

I.—LOWER SILURIAN.

The Atlantic coast series, which I regard as probably of this age, has afforded little that is new since my former publication on the subject. It extends continuously, with prevailing east and west strike and northerly dip, from Cape Canso to the middle of the peninsula at Halifax Harbour. Thence it continues with prevailing north-east and south-west strike to the western extremity of the province. Its most abundant rocks are coarse clay slate and quartzite in thick beds. In some districts the slates are represented by mica-schist and gneiss, and interrupted by considerable masses and transverse bands of intrusive granite. It has afforded no fossils; but it appears to be the continuation of the older slate series of Mr. Jukes* in Newfoundland, which has afforded trilobites of the genus *Paradoxides*.† These fossils would indicate a position in the lower part of the Lower Silurian series, possibly on the horizon of the Potsdam sandstone or Lingula Flags. If so, the Lower Silurian limestones are either absent or buried by the unconformable superposition of the next series, or of the carboniferous beds which in some places immediately adjoin these older rocks.

It is however proper to state that on a comparison of these rocks with the series of altered deposits from Eastern Canada, collected by the Canadian Survey, and elaborately examined by Mr. Sterry Hunt, they appear more nearly to resemble those of the Hudson River group than any other of the series. It seems also, that chialstolite and staurotide, which occur abundantly in some parts of the Nova Scotia coast series, as for example, at Cape Canseau and in Shelburne, are characteristic in Canada and New England of altered Upper Silurian and Devonian rocks. It is possible that this last fact may be accounted for by the local occurrence of some beds newer than the others; and the characters of the Silurian and Devonian series, as seen elsewhere in Nova Scotia, seem at least to exclude the mass of these coast rocks from any formation newer than the Middle Silurian.

II.—MIDDLE AND UPPER SILURIAN.

The inland group of metamorphic rocks is more variable in its character, presenting many varieties of shales and slates some-

*Survey of Newfoundland.

† Salter, Proceedings Geological Society of London, 1859.