in a more practical work than this is intended to be. But the reader may obtain an idea of the great impediment or assistance these currents are to the navigator, from a statement made by Baron Humboldt—that the Gulf Stream, in the twenty-sixth and twenty-seventh degrees of latitude, moves with a velocity of eighty miles in twenty-four hours.

CHYMICAL COMPOSITION OF SUBSTANCES.

Having explained the most important appearances presented by land and water, we might now, in the order of our subject, direct the attention of the reader to an inquiry into the composition of the bodies which constitute the earth. But here we should start into a subject which it would be impossible for us to explain in the limits of a few pages. This work, however, must be left in a state of great incompleteness, if some attempt be not made to put the reader in possession of so much information, at least, as shall enable him to understand the composition of bodies, the elements of which they consist, and the laws which govern their union The sciences of chymistry and mineralogy are now both open before us ; sciences which, during the last few years, have received perhaps greater additions than all others, and now imbody so vast a number of facts, that it is only by considerable and long-continued attention to these interesting branches of knowledge, that the student can become perfectly acquainted with them. But, at the same time, it may be remembered, as an encouragement to the study, that all the economical processes are regulated by their decisions, and there are few subjects so interesting in themselves, or leading to so useful results. But we can only refer to those general principles which may enable us to explain the constitution of the substances forming a part of the earth's body.

ELEMENTARY SUBSTANCES.

The simplicity of the means employed by the Creator to accomplish his objects is peculiarly evident in nature. The hypotheses of men are complex, and overloaded with machinery ; the methods adopted by the God of Nature are simple and effective ; and as science opens successively the pages upon which the history of material existence is written, we are surprised that an explanation so simple should not have