

## NEWFOUNDLAND.

§ 49. As we have already noticed, the Georgia fauna is found in the vicinity of Quebec, Canada, and eastward along the south shore of the St. Lawrence River, in conglomerates of a later group; but at Bonne Bay on the west coast, L'Anse au Loup on the north side of the Straits of Belle Isle, and at Topsail Head, the extreme eastern locality, near St. John's, it occurs in situ. The Topsail Head locality has not been thoroughly worked, but I recognized, in the collections of the Canadian Geological Survey:

Scenella reticulata.

Iphidea bella.

Stenotheca rugosa.

Protypus senectus var. parvulus.

Of these *Stenotheca rugosa* and *Protypus senectus* are found at L'Anse au Loup, and Bic Harbor, below Quebec.

§ 50. The section given by Logan (Geol. Canada, 1863, pp. 865-867) of the strata holding the Georgia fauna at Bonne Bay gives over 2,000 feet in thickness; but, as the section was not taken by him and as there is confusion in relation to the fossils collected from it, a doubt remains as to its value. The species mentioned (Geol. Canada, 1863, p. 866) include *Kutorgina Labradorica*, *Obolella chromatica*, *Salterella* sp., *Olenellus* sp.? *Ptychoparia* sp.? Reference is made to a species of *Bathyrurus* like *B. extans*, and, from an examination of the specimens and also associated fossils, I have no doubt that it is *Bathyrurus extans* of the Trenton. The other species mentioned I did not see when looking over the collection of the Geological Survey of Canada. The section at L'Anse au Loup, as given in the Geology of Canada, p. 288, shows 231 feet of arenaceous beds at the base, overlaid by 143 feet of gray, reddish, and greenish limestones. I recently examined the collections from these limestones, now in the Canadian Geological Survey collection, and found the following species, most of which had been recognized and described by Mr. Billings:

Palæophycus incipiens.

Stenotheca elongata.

Ethemophyllum profundum.

Stenotheca rugosa.

Archæocyathus Atlanticus.

Hyalithes Billingsi.

• Archæocyathus Billingsi.

Salterella pulchella.

Iphidea bella.

Salterella rugosa.

Kutorgina cingulata.

Olenellus Thompsoni.

Kutorgina Labradorica.

Ptychoparia miser.

Obolella chromatica.

Protypus senectus.

Orthis, 2 sp.

Solenopleura (like *S. Nana*).

§ 51. In passing from the eastern to the western side of the continent the Georgia horizon is not met with, as far as known, until we reach into the heart of the Rocky Mountains, in the great Wasatch Range of Utah.

Prof. N. H. Winchell has described *Paradoxides Barberi* from so-called Potsdam strata (Geol. and Nat. Hist. Survey Minnesota, Thirteenth Ann. Rep., 1885, p. 67), but after examining the specimen I am led to doubt