

had never conceived of before, says: "Enterprises have been tried under the most propitious auspices; most of them have been guided by the most expert seamen of the world, upheld by the most lavish outlays of moral sympathy and material wealth, and animated by a zeal which the eternal ices of the North could not chill. In vain have they endeavored every route save the one now suggested. Their failures and disasters have been most signal. The paltry successes they have reaped—paltry when compared with the means employed—have been reaped only by crossing immense plateaus and mountains of ice with infinitely more pains and perils than attended Hannibal's or Napoleon's passage of the Alps. And this fact alone, however it may shed lustre and glory on the heroic explorers, reflects none or but little light on the Arctic problem—unless, like the floating fragments of some noble ship that has foundered and gone down to tell a tale of warning, and to reveal the rocks on which the fairest hopes lie stranded. And yet, in the very gropings of these gallant spirits—such as Kellett and Kotzebue, and Parry and Kane—it appears that just so far as accidentally they were led to move towards these "thermometric gateways to the Pole" now pointed out, light has beamed upon their pathway. The moment they were called away from these routes and looked westwardly, that light grew dimmer till it was quenched, and some of them steering away from waters almost tepid and haleyon, furnishing a furrow for their keels, quickly plunged into cold and became entangled in icy desolation." * * * "If it is true, as this thermometric theory claims, that the Gulf Stream reaches the Pole with heat enough to melt its ice, it ought to follow, conversely, that the cold counter under-current from the Arctic Ocean, that offsets the Gulf Stream, will, in its long flow to the south, lose but little of its Arctic cold and reach the tropics with frigerific power. Such, at least, would be the demand of a remorseless logic. Anxiously we turn to ask, 'Is this demand satisfied? Do the nicest mean observations attest the fact indubitably?' Here is a gigantic balance, hung by the Creator himself, one scale at the pole, the other at the tropic. The first is, as yet, invisible; the other we can read. We know they must be in equilibrio. Let us go to the tropic, and with the deep sea thermometer drag up an answer from this unbiased and incorruptible witness.

"We have the most exact observations, taken with a variety of exquisitely-constructed instruments, and continued, at vast expense of money and care, through many years. They all tell the same story, so that science may be said to have sat at the feet of this great aqueous traveler to the Pole and heard him recount its mysteries.

"PROFESSOR BACHE,

of the United States Coast Survey, records that 'at the very bottom of the Gulf Stream, when its waters at the surface were 80° in tempera-