

He must have confidence. He must believe in himself, his methods, his proposition, his country and his associates. He must not fear competitors. He must know details, what is going on, how it is done, why it is done. Then he is in a position to know whether his wish is being carried out; and it is just here the inexperienced engineer is going to make his mistake. His study, his confidence, and love of detail are going to narrow him. He will lose the larger vision, will become dwarfed. The possibilities will not be secured. The general plan will be incomplete. It is in assisting to avoid these errors that the consulting engineer has found his field.

The consulting engineer, worth consulting, is in the first place too big to "brag." He recognizes the limitations and possibilities of his confrere, but does not comment. His years of experience, studying his own mistakes and the mistakes of others, his own construction and the construction of others, enable him to advise, plan and execute; for after all we only learn to do by doing. The wise consulting of experienced engineers is the quicker way to success.

EDITORIAL NOTES.

The sort of fact which tells more than columns of figures as to industrial improvement in the United States is the announcement that the Gould-Harriman railway group have practically closed contracts for the supply of 10,000 steel cars.

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It is reported that the C.P.R. are quoting prices for 1908-9 on ties six cents lower than last season. If this is correct other road will doubtless drop their prices also. Should this be the policy of the railroads very few contractors will open camp this fall, and those who do will seek markets in the United States.

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On every side we are assured that Canadian material and Canadian labor will be employed in constructing the Ontario Transmission Line, but when discussing the selection of engineers the contractor said: "I never ask a man his nationality. I want to know whether he can do his work or not." That looks like a bid for engineers from other countries. Mr. McGuigan, we would like to have heard you say: "I will first ask Canadian engineers if they can do the work."

VALUATION OF MILL PROPERTY FOR TAXES.

In a discussion of the taxable value of mill property, Mr. Chas. T. Main, engineer, of Boston, presents the following on this subject of never ending controversy:

"The Public Statutes of Massachusetts state that the assessors shall make a fair cash valuation of all the estate, real and personal, subject to taxation therein. It seems as though this definition of the cash value as the taxable value did not intend that assessors should consider the plant in the same light that a purchaser would, for the reason that the earnings cannot be included in the assessor's investigation, while they are the all important item to the purchaser.

"The average assessor knows but little about the physical qualities, to say nothing of going into the estimate of all the items which make a mill more or less profitable than other mills located elsewhere.

"It is not at all improbable that some mills, which are running at a loss, or making a slight profit, would be better off to abandon their present site and move their machinery to some more favorable location.

"It may have been that when such a ruling was made the choice of locations was not as wide as now, and that it was intended not to consider such broad questions as must be considered by a purchaser, and which to him might render a property of no value to purchase, and yet it might represent a large amount of property.

"It would seem, therefore, that in considering the taxable value of a mill, the assessors must ignore the broad questions of labor, location, transportation, etc., and confine themselves to the physical condition of the plant existing at a certain place, which place is assumed to be advantageous to the carrying on of the business. Even in this limited consideration they cannot be as severe upon the plant as a purchaser would be.

"For example, suppose that the looms in a mill are old, and so constructed as not to be able to run at anything near the speed and production of modern looms, and that the price of weaving is consequently so much higher than on modern looms as to wipe out what would otherwise be a fair profit on the goods. A purchaser taking this into consideration would say that the looms were of no value; but, unfortunately, they are in the mill, and if the company prefers to keep them, they are taxable property, and the company is unfortunate which possesses much of such property to be taxed."

ANNUAL MEETINGS.

Company.	Day.	Time.	Place
Elgin & Havelock Ry...	Sept. 2	3 p.m.	Halifax, N.S.
Rutland & Noyan Ry. .	Sept. 2	4 p.m.	St. Thomas, Que
G.T.P. Branch Lines Ry.	Sept. 16	12 a.m.	Montreal, Que.
Ottawa & New York Ry.	Sept. 3	3 p.m.	Ottawa, Ont.
Central Ry. of Canada..	Sept. 7	2.30 p.m.	Montreal, Que.

It is stated that during the past three months the C.P.R. have had delivered to them from contractors in this section over 2,000,000 ties.

Railroad transportation in the United States was substantially seventy-five years old in 1907. There were only 32 miles of railroad in operation in 1832, and in the seventy-five years to 1907 there were constructed 228,128 miles of operated railroad.

PATENTS.

The following is a list of Canadian patents recently issued through the office of Messrs. Ridout & Maybee, Patent Solicitors, Toronto, from whom any further particulars as to the inventions may be obtained:

Reducing and treating iron ore, M. Moore and T. Heskett; wave power apparatus, A. Ravelli; water motor, G. C. Kaitting; Metal Shingle, Nathaniel Brown; electric conductors for lighting purposes, Isadore Ladoff; force feed lubricators, C. C. Wakefield; gas and oil furnaces, A. Nicholson; internal combustion engines, Thos. D. Kelly; process of chloridizing ores, C. Herner, F. Sternburg; improvements in dynamos (regulation), C. A. Vandervel and W. H. Proctor; production of artificial fuel and coke, H. S. Robertson and J. R. Graham.

¶ During the First Six Months of 1908 the subscription receipts on the Canadian Engineer in cold cash were 50% more than during the twelve months of 1907.

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