

These two systems, therefore, afford incontrovertible evidence of marine depositions going on through an immense period of time, during which the sea abounded in polyparia, mollusca, and crustacea; for although organic remains prevail only in the uppermost or newest group, yet as we have decided proof that the lowermost division has been subjected to intense heat, and that even the lines of stratification are in a great measure melted away, it is clearly reasonable to conclude, that the absence of fossils may be attributable to the obliteration of the remains of the animals which lived and died in the waters that deposited the slate. We must not, however, fail to remark, that the relics of organized beings which remain are of a peculiar type, and altogether different from the corals and shells of the newer secondary formations.

38. REVIEW OF THE METAMORPHIC ROCKS.—The traces of stratification, a structure which, we have seen, is characteristic of aqueous formations (page 189), are evident in the upper group of the crystalline metamorphic rocks; and there is also an obscure resemblance to the alternate depositions of secondary beds, in the succession of different mineral masses, as gneiss, mica schist, quartz rock, &c. But in the lowermost term of the series, the granite, even these apparent relations to the stratified formations, are wanting; and in the amorphous masses, veins, and dikes, we see the effects of long continued and intense igneous action, produced under