night. Do not say this is all a dramatic representation. How else could the forces work? It is reasoning, not imagination which has reproduced the incidents of the primeval storm. That storm was a real chapter in the childhood history of the planet which is our home. So we must remember it. But, thanks to the constitution of nature, we live in the fortunate period when, on another member of our planetary family, the secular storm is raging. From our safe distance we hear none of the turmoil which reigns on Jupiter; but we can gaze on the exterior of the cloudy envelope, and we can believe ourselves, with Lockyer, catching glimpses, at times, of the lightning flashes which glare within, and seem to shoot their darts quite through the blanket of vapors. A specimen world—still in its swaddling clothes—held back in development, that our human intelligence might find response to its earnest inquiries about the past—held back, like the living rings of Saturn, to serve as samples of unformed worlds, hung up to illustrate the divine process of world formation.

XXXIX. THE WAR IN THE OCEAN.

THE EARLIEST STRATA.

A SHORELESS ocean now enwrapped the world. It was not a placid summer expanse overhung by bright skies and swarming with happy sentient creatures. The rains which supplied the ocean had washed from the atmosphere certain acid gases—especially sulphuric, chlorhydric, and carbonic—and these pervaded the water now resting over the earth. The fire-formed crust, however, on which the ocean rested, was composed chiefly of silicates of somewhat complex constitution, but largely silicates of alumina, potash, soda, lime, and magnesia. Now, when the hot acid waters came in contact with these silicates, certain reactions immediately began. The silicates were decomposed; the alkaline bases, potash, lime, and so forth, were taken up by the free acids, forming chlorides of potassium, calcium, sodium, magnesium; as also sulphates and carbonates of potash, soda, magnesia, and lime.