

that the vast majority of them have no time to study medicine thoroughly, you would no doubt remonstrate vigorously, yet this argument is as sound as the one just advanced. Until a school is able to command the services of a competent man to direct a course, it had better let that course alone, and confine itself to work which it can really do well. To do otherwise is neither fair nor honest, notwithstanding numerous specious arguments to the contrary.

"It is indeed absurd to 'grade a man as a mining engineer if he has never been down a mine nor felt the heat of a furnace,' but it is even more absurd to place in charge of technical courses men whose qualifications are almost as limited. Yet this will continue to be done, until school trustees, and the public as well, realize that *brains are worth money*, even in an educational institution. A man who is thoroughly capable of directing a department of engineering in a school, must not only be a good engineer, but possess all the additional knowledge and personal qualifications necessary to make him an educational expert. Is it any wonder, then, that professors of engineering are frequently regarded as men of an inferior grade, when it is a matter of daily observation that live corporations are willing to pay from \$5,000 to \$30,000 per annum to a man who is an expert in engineering alone, while schools offer \$1,500 to \$4,000 (seldom the latter) for a man who must know far more, if he is what the schools occasionally *want* him to be, and always publicly *claim* him to be? There is an idea abroad that the moment a man accepts a position in a school he must be prepared to work for little or nothing. Men who are not above suspicion as to honesty appear to accept this condition, while in reality they perform little real service for the school, and use their position before the public as a means to make enough extra money to bring up their income to a respectable figure. While some defend this, I cannot but regard it as a deception, since the public is not aware of the facts, and the students are defrauded of the care which the school ought to give them.

"In other words, educational institutions should be run on solid business principles, perform literally all they promise the public, and realize that the day has passed when schools, being under control of church authorities, could announce anything and have it instantly accepted by a public whose faith was very much more developed than its intellect."

Pig Iron Industry.

The advent of the Liberal administration brings to the fore the question as to whether the development of the iron industry will be interfered with by the proposed revision of the tariff. Iron producers will naturally hesitate to proceed with the legitimate development of their various enterprises (now passing through the somewhat critical initial stages) until the policy of the new Government is formulated. Believing that the Hon. Mr. Laurier and his colleagues earnestly desire to maintain and develop the industries for which nature has fitted this country, we feel quite sure that any legislation that may be brought forward with regard to the iron industry, during the coming year, will be along the lines of restoring confidence to the iron producers, rather than wiping out the industries which they have, during the past few years, laboured so faithfully to establish. No doubt pressure will be brought to bear upon the Government by certain consumers of iron in this country, who themselves possibly, in some cases, inadequately protected, somewhat naturally desire to enhance the earning powers of their own enterprises by taking something out of the producers of what they term their "raw material." In dealing with such complaints the Government must bear in mind that what is "raw material" for one concern is the "finished article" for another, and if the gauge be the labor employed in the respective industries, the manufacturer of pig iron is often entitled to far more consideration at the hands of the Government than the man who simply re-smelts the pig iron into foundry castings. If pig iron is made from Canadian ores and Canadian fuel there is no industry that equals it in the amount of labor employed, in proportion to the market value of the product.

In any revision of the iron duties, pig iron must be considered as a manufactured article of great labor value to the country. It is the initial stage, and must be taken as the basis of the whole industry. In considering the advisability or otherwise of lowering the duties, it must be remembered that the producer of pig iron from Canadian ores cannot in turn fall back upon any other producer to recoup himself for loss sustained. His only recourse, if he continues to run his furnace, is to cut down the wages of the men employed at the works and in the ore fields.

This would mean great hardship to the employees, and indeed is hardly practicable.

It has, we think, been amply proved, especially within the past three or four years, that iron of exceptionally good quality can be successfully produced in Canada, and that the existence of such industries, is of very great value to labor, to the railways, and indeed to every Canadian interest. The history of Great Britain, the United States, and the leading continental powers, shows the great part that the building up of the iron industry has had in the successful development of the nations. Canada cannot afford to be behind.

The progress of the Canadian iron industry, during the last few years, has been such that to-day Canadian iron is being sold throughout Canada at an average of from \$1.50 to \$2 per ton below imported American iron, and at a considerably greater reduction on British iron. The Canadian iron men are certainly not taking advantage of the full amount of the duty imposed at the present time, but \$4 per ton duty is not too much to guard against the periods of depression, when American producers invariably attempt to make a slaughter market of Canada, to the great detriment of the growing industries of this country. In considering the revision of the tariff, the question will come up as to how heavily, or otherwise, the present duties bear upon the tax-payers. It is interesting to note, for instance, that on an average sized cook stove, weighing, say 175 lbs., the total contribution to the \$4 per ton duty is, as a matter of fact, not over 20c. This by reason of the fact that Canadian pig iron is sold, as already mentioned, at considerably less than foreign. Then again, upon a cooking range, weighing 400 lbs., the contribution to the duty, in the same way, is not over a total of 50c. It is reasonable to suppose that these stoves will last for years, so that the contribution per annum to the duty is infinitesimal. In the same way analysis proves that the contribution of harvesting machinery is very light indeed. A plough weighing (iron and steel combined), 175 lbs., contributes to the protection of the pig iron industry perhaps the small sum of 25c. A binder of the very best type, the iron and steel in which, combined, weighs, say 800 lbs., contributes to the pig iron protection a sum not exceeding \$1. As a matter of fact, the experience of the past few years amply proves that home competition, as it grows, will in time entirely wipe out this tax, so far as the consumer is concerned, while at the same time industries affording a large amount of employment to Canadian labor are successfully retained in the country. The manufacturers of harvesting machinery themselves must admit that any industry that helps to increase the prosperity of the farmers, as for instance, the Quebec charcoal iron industries, to which we will refer further on, well compensates them for the comparatively small contribution that harvesting machinery in the initial years is called upon to make towards the protection of the pig iron industry.

The importance of the iron industry is well admitted in Ontario, where its value, for a long time, was best appreciated by the want of the industry. Sir Oliver Mowat, and his Liberal Government in Ontario, so well recognized this that they have recently added to the encouragement given by the Dominion Government, a bonus of \$1 per ton upon the pig metal product of Ontario ores, raised and smelted in that province. The result of this has been the establishment of the Hamilton furnace, and we know that a still greater development awaits Ontario, by the almost immediate erection of a 100 ton per day furnace, probably with steel plant attached, if the Government will show by their action that they intend to maintain the tariff, and encourage the industry by protection and bounty. We know, too, that in the Province of Quebec the manufacture of charcoal iron has attained such proportions, under the existing tariff and encouragement, that it is only a question of a short time, when (if the duty and encouragement is maintained) the industries now in operation will be largely developed. In the Quebec industries all the material used is Canadian—ore, charcoal, fuel, limestone and everything else that goes to make a successful iron industry. Seventy-five per cent. of the labor is done by the farmers of the Province, and