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## NEW BRUNSWICK.

ism may be traced in almost every particular, whether of colour, texture or mineral composition, but is especially noticeable in the apparently similar influence of the causes originating the granite in both instances, determining the same highly micaceous character in each, with the development of the same crystalline minerals, as both are abundantly invaded by granitic and syenitic intrusions.

## GRANITES, SYENITES AND INTRUDED ROCKS.

These rocks require some further notice if only on account of the extent of the areas which they occupy and the important influence which they are believed to have exerted upon the associated formations. In addition to the granites and syenites the rocks to be described in this place include felsites and felspar porphyries, diorites and dolerite or diabase.

Granite.-The extent to which this rock is represented in central Granite. and western New Brunswick constitutes one of the most marked features in the geology of the latter, and, with somewhat varying outlines, has been represented in all the published geological maps of the province. The limits which have been assigned in the preceding pages Limits. as well as upon the accompanying map have been very carefully determined, and are probably as nearly accurate as the facts of the case will permit, the exact outlines being often difficult to recognize, first from the extent to which the granite itself penetrates the surrounding formations, and secondly from the great accumulations of boulders and other drift material which cover its surface and obscure the lines of contact. The great number and large size of these boulders is quite remarkable, and it would probably be no exaggeration to say that over large areas, as around McAdam junction, they are so thickly strewed Boulder as completely to conceal the subjacent rock and to determine a region nearly or quite destitute of soil. Where, however, the loose material is less abundant and the soil not farther impoverished by forest fires, it is regarded by many with much favor, as being especially adapted for the growth of cereals and for grazing. Many interesting facts relating to the surface geology of the region will be found in the report of Mr. Chalmers.

Another circumstance tending to make difficult the correct delineation of the granitic areas is the very irregular distribution over or in connection with them, of the gneissic and micaccous strata already described as Cambro-Silurian, and which are supposed to have derived their crystalline character from the influence of the same causes which originated the granite. The larger of these areas, such as that of Caverhill and Haynesville, have been already referred to; but a