

or that employees should be compelled to go to work for such a wage. This would have to be left to the parties concerned to decide for themselves. The question will bear further discussion as to the practical details, for the time has come in this Province when the relations between employer and employed should be placed upon a better basis than they now are.

THE IRON INDUSTRY.

MUCH attention has been given during the last few months to the possibility of establishing in British Columbia iron smelters and kindred industries. While nothing definite has been yet accomplished, nor is indeed to be expected, from public discussion, a great deal of good has been done, for much information bearing upon the question has been brought out and the Department of Mines has promised to do all in its power to supplement information at present available by official investigation. The great benefit of the academic treatment of this industry is that the facts elicited will hardly fail to attract the attention of possible investors, for there never was a time in the history of the world when iron, in one form or another, was in anything like as great demand as it is to-day. In the building trade, for example, the consumption of this metal far exceeds anything contemplated not very long ago. Most of us can remember when in the construction of even the largest buildings iron played a very subordinate part, while in structures of the ordinary class it was scarcely ever employed except in the form of nails. Nowadays the concentration of business in the larger cities has led to the erection of buildings of a class calling for great quantities of steel, and even in smaller structures iron is being employed to a much larger extent than ever before. Within comparatively recent years there has been an active demand for steel for bridge purposes, and it is only a matter of a comparatively short time when the majority of the larger wooden highway bridges in North America will be replaced with steel. The same is true of the railways. In thousands of instances wood has been employed in the construction of railway bridges, with a full knowledge that they would later be replaced by steel structures. This has been the case with so many roads that it is needless to particularize any one of them. At the time of construction motives of economy led the companies to employ the material which was the cheapest at the moment, with the intention of substituting permanent structures when traffic warranted. A heavier volume of traffic likewise calls for heavier rails over many miles of railway every year, in addition to the demand made by ordinary wear and tear. A steady increase in railway mileage means not only a demand for rails for

new lines, but an increase in the annual demand for renewals. The volume of commerce is steadily growing, and this means a vast addition annually to the quantity of iron used in ship-building. In short, the demands of transportation, including ships, railways and bridges, call for a supply of iron which not only immensely surpasses that of a comparatively short time ago, but is expanding every year. It is not necessary to mention the other industrial uses to which iron is put, for nothing is clearer than that with the increasing complexity of our civilization the number of the purposes for which it is employed and the quantity required is steadily expanding.

It is open to doubt if the discovery of new deposits of high-class iron ore is keeping pace with the expansion of the market. Though very widely distributed the ores of iron are not very often found of such quality as to warrant their employment economically at present prices and under existing methods of treatment. Every deposit of iron ore is not a mine of economic value, as a good many people in this Province have learned to their cost. Many things enter into consideration, when one endeavours to pronounce upon the value of an iron deposit. There is the quality of the ore itself, the availability of fluxes when necessary, the cost of fuel, the convenience and cost of grouping together the materials necessary in successful smelting operations, the cost of labour, the accessibility of a market and so on. In addition to these what may be called natural considerations, there is the artificial consideration which may or may not arise from the fact that a great combination of capital dominates the iron market. These are matters into which intending investors will look, and the most that those who are unable to take up the industry in a practical way can hope to do is to cast as much light as possible upon them. We repeat that what has been done in this direction in Victoria recently has been of very great value, and those who have been instrumental in accomplishing it should persevere along the lines of investigation that may open up.

Some things have been established beyond question. There are numerous deposits of iron ore in British Columbia, some of them being apparently of great magnitude, although few, if any, have been fully proved. The magnetite ores are of high quality as a rule, but will be expensive to handle without a flux. The hematite deposits are not as well known, and are not as a rule as well situated in respect to water transportation as the magnetite, many of these latter being upon salt water and accessible by the largest ships. There are some deposits of bog iron, but very little has been ascertained about their extent. There are apparently extensive deposits of iron clay. Speaking conservatively, it may be said that, so far as the ore is concerned, a good *prima facie* case has been made out, and one may feel safe in recommend-