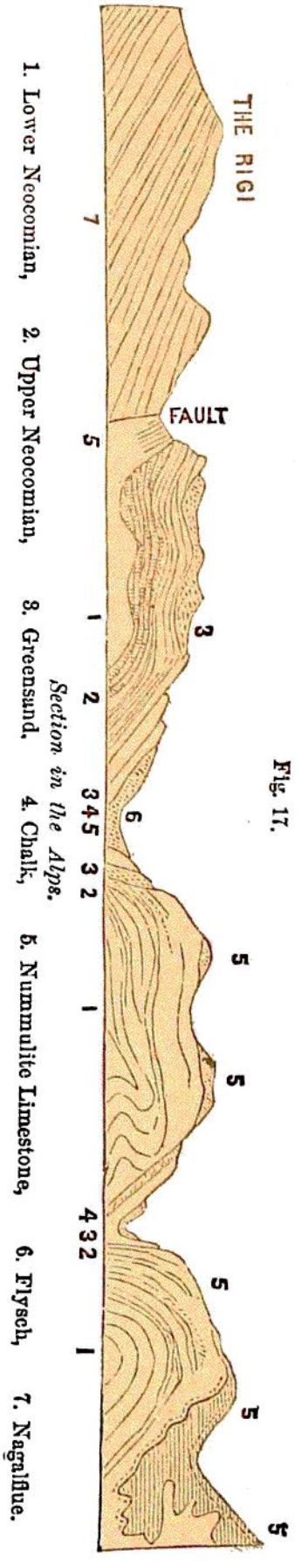
side in Colebrook, Connecticut, and is no unusual example of plication in the folia of that rock.

Fig. 18, for a sketch of which we are indebted to Mr. Eben A. Knowlton, shows a remarkable specimen belonging to the cabinet of Amherst College, from Shelburne Falls, in Massachusetts. It is six feet long, weighs a ton, and was worn smooth by the water and ice of Deerfield river. It consists of beautifully contorted or plicated strata; or more properly, perhaps, folia, of white gneiss and black hornblende schist alternating. The minute flexures, which frequently become saw-like, can not be exhibited, and actual inspection can alone give a correct idea of its beauty. We shall refer to it again under Metamorphism.

These delicate curves in foliation are a miniature representation of what occurs in the strata of most of the great mountain ranges of the globe. Fig. 17, is an actual section in the Alps, extending southeasterly from the top of the well-known Righi. Here we have mountains thousands of feet high, looking as if crumpled together by some Mighty Hand. Doubtless it was done by lateral forces in the hand of Nature.

In this country we have the same phenomena on a magnificent scale. From Canada to Alabama, a distance of at least 1200 miles along the Appalachian Mountains, the strata have been folded into numerous anticlinal and synclinal axes by a force crowding them from southeast to northwest, making the southeasterly slopes quite gentle, and the northwest ones steep and abrupt. A section across the Appalachian chain, say through New Jersey and Pennsylvania, is given in Fig. 19; and though it be an ideal section, it will convey a good idea of the structure of this chain of mountains almost any



Section in the Alps.

Fig. 17.