

DESCRIPTION OF PLATE VIII.

- I. Section of a volcanic cone, formed of scoriæ and lava. A bed of alluvial detritus (coloured *sienna*) covers the flanks of the principal cone, as in the Isle of Ascension, Iceland, &c.
- II. Volcanic mountains in Auvergne, from Mr. Scrope. Part of the southern chain of Puys, exhibiting the broken craters of Chaumont, each with a lava current issuing from its base; see p. 258.
 1. Montchal.
 2. Puys de Montgy.
 3. Montjughat.
 4. Mont Dome, in the distance.
- III. Environs of Clermont, from Mr. Scrope; *vide* p. 258. The town of Clermont is seen in the valley; in front is a basaltic peak, on which is built the castle of Montrognon. The green on the hills denotes the basaltic platform, which caps hills of fresh-water limestone. The distant outline is the granitic escarpment forming part of the boundary of the plain of Auvergne.
- IV. Hills capped with basalt; Ardèche. View of the lateral embranchments of the basaltic platform of the Coiron, in Ardèche; see p. 258.

The beds of basalt, between three and four hundred feet in thickness, are spread over limestone strata, which, together with the basalt, were once continuous, but have been eroded and carried away by alluvial action.
- V. Section of the cascade of Mont Dor; see p. 261. 1. Porphyritic trachyte; *volcanic*. 2. Tufa; a deposit from fresh-water. 3. Basaltic phonolite. 4. Breccia, composed of volcanic fragments. 5. Basalt. 6. Tufa, with veins of basalt.
- VI. Section in the Isle of Rathlin. Eruption of trap through chalk; p. 751.

Figs. 1, 3. Trap dikes; the chalk between the dikes, and on each side of the walls, to an extent of several feet, is changed into granular marble.

Fig. 2. A vein of trap traversing altered chalk.
- VII. Eligug* Stack; a range of cliffs, composed of carboniferous limestone, in which the strata have been contorted by elevatory movements, and the upper part removed by denudation; from Mr. De la Beche.

Granite on chalk, near Weiss, in Saxony. This section shows that the metamorphic rock has been erupted since the deposition of the chalk, and has flowed over the cretaceous strata on which it reposes.

Trap with sandstone, at Strathaird. Vertical dikes of trap intersecting horizontal strata of sandstone; p. 753.

* Eligug—so called from the number of sea fowls, principally the Eligug (*arca torda*), which frequent it.