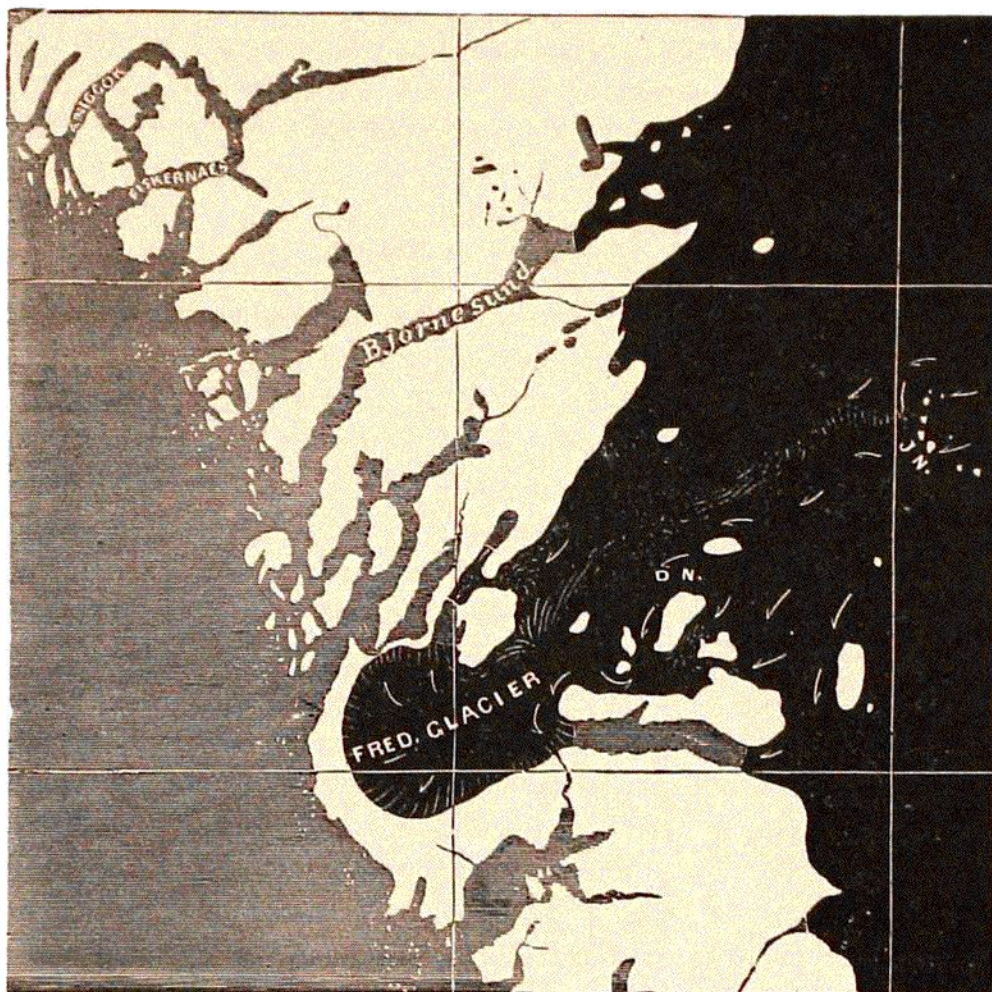


20', the Humboldt Glacier has a breadth on the sea of 45 miles. Over the interior ice there are small lakes and rivers; the latter plunge down crevasses to become underglacial streams. Thus, a large part of the fiords, on the west and east, and also on the north side of Greenland, as shown by Peary, are the courses of glaciers.

212.



The black part, ice; white, land; shaded, water; J N, Jensen's Nunataks, or rocky peaks; D N, Dalgner's Nunataks; white lines on the black, crevasses; arrows, glacier-flow. J. A. D. Jensen, '79.

The Greenland ice is in many places covered with a minute Alga, the *Protococcus nivalis*, and in some places so much of it lies together that it becomes putrescent. There is also much dust — the cryoconite of Nordenskiöld — which may be of volcanic origin, and possibly from Hecla. An analysis of it obtained Silica 62.25, alumina 14.93, Fe_2O_3 0.74, FeO 4.64, MnO 0.07, magnesia 3.00, lime 5.09, soda 4.01, potash 2.02, phosphoric acid 0.11, sodium chloride 0.06, water 3.20, which is near the composition of oligoclase with some hornblende, or pyroxene, and traces of other ingredients. Doctor Rink, the Danish explorer, says that out of the 10 inches of annual precipitation 25 per cent are needed to supply the loss from icebergs, and that the rest makes up the amount lost by evaporation and by the discharge of waters.

In the Antarctic regions, Captain Ross found glaciers in lat. 75° – 78° S., near long. 170° E., and Captain Wilkes (1840) reported the discovery, at intervals between 165° and 100° E., along the Antarctic circle, of the outline of a great ice-barrier 150' to 180' high. The "Challenger" expedition followed the course of the barrier from 80° E. on the Antarctic circle to 100° E., thus carrying Wilkes's line 20° farther west; and on Heard