deserving students are forced to depend upon their own efforts, and often they are left in the lurch.

Incidentally we feel inclined to agree with the statement of one member of the committee that drafted the resolutions cited above. It is his opinion that a firm stand should be taken against the idea that it is necessary or even advisable for a young engineer to engage in manual labour during his course of training. There is no inherent virtue in getting dirty. Certainly a young man must know the value and meaning of a day's work. He should not be unfamiliar with pick, shovel, and drill. But he should realize that this phase of his experience can easily be overdone.

In the main, the practical experience now obtainable by our mining students is of the helter-skelter variety. He may spend one summer in an assay office, another prospecting, and yet another surveying, whilst his object in life is to become a mine manager. His professors can assist him only to a limited extent, and unless the mine manager takes a friendly interest in him, he is compelled to switch his energies into channels that he knows to be unprofitable. We need not expand upon this topic. Our student readers at least will catch our drift.

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There are three bodies upon whom falls the duty of providing better and more uniform facilities for students who require actual acquaintance with working conditions. These bodies are first the professors, secondly the mine managers, and thirdly the Canadian Mining Institute. The latter two bodies may advance the objection that this smacks of paternalism. A little reflection will show, however, that this is not the case. The Institution of Mining and Metallurgy has set a good example. Such of its members as are operators or managers of mines have been requested to take on one or two graduates of designated mining schools. We can well afford to follow this example.

Finally, we would urge most strongly that, instead of fostering the present rivalry, the professors of our various mining schools consult each other with a view to rendering uniform the conditions under which Canadian mining students secure professional employment. This is probably the first and the most important step, and now, near the beginning of the academic session, is the best time. Another consideration makes this step extremely desirable. This is the fact that any recommendations formulated by a convention of professors could be at once submitted to the Royal Commission on Technical Education.

CONCERNING NOVA SCOTIAN GOLD.

Early in August we visited several old gold mining camps in Nova Scotia. Our readers are not unfamiliar with the questions that have been raised concerning gold mining in our easternmost province, and, in the hope that a ray of light may be thrown upon the subject, we shall venture herewith to set down a few general impressions gathered during our visit.

The outstanding advantages that first strike the traveller are the accessibility of many of the mines, the good roads connecting them with their sources of supply, the cheapness and apparent abundance of labour, and the plentifulness of water and timber. To be added to these is the natural beauty of the surroundings, and the relative scarcity of mosquitoes and black flies. So much for the bright side.

In a certain camp that shall be nameless the most superficial inspection shows that something is wrong. A mill test, for instance, consisting of a few tons of ore was about to be put through a five-stamp battery. No steps had been taken to determine the gold contents of the ore, the plates were dirty, the mill was dirty, and, so far as we could learn, it was the intention of the operators to "sweeten" the run with some very rich nuggets that had been found a few days before. All this, of course, was being done innocently. But we have no doubt that the parcel of ore would be credited—equally innocently—with the total yield. Lest we be misunderstood, let us repeat that in the instance quoted, there was not the remotest intention of gulling anybody. The facts, such as they were, were explained fully to us. But the result is bad. No real evidence is gained, and, in all probability, the management is confirmed in the practice of wasting time and money in putting worthless quartz through a mill of very limited capacity. If any ore requires assaying carefully and systematically, the narrow spotty veins of this type require it.

Of careful mining there is no evidence. The head frames are of the rudest and clumsiest description. The shafts are badly timbered. The narrow, irregular underhand stopes are unspeakable. They are eloquent of lost labour and wasted time. Supervision, close and careful, is unthought of. The object of one and all appears to be to discuss the whereabouts of the next bonanza.

And it is the search for the bonanzas, the fabulously rich rolls and pockets, small in extent and irregular in occurrence, that not only incites the novice to spend his money, but also destroys the efficiency of the mine as a whole.

There have been two kinds of failures in Nova Scotian gold mining. The one has been due to over-equipment, equipment out of proportion to the possible yield of the mine; and the other is attributable to the feckless gophering of men who do not know what a mine is. Either kind may succeed; but chances are very much against them.

Somewhere in between lies the golden mean. The intelligent study of the ore shoots, the proper development of the mine in relation to these shoots, the elimination of barren ore, the just co-ordination of plant and mine, the utilization of water power wherever possible, and, above all, the keeping of full and continuous assay