

in Nova Scotia. Show also their effect on the transportation and deposition of gold bearing drift, especially if transportation was on different courses. 11. Problems in Glacial Geology should be solved by the Students. Illustrate with plans and sections. 12. This subject could be made much plainer by visits to the nearest railway cuttings or other earthworks.

*Mineralogy* A general course in mineralogy would be a waste of time more needed for other branches. It should contain matter from or related to Chapter V and VI. Gold and its associated minerals should receive special attention. Then should come Tungsten, and the minerals of the granite tracts, manganese, silver bearing galena &c. Field tests for minerals are necessary, illustrated by samples in the Provincial Museum. Gravity and Hardness should also receive some attention as a further means of identification. Sets of specimens to illustrate these qualities are necessary. It is needful also to know the conditions under which these minerals are found.

*Blowpipe analysis* Some practice in this in order to be able to make use of a simple outfit.

*Qualitative analysis* of the simplest form for those who wish to take it confined chiefly to the minerals of the gold fields.

The use of a compass can be taught with explanation of variations. The diurnal variation is too slight to affect the prospectors work and therefore need not be bothered with. A knowledge however of secular variation is necessary to the thorough understanding of the differences between old and new Government plans (See Chapter XIII.)

A knowledge of the use of the traverse tables may help to solve difficulties that cannot be otherwise overcome. Those in which distances are dealt with in detail are of more service to the prospector than those which give more place to the divisions of a degree. While the skill to calculate is useful, it is not necessary in the partially rudimentary course proposed. Therefore apart from a few simple geometrical rules everything of an advanced nature can be dispensed with, as the chief idea is to make a good prospector.

The Dip Needle or goniometer is a necessary article, and a knowledge of its use saves a lot of guess work.

*Levelling* A little knowledge of the level and its uses may be needful in case the prospector aspires to its possession. Drainage is a very important thing to him and the slope of the ground worked over, though it may be got at in a way with a carpenters level, should in some cases be measured with more exactness.

Map and Section making is a very necessary branch of prospecting. Though exactness is indispen-