2. No fossils of the order (*Xiphosura*) to which *Limulus* belongs have been found so low down as the Potsdam sandstone.

5. Large Trilobites occur there in abundance.

The weight of the evidence, therefore, favours the inion that the tracks in question are those of Trilobites. It is important to bear in mind that *Protichnites* and *Climactichnites* occur together on the same slabs of sandstone. Dr. Dawson's observations clearly prove that both might have been made by an animal of the same species under different circumstances, accordingly as its walking- or its swimming-feet were made use of. Judging from the width of the tracks, I believe that several of those of both kinds on one of the slabs, now in the Museum of the Survey, were made by the same individual.

4. On a rolled-up specimen of Calymone senaria filled with small ovate bodies.

It is above stated that while seeking for additional evidence rolating to the limbs of Trilobites, a number of specimens were cut up and polished. One of these was an exceedingly perfect, rolled-up *Culymene senaria*, from the Hudson-River group at Cincinnati, in Ohio.

This animal (Pl. XXXII. fig. 3) appears to have shut itself up so completely that the fine mud in which it was buried could only gain access through the small fissure at a, where the points of the head and tail come together. There is here a small space, within the letters, c, d, e, f, which is of a light yellowish brown. I think that neither the mud, nor even the muddy water, penetrated further. There is no trace of comminuted fossils in this space, as there is in most specimens that I have cut up. The whole of the remainder of the cavity is filled with a greenish-grey spar, with a patch in the back part of the head at b of a different colour. This spar holds a vast number of small ovate bodies (fig. 4), of which the greater diameter is about an eightieth of an inch, and the lesser a hundredth. They are of a lighter colour and more opaque than the When examined with a good glass, and under favourable matrix. light, they seem to float, as it were, in the spar. The hypostoma c d, is in place, and is here cut through. From the end of the tail, at e, a thin rough line runs inwards, nearly to the large spot at f, and is obscurely indicated thence to the end of the hypostoma at c. The spot f appears to be organic. It is of an ovate form, and has four or five obscure ribs across it at right angles to its greater diameter. There are other dark spots scattered irregularly throughout the matrix, that possibly may represent organic structures.

It is possible that the line e f c may represent the edge of the ventral integument cut through; for in a rolled-up trilobite this must be exactly its position. The small ovate bodies I beli \neg to be the eggs.

1870.]