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Lecture on the Access to an Open Polar Sea in connection with the Search after Sir John Franklin and his Companions, read before the American Geographical and Statistical Society at its regular monthly meeting, by Dr. Kane, December 14, 1852.

THE north pole, the remote northern extremity of our earth's axis of rotation, is regarded, even by geographers, with that mysterious awe which envelops the inaccessible and unknown.

It is shut out from us by an investing zone of ice ; and this barrier is so permanent, that successive explorers have traced its outline, like that of an ordinary sea-coast.

The early settlements of Iceland, and their extension to Greenland, as far back as 900 A.D., indicated a protruding tongue of ice from the unknown north, along the coast of Greenland. I must express a doubt if the early voyages of Cabot, and Frobisher, and the Cortereals did more than establish detached points of this line. The voyages, however, of the Basque and Biscayan fishermen, about 1575, to Cape Breton, made us aware of a similar ice-raft along the coasts of Labrador to the north ; and the commercial routes of the old Muscovy company, aided by the Dutch and English whalers, extended this across to Spitzbergen, and thence to the regions north of Archangel, in the Arctic Seas. The English navigators of the days of Elizabeth, the " notable worthys of the North West Passage," spoke of a similar ice-raft up Baffin's and Hudson's Bays, and the Russo-Siberians gave us vaguely a girding-line of ice, which protruded irregularly from the Asiatic and European coasts into the Polar Ocean. Lastly, Cook proved that the same barrier continued across Behring's Straits as high as $70^{\circ} 44'$ north.

From all this it appeared that the approaches to the pole were barricaded with solid ice. We owe to the march of modern discovery, especially stimulated by the search after its great pioneer, Sir John Franklin, our ability accurately to define nearly all the coasts of a great polar sea, if not to lay down the no less interesting coast of a grand continuous ice-border that encircles it.

It is worthy of remark, that this ice, although influenced by winds, currents, and deflecting land masses, retains through the corresponding period of each successive year a strikingly uniform outline.

During the winter and spring, from October to May, or eight months of the year, it may be found traveling down the coast of Labrador almost to Newfoundland, blockading the approaches into Hudson's Bay, and cementing into one great mass the numberless outlets which extend from it and Baffin's Bay to the unknown coasts of the north.

Influenced by the earth's rotation, this ice accumulates toward the westward, leaving an uncertain passage along the eastern waters of Baffin's Bay ; after which it resumes its march along the eastern coast of Greenland, shutting in that extensive region appropriated to the interesting legend, or that meteorological myth, as it has been designated by Humboldt, of " Lost Greenland." Its next course is to the northeast, sometimes enveloping Iceland ; and thence, ex-