

1. The proportion of saline matter contained in the water of the southern ocean is to that in the northern as 1.02919 is to 1.02757.

2. There is no great difference in the proportions under different meridians, but the sea under the equator appears to range between the two hemispheres.

3. The waters drawn from a great depth do not generally contain a larger quantity of saline matter than those taken from the surface.

4. Inland seas are always much less salt than the ocean, and so are those bodies of water situated near to large masses of ice. Inland seas do not contain so large a quantity of salt as the ocean, on account of the large volumes of fresh water brought into them by rivers. But the waters of the Mediterranean contain a larger proportion of salt than the ocean, although the same cause might be supposed to act in producing the same result in this as in other cases. It has been, since the discovery of this fact, an object with philosophers to account for it, but now the chief difficulty is to explain the reason why the waters of this sea do not gradually become salter. Although so large a quantity of water is carried into it by the numerous rivers of which it is the basin, yet its amount is not sufficient to compensate for the evaporation which is going on at its surface, but it is supplied, for the maintenance of a general level, by a constant current flowing eastward through the Straits of Gibraltar. Now all these circumstances would apparently tend to increase the saltiness of the Mediterranean Sea, and ultimately convert it into a saturated brine. The cause which prevents this is said to be an under-current which flows out of the sea through the Straits of Gibraltar, and discharges the constantly accumulating saline matters. There are many facts which strongly support this opinion. Dr. Macmichael states, upon the authority of the British Consul at Valencia, that some years ago a vessel was lost at Ceuta, on the African coast, and its wreck was afterward thrown up at Tariffa, on the European shore. But the most remarkable fact is that recorded by Dr. Hudson, in the "Philosophical Transactions." In 1712, M. de L'Aigle, of the Phenix, came up with a Dutch ship in the middle of the Gut, between Tariffa and Tangier, and with one broadside sank her. A few days after this, the ship rose again off the shore near Tangier, at least four leagues to