Sculpture.—All these forms of plates, except for the keels and furrows described, have a comparatively smooth surface, there being only obscure lines of growth, and these not usually seen except toward the edges of the plates, and to these edges the lines are parallel.

Horizon and Locality.—Gray shales of Div. 1 *c* at St. John and Hanford Brook, St. Martin's. Somewhat rare.

The reference of these plates to Cirripedes is largely a matter of conjecture. As oval and circular plates have been found to occur along the dorsum of several genera of fossil Cirripedes plates of the type *L* and *D* may have had such a position, those of type *B* are evidently lateral, though the elongated form is unusual. Plates of the type *C* are more plentiful than the others and have the appearance of overlapping lateral plates. I have seen plates from the crown and lateral edges of a Trochocystites that resemble these, with similar flange and furrow. Plates of the type *F* more nearly resemble the opercular armature of modern Cirripedes, and seem to be the representatives in the old rocks of the conical plates of Plumulites,* and are perhaps scutal plates, while the type *G* is analagous to the laterals of such a genus as Scalpellum.† The longitudinal curved ridge of type *F* is comparable to those figured by Barrande. Hall and J. M. Clarke.‡

The broad sub-semicircular or subtrapezohedral form of many of these plates may seem unusual, but is not without a precedent in extinct genera, as Archæolepas and Loricula, which have rows of similar broad plates on the peduncle.§

In the shales which contain *Plumulites Manuelensis* at Manuel Brook, Newfoundland, are casts of calcareous plates which are similar to the above, thus resembling the coronal plates of Trochocystites; but they are different in form from those of the Eteminicus zone at St. John; the commonest form has a very heavy keel or furrow and is truncated at each end. The material is insufficient to determine the nature of these plates, which are sparsely scattered over layers in which *Microdiscus punctatus* abounds.

TRILOBITA.

AGNOSTUS, Brongniart.

This is the most aberrant of all the primordeal trilobites of common occurrence, and the most difficult to associate with the

*Syst. Silur. Bohem., vol. i., Supp. pl. 20, figs. 7, 8 and 9 *b*. Pal. N. York, vol. vii., pl. xxxvi., figs. 1 and 3.

†Traité de Palæontologie, Zittel & Barrois, tome ii., p. 536.

‡Syst. Silur. Bohem. vol. i., Supp. pl. 20, figs. 22, 1 *a* and 5 *b*; also Pal. N. Y., vol. vii., pl. xxxvi., figs. 10, 11 and 16.

§ Traité de Palæontologie, Zittel and Barrois, p. 533 and 534.