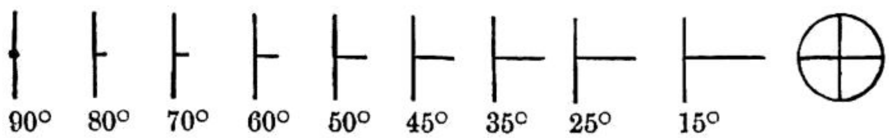
the dip may be obtained thus: take the dip and the direction along two of the sections; then, from a point, A, draw two straight lines, AB, AC, in the directions of the observed dips, and set off, on each, lengths proportional to the cotangent of its own dip, A*b*, A*c*; then, a line through *b*, *c* will have the direction of the strike, and a perpendicular to it, that of the dip.

In studying a region of rocks it is important that the dip and strike should be obtained *at all outcrops*, and noted down on a map. For the latter, the best mode is to use a symbol like the letter **T**, giving the top the direction of the strike and the stem that of the dip; and the different angles of dip may be approximately indicated by variations in

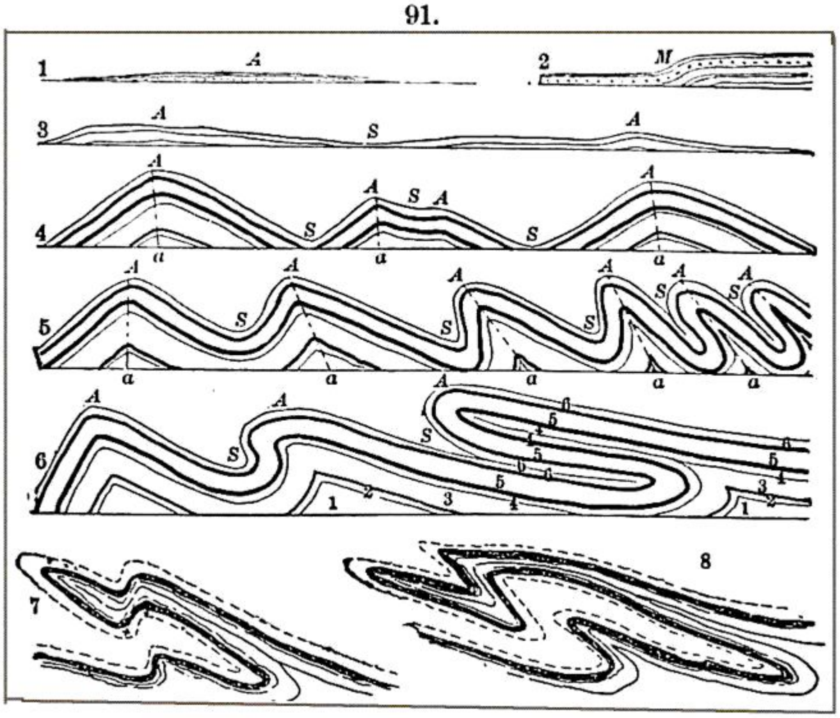
90.



the length of the stem of the **T**, as in the annexed figure, in which the ratio of the stem to half the top of the **T** is for 80° = 1 : 4; for 70°, 1 : 3; for 60°, 1 : 2; for 50°, $1 : 1\frac{1}{3}$; for 45°, 1 : 1; for 35°, $1\frac{1}{4} : 1$; for 25°, $1\frac{1}{2} : 1$; for 15°, 2 : 1; and for horizontality, a crossed circle.

Flexures. — Some of the forms of flexures are illustrated in the following figures. Such flexures, while often very small, may be several thousands of feet in height, and many are miles in span. The following are a few of the forms. The slopes either side of the center are seldom equal. In 4, Fig. 91, *Aa* is the axis of the flexure, and in both of those to the right

91.



this axis of symmetry is inclined; and in 5 and 6, still more inclined; while in 7, 8 (from the Alps) other complexities are represented. Flexures like those in the right half of 5 and in 6 are called *overthrust* flexures, the flexing being due to pressure from the right. Supposing the pressure