

that this uniform composition and regular form should have been produced by irregular shocks and sudden explosions ?

But as this opinion has prevailed among some philosophers, and as the nature and effects of earthquakes are not well understood, it may possibly be pertinent to hazard a few ideas with a view of explaining those intricate subjects.

The earth has undergone great changes on its surface ; we find at considerable depths, holes, caverns, subterraneous rivulets, and void places, which sometimes communicate by chinks, &c. There are two kinds of caverns ; the first are those produced by the action of subterraneous fires and volcanos ; the action of this fire uplifts, burns, and throws out to a distance the matters that are above, and at the same time divides and deranges those which are on the sides, and thus produces caverns, grottos, and irregular holes, but which however is only effected in the environs of volcanos ; and these kinds of caverns are more rare than those produced by water. We have already observed that the different strata which compose the terrestrial globe are all interrupted by perpendicular fissures : the waters which fall on
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