siliceous marls and tripolis are almost entirely made up of the remains of these creatures. Beds of tripoli occur at Laval and Lanoraie (Sir W. E. Logan) in the Lower Province, but their infusorial forms do not seem to have been specially examined.

SPONGES.—Modern sponges consist of a gelatinous mass, full of pores, and possessing in general the power of secreting a horny framework or kind of skeleton—the "sponge" of commerce. This horny framework is commonly strengthened by a number of sharp spines or spicula, crossing each other in various directions. The spicula are either siliceous or calcareous, according to the species. Fossil spicula often occur in flints and in infusorial deposits. Dr. Dawson has also detected them in the Drift deposits of Montreal, (see Part V.) The ancient sponges appear to have secreted a hard calcareous framework, and to have been more nearly related to corals. If we except the doubtful *Stromatopora* or *Stromatocerium*, (see under "corals," further on) our Canadian rocks do not appear to have yielded any determinate forms.

RHIZOFODS (or I)RAMINIFERA.)—The animals of this class are aquatic, and, with exceptions, of extremely minute size. They swarm in many of o seas. Their soft gelatinous body is sometimes naked, or enclosed ... a horny capsule; but more commonly it is protected by a calcareous and usually many-chambered shell, perforated for the passage of long and delicate filaments, whence the name of the class, from $\rho\iota\xi a$, a root. The latter forms, or those possessing shells, are generally known as *Foraminifera*. The only representatives of these in Canadian Deposits occur in the Drift or Post-Pliocene accumulations of Montreal and its vicinity, where they were discovered

by Professor Dawson. (See illustrations and descriptions in the Canadian Naturalist, vols. 2 and 4.) All have been recognised as identical with existing forms. Fig 66 is a greatly enlarged view of the most common species, *Polystomella umbilicatula*.



Fig. 66.

Radiated Animals.—The following Classes belong to this division : POLYPIFERA OF CORALS, ACALEPHA, and ECHINODERMATA.

CORALS.—The fossil forms of Canadian occurrence referred to this class may be conveniently arranged in two groups: *Graptolites* and *Corals proper*. The true position of the graptolites, however, is exceedingly uncertain; but the general opinion allots them a place