

a small quantity of seawater is examined, it has no colour; and this is also true of a small quantity of atmospheric air; both of these media are, in minute volumes, incapable of intercepting so large a quantity of any ray as to give colour to the volume. Yet they differ in their powers of interception; air reflects the most refrangible rays, the violet, indigo, and blue, which produce the azure hue that is known to distinguish it; but water, on account of its density, as well as its depth, reflects some of the less refrangible rays, and hence its greenish blue colour. Under peculiar circumstances, the sea exhibits other shades, but these are to be attributed to local rather than general causes,—the character of the bed over which the water flows, and sometimes the animalculæ, insects, or plants, which float over or immediately beneath its surface. In the Gulf of Guinea the sea is white; around the Maldives it is black; in the upper part of the Mediterranean it has a purple teint; and the West Indies are washed by an ocean so transparent, that the bottom of the sea lies open to examination. There are also in all places changes of colour, produced by the shadows thrown upon the sea by the interception of the clouds, and these shades are so evanescent and varied when the sky is thickly covered with broken clouds, that we may almost fancy the eye is deceived.

#### PHOSPHORESCENCE OF THE SEA.

The sea has sometimes a luminous appearance, a phenomenon that has been observed by all sailors, who consider it the forerunner of windy weather. It is said to occur most frequently in the summer and autumn months, and varies so much in its characters as to induce a doubt whether it can be always attributed to the same cause. Sometimes the luminous appearance is seen over the whole surface of the water, and the vessel seems as though floating upon an ocean of light; at other times the phosphorescence only encircles the ship. A portion of water taken from the sea does not necessarily retain its luminous appearance, but its brilliance will generally continue as long as the water is kept in a state of agitation. Some philosophers imagine the phosphorescence of the sea to arise from the diffusion of an immense number of animalculæ through the medium, and others attribute it to electricity. Dr. Buchanan has given an account of a very