

generally admitted truth, have obtained for it the attention which I think it was justly entitled to, and which it would certainly have received, had it been announced by any tyro in geology, either in France or Germany. At pages 152, and 153., of the present volume, will be found a brief account of this discovery, which was also republished in the 3d edition of this work; but it may be proper to give a more full reference to the sections by which the discovery was illustrated, as they serve, not only to explain from what data the relative age of the elevation of different mountain chains may be ascertained, but to show that M. Elie de Beaumont has been guided by exactly the same data, in forming his recent conclusions respecting the ages of mountain chains in various parts of Europe. See Plate II. fig. 2.: *d, d, d,* represent the highly inclined beds of granite and primary rocks of Mont Blanc: the dotted lines represent the supposed extent of the beds before they were broken down by causes that are incessantly wearing them away, as described in the preceding chapter: *c c,* are elevated beds of soft slate, which have undergone more disintegration than the harder beds of granite: it is in these depressions, called *cols*, that the passages over the Alps are generally situated.

The beds *b a, b a a,* are composed of the secondary formations, from magnesian limestone, to the green sand of the chalk formation. Now, as all these beds rise at nearly the same angle of elevation as the granite, it is evident that they were elevated at the same epoch, which must have been subsequent to the deposition and consolidation of all the secondary beds from *a a* to *b*, that rise up with the granite, and therefore the elevation of the granite of Mont Blanc, was posterior to the secondary epoch. Plate II. fig. 4. shows a section of the low granitic and slate rocks of Charnwood Forest, Leicestershire, considerably elevated, *b c, c b.* On the top of the elevated beds *c c,* there are a series of nearly horizontal beds of the upper new red sandstone described in Chapter XI. Now as these beds of new red sandstone are of the same age as the lower secondary beds *b b,* in fig. 2., and were obviously deposited, after the beds of granite and slate rock were elevated, it is obvious that this elevation took place prior to the secondary epoch, and therefore long before the elevation of the granite beds of Mont Blanc. The new red sandstone not only fills up depressions in the rocks of slate and granite at Charnwood Forest, but also fills some of the valleys at their feet.

If we admit, what few geologists will deny, that the same secondary formations in different European countries were cotemporaneous, it cannot be controverted, that the elevation of the slate rocks and granite in Charnwood Forest, was long prior to the elevation of the granite of Mont Blanc. This is but repeating what I published in 1823:—a similar position has recently been advanced by M. Elie de Beaumont, much amplified, and illustrated by numerous facts. It would scarcely be possible within the limits allowed for the subject