

methods which were then known; it is an *imago mundi*, or mirror of the world, of the most faithful kind.

Immediately before the publication of Humboldt's *Cosmos*, in 1844, Bernhardt Studer, the Swiss geologist, published a text-book of physical geography and geology, which is remarkable for its clearness of disposition, mastery of the subject, familiarity with the literature, and conciseness of treatment.

Numerous text-books of physiographical geology appeared in the latter half of the nineteenth century; amongst others may be mentioned those of Oscar Peschel (1879), of Siegmund Günther (new ed., 1897-99), the popular *La Terre* of Elisée Réclus (1868-69), those of Hann, Brückner, and Kirchhoff, and the able chapters in Sir Archibald Geikie's *Text-book of Geology* (3rd ed., 1893).

*Form, Size, and Weight of the Earth.*—The determination of the form, the size, and the weight of the earth, although of great interest to geologists, is more especially the domain of the geographer, and cannot here in the narrow limits of space be treated with historical detail. Suffice it to state the present standpoint of our knowledge. For the actual form of the earth, with its numerous deviations from the spheroid of rotation, Listing proposed in 1872 the name of "Geoid," and it is at present one of the chief tasks of the International Commission for the measurement of the degree to arrive at the true form of the geoid.

The form of the geoid, however, cannot be discovered merely by trigonometric methods; probably the pendulum will play an important part in the future solution of the problem. It has already been demonstrated that the oscillations of the pendulum do not everywhere depend upon the distance from the earth's centre; it is more especially in the interior of continents that the deviations indicate a diminution in the force of gravity. Faye is therefore of opinion, that in consequence of the stronger cooling, the earth's crust is denser under the floor of the ocean than under the continents. Helmert, Hergesell, Drygalski, and others, have supported Faye's hypothesis in its main features; they are of opinion, however, that the attractive force exerted by continents on neighbouring ocean surfaces is more or less compensated for by the smaller density of the earth's crust under the continents.

The pendulum observations made by Von Sterneck in the