

run down and swamped. The captain told me an instance of individual intrepidity which, if true, is wonderful. At the close of the revolutionary war a doctor at Portsmouth, Massachusetts, built a boat, and sailed in her quite alone to England, thence to the West Indies, South America, and home. Notwithstanding the captain's asseverations, I don't believe it.

The Banks of Newfoundland have been called the *bar* of the Great Oceanic River—the gulf stream. The gulf stream and the Arctic current meet on the great banks of Newfoundland; the Arctic current is three degrees colder than the surrounding ocean, and twelve degrees colder than the gulf stream: it is the evaporation arising from the mingling of streams of such different temperatures that causes the constant fogs on the great Banks of Newfoundland. Humboldt, who studied the direction and velocity of the gulf stream more than any other man living, or dead, has some very curious calculations on the subject. He says, "that a molecule of water, (supposing such a thing possible,) leaving the coast of Florida by the gulf stream, would perform a detour of 3800 leagues, and return to the same spot in about three years. The stream would take it in forty or fifty days from the coast of Florida to the banks of Newfoundland, progressing at the rate of two or three miles an hour. Eleven months more, and a portion of the same gulf stream would take it from the banks of Newfoundland to the African coast. Thirteen months more, and it would enter the Caribbean Sea; and in ten months more, having made the detour of that almost Medi-