

of the "Germania," steamer, and sailing vessel "Haasa." His instructions were, I believe, pretty much the same on this occasion as those given to Captain Koldewey the previous year, which were, to make Greenland the objective point and to endeavor to pass round that island by finding a channel open along its east coast, and thence to Behring's Straits, his idea being that Greenland trends off to the northwest, inclining southwardly and terminating near these straits. The Germania was frozen in in latitude 75° after reaching the coast, where she remained the winter, and was unsuccessful the following season also. The Haasa was beset by ice near the Greenland coast in latitude 73° , crushed and sunk. Her crew saved enough from their vessel, however, to protect and subsist them on the ice until, after terrible sufferings, they left it in May, 1870, in latitude $61^{\circ} 12'$, in their boats, having been carried two hundred miles to the southwest along the coast of Greenland during their sojourn upon the ice.

Dr. Petermann is still skeptical as to the existence of an open sea around the Pole as I have it here represented, and although he claims, I believe, the credit of having for some years past said that the best route to the Pole "is right up between Spitzbergen and Noya Zembla," yet he has also said that the best way to penetrate the ice-belt is to go *against* the current and not with it; and, in accordance with that belief, he sent both of his expeditions of 1868-69-70 to the east of Greenland, instead of to the east of Spitzbergen, to look for a route, and has written to Professor Maury, under date of Nov. 29, 1871, that "I am now, night and day, at work to get up a German or Austrian expedition for next year, to steam right along the Gulf Stream, past the northernmost cape of Asia, the New Siberian islands, to Behring's Straits." From this, you see, he thinks that the Gulf Stream does not go to the Pole, but passes off to the eastward, along the coast of Asia.

It is to be hoped, however, that Dr. Petermann will reconsider this plan before the sailing of his expedition, and for two reasons: first, because if this route is attempted, his vessels will run directly down into the ice-belt again and find it impracticable; and the second is, the shortest distance from the point reached by Payer and Weyprecht to Behring's Straits, is by following the arc of a great circle which runs northeast until near the pole and then southeast to where the Kuro-Siwo probably pierces the ice-belt on the meridian of 160° west.

SIGNAL COINCIDENCE.

You will perceive that none of these expeditions have attempted to follow the northeast branch of the Gulf Stream, as here suggested on my map, though they have been hovering all round it; but a small sailing vessel, hired by Lieutenant Julius Payer, of the Austrian army, and Lieutenant Weyprecht, of the German navy, sailed last June for the