thelevel of the sea; and in New England nearly six thousand feet above the The gigantic rounded ocean level. boulders of granite and other hard rocks have been removed from the parent strata and worn round by glacial Ice, no known current or exposure to the atmosphere, however much prolonged. being sufficient to round them on all sides and to produce striations on masses many tons in weight. An inspection of a good map of New Brunswick and Maine will show that the axes of all the lakes have a general direction from north to south, or from north towards the south east, or south west, the directions of their excavated basins being determined by the Ice-flow.

The great Canadian Lakes from five hundred to one thousand feet deep and surrounded by unbroken rocky ruins are excavated in the soft strata on the edge of the hard Laurentian rocks which form the back - bone of the American Continent. The general general direction of the Ice-flow in New Brunswick at the close of the glacial epoch was about ten degrees west of north. The strice or grooves on the rocks are found at all altitudes, and even the summits of the highest mountains are grooved and polished, showing that the Ice masses which once covered the province with a glacial pall ex-ceeded two thousand feet in thickness. In order to account for the southerly flow of the Ice, it is necessary to suppose that an elevation of the northern part of the continent took place to the extent of several hundred feet, and of this phenomenon ample evidence ex-In Barrow Straits sea shells are ists. found one thousand feet above the preent ocean level. At Montreal the shells are found four hundred and seventy feet above the sea; on the shores of Lake Champlain, four hundred feet, and on the coast of Maine two hundred feet, showing an increasing elevation towards the north similar to the change in level of the earth's crust which is now taking place in Sweden. Among the most striking results of Ice action

are the great inland escarpments without beaches on their slopes, which form so characteristic a feature in many parts of America. The Niagara escarpment, which on Lake Huron rises seventeen hundred feet above the present sea level is a familiar illustration. These escarpments were formed originally by sub-glacial rivers excavacating and washing away laterally the face of the cliff in advance of the glacial mas-There are three great escarpments ses. north of the fortieth degree of latitude, running roughly parallel to one ano. ther, and rising towards the west from six hundred to three thousand feet above the sea, and following the course of isothermal lines. These are first. the Niagara escarpment; second, the Riding Mountain escarpment west of Lake Winnepeg, and third, the escarpment of the grand Coteau de Missouri. These wall-like boundaries are about seventeen hundred miles long, they vary from four hundred to one thousand feet in abrupt altitude, ring suddenly from plains which lie to the north of them, and they are thought to represent the boundaries of three great continental masses of glacial Ice, like that which now covers part of The immense hydraulic Greenland. power of the sub-glacial rivers was competent to cut away the soft rock in advance of the glacial Ice. The lower The lower portions of these escarpments have been remodeled by the sea, or by interior fresh water lakes. All the phenomna of striated and polished rocks, lake basins, many inland escarpments, inland beaches, "horsebacks," the formation and partial distribution of huge boulders, and the origin of the unstratified drift clays are among the varied results of the power of glacial Ice, and manifestations of the work it has accomplished on the earth. It is an interesting subject in connection with Ice-work to notice the supposed existence of glacial moraines on the surface of the moon, and the recently announced diminution in amount of snow about one of the poles of the planet Mars.

CORRESPONDENCE.

TORONTO, Jan. 17, 1866. MY DEAR MR. BDITOR.-I was very glad to hear from you, and will answer your questions with pleasure.

with pleasure. 1. I do very decidedly "think a Church Synad desirable for a North American Dioczee." I think it more than desirable. I hold

it to be well nigh essential to the vitality and progress of the Church.

2 "Canadian Sinods," both Diocesan and Provincial, are, in my judgment, "torking satisfactorsly." I am not aware of the least jar having taken place in their working since the day of their institution, when the first

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