

To appreciate the oceanic basins, we must conceive of the earth without water, — the depressed areas, thousands of miles across, sunk 10,000 to perhaps 30,000 feet below the bordering continental regions, and covering four elevenths of the whole surface. The continents, in such a condition, would stand as elevated mountain plateaus encircled by one great uneven, almost featureless, basin. If the earth had been left thus, with but shallow briny lakes about the bottom, there would have been an ascent of five miles or more from the Atlantic basin to the lower part of the continental plateau, and about five miles more to scale the summits of the loftier mountains of the globe. The continents would have been wholly in the regions of the upper cold, all alpine, and the bottoms of the oceanic basin under oppressive heat, with drought and barrenness universal. The uneven surface of the oceanic basin has been leveled off to a plain by filling it with water. The greatest heights of the world have thereby been diminished more than one half, and genial climates substituted for intolerable extremes, rendering nearly all the emerged land habitable, and giving moisture for clouds, rivers, and living species. By the same means distant countries have been bound together by a common highway, into one arena of history.

The calculated mass of the ocean, taking the depth as above given, is 1,320,000,000,000,000 tons.

(4) **General view of the land.** — (a) *Position of the land.* — The land of the globe has been stated to lie with its mass to the north, about the Arctic pole, and to narrow as it extends southward into the waters of the southern hemisphere; with the mean southern limit of the continental lands in the parallel of 45° , or just half-way from the equator to the south pole.

South America reaches to 56° S. (Cape Horn being in $55^{\circ} 58'$), which is the latitude of Edinburgh or northern Labrador; Africa only to $34^{\circ} 51'$ (Cape of Good Hope), nearly the latitude of the southern boundary of Tennessee, and 60 miles nearer the equator than Gibraltar; Tasmania (Van Diemen's Land) to $43\frac{1}{2}^{\circ}$ S., nearly the latitude of Boston or northern Portugal.

(b) *Distribution.* — The independent continental areas are three in number: America, one; Europe, Asia, or Eurasia, and Africa, a second; Australia, the third. Through the East India Islands, Australia is approximately connected with Asia, nearly as South America with North America through the West Indies; and, regarding it as thus united, the great masses of land will be but two, — the American, or *Occidental*, and Europe, Asia, Africa, and Australia, or the *Oriental*.

But, further, these great masses of land are divided across from east to west by seas or archipelagoes. The West Indies (between the parallels of 10° N. and 30° N.), the Mediterranean (between 30° N. and 45° N.), and the Red Sea, and the East Indies (between 30° N. and 10° S.), with the connecting oceans, make a nearly complete band of water around the globe, sub-