

BRYOZOA.—The bryozoons (so named from the general moss-like aspect of their united cells) are minute animals of marine existence. They form cell-colonies after the manner of most coral animals, but present a higher organization than these latter. They possess a distinct oral and anal cavity, and assimilate in many other respects to the molluscos type. The compound cell-structure in some forms takes the shape of leaf-like expansions, and in others is either dendritic, plumose, rounded, or irregular. It is also either free, or attached by growth to shells and other sub-marine bodies.

Modern bryozoons abound in all seas. Fossil forms of this class are also exceedingly numerous, ranging throughout the entire series of fossiliferous rocks. Their separation from corals is in many instances, however, a task of much perplexity; and, as those found in our Canadian strata are of little importance as test-forms, we confine our illustrations to a single example, *Fenestella elegans*, (Fig. 87), from the Niagara Group of the Upper Silurian Series. Representatives of the class, it may be observed, occur as low down as the Calcareous-Sand-Rock (see PART V.); and Professor Dawson, on the other hand, has found a number of species identical with existing forms, in the Post-tertiary deposits of Eastern Canada. These are described in the 4th volume of the *Canadian Naturalist*.



Fig. 87.

The *Graptolites*, already described as a section of the POLYPIFERA or CORALS, (see Vol. VI., p. 503) are referred by some palæontologists to the present class.

BRACHIOPODA.—The brachiopods are marine, headless mollusks, provided with a bivalve shell. The valves of this shell are always of unequal size; and one is situated on the dorsal, and the other on the ventral side of the animal. The ventral valve is almost invariably the larger of the two, and without reference to the anatomy of the mollusk would be naturally taken for the dorsal valve. The valves, though unequal in size, are “equilateral”—i. e., a vertical line drawn straight through the middle of each valve, divides the shell into two exactly equal parts. This serves to distinguish at a glance a brachiopod shell from the shells of other bivalves: or at least from the great majority of these, as some few, the *Pectens* for example,