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The Recent Advance of the Polar Ice in the Greenland and Spitzbergen Sea

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cultivation, and in a somewhat less degree to the production of sugar and coffee. The people at present on the river are emigrants from the province of Ceara, who are of little use from an industrial point of view; but, in order to promote the development of this region, the Brazilian Government are said to be making arrangements for a large immigration of Chinese. The gentleman to whom Lieutenant Jones refers has already commenced the construction of a road which is to connect his settlement on the Purús with the savannahs, a distance of 37 miles, and his object is that it should be continued across the savannahs to the point where the Beni and Mamoré unite to form the Madeira. He is endeavouring to interest the Bolivian Government in the project, which, if carried out, will have the effect of drawing a large cattle-trade to the Purús.

New Geographical Society.—A new Geographical Society has lately been formed at San Francisco, under the title of the Geographical Society of the Pacific. Professor George Davidson, of the United States Coast and Geodetic Survey, is the President; and our associates, Mr. Wm. Lane Booker, Her Majesty's Consul for the States of California and Oregon, and Mr. C. Mitchell Grant are respectively Vice-President and Secretary. The objects of the Society are "to encourage geographical exploration and discovery; to investigate and disseminate information by discussion, lectures, and publications; and particularly to establish in San Francisco, for the benefit of commerce, navigation, and the general interests of the Pacific Slope, a place where the means will be afforded of obtaining accurate information respecting the countries bordering on the Pacific Ocean, as well as all other parts of the world." The Society will be in a favourable position for obtaining early intelligence regarding the opening up of the Territory of Alaska, and the northern region generally.

CORRESPONDENCE.

The Recent Advance of the Polar Ice in the Greenland and Spitzbergen Sea.

Map, p. 768.

PETERHEAD, 10th October, 1881.

DEAR SIR,—I have sent you by mail to-day a Greenland chart, showing the margin of the ice between Iceland and Spitzbergen during the past two years.

The increase of the ice, I think, is due to the severe winter we have had lately, and to the absence of the usual drift of the ice, which was very marked in 1880 and 1881.

We have often great difficulty in keeping up our northing, being constantly driven south by the rapid drift of the ice. The past two years have been quite different, the ice has been almost stationary notwithstanding that the winds were strong from the north, up to the end of June in both years.

The absence of southerly drift can only be accounted for by the lanes of water making amongst the floes, being immediately frozen up again with the severe frosts, keeping the ice fixed together, and preventing any large waters being made to force the ice south.

The ice has not diminished during the last two summers so fast as usual, owing to the frosts covering the lanes and pools of water with bay ice, preventing the wash of the water from cutting into it and washing it away. Close ice melts very slowly, open ice soon disappears.

This winter the ice may spread still further, unless the winds prevail from the south to raise the temperature, drive the ice north and eat into it along its southern edge. If the winter winds are northerly, we may expect to meet with the ice in the spring, approaching the Faroe Islands on the west, and find it down on the coast of Norway on the east.

It appears to me that the advance of the ice south has already affected our climate. The cold bleak winds, with the dull, shapeless, leaden coloured sky, and want of sunshine, which we have had here all summer, are very characteristic of Arctic weather. We had frost here early in August, and ice was seen on the pools. I am afraid we may expect an early and severe winter.

When the *Eira* returns, Mr. Leigh Smith may add his observations, and complete the lay of the ice to Gillis Land.

DAVID GRAY.

Askja, the Largest Volcano of Iceland.

16, KINGSTON TERRACE, CHARLTON, 3rd November, 1881.

I find upon making a more extended examination this summer of the lava-flood erupted in the Mývatns Örafi in 1875, that its description in my paper, published in the August number of the 'Proceedings,' is in some particulars incorrect.

The lava covers a larger area than is there stated, viz. "twelve miles in length from S.S.W. to N.N.E., by from half a mile to three miles in breadth," while the extent of the subsidence is not so great.

Both in 1878 and 1880 I approached the site of the eruption by crossing the deserts from the north-west, and when at a distance of three or four miles from the northern end of the lava-bed I came upon deep parallel rifts running therefrom in that direction, between which an extensive subsidence had recently taken place, its depth increasing as the lava was neared. I followed up the westernmost of the rifts until it was concealed by a sheet of lava which had spread out beyond it from the main bed; the northern end of which lies for over a mile in the trough-like hollow formed by the subsidence. Having no tent with me, and the nearest farm, Reykjahlíð, being distant 18 miles, I upon neither occasion examined the bed farther southward than the point where the westernmost rift was hidden by the flow of lava westward, or terminated; ascending to the summit of a crater-cone, about a mile and a half from the northern end of the bed, to get an idea of its extent, it stretching farther southward than the eye can follow when one is standing on the level ground. Deceived by the wonderful clearness of the atmosphere (frequently in Iceland it is possible to see from the summit of one mountain others 70 miles off), I judged the extent of the lava-bed to be as stated, whereas its length is at least 18 miles, and its greatest breadth six or seven. The people of Reykjahlíð, who scour the Örafi every autumn in search of strayed sheep, say it is over four Danish (= 22 English) miles in length. This year I stayed some time at Reykjahlíð, and, believing the bed to be but 12 miles in length, I made an early start one morning in August to ride round it, my guide and myself each having a spare pony. After riding up the western side