The known fact,—a result of modern science, sent day. that the several formations (always invariable in their order of succession) have their groupes of organisms peculiar to themselves, has, however, interposed a difficulty from which the earlier cosmogonists were exempt. It has become necessary to show that the Noachian cataclysm was strangely selective, in burying in the beds which it is held by the class to have formed, now one group of plants and animals, now quite another group, and anon yet another and different group still; and all this many times repeated with such nice care and discrimination, that not a single organism of the lower beds is to be detected in the middle ones, nor yet a single organism of either the middle or lower in the beds that lie above. Even this task, however, just a little lightened by here and there a suppression of the facts, has been attempted by the redoubtable Dean of York.* Fire and water were, he conceives, equally agents in the great catastrophe that destroyed the old world,-a circumstance which, if true, would have furnished with an admirable apology the class of persons who, according to the wit, would have cried out, "Fire, fire, at the Deluge." The Dean conceives that at the commencement of the Flood, when torrents of rain were falling upon the land, numerous submarine volcanoes began to disgorge their molten contents into the sea, destroying the fish, and all other marine productions, by the intensity of the heat, and at the same time locking them up in strata formed of the erupted matter. This process took place ere the landfloods, laden with the spoils of island and continent, and the accompanying mud and sand, could arrive at the remoter depths; which, however, they ultimately reached, and formed a second formation, overlying the first. There were thus two formations originated,-a marine formation below, and a ter-

^{*} Newspaper Report of Meeting of the British Association held at York in September 1844.