

central and higher parts of the area are nearly barren, but where covered by forest growth it is found to consist of stunted Banksian pine. The general level of this rocky district is over 900 feet above tide, and the greatest elevations above this amount are not over 150 feet. The hills bordering the valley of the Churchill river may, in some cases exceed this, but their greater relative height is mainly due to the great denudation along the line represented by the valley of the above river and again along that of Burntwood lake.

#### GENERAL GEOLOGY.

##### *Laurentian.*

This term as applied to rocks in Eastern Canada has been given Laurentian significance as a formational term and the rocks comprising it are thought to form an older series on which the Huronian or earliest eedimentaries rest. Throughout the central part of the continent all the rocks in the Archean complex, which do not belong to the earliest sediments, are found to have been subjected to such metamorphism, that in the writer's opinion it is impossible to definitely assert at present that any of the various gneisses or schists met with are older than the Huronian, though many bands might be considered to be altered equivalents. In a few instances, between the rocks classed as Huronian and the surrounding granites and gneisses the contact is igneous, and shows granites and gneisses to have been in a state of partial fusion at the time of the folding and crumpling of these rocks.

In the district under discussion it is impossible to map out, under the conditions of a reconnaissance survey these newer gneisses from any that might be supposed to be older. The rocks therefore described and mapped as Laurentian are a series of gneisses composed in part of highly metamorphosed material in close relation with granites and gneisses whose age the writer supposes to be younger than either the series of gneisses noted above or the Huronian.

The original crust of the earth, after its great crumpling and folding subsequent to the deposition of the Huronian sediments, suffered such extensive denudation that the rocks now exposed can be considered as a horizontal section of the crust at a considerable distance below the original surface. The present areas of Huronian are thus the lower parts of such deep folds as penetrated to this level through the harder crust. It may be supposed that the lines on which the greatest movement would take place would be over such areas as

Extensive  
denudation.