

the engineer to be aware of the cost of the work, and when a contractor puts on a "poor" face, to be able to say to him: "Not so, my friend; you are doing well, and I am glad to see you are getting ample to warrant my exacting the most liberal interpretation of my specifications."

This information is the result of carefully tabulated experience, and I know it is correct, but I do not wish to be understood as saying that a railway company should contract for work for others at those figures, neither should contractors be asked (otherwise than in open competition) to do work at such prices if they are considered low, as perhaps some men of experience may say, if this reaches them; and in no work more than in masonry will circumstances affect prices. First, the nature of the stone, its adaptability for quarrying and dressing, cost of carriage, foundations, detentions by trains or otherwise during the building, and such like features, must regulate and affect the price per cubic yard, and the less masonry in quantity—such as smallness of piers—the greater will be the cost per cubic yard.

The steel superstructure of bridges now costs under three cents per pound for plate girder bridges, riveted together, on cars at bridge works ready for dropping into place, and three and a half cents per pound for lattice bridge work, f.o.b. cars, to which must be added cost of erection. These prices are less than at any time in our history—comparing favourably with prices for similar work in the United States.

The ordinary labour of the country, which enters so materially into construction, is plentiful; and in the settled portions of Canada can be obtained at the following rates:—

Labourers, \$1.25 per day.

Carpenters, \$1.50 to \$1.75 per day.

Stone-cutters, \$2.00 to \$2.50 per day.

Masons, \$2.00 per day.

Riveters, \$1.50 per day.

So that in the construction of railways or works of like nature the rates are not high, commanding as they do experienced and able-bodied men. It has occurred to me that it would be beneficial if sets of specifications and working plans were made out for governing the construction of railways in Canada so as to form a basis for a proper understanding as between the "promoter" and the "investor."

Such a basis would be a guide for the engineer, and certainly form a protection for the investor. I would suggest two classes of construction:—