

solutions were able to circulate, than by minute difference in the character of these old basic Pre-Cambrian rocks.

In the Porcupine district I believe that the percentage of silver as an alloy of gold is practically constant at any depths yet reached, but in the Kirkland Lake district, where tellurides of gold, silver and lead are present in appreciable quantities, the silver in the ore undoubtedly varies with the quantities of tellurides present. It is hardly likely, however, that the grade of the gold itself, and the quantity of silver which is alloyed with it, have suffered any change at any depth to which the shafts have yet reached in the Kirkland Lake district.

I can only repeat what I said in an earlier part of this paper, that my object in bringing the occurrence of gold in Ontario before members was to point out the association of gold-bearing veins in our Pre-Cambrian areas with diorite-porphyrries, or intrusives rich in soda-lime feldspar.

Dr. Malcolm MacLaren, in a recent paper in the *Mining and Scientific Press*, has clearly pointed out a similar association in the Pre-Cambrian rocks of Kalgoorlie in Western Australia.

In summing up the value of a knowledge of the association of the gold-bearing veins in Western Australia with the intrusive dykes, Dr. MacLaren* says: 'It is not too much to say that had a geological map, showing all the porphyry and porphyrite dykes of the region, been available in 1893, every deposit now known, and some still unknown, would have been discovered within three months, and thousands of pounds' worth of useless work and mis-spent energy avoided.'

* 'Geology of the Kalgoorlie Goldfields,' by Malcolm MacLaren and J. Allan Thomson, *Min. and Sci. Press*, 9th August, 1913, p. 232.