kindly given me by Dr. Morris—the sponge itself not having yet been found, probably from the fact of its being, like *Meyenia Ramsayi*, a rather deep-growing species, and not to be readily got at unless when the water is exceptionally low. It is a species of *Meyenia*, and quite distinct from *M. Ramsayi* and *M. Capewelli*.

Note on the Brain of the Tiger Shark (*Galeocerdo Rayneri.*)

By William A. Haswell, M.A., B.Sc.

The acquisition a few months ago by the Australian Museum of a large specimen of *Galeocerdo Rayneri* (18 feet in length), enabled me to examine and make a few notes on its brain, which, as far as I can ascertain, has not been previously described or figured. Unfortunately the specimen had been dead for more than two days before I had the opportunity of dissecting it, and,