

enclosing limestone; at places this tapering off is seen, on closer inspection, to be due to strings of particles of feldspathic and similar material arranged in line.

All these inclusions of whatever shape seem to have one feature in common. Their exterior surface is hackly, pitted and with a generally corroded appearance.

The general striping of the limestones would seem, on careful study, to be due, either to little irregular chains of such particles or to a different colouring of the replacing calcite crystals, probably marking the places where such particles have been.

The detailed explanation offered by the writer seems to him to satisfactorily and thoroughly explain these and other features of the limestones of the Laurentian. He is led to the conclusion that they simply represent areas of gneissic and similar rocks altered in place into limestones. Furthermore, that the extent and location of these areas have been largely determined by the presence of the abrupt bends and other contortions of these rocks, whose foliation would thus be separated and opened up to the complete action of the subterranean waters. Where such contortions and crumpling of the rocks had extended over a considerable area, the alteration would have gone further and have produced the solid limestone masses so frequently found. In these the inclusions would naturally be scarcer and represent the more solid portions of the ribs of the gneiss which for this reason or owing to their mineral composition were less amenable to change than the rest of the area. These would naturally show the corroded surface already alluded to, and the tapering off along the striping of the rock. The lesser and scattering occurrences of limestone throughout the district, which are a very confusing feature on any other supposition, would thus be satisfactorily accounted for as well as the extreme irregularity of the boundaries of these limestone areas and other phenomena of their occurrence.

Doubtless also the mineral constitution of the original rocks must have been an important factor in the determination of the position, etc., of these alteration areas.