1º 76'; where, after e eastern coast of er, when the great a of the frost, a curt, along the Asiatic at surface ice, furmam, and the heated Siberian coast. the seat of an act-

ependent of either; between the Atlanhe two oceans are

ecognized equaliza-

follows of course.

For if it be not,
I and upon general
And an argument
eberg is an offeast
ent in its production
and from which she
at detached masses,
ints, while their size
te zone before their
ice hulks are conroughout the entire
ircumscribing coast
them.

to that a large area stober, in the upper lled by the whalers of the intermediate ost northern known lare miles.

ving traveled to the d the latest explorahirty-six miles wide

the freezing point; tzbergen ice as high ater temperature as so above zero.

he received theories earth.

n only be inferred. positive data, ceased tyer's theorem), that ave, as the members Sir David Brewster, by a combination of the observations of Scoresby, Gieseke, and Parry, determined the existence of two poles of cold, one for either hemisphere, and both holding a fixed relation to the magnetic poles. These two seats of maximum cold are situated respectively in Asia and America, in longitudes 100° west and 95° east, and on the parallel of 80°. They differ about five degrees in their mean annual temperature; the American, which is the lower, giving three degrees and a half below zero. The isothermals surround these two points, in a system of returning curves yet to be confirmed by observation; but the inference which I present to you, without comment or opinion, is, that to the north of 80°, and at any points intermediate between these American and Siberian centres of intensity, the climate must be milder, or, more properly speaking, the mean annual temperature must be more elevated.

Petermann, taking as a basis the data of Professor Dove, deduces a movable pole of cold, which in January is found in a line from Melville Island to the River Lena, and, gradually advancing with the season into the Atlantic Ocean, recedes with the fall and winter to its former position. Such a movement is clearly referable to the summer land currents with their freight of polar ice.

With the consolidation of winter, the ice recedes, and the Gulf Stream enters more perceptibly into the far north. The mean temperature of the northeast coast of Siberia is forty or fifty degrees colder than that of the western shores of Nova Zembla, while in July it is twenty degrees higher.

But if any point between 75° and 80° north latitude, a range sufficiently wide to include all the theories, be regarded as the seat of the greatest intensity of cold, we may, perhaps, infer the state of the Polar Sea from the known temperatures of other regions, equally distant with it from this supposed centre; though, as the lines of latitude do not correspond with those of temperature, this must be done with caution.

I have been interested for some time in examining this class of deflections; and I find that they point to some interesting conclusions as to the fluidity of the region about the pole, and its attendant mildness of weather.

Thus, for instance, at Cherie Island, surrounded by moving waters, but in a higher latitude than Melville Island, the seat of the greatest observed mean unual cold, the temperature was found so mild throughout the entire Arctic winter, that rain fell there upon Christmas-day.

Barentz, a most honest and reliable authority, speaks of the increasing warmth as he left the land to the north of 77°. The whalers north of Spitzbergen confirm the saying of the early Dutch, that the "Fisherman's Bight" is as pleasant as the sea of Amsterdam.

Egedesminde and Rittenback, two little Danish and Esquimaux settlements on the west coast of Greenland, in latitude 70°, with a climate influenced by adjacent land masses, but nevertheless not completely ice-bound, are in the isothermal curve (summer curve) of 50°, giving us a vegetation of coarse grasses, and a few crucifers.

In West Lapland, as high as 70°, barley has been, and I believe is still grown; though here is its highest northern limit. If 80° be our centre of maximum cold, the pole, at 90°, is at the same distance from it as this West Lapland limit of the growth of barley!

But there are other arguments based upon known facts, and facts popularly recognized, bearing upon the theory of an open sea: