

APPENDIX.

Since delivering the address I have received from Captain Wyman, the Superintendent of the Hydrographic Office of the Navy Department, a translation of Lieutenants Weyprecht and Payer's preliminary report, which is even far more confirmatory of the "Thermometric Gateway" theory than this telegram from Tromsøe would indicate. I cannot give it in full, but make the following extracts, viz:

* * "The weather in Finmark during the preceding seasons augured the very worst for the state of the ice in the high north. * * *

"On the 21st of August we pushed, on the meridian 28° E., further into the ice, reaching south of Gillis Land, the parallel of $77^{\circ} 17'$ N. The ice between the 28° and the 36° of longitude proved to be looser and thinner than, perhaps, in any other part of the arctic region, consisting of small fields of an average thickness of two feet (above and below the water), which closed up to long strips with fresh northerly winds. Flakes were nowhere to be seen, and the horizon appeared as a straight, unbroken line; one could believe himself to be on a fresh-water lake instead of the Arctic Ocean. A strong steamer could have taken a straight course through the ice, particularly between the meridians of 28° and 32° E, where it was thinnest. * * *

"We reached, on the 29th, $77^{\circ} 30'$ N., on the meridian 42° E. without meeting ice, and were still more surprised by its entire absence, even beyond the parallel of latitude 78° N., which we crossed on the 30th, on a northeastern course, near the meridian $41^{\circ} 30'$ E. When coming up, at last, in the night of that day, with the border, *it trended north instead of easterly*, as heretofore. At noon of the 31st we were in $78^{\circ} 25'$ N., 42° E., and at 8 p. m. in $78^{\circ} 41'$ N. within the ice, which now appeared *to trend northeasterly*. Toward the west, it lay quite close, with a strong glittering and some icebergs among it; toward the north, however, it was loose.

"At midnight of the 1st of September we attained, within loose drift ice, our highest latitude, by the log, in $78^{\circ} 48'$ N., or, by an indifferent observation obtained the succeeding noon, in $78^{\circ} 37' 3''$ N., on the meridian $42^{\circ} 30'$ E. * * *

"The temperature of the water in $77^{\circ} 30'$ N. on the 3rd of September, was observed to be 37.6° F., and in $76^{\circ} 30'$ N., on September 8th, in sight of Cape Nassau, even 40.1° F. * * *