

the vapours which every moment escape from the surface of the sea, the whole earth would sicken and wither into an inanimate desert ; and if the ocean slowly or suddenly dried up, all organized nature would probably be annihilated.

Nevertheless, the immense and profound seas offer no obstacles to the commercial intercourse of nations, whom they only separate in appearance ; the maritime highways now traversed by such long processions of ships are freer and broader than those of earth ; their maintenance lays no burden upon human communities, for they are kept up by nature.

One of the most remarkable features of the sea is its continuity. With the exception of some inland reservoirs which the ocean long ages ago abandoned in the heart of the continents—such as the Dead Sea and the Caspian—it is “one and indivisible.” As the poet says, it embraces the whole earth with uninterrupted wave.

Περὶ πᾶσαν εἰλισσόμενος χθὼν' ἀκοιμήτῳ ρεύματι.

The average depth of the sea has not been accurately ascertained ; but it is impossible to explain certain tidal phenomena without allowing it to be at least 22,000 feet (7 kilomètres). It is true that a great number of soundings, taken out at sea, have invariably given lesser results ; but, on the other hand, several have overpassed this limit ; and cases are recorded * in which 39,340 feet to 49,180 feet of line has been paid out without touching the bottom. But admitting that 21,300 feet represent the mean depth of the ocean, Sir John Herschel computes that the volume of its waters will exceed 32,808,000,000 of cubic yards, and their total weight three millions of trillions of tons = 3,000,000,000,000,000. This would equal one two-thousandth of the whole terrestrial mass.

We shall return hereafter to the subject of soundings, by means of which we ascertain the depth of the ocean, and the configuration of its bed. We must now treat of the colour and composition of its waters.

The colour of the sea varies greatly, at least in appearance. According to the evidence of a host of observers, the ocean, when seen by reflection, presents a tint of ultramarine blue, or lively azure. When the air is pure, the tranquil surface of the waters seems of a brighter and more radiant blue than the skies. In cloudy weather this passes into a sombre green ; which becomes darkly or luridly

* [This is doubted by Captain Maury in his “Physical Geography of the Sea.”]