The most important of these joints, called *master-joints*, are more or less parallel, and so extended as to imply some general cause of production.

When these joints cross the beds obliquely, as they usually do, and there are two sets of them, they divide the rock into rhomboidal masses of considerable regularity; though wanting in that perfect equality in the corresponding angles of the prisms which is found in crystals of a simple mineral. They do the same in the unstratified rocks, producing a pseudo-stratification, and are of great help in quarrying.

Figs. 9 and 10 are examples of joints in unconsolidated clay, in West

Fig. 9.

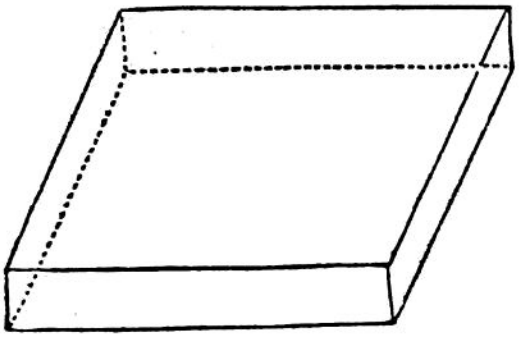


Fig. 10.

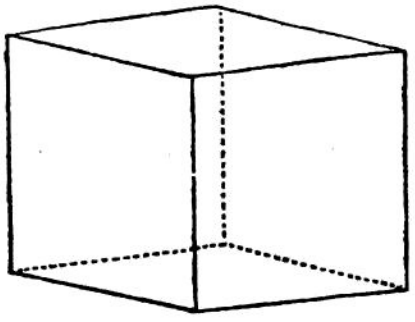


Fig. 11.

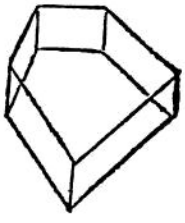
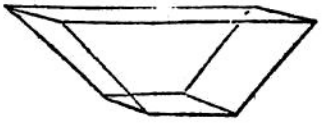


Fig. 12.



Springfield, Massachusetts. Figs. 11 and 12 are more complicated forms from the quartz rock of Bernardston, in Massachusetts.

Sometimes fissures are quite irregular in direction; but they assist in breaking the rock into fragments. The fissures are sometimes occupied by a foreign mineral, such as calcite; but these are properly veins.

Cleavage.—Rocks of homogeneous composition, especially clay slate, are often divided by parallel planes, sometimes conforming in dip and direction to the bedding or stratification, and sometimes not. They differ from joints in causing the rocks to split into plates indefinitely thin, and also by being far more extensive,