

find this protogin here in our western country, the veins have exactly the same appearance, the vein matter is the same, consisting of quartz, blende, copper and iron pyrites and galena, and almost in every instance gold free and combined, and also the slickenside is made up of the chloride or talc of the rock. Now I will not say that lateral secretion was the exclusive cause of the filling of the veins, although it is easier to accept, when one considers that the different minerals appear in vertical lines in the veins, and commence often on both walls with the same mineral, changing toward the middle in equal sequence. I observed another peculiar feature, that is, in the forming of the veins or fissures, they seem to radiate from one common centre, which is caused, perhaps, by the magma being longest hot and viscid there where it was thickest, and cooled and contracted, therefore, more slowly than towards its thinning sides.

Now, when we consider that this protogin is of eruptive origin and comparatively little altered by dynamic forces (perhaps with the exception of a little "rough shaking at times" which might have produced and opened some of the fissures still more), unlike those which prevailed in Keewatin times and formed the rock of that period to what they can be seen now to exist, as often sharply foliated and highly tilted slates, while this protogin still showing its compact and massive structure, then it is to be assumed that most of the veins therein should be of a "true character." If so, and if we consider further the often very rich mineralization of the veins, then, gentlemen, I am somewhat justified to have dwelt upon and kept your attention so long upon the occurrence of this rock, because it will play an important role in our gold-mining camps as a rich and permanent producer of that yellow, much desired metal, gold.

To do justice also to the neighbors of this rock, to the slates much developed in the western part of the Rainy Lake and River district, we find in them sometimes very good and very likely also permanent veins, especially where they form the contact between the different series of the Huronian and these and the Laurentian rocks, but a large percentage of the veins in the slates show a bedded, or to use a more current expression, a gashy form. So much is certain that there are few gold-mining camps where the gold is so generally distributed in the numerous veins over so large an area as in the Rainy River district. This area extends east to the Shebandowan Lake region and as far known, as far as