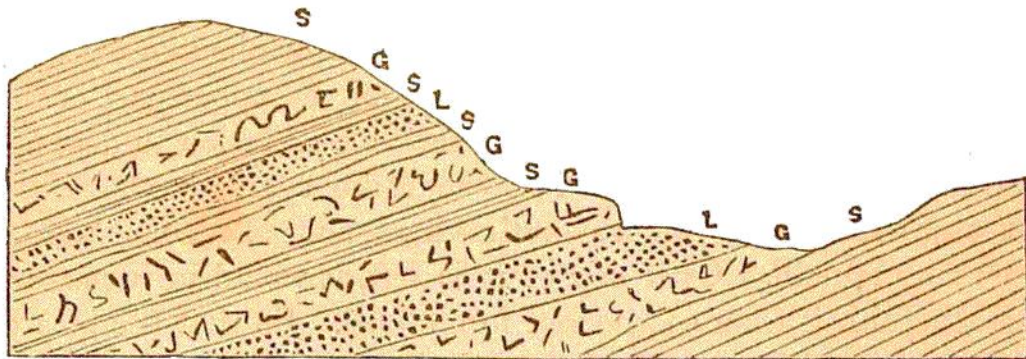


1. *We see how it is that azoic schists may be interstratified with fossiliferous strata.*—A few examples of this sort have been pointed out, especially in the Alps, where wedged-shaped masses of fossiliferous limestone, of liassic age, have been intercalated among the strata of gneiss. Indeed, strata of eocene tertiary have been converted into crystalline gneiss, mica schist, and even into granitic beds. In our country not many analogous cases have been pointed out. We present one, which fell under our notice in the town of Derby, on the east shore of lake Memphremagog, in Vermont. The section below, in Fig. 147, will give an idea of this case, as we understand it. Here, as we ascend a hill of moderate elevation, the strata succeed one another in the following order; mica schist, granite, fossiliferous limestone, (Devonian), granite, mica schist, granite, mica schist, limestone, schist, etc. Some of these masses, especially the granite, may be somewhat wedge-shaped, especially as we follow on in the direction of the section. The mica schist is highly crystalline, containing that peculiar species of mica denominated Adamsite, by Professor Shepard.

Fig. 147.



Section in Derby, Vt.

Here we have highly crystalline granite and mica schist lying above limestone of Devonian age, in which we found encrinural stems, and scarcely at all crystalline. But we have shown how this might take place, viz., by the greater fusibility of the superimposed and intercalated beds, or possibly by a lateral permeation of heat and water.

2. *The process of metamorphism is still going on.*—We see it more strikingly at the surface, especially in regions that have not experienced the erosions of the drift agency. There the rocks