

the motion of the stars is only apparent, and that it is produced by the revolution of the earth on its axis.

THEORY OF THE FORMATION OF THE EARTH FOUNDED ON  
ITS DIURNAL REVOLUTION.

Now it is a singular fact, that these results perfectly accord with the combined theoretical deductions of astronomers and geologists. The covering or crust of the earth is known to consist of a series of strata of different substances and of various thicknesses. Beds of clay and marl, limestone and sandstone, gravel and sand, are promiscuously mingled together, many of them containing the remains of marine and fresh-water animals, and all of them bearing evidence of their formation as resulting from the deposition of water. Some have been formed at the bottom of rivers and lakes, and some in seas and oceans, while others have been produced by casual catastrophes, which have caused the waters to leave their channels, and sweeping over localities, or the entire surface of the earth, to destroy rocks, and round the fragments they have broken from the parent bed. The same process of destruction and reproduction is going on in the present day, though not perhaps to so great an extent as at the time when the crust of the earth was formed. If the beds of rivers, or of lands that are frequently flooded, be examined, strata of sand, mud, or gravel will be found, as produced by sediment from the water that has flowed over them; and many contain the remains of the animals that once lived in the water, or were destroyed by its means. Wherever strata, having the same characters, and containing organic remains, are found, it is fair to deduce, how deep soever they may be below the surface, that they are attributable to causes similar to those which are now active in the production of rocks. But such strata have been seen in all those parts of our globe which have been visited by man, and hence it would appear, that the dry land has actually been produced by water; and that the particles which, united together, now form the superficial covering of the earth, must at a former period have floated in loose unconnected particles in pre-existing rivers and oceans.

Taking these statements as the legitimate deductions of geological inquiry, they may be so applied as to account for the present form of the earth. If the earth had been formed