

VIII. Those lower strata, and in the proportion of their distance from the surface, which is the same as their proximity to the focus of heat, bear the more abundant proofs of having been, not only urged upwards by the expansive power below, but in other ways acted upon by the immensely high temperature. The source of that heat can be no other than the fires which had melted and driven upwards the materials forming the rocks of fusion. We have great reason to believe that these deep-seated fires—(scarcely however to be so called, when we reflect how near they must be to the surface,—) or, as some eminent geologists are disposed to think, certain remainders of them, are perpetually in action. Consequently, the order of production, in those rocks of fusion, must be the reverse of that which is seen in the rocks of deposition and stratification. The uppermost masses are the oldest; and the newest, so long as they remain in their proper place, must be deep-seated beyond the reach of human inspection, and lying in contact with the amazing mass of melted mineral matter. There are also examples innumerable and upon a grand scale, of the melted mineral matter having been driven up with a force so great as to have overcome every resistance, breaking through all the hard and thick rocky masses that lay over it, bending, cracking, bursting, uplifting, and overturning strata, filling the chasms made, running in those lines of crack or fissure, separating strata and entering between their previously close-lying surfaces, so as to form flat tablets, often also coming to the surface and towering over all that it had displaced. These cases are of frequent occurrence, and they form an exception to the observation just made with respect to the relative antiquity of the fused rocks, of which these projected kinds have come up from the lowest depths and the most recently. In fact, those fused rocks may be of all ages;