

pearance, so noticeable in mountain structure, may be seen on lower grounds, as in Pembrokeshire, where De la Beche has shown that the roofs and pavements of coal-seams are brought together, the coal itself, as having least resistance, being thrust into the loops (*a a*, Fig. 255).⁶

Deformation and Crushing.—During the intense shearing movements to which rocks have been subjected, their individual particles have been compressed, elongated, and made to move past each other, as is instructively shown by the deformation of pebbles and of fossils (p. 535). The most important consequence of this process is the production



Fig. 255.—Unequal compression of Coal in crumpling, Pembrokeshire (B.).

of the shear-structure already noticed (p. 538). Massive coarsely crystalline pegmatites may be traced through successive stages wherein the component orthoclase and felspar are more and more crushed and drawn out, until in the end the rock becomes a compact finely fissile schist, with a peculiar thready or streaky structure, which can hardly be distinguished from the flow-structure of a rhyolite. This change is more particularly developed along great thrust-planes, but may be observed throughout a mass of rock that has undergone intense shearing.

In many cases lenticular "eyes" of the original rock have been left little or not at all affected, while the portions between them have been crushed and rolled out and have recrystallized more or less completely as true schists (Fig. 332). Sections showing the close connection between

⁶ For illustrations of this structure see Heim's "Mechanismus der Gebirgsbildung," where a terminology for the different parts of folds is proposed.