

further fact that the schistose structure occurs only on the southern flanks of the granitic bosses of the Morbihan, Dr. Barrois attributes this structure to a powerful lateral pressure which has acted in a direction from south to north.<sup>7</sup>

**Relation of Granite to contiguous Rocks.**—From an early period the attention of geologists has been given to the evident mineralogical change which has taken place among stratified rocks as they approach a mass of granite. This change is developed within a ring or areola which encircles the granite, and varies in breadth from a few yards to two or three miles. The most intense alteration is found next the granite, while along the outer margin of the areola the normal character of the rocks is resumed. In some cases, however, no perceptible trace of alteration can be detected next a mass of granite. Of the European examples of contact-metamorphism, those of Devon and Cornwall, Ireland, Scotland, the Harz, Vosges, Pyrenees, and Norway have long been known. The nature of the metamorphism thus superinduced upon rocks is more particularly discussed at p. 1007.

The southeast of Ireland supplies an admirable illustration of the relation between granite and its surrounding rocks (Fig. 280). A mass of granite 70 miles in length and from

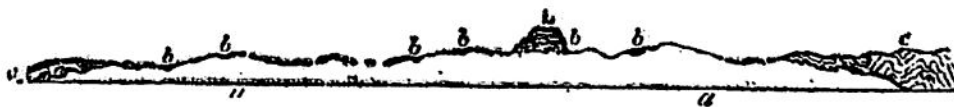


Fig. 280.—Section across part of the granite belt of the southeast of Ireland.  
a, Granite; b b, patches of Lower Silurian rocks lying on the granite at various distances from the main Lower Silurian area, c c.

7 to 17 in width there stretches from northeast to southwest, nearly along the strike of the Lower Silurian rocks. These strata, however, have not been upraised by it in such a way as to expose their lowest beds dipping away from the granite. On the contrary, they seem to have been contorted

<sup>7</sup> Ann. Soc. Geol. Nord, xv. 1887, pp. 1-40.