

The distribution of these limestones is represented on the accompanying map. Since they are much softer than the accompanying gneiss, they nearly always occur in depressions and are consequently often so concealed by glacial deposits or dense forest that it is hard to trace them out. The limestones, however, continue just as persistently as the other members of the stratified series. Single beds may be traced for many miles, while certain horizons in the gneiss at which the limestone bands occur, sometimes quite pure, and again rendered more or less impure by the presence of various disseminated minerals or thin layers of gneiss, can be traced as far as the limits of the map. It must here be remarked that many irregularities in form presented by these limestones, must be attributed to the fact that the limestones (as every observer may perceive) under the great pressure to which these rocks have been subjected are much more plastic than the associated rocks. Thin layers of gneiss interstratified with them are often by the folding of the rocks torn asunder into extraordinarily bent and twisted ribbonlike pieces which lie isolated in the limestone so that there results a pseudo conglomerate. The fact that these limestones are now and then squeezed into cracks in the associated gneisses, led Emmons in his description of the geology of the State of New York, to express the opinion that they were of eruptive origin. The greater plasticity of the limestone as compared with other rocks has also been established, as is well known, by many direct experiments. Since, therefore, they alternate with the gneiss and follow its strike, and because they are more easily distinguishable than any other of the countless varieties of gneiss, Logan recognized that a careful study of their distribution would furnish a clue for the unravelling of the structure of this or any other Laurentian area in which they occur, and moreover that by the determination of their relations to the anorthosite rocks, very important data might be obtained concerning the stratigraphical position of the latter. In investigating that portion of the area which lies to the