

foliation appears to be the result of the same forces as cleavage, except that in the former the process was carried so far that crystallization resulted.

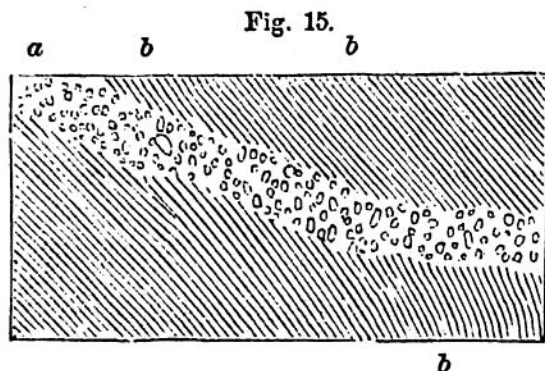


Fig. 15 represents foliation as it is seen in talcose conglomerate in Richmond, Vermont: *aa* shows the position of the strata, and *bb* the inclination.

The rocks in which foliation exists are called *schists*, as mica schist, talcose schist. Gneiss, however, is foliated,

and some contend that foliation is sometimes produced in unstratified or igneous rocks. The term *slate* ought to be limited to those fissile rocks that are homogeneous, and schist to those where the materials are heterogeneous, and are arranged in alternate layers. Few geologists, however, have as yet carried out these new views rigidly, so that their works still speak of mica slate, hornblende slate, &c. The theory of the origin of the various superinduced structures will be deferred to the chapter on Metamorphism.

Fig. 16.



*Contorted Laminæ of Gneiss: Colbrook, Ct.*

*Plication and Contortion.*—The laminated rocks sometimes, but the foliated and metamorphic much oftener, present examples of folding, plication and contortion most remarkable, and in general the more thorough the metamorphism the greater the curvatures and tortuosities. Fig. 16 was sketched from a block of gneiss lying by the road-