

shoals of Hatteras, in North Carolina. the extreme point of which lies in lat. $34^{\circ} 50'$.—On these shoals (which are but of small extent, and are every year becoming less) is in general from twelve to fifteen feet of water. When you are outside of them, in fifteen fathom water, and can just discern the cape, from the mast head of a sloop or schooner, you may consider yourself as entering the gulph, as you presently after lose soundings. The immense force of the stream being here a little interrupted, evidently alters its direction about one point and a half more to the eastward than before.

3. In the language of poetry, the whole cluster of the Bahama islands might be individually denominated the daughters of the gulph, as they clearly demonstrate their descent by the recent appearance of the soil; being nothing but sand forced up from the bottom of the ocean, and but of yesterday, in comparison to the greater part of the continent, and the islands of the Charrihees. The vegetation upon most of them seems also to be but newly acquired, and the soil in general is as bare as the sea shore itself.

4. The whole coast of North America has evidently been formed by the course of the gulph stream. It is, for the most parallel thereto; and to the westward of it, is a constant eddy, setting to the south-westward—at least when out of the draft of the ebb and flood tides of the larger inlets.

5. A long succession of south westerly winds spreads the current of the gulph in such a manner as, in the seaman's phrase, to kill it, or weaken it to such a degree, as scarcely to be felt. On the contrary, a prevalence of north easterly gales narrows it in many miles, and, strange as it may seem, it runs with a greater degree of rapidity at these times, than any other. Like an angry man, of powerful nerves, it cannot bear the least opposition, but swells into rage, becomes dreadfully hollow, and particularly dangerous to vessels with single decks and deep waists.

6. There is no method more certain of knowing when you are in the gulph, than by the sudden change of the temperature of the atmosphere.—While you are on soundings, though ever so deep, there is a coolness and springiness in the air, which is lost immediately upon your entering the edge of the gulph. The coldest storms at-

midwinter, are here divested of their frosty particles. If you have ice upon your decks, it immediately thaws; a sleepy languor attacks the human frame; the air in the cabin and hold becomes suffocating; the water of the sea is, to the feeling, as though it had been boiled, and set awhile to cool, until luke-warm; the colour of the ocean, through the rudder case, is (apparently) of a deep indigo blue; whereas upon soundings, it has ever more or less of a greenish tinge, and to the eastward of the gulph is of a fine sky blue. At the same time, what is very remarkable, if you take up a glass of this water, it is as clear as any you can possibly imagine, and precisely the same with that in the main ocean, in point of colour.

7. It is extremely probable, that the gulph stream is the deepest part of the Atlantic; and, could the whole bottom of the ocean be laid dry, the former course of the gulph would exhibit the appearance of a vast valley or ditch, washed out by the prodigious force of the current.

8. The Nantucket shoals are undoubtedly another excrescence of the gulph. The same may be said of those submarine mountains, the banks of Newfoundland. These, with the Isle of Sable, and its surrounding shoals, form the first barrier of consequence, to check the farther progress of the stream to the northeastward. Being effectually arrested in those parts, it turns off in an easterly direction, gradually inclining to the south eastward, until its sensible strength is entirely lost.

9. An abundance of the gulph weed is no infallible sign of your being in the gulph. Relying upon the frequent appearance of the gulph weed has often deceived inexperienced navigators in this respect. It must be conceived, however, that in the summer season and good weather, greater quantities of the weed will be found in the eastern and western edges of the gulph than in other places.

10. The strength of the stream (as was before observed) is very unequal. Its general progress is from $1\frac{1}{2}$ to 3 knots per hour. But vessels steering E. N. E. thro' the gulph, with the wind at north, have been known to make 120 miles difference of latitude in 34 hours; which shows that the current alone must at such times have carried them upwards of four miles an hour, to the northward.