

these wells along the main road which crosses the Isthmus of Suez.

I have felt it important thus to enter into the theory of Artesian Wells, because their more frequent adoption will add to the facilities of supplying fresh Water in many regions of the Earth, particularly in low and level districts, where this prime necessary of Life is inaccessible by any other means; and because the theory of their mode of operation explains one of the most important and most common contrivances in the subterraneous economy of the Globe, for the production of natural springs.

By these compound results of the original disposition of the strata, and their subsequent disturbances, the entire Crust of the Earth has become one grand and connected Apparatus of Hydraulic Machinery, cooperating incessantly with the Sea and with the Atmosphere, to dispense unfailling supplies of fresh Water over the habitable surface of the Land.\*

Among the incidental advantages arising to Man from the introduction of Faults and Dislocations of the strata, into the system of curious arrangements that pervade the subterranean eco-

\* The causes of intermitting Springs, and ebbing and flowing wells, and many minor irregularities in the Hydraulic Action of natural vents of water, depend on local Accidents, such as the interposition of Syphons, Cavities, &c., which are scarcely of sufficient importance to be noticed, in the general view we are here taking of the Causes of the Origin of Springs.