

## SOME ENGINEERS\*

BY AN OTTAWA ENGINEER

Who is the man that designs our pumps with judgment, skill and care?

Who is the man that builds 'em and who keeps them in repair?

Who has to shut them down because the valve seats disappear?

The bearing-wearing, gearing-tearing Mechanical Engineer.

Who buys his juice for half-a-cent and wants to charge a dime?

Who, when we've signed the contract, can't deliver half the time?

Who thinks a loss of twenty-six per cent. is nothing queer?

The volt-inducing, load-reducing Electric Engineer.

Who is it takes a transit out to find a sew'r to tap?

Who then with care extreme, locates the junction on the map?

Who is it goes to dig it up and finds it nowhere near?

The mud-bespattered, torn and tattered Municipal Engineer.

With compressed air and dynamite, who toils in dark and wet?

The copper, iron, coal and gold for all the world to get?

Who sinks his shafts, and drives his slopes and makes the wealth appear?

The drilling, blasting, pumping, hoisting, Mining Engineer.

Who thinks without his products we would all be in the lurch?

Who has a heathen idol which he designates Research?

Who tints the creeks, perfumes the air, and makes the landscapes drear?

The stink-evolving, grass-dissolving Chemical Engineer.

Who is the man who'll draw a plan for everything you desire?

From a trans-atlantic liner to a hairpin made of wire?

With "ifs" and "ands," "howe'ers" and "buts" would make his meaning clear?

The work-disdaining, fee-retaining Consulting Engineer.

Who builds a road for fifty years, that disappears in three?

Then begs another subsidy to change its quality?

Who covers all the travelled roads with filthy, oily smear?

The dust-providing, rough-on-riding Highway Engineer.

Who is that youth who scales yon height and swims that torrent black?

To find a grade point four per cent. across the mountain's back?

Who lays his rails of shining steel to bring far places near?

The booze-absorbing, girls-adoring Railroad Engineer.

Who is the man who lays out docks whence steamers ply their trade?

Who overcomes all obstacles when others are afraid?

Who builds canals, hydraulic plants, to help our daily cheer?

The ne'er dismayed, yet underpaid Civil Engineer.

\*Read at the "Smoker" held February 11th at Ottawa by the Engineering Institute of Canada.

Standard plans and specifications for inexpensive houses have been prepared by the Ontario Housing Committee in order to assist builders who wish to borrow from the Federal Housing Fund. The smallest house planned has four rooms and requires 16 ft. frontage.

On page 199 of the February 6th issue of *The Canadian Engineer* there appeared an article on "Town Planning in Canada" by James White, deputy head of the Commission of Conservation. Mr. White writes that this article had been prepared by Thomas Adams, town planning adviser to the Commission, and that its authorship should have been credited to Mr. Adams.

## CANADA'S PROSPECTS AS A STEEL PRODUCER

IN the course of an address last month before the Canadian Manufacturers' Association, Toronto, Colonel David Carnegie, of the Imperial Munitions Board, in speaking of the prospects for selling Canadian iron and steel products to Great Britain, France and Belgium, said:—

"We have fine deposits of magnesite in Canada, developed during the war, which is of excellent value for our furnaces, making it unnecessary to import as hitherto; our carbon electrodes are second to none and cheaper than are produced in England; we have nickel in abundance; everything, in fact, calls for Canada to rise to the first rank as a producer of high quality steels. She has the opportunity by sustained and wise propaganda of displacing much of the heavy, cumbersome, short-lived, common carbon steels used in our rolling stock, ships, dredges, docks, mines and general machinery, and of becoming one of the principal exporting countries in the world. The things I have named—power, electrodes, magnesites and nickel—enter so much into the vital cost of producing high grade steels that Canada stands out almost alone in its great opportunities in this direction."

## Believe Belgium Will Buy

Discussing prospects of trade with France, Colonel Carnegie said that the resourcefulness of that country, especially with the restoration to her of Alsace and Lorraine, would enable her to repair her own waste places without calling upon other countries; indeed some believe that France will not only be able to reconstruct her own country, but will be a formidable competitor of Britain and other industrial nations in the export of her surplus productions to foreign markets.

As for Belgium, it is believed that she will buy iron and steel products for one or two years while she is rebuilding, but after that she will return to her former place as an exporter, particularly of rolled steel and cast steel products.

"Regarding Britain, the amount of work likely to be secured through Government channels for public works will no doubt exceed the pre-war annual requirements, owing to most of the ordinary Government contracts during the war having been suspended," said Colonel Carnegie.

"Canada has increased her steel production per annum from one million tons before the war to two and a quarter million tons at present. United States steel production has increased from thirty-two million tons to forty-five million tons, and Britain's from seven and a half million to twelve million tons per annum."

## Canadian Export Competition

Touching on Britain's high cost of production compared with pre-war costs, Colonel Carnegie said that while Britain has a capacity to supply her domestic requirements, she will have a struggle to maintain both her home and export trade against United States and Canadian competition.

"Facts show that Britain has a capacity for steel production exceeding her pre-war capacity of 62 per cent., while Canada's capacity has increased 125 per cent.," said Colonel Carnegie. "If Canadian manufacturers will follow Britain's example by determining to supply her domestic trade more fully than in the past, Canada will go a considerable distance in using her surplus steel capacity."

"Canada should have at least one structural mill for rolling heavy structures.

"The home demands alone of the electrical industry for higher quality steel sheets is not by any means insignificant, and should be supplied by our manufacturers who have finishing mills.

"The growing demands for alloy steels for motor cars, tractors and all kinds of engines and high-class machinery where excessive wear calls for a better and more enduring steel, should arouse the most earnest attention of the makers of electric and crucible steel.

"The importation into Canada of tool steel, file steel and files, spring steel and springs should be reviewed by the makers of high-class steel. There is no doubt that a much larger volume of that business should be undertaken by the manufacturers of Canada."