CHAPTER V.

THE REIGN OF FIRE.

WHATEVER may be thought of the evidence bearing upon the question of the former gaseous condition of our world, or of the entire solar system, it is generally admitted that the evidence of former igneous fluidity is somewhat conclusive. This is a doctrine which we may regard as resting on legitimate geological data. This is a condition of the world we may proceed to contemplate without serious misgivings. Our earth was once a self-luminous star.

At the temperature which would fuse the mass of the rocks, all the more volatile substances could only exist in the form of an elastic vapor surrounding the earth. the carbon in the world must have existed in the form of carbonic acid; all the sulphur as sulphurous acid; all the chlorine as chlorhydric acid; all the water as an invisible elastic vapor, extending out beyond the limits of the pres-There could hence be upon the earth no ent atmosphere. vegetation, no animals, no limestone, no salt, no gypsum, no water. All that we now behold must have been represented by a glowing, liquid nucleus, enveloped in a dense atmosphere of burning acrid vapors. This orb, by the immutable laws of physics, must have revolved upon its axis and performed its revolutions around the sun. The sun and moon (if the latter existed) must have raised the fiery ocean to a tidal wave which rolled around the globe-the type of an action which has continued to the present pe-There were also day and night. The sun rose in