

CHAPTER II.

DISTRIBUTION OF THE LAND ON THE SURFACE OF THE GLOBE—POSITION AND OUTLINE OF THE CONTINENTS—MAP OF THE WORLD—OCEAN, AND ITS DIVISIONS.



THREE forms of matter divide among themselves the surface of the terrestrial sphere. The *gaseous*, represented by the atmosphere and the clouds, envelops and surrounds its mass; the *liquid*, that is to say, the ocean, covers nearly three-fourths of its entire area; and, finally, the *solid*, or “terra firma,” is distributed over about one-fourth.

It is worthy of remark that all matter condenses in proportion as we approach the centre of the Earth. Externally, the “world of air” encircles and enshrouds our globe as with a light transparent mantle; next come the waters, considerably heavier than the air; and, last of all, the solid rocks, which, as they lie nearer to the centre, also increase in density. It is a well-established fact that the materials of the most ancient eruptions, such as granite,* are less dense than the more recent igneous rocks, such as the trachytes and the basalts. Thus the materials occupying the interior of the globe augment in weight in the same ratio as we approach the centre; and there may come a time when the Earth shall pour forth from her “torn entrails” eruptions of far heavier matter than even those which at present we regard as the heaviest—namely, gold and platinum.

The study of the complex phenomena of the air is called *Meteorology*, and it is, perhaps, the least advanced of the sciences. It interprets for us the signs and warnings of the clouds, and the pregnant language of the atmosphere, as conveyed to our eyes by means of the barometrical column.

* [The reader should here be reminded that some eminent geologists have lately put forth the theory that granite is not an *eruptive* but a *sedimentary* rock.]