

around us, and of which these furious outbreaks, after all, are but minute, and for the moment unbalanced surpluses in the great account. The energy requisite to overthrow a mountain is as a drop in the ocean compared with that which holds it in its place, and makes it a mountain. Chemistry tells us that the forces constantly in action to maintain a single grain of water in its habitual state; when only partially and sparingly let loose in the form of electricity, would manifest themselves as a powerful flash of lightning.* And we learn from optical science that in even the smallest element of every material body, nay, even in *what we call* empty space, there are forces in perpetual action to which even such energies sink into insignificance. Yet, amid all this, nature holds her even course: the flowers blossom; animals enjoy their brief span of existence; and man has leisure and opportunity to contemplate and adore, secure of the watchful care which provides for his well-being at every instant that he is permitted to remain on earth.

ON THE HISTORY OF EARTHQUAKES AND VOLCANOS.

(28.) The first great earthquake of which any very distinct knowledge has reached us is that which occurred in the year 63 after our Saviour, which produced great destruction in the neighbourhood of Vesuvius, and shattered the cities of Pompeii and Herculaneum upon the Bay of Naples, though it did not destroy them. This earthquake is chiefly remarkable as having been

* Faraday: "Experimental Researches in Electricity," § 853.