

principle, that principle is generally so little in quantity, that it eludes all chemical research. The tints of the ocean seem often to depend neither on the nature of the bottom, nor on the reflection of the sky on the clouds. Sir Humphrey Davy was of opinion that the tints of different seas may very likely be owing to different proportions of iodine.

On consulting the geographers of antiquity, we find that the Greeks had noticed the blue waters of Thermopylæ, the red waters of Joppa, and the black waters of the hot-baths of Astyra, opposite Lesbos. Some rivers, the Rhone for instance, near Geneva, have a decidedly blue colour. It is said, that the snow-waters of the Alps are sometimes of a dark emerald green. Several lakes of Savoy and of Peru have a brown colour approaching black. Most of these phenomena of coloration are observed in waters that are believed to be the purest; and it is rather from reasonings founded on analogy, than from any direct analysis, that we may throw any light on so uncertain a matter. In the vast system of rivers near the mouth of the Rio Zama, a fact which appears to me remarkable is, that the *black waters* are principally restricted to the equatorial regions. They begin about five degrees of north latitude; and abound thence to beyond the equator as far as about two degrees of south latitude. The mouth of the Rio Negro is indeed in the latitude of $3^{\circ} 9'$; but in this interval the black and white waters are so singularly mingled in the forests and the savannahs, that we know not to what cause the coloration must be attributed. The waters of the Cassiquiare, which fall into the Rio Negro, are as white as those of the Orinoco, from which it issues. Of two tributary streams of the Cassiquiare very near each other, the Siapa and the Pacimony, one is white, the other black.

When the Indians are interrogated respecting the causes of these strange colorations, they answer, as questions in natural philosophy or physiology are sometimes answered in Europe, by repeating the fact in other terms. If you address yourself to the missionaries, they reply, as if they had the most convincing proofs of the fact, that "the waters are coloured by washing the roots of the sarsaparilla." The Smilacæe no doubt abound on the banks of the Rio Negro, the Pacimony, and the Cababury; their roots, macerated in