

passed without effusions of hot water and steam, and copious hot springs. The heated waters and vapours of these, rising through the crystalline rocks below, may have exerted an active agency in bringing up the ores, that are distributed in the various formations of our earth. Some geologists have asserted that the whole of our globe was at one time in a state of incandescence, and many ridiculous theories in this connection have prevailed at different times ; one being that the matter of which all the planets are composed, at one time constituted a portion of the sun, which by coming into collision with a comet, had some of its particules driven off like a stream of sparks from red hot iron on the anvil, and that each of these jets of melted matter formed itself into a planet, which being launched far out into the colder regions or space, cooled down, solidified, and became a globe. In such a theory as that, there are ample grounds for the idea of sublimation.—The various speculations however were not without their beneficial results, opening as they did a field of controversy and research, and leading to the examination of facts which science is now revealing ; the child must often fall, before it can walk with the well-balanced step of manhood, and the theoretical failures of the past, were but the first struggles of the infant intellect of our race, to attain that perfection which the Almighty has willed can only be secured as the fruit of labour.

The oldest formation of rocks on this continent, is the Laurentian. The northern iceberg drift, scattered boulders over the surface of a certain portion of the continent of America, at a time of which history can give no record ; but the Laurentian rocks, although bearing evidence of having been submitted to igneous action, proclaim the existence of seas still more remote in time. They consist of hard rocks, which for the most part have been partly melted and reconsolidated—they are stratified, but much bent and twisted together, and their surface presents unmistakable evidences of their having been greatly denuded or worn down by the long continued action of atmospheric and other causes, before any other system was deposited on them. In Canada they occupy the surface of nearly all the country lying on the North shores of the St. Lawrence and Ottawa Rivers, crossing the latter at the mouth of the Madawaska, near Amprior—extend-