and we may reasonably infer that the Laminarian Zone of olden times did not materially differ from the one of the present day. Bryozoan (Polyozoa) so abundant in the chert band of the Niagara Escarpment here, cannot be looked upon as safe guides in deducing geological conclusions regarding the depth of primeval seas. The modern Sea Mats, Mooses and "Mermaids Lace Work" are worldwide, inhabiting alike Arctic and tropical waters, attached to the floating Gulf weed (Sargassum) and to the dense sea forests that annually spring up about Norfolk Bay and the shores of the North Pacific. Indeed, fossil plants, Algæ or Fucoids, are not certain indicators on this point either unless undoubted evidence can be obtained that sea currents had not transported the broken sea weeds from a distant place. The Laminarian Zone is supposed to extend from low water to about fifteen or sixteen fathoms, but banks, etc., may occur a considerable distance from land and there the plants would flourish, no doubt, yet they are liable to be torn away from their anchorage in heavy gales and carried seaward, not shoreward.

THE CHITON (MODERN COAT OF MAIL SHELL).

I was recently asked when the above named shell first put in an appearance in a fossilized state. The late Professor Billings claimed he discovered a specimen in the Black River Series Cambro, Sil. He named it "Chiton Canadensis."

Another was described by the late Dr. Salter, Palæontologist of the Geological Survey of Great Britain and Ireland. It came from the Coal Measures, Europe, and was named Chiton Carbonarius. The former I have not seen figured or described, but little doubt can be entertained regarding the correct classification of the latter. We may see how very imperfect the geological Record must be when no specimens have been found in the intervening beds. The Devonian formation alone is nearly three miles in thickness. Dentatium, commonly called the Tusk Shell, is another Mollusc, which apparently survived from Palæozoic times.

ANADONTA-UNIONIDÆ.

In "Characteristic British Fossils," of the late Professor W. H. Baily of Dublin, you will find figured the oldest fresh water bivalve I think yet discovered. It occurs in the upper part of the old red

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