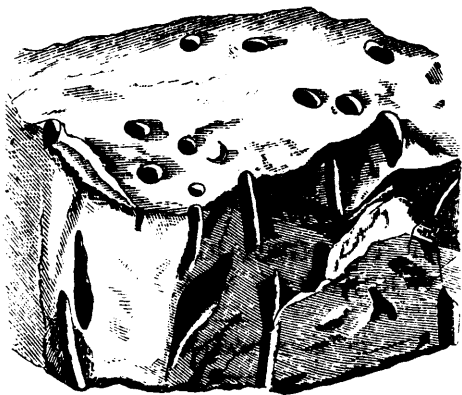


meaning the dawn of life of Canada. It was animal life in its lowliest form; being simply a mass of *sarcodæ*, or living jelly enclosed in a shelly covering. Ears, eyes, nose, mouth, digestive and locomotive organs were unknown to it. Lying on the bottom, it assimilated its nutriment from the surrounding water. Those early ocean depths teemed with many of its kind, and probably other such strange creatures now unknown. It may not be amiss here to



(Fig. 2.) Supposed Worm Burrows,—*Scolithus Canadensis*.

reflect that this is the oldest life known to us; that it is an antiquity when compared with the Pyramids in age,—they are as yesterday; that the ocean bottom where it lived became the first permanent dry land. But what a land! undiversified by hill or dale, no animal to roam over its desolate plains, nor plant to take root on its truly virgin soil. How bleak and inhospitable its appearance! Yet this was the first of a long series of changes from the still more bleak monotony of a universal ocean, by which this world was rendered habitable for man.

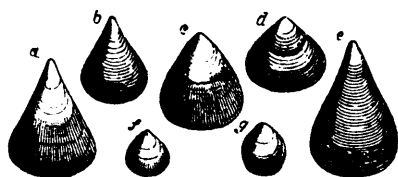
Long ages rolled away, leaving no other record in this locality. But we have elsewhere records that the ceaseless conflict between sea and land had been carried on since the first appearance of the latter. During this conflict the island nuclei were slowly developing into continents, and an extensive sand bar was forming a little to the south of us. Stretching out northwards, it extended within our borders; and this sand bar, for a short time exposed at low water, was the first unassuming *debut* of our beautiful island. On the rocks exposed at St. Ann's we

find ripple marks, wind hillocks, sun-cracks, and rain impressions. From these we gather that gentle breezes played over the surface of that early

Canadian sea; that fierce gales swept over those barren wastes; that a torrid sun shed its lurid glare over its sandy plains, and that gentle showers descended upon the teeming earth. So abundantly had teeming things multiplied that the sandstone is permeated in every direction by what are supposed

to be worm burrows.

Along with these are associated shells of an animal going under the family name of *Lingula*, because shaped like



(Fig. 3.)—*Lingula Acuminata*.

a tongue. They differ from ~~all~~ belonging to the same order (that is lamp shells) in that their shells are composed of phosphate, while those of the others are of carbonate of lime. Another peculiarity connected with them, is, that they belong to the only *genus* of shells having living representatives, all other *genera* of that time having given place to those introduced at a much later period. Still more interesting to us are the tracks left on these rocks by what are now believed to be *Trilobites*. This *Protichnites* as it has been named, being the first creature whose foot-