

even parallel beds, have been subjected to great compression from the directions (A) and (B), the original planes of stratification are represented by wavy lines, and the new system of cleavage-planes by fine upright lines. The fineness of the cleavage depends in large measure upon the texture of the original rock. Sandstones, consisting as they do of rounded obdurate quartz-grains, take either a very rude cleavage (or jointing) or none at all. Fine-grained argil-

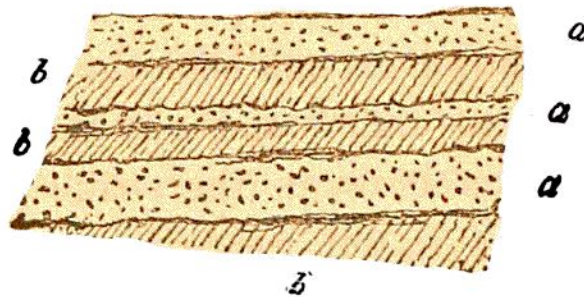


Fig. 83.

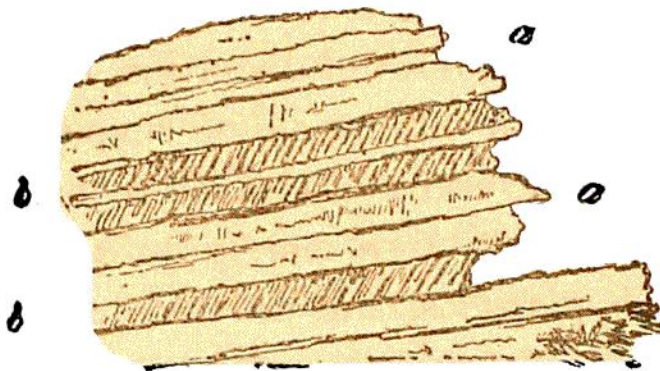


Fig. 84.

Dependence of Cleavage upon the grain of the rock (B).

laceous rocks, consisting of minute particles or flakes, that can adjust their long axes in a new direction, are those in which the structure is best developed. In a series of cleaved rocks, therefore, cleavage may be perfect in argillaceous beds (*b b*, Figs. 83 and 84), and imperfect or absent in interstratified beds of sandstone (*a a*, Fig. 83) or of limestone (as at Clonea Castle, Waterford, *a a*, Fig. 84).

That cleavage may be produced in a mechanical way by