River, Cape Breton, contain several species of trilobites, which show that these measures are in the upper part of the Olenus Zone, or Lingula Flags of Great Britain. The species observed were the following:—Peltura scarabeoides, Wahl; Sphæropthalmus alatus, Boeck; and Agnostus pisiformis, Lin. There is also a small Lingulella similar to that which characterizes the Upper Flags of the St. John Group, and also an Orthis, similar to Orthis lenticularis, Dal.

In a small collection of fossils sent to him by Mr. Howley, of the Geological Survey of Newfoundland, a number of species not heretofore reported from that island were observed. With the aid of these and the description of other species given by the late Mr. Billings and by Mr. Whiteaves, Mr. Matthew is able to classify roughly the Cambrian horizons of that island.

HORIZON OF PARADOXIDES KJERULFI.

The oldest fossils appear to be those of Topsail Head and Brigus in Conception Bay. Mr. Billings describes from these places:—Agraulos strenuus, Bill.; Stenotheca paupera, Bill.; and Iphidea, allied to I. bella. To these may be added the following as characterizing the limestones of Topsail Head:—Paradoxides Kjerulfi, Linrs.: Selenopleura, sp.; Ptychoparia. sp.; Stenotheca, sp.; Straparollina? sp.; Hyolithes Micmac.

HORIZON OF THE CONOCORYPHEES.

Manual River, a small stream near Topsail Head, appears to give the next horizon, for Mr. Whiteaves chronicles from this place:—Microdiscus punctatus, Salter; M. Dawsoni, Hartt; Agnostus Acadicus. Hartt; Conocephalites (Liostracus) tener, Hartt; C. (Conocoryphe) Baileyi, Hartt; and C. (Ptychoparia?) Orestes, Hartt. Of these species the second, fourth and fifth do not range as high in the Cambrian beds of Acadia as the others, and it is possible that the collections examined may have been from two horizons. The assemblage of species, however, may be taken to correspond with those of Band C. of the Acadian area. In a fragment of shale from the same locality, the following