

The gneisses which are as a general rule intimately associated with the limestone are quite different from those of the *second class* they are almost all highly garnetiferous and frequently consist essentially of garnet and sillimanite. Quartz and orthoclase are present in subordinate amount, some of them contain pyroxene, scapolite and other minerals. These gneisses show no granulated structure, the minerals constituting them have crystallized under the influence of the pressure which has granulated the gneisses of class 2, and are not in any marked manner deformed by it.

These rocks are generally well banded ; this structure being much more pronounced than the foliation, and graphite, which does not occur in the igneous granulated gneisses of class 2, is very frequently present and often abundant.

Complete analyses are furnished of four specimens of these gneisses from various localities throughout the district under examination. Two of these have the composition of ordinary roofing slate ; a third, highly quartzose, bears a very striking resemblance in composition to the more silicious bands so often found in slate quarries. The fourth of these gneisses (from Rawdon) differs entirely from the others and if it is an altered sediment it is one which has suffered very little leaching during deposition and must have been of the nature of a tufaceous deposit or one formed from the rapid disintegration of an igneous rock having the composition of a basic trachyte or syenite.

The gneiss of Trembling Mountain like many others including some in the Grenville series has undoubtedly the composition of an igneous rock being simply granite which has undergone deformation by pressure.

It is impossible in the brief space allotted to a review to even mention all of the important results obtained from these studies but a careful perusal is recommended to every worker, and student interested in the difficult problems of Archæan geology.

A. E. B.

Our Club has just received from the author a most interesting book entitled "The History of Mount Mica of Maine, U. S. A. and Its Wonderful Deposits of Matchless Tourmalines" by Augustus Choate Hamlin,