altered in character. The change consists, for the most part, in a recrystallization of their constituent particles, destroying their original textures and structures and developing new ones. The Grenville and Saranac rocks are the ones most affected and in large part have their original characters utterly destroyed. In the great igneous masses the changes are not so widespread and profound, so that often there is at least a partial preservation of their original characteristics.

The old sedimentary rocks have lost all traces of lamination and nearly all signs of original bedding; they have undergone complete recrystallization, entirely obliterating their old textures, and, as a result of severe compression, have had a development of cleavable minerals along certain parallel planes, the mineral particles having a common orientation. This gives rise, on the part of the rock, to a capacity to split along such planes, and the structure is a variety of cleavage, and is known as foliation. Sometimes this new structure is parallel to the old bedding planes and sometimes it is not; often the latter can not be made out at all. In general the old limestones, now converted into coarse marbles, are the only sedimentary rocks which are not now foliated. This is because of the facility with which such rocks become crystalline, their rather uniform composition, such that they consist mainly of one mineral, and their comparatively great plasticity under pressure.

The great igneous masses are, in general, much less foliated, though this is not true of many of the smaller ones, and specially not of the older ones, those that seem to be of Grenville age. In considerable part the absence of foliation in much of the igneous rock is thought to be due, as in the limestones, to the fact that the rock is largely constituted of a single mineral. Much of the anorthosite, and to a lesser degree of the syenite also, is quite purely feldspathic, the minerals which are most effective in producing foliation being present in but slight quantity, or not at all. Such rocks are often badly mashed and granulated, indicative of the great pressures which they have experienced, but with no production of foliation. But, with change in the rock composition, with the formation in quantity of biotite, amphibole or pyroxene, more or less foliation is pretty sure to be induced in