

raised by the occurrence together of coral, in the same locality, of silurian and carboniferous forms.

I entertain no doubt of their being *in situ*, and occurring in the same beds, for the following reasons :

1st. The Syringopores of Griffith's Island were found at an elevation of 400 feet above the sea, and, therefore, could not be brought by drifting ice.

2nd. The specimens were apparently of the same texture and composition as the native rock, whenever the latter was visible from under the snow.

3rd. I do not believe in the lapse of a long interval of time between the silurian and carboniferous deposits,—in fact, in a Devonian period.

4. The same blending of corals has been found in Ireland, the Bas Bon'onnais, and in Devonshire, where silurian and carboniferous forms are of common occurrence in the same localities.

5th. In the carboniferous beds proper of Melville Island and Bathurst Island, there were not found, so far as I am aware, any corals of the same character as those at Griffith's Island, Cornwallis Island, and Beechey Island, which could give a supply to be drifted to the latter localities in a Pleistocene sea. It is plain, from the height at which the corals were found that, if they were brought to their present localities by ice, it must have been during the period known as Post-tertiary, as the present conditions of drift-ice in Barrow's Straits do not permit us to suppose them to have been placed where we now find them by existing causes.

The occurrence of coal-beds in such high latitudes has been speculated on by many geologists—in my opinion, not very satisfactorily; as it is very difficult to conceive how, even if the question of temperature was settled, plants even of the fern and lycopodium type could exist during the darkness of the long winter's night at Melville Island. This difficulty is increased by the facts made known to us by the