

the tops of our mountains the shoals of the sea.

Since then the waters have covered, and may successively cover every part of the present dry land, our surprise must cease at finding every where marine productions and compositions which could only be the works of the waters. We have already explained how the horizontal strata of the earth were formed, but the perpendicular divisions that are commonly found in rocks, clays, and all matters of which the globe is composed, still remain to be considered. These perpendicular strata are, in fact, placed much further from each other than the horizontal, and the softer the matter, the greater the distance; in marble and hard earths, they are frequently found only a few feet; but if the mass of rock be very extensive, then these fissures are at some fathoms distant; sometimes they descend from the top of the rock to the bottom, and sometimes terminate at an horizontal fissure. They are always perpendicular in the strata of calcinable matters, as chalk, marle, marble, &c. but are more oblique and irregularly placed in vitrifiable substances, brown free-stone, and rocks of flint, where they are frequently adorned with chrystals