

mechanical crushing and the production of a schistose structure may be seen abundantly among the Scottish Highlands.⁷ In the Silurian district of Guldalen in Norway diabases and other igneous rocks exhibit every stage in the crushing down of eruptive material and its conversion into schists. Similar structures are well displayed among the schists and their accompaniments in Anglesey.

Not only are the individual particles of rocks drawn out by shearing, but in the complicated process of mountain-building, larger features of geological structure likewise undergo deformation. The anticlinal and synclinal folds developed in the earlier

stages of the process are sometimes bent over and crushed together, so as to be nearly or completely effaced.

Various experiments have been devised to illustrate the facts of mountain-structure. By a combination of parallel layers of different substances exposed to lateral compression and tension it is possible to imitate many of the features of that structure and to produce very instructive diagrams.⁸



Fig. 256.—Shear-structure.

Torridon sandstone, Loch Keeshorn, Mag. 30 diam. (drawn by Mr. F. W. Rudler). The feldspars and other grains have been crushed and flattened, and the matrix made to move past them as in flow-structure. (Compare Fig. 80.)

PART V. CLEAVAGE

Cleavage-structure having been described at p. 531, we have to notice here the manner in which it presents itself

⁷ See *Quart. Journ. Geol. Soc.* xliv. 1888, p. 392.

⁸ See for example, A. Favre, *Nature*, xix. p. 103; H. M. Cadell, *Trans. Roy. Soc. Edin.* xxxv. 1888, p. 337. Much information will also be found in Mellard Reade's "Origin of Mountain Ranges," 1886.