with minerals; and although it does not always happen to such an extent as to prevent its use in nature, and by man, yet it always acts in some degree. Now, according to the nature of the rocks through which the water percolates, will be the alteration effected in the character of the water; and all mineral springs might be easily accounted for, did we know the composition of the beds through which the waters pass.

But we can only refer to the composition of seawater, and this we must do without entering into those minute analyses which have recently received so much of the attention of chymists. That which in the estimation of ancient philosophers was a pure elementary substance, is not only found to be in itself a compound, but to contain singular combinations of compound substances. There is, perhaps, no substance in nature that has a more complicated composition than seawater; and, if we consider the extent of the ocean, and the great solvent power of the fluid, we might expect to find in it an immense number of adventitious substances; but of all these, the most abundant is common salt. It was once maintained by chymists, that the water taken from different parts of the ocean did not materially differ in composition; but the experiments which have been made during the last few years prove that it differs not only in relation to place, but is also conditionally dependant on the depth. Bouillon, Lagrange, and Vogel, severally examined the waters of the English channel, the Bay of Biscay, and the Mediterranean Sea, and found them to contain 3.47 per cent. of saline matter. Dr. Murray estimates the saline matter of the waters of the Frith of Forth at 3.03 per cent. Dr. Fyfe examined the waters collected in the North Seas by Mr. Scoresby during his voyage, and by Captain Ross in his Polar expedition, and the results lead to the general conclusion, that the waters of the ocean, from 61° 52′ to 78° 35′ north latitude, do not essentially differ in the amount of saline matter, the maximum being 3.91 per cent., the minimum 3.27. The experiments made by Pages, on the water collected by him in southern latitudes, induce the supposition that the saline matter is least abundant in the waters of the northern hemisphere. But the most important series of experiments made upon seawater with the view of determining the amount of saline matter contained in it, is that performed by the late Dr. Marcet, from which the following conclusions have been deduced:—