

the materials upon which igneous action exerted its influence, and produced those crystalline masses which are the *ultima Thule* of geological research? These are questions which in the present state of our knowledge we are not in a condition to solve.

39. ORGANIC REMAINS IN THE METAMORPHIC ROCKS? ?—I have before stated, that with the last or lowermost of the slate rocks, all traces of organization are lost; but this assertion requires some modification, for, as an eminent geologist has remarked, “with the exception of granite, probably no rock is known beneath which organic remains may not be found.”\* Let us now resume the inquiry. From the intense heat to which the metamorphic rocks have been exposed, we cannot expect to find any elementary organic structures, except those which are formed of materials capable of resisting the effects of such an influence. The observations and experiments of Mr. Reade have shown (page 647), that vegetables possess a structure which is composed of silex, and is indestructible in a common fire. In animals, we seek in vain for an elementary tissue, capable of resisting the powerful influence of heat, except in those minute beings, the infusoria, of which I treated in a previous lecture (pages 324, 567). The silicious skeletons and shields of the infusoria, are, indeed, the only animal structures that can escape

\* Western Isles, p. 514.