PRACTICAL MINING FOR MINING ENGINEERS

It has been a very common practice in Canada to urge graduates in mining engineering to forget the fact that they are graduates and to go to one of the mining camps and take employment as unskilled laborers. They are advised that they cannot hope to be successful unless they spend a few months shoveling broken rock into tramcars. When they have done this they are supposed to be better able to appreciate how much inferior they are to the average laborer. They are then to approach the superintendent and ask to be given some other kind of work, anything being preferable to "mucking". Then after spending a few weeks dragging logs up into stopes for the timbermen, carrying steel for the machine runners, or helping disabled tramcars back onto the track, they may be given jobs as helpers on drills. After a period as helpers they may be allowed to run the machine themselves. Then while the miners take their places as helpers, they may place or misplace a few holes themselves. The attempt at placing the holes is not unlikely to meet with the disapproval of the miners and to lower the latter's opinion of college graduates to the level of the sump, if it is not there already. In case one-man drills are used the college graduates may be put in working places by themselves, but in this case the proper amount of criticism is not obtained, being limited to the lunch hour visits of the nearby workers. A greater variety of holes is often obtained in this way however as the restraining influence of a partner who does not like to see work wasted is lacking.

There is good reason for advising college graduates to gain some experience at the work of the various employees of a mining company. This is especially true of the underground work, for nothing is more vital to the successful operation of a mine than a very intimate knowledge of what is going on below the surface. It is well to impress this fact, for it is sometines lost sight of by others than novices.

But should experience in the work of underground laborers be sought after graduating from college? Is it not better to do such work at an earlier stage? We agree with Professor Gwillim when he says: "practical mining should be seen and known before entering and during college years, not learnt at a rock pile or roast heap after one's brains have been trained to do better work."

The time honored custom of advising graduates to spend a period as laborers doubtless arose from the fact that Canadian mining colleges are not located in mining districts. It was not impossible a few years ago for a student to graduate from a mining course without having had any experience in a mine. Those who lived in mining districts or who found employment in mines during vacations were prepared for more important tasks, but those who neither lived in nor visited the mining districts had to learn a great deal about mining that is not taught in colleges. The difficulty has been partially overcome by refusing to grant degrees to students who have not worked for a certain period in mines or metallurgical plants.

It is not essential to the success of a mining engineer that he should be able to shovel as much broken rock per day as does a common laborer, be able to drill as many holes per day as the average miner, slide ladders as quickly as the drill boy, sharpen drills as well as does the blacksmith, nor even to understand foreigners as well as does the mine captain; but it is essential that he should have an intimate knowledge of what the various employees are doing and what they are capable of doing. A little time spent at each of the underground tasks should prove useful in later years to any engineer.

SERVIAN COPPER

The newspapers recently printed a despatch describing the Servian copper mines captured by the Germans as "probably the best copper mines in Europe." There is one important copper mine in Servia, the Bor, which produced in 1912, 16,500,000 pounds copper. Such a production is exceeded by only a few mines in Europe. In 1912 Europe's premier copper mine, the Rio Tinto, Spain, produced 89,432,000 pounds, the Mansfield, Germany, 45,200,913 pounds and the Kyshtim, Russia, 16,812,000 pounds.

The Bor mine ranks fourth among European copper mines in production and is a prize of very considerable value to the Germans. Aside from the Bor there are no important producers of copper in Servia.

In 1912 the copper production of Germany was 53,581,500 pounds, and of Austria-Hungary 8,820,000 pounds. The Bor mine production is therefore equal under normal conditions to about one quarter the combined output of the central powers.

It would be folly to suppose that the Bor mine was left in working condition by the Servians. It was doubtless, as has been reported, flooded and the machinery destroyed. The Huns will of course make heroic efforts to get it into operation quickly; but it may easily be at least a few months before the mine is again making a large production.

The Glace Bay collieries of the Dominion Coal Company produced 408,200 tons in October, an increase of 40,184 tons over 1914. The coal and steel industries of Nova Scotia have made a grand recovery from the depression which followed the outbreak of war. The closing months of this year will probably be very busy ones.

Few companies can show a better record of enlistments for military service in this war than the Dominion Coal Company. Nearly 1,500 men, most of whom had worked underground, have gone to the front from the Glace Bay mines, or are on the way. These men should prove specially useful in tunneling operations and their services are doubtless being turned to good account. The loss of so many good miners must seriously embarrass the mine operators.

The Orillia Molybdenum Company announces that its concentration process has worked out satisfactorily. The company is now making weekly shipments of concentrate to the Imperial Government brokers at Liverpool, and is in the market for molybdenite ores.