



striking change has taken place in respect to this matter of late years: formerly, when granite was by many geologists thought to be of aqueous origin, its inferiority of position was held to be sufficient proof of anterior production; now, when it is known to have been formed by the action of heat, this argument is of no value; and other circumstances have been observed which leave no doubt that in very many cases the granite has been in a state of fusion since the deposition of several of the older formations, so that it has actually been injected into fissures and cracks of these strata, or been raised up in a fluid mass amongst them. (Diagram No. 33.) Granite veins, as these injected portions, once thought so rare, are called, have now been observed in almost every region of old strata; entering hornblende slates, and primary limestones in Glen Tilt (Blair Athol), and clay slates in Arran, Skiddaw, and Cornwall. Granite which we thus see irrupted through and into the stratified rocks, is, in fact, of no one particular or determinate age, but is the local result and evidence of many independent excitements or periods of critical action among the subterranean agencies of heat. We may, therefore, consistently admit granite, as well as other igneous rocks, to be of any, that is, of all ages; some of that which is visible in the crust of the globe may have been solidified from fusion before the production