

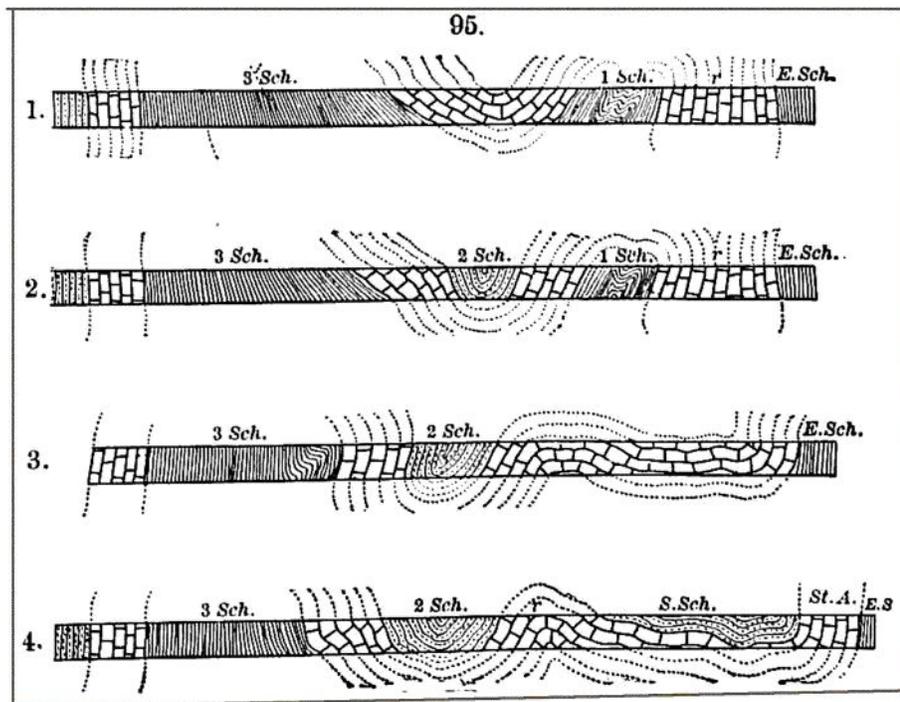
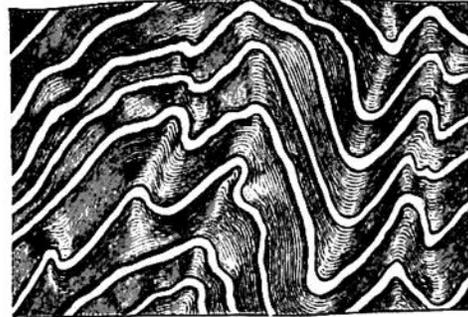
and faulted in the direction of the thrust, and the beds become stretched and thinned in the process, as explained beyond.

In Fig. 94, which represents a surface only six feet square, the synclines and anticlines are a few feet only in span; moreover, as is seen, the little anticlines have still smaller anticlines and synclines subordinate to them; so that the figure represents *compound flexures*. But these small flexures at the locality are subordinate to the great flexures of the region, which are thousands of feet in span, so that they are portions of a *doubly-compound* system of flexures.

Since flexures are greatly disguised, as explained above, so that the kind is seldom indicated in the exterior form, their nature has to be learned from the dip and other characters of the associated beds. A portion of a flexure may be mistaken for a monocline unless the region is well studied.

Fig. 95 represents the rocks with their true dip along 4 parallel sections across a country, the blocked areas being limestone and the others mica schist. They show what may be the actual appearance of a region of folded rocks after it is worn down to a nearly level surface. All that is visible over the region is the upper surface and enough below it to give the true dip; and from these facts and the study of the characters

94.



Flexures in limestone and schist, Westchester Co., N.Y. D. '81.

of the beds throughout the region, the kinds of flexures are deduced. The dotted lines show one interpretation of the facts. The synclinal near the middle of section 1 is overlaid by schist in 2, and by still more schist in 3 and 4; and changes occur also in the other flexures. But other interpretations are possible.