tions are found partly in vertical lines or bands of rupture or crushing, along which, sometimes for a breadth of 500 feet or more, the rocks have been crushed or sheared, partly in thrust-planes which are often nearly flat. In some instances the intrusive dikes remain quite distinct, but have acquired a more or less distinct foliated structure, the planes of foliation being parallel to those which traverse the surrounding gneiss (Fig. 330). But the alterations produced by these enormous terrestrial stresses are most strikingly displayed by some of the more basic dikes.

Along the central portions of one of the basalt or dolerite dikes, the massive rock may be observed to have been broken into oblong lenticles round which the more crushed material passes into hornblende-schist, while the outer por-

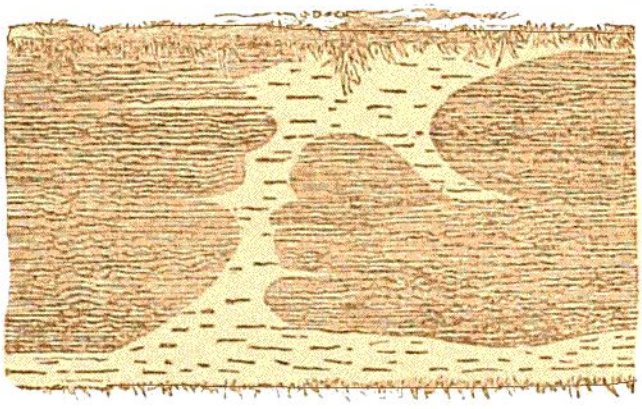

Fig. 330.—Foliation induced in a granite vein in gneiss, Loch Laxford.

tions of the dike likewise become entirely schistose (Fig. 332). So great has been the metamorphism that the augite for the most part has been changed into hornblende. The felspars have assumed an opaque granular condition, and the rock becomes a diorite. The peridotite and picrite dikes have been converted into soft talcose schists, the veins and belts of granite into granitoid gneiss. Such, too, has been the compression that in some cases dikes of 50 or 60 yards in breadth are reduced, where one of these crush-lines crosses them obliquely, to a thickness of no more than four feet, while the horizontal displacement sometimes amounts to a quarter of a mile (Fig. 331). Besides foliation produced parallel to the vertical or highly inclined lines of movement, a similar structure has been superinduced in the gneiss parallel to the gently inclined thrust-planes.

The influence of these movements, not only on the amorphous dikes and veins, but on the general body of the already foliated gneiss itself, has been profound.