

(323.) Geology, in the magnitude and sublimity of the objects of which it treats, undoubtedly ranks, in the scale of the sciences, next to astronomy; like astronomy, too, its progress depends on the continual accumulation of observations carried on for ages. But, unlike astronomy, the observations on which it depends, when the whole extent of the subject to be explored is taken into consideration, can hardly yet be said to be more than commenced. Yet, to make up for this, there is one important difference, that while in the latter science it is impossible to recall the past or anticipate the future, and observation is in consequence limited to a single fact in a single moment; in the former, the records of the past are always present;—they may be examined and re-examined as often as we please, and require nothing but diligence and judgment to put us in possession of their whole contents. Only a very small part of the surface of our globe has, however, been accurately examined in detail, and of that small portion we are only able to scratch the mere exterior, for so we must consider those excavations which we are apt to regard as searching the bowels of the earth; since the deepest mines which have been sunk penetrate to a depth hardly surpassing the ten thousandth part of the distance between its surface and its centre. Of course inductions founded on such limited examination can only be regarded as provisional, except in those remarkable cases where the same great formations in the same order have been recognised in very distant quarters, and without exception. This, however, cannot long be the case. The spirit with which the subject has been prosecuted for many years in our own country has been rewarded with so rich a harvest of surprising and unexpected discoveries, and has carried the investigation of our island into such detail, as to have excited a corresponding spirit among our continental neighbors; while the same zeal which animates our countrymen on their native shore accompanies them in their sojourns abroad, and has already begun to supply a fund of information