

May 17, 1917.



Sir,—During the last few years considerable has been said and written by members of the Canadian Society of Civil Engineers regarding the status of the engineering profession in Canada. Mr. W. F. Tye, in his address at Ottawa on March 29th last referred to the engineer's standing and gave some advice for improving our status before the public and to demand a greater share than now given on government engineering commissions. It is only too true that Canadian engineers are being too often overlooked by our governments when they make appointments to important public engineering works and commissions. Most emphatically it can be said that there is no valid reason whatsoever for any Canadian government to go outside of Canada for engineers. There are no problems or projects in Canada which cannot be more capably handled by Canadian engineers than by engineers from other countries. We are at least on a par with them as far as education and abilities are concerned, and we have the advantage that we are in our own country and hence undoubtedly more intimately acquainted with all its conditions. The preference often shown to outsiders is certainly somewhat inexplicable.

It is, however, difficult, in fact impossible, for the most of our engineers to participate in the actual government of the country by becoming members of parliament and senators. Lawyers, doctors, farmers and merchants have always a fixed place of residence. The avocation of the engineer does not render his life so fortunate as to allow him a permanent place of abode, nor does the fact that he is an employee allow him time or opportunity to participate in the political affairs of the country. Only the comparatively small number of engineers who are in private practice are justified in aspiring to become members of parliament or senators. So it appears that the bane of the engineering profession is its non-independence and the nomadic mode of life to which its members are compelled to accommodate themselves. I have no suggestions of improvements to make at present, but would think that herein lies an opportunity for our society to become more useful to its members, namely, by evolving a new basis for the profession whereby its members could more easily situate themselves so that they could take a more active part in the public affairs of the country.

A. J. MACDONALD, A.M.Can.Soc.C.E.

St. Irénée, Que., April 16, 1917.

**Inspecting Engineers.**

Sir,—In these days of the great world war, an army of inspectors of every classification has grown in our midst. Are they to stay professionally, and be received into the engineering world? There are two classes of inspectors,—those that make a profession of inspection, and the second-year student with the influential pull and a library of books which he believes will direct him in the practical works of engineering. The latter class has belittled the inspector's position of to-day.

What are the duties of the inspector? He is engaged to carry out the duties of the clerk of works, and must have a good working knowledge of plans and a technical

training; and must be essentially practical in all things to obtain results to the satisfaction of all concerned.

The leading architects of Canada all have staffs of inspectors, with one man as chief inspector who goes over all work for its final acceptance, but receives little, if any, reimbursement for his discretion.

Do engineers realize that when they call for the services of an inspector and place him in charge, that all the responsibility is in reality on the inspector? Should any bad work or oversight in construction arise at the finish, he is dismissed, but when all is O.K. then you do not see Mr. Inspector or hear of him.

In your issue of April 19th you have an article by Mr. C. A. Mullen. This gentleman states that inspection and testing is a sound investment. I fully agree from every point of view except one, and that is,—it is a very poor investment for the inspector. He is underpaid, and he must be honest. Keep him honest, for his services are essential.

G. H. LOVETT,  
Inspecting Engineer.

Quebec, P.Q., April 23rd, 1917.

[NOTE:—The above letter is unique in that it represents the thoughts of one of a class of men who seldom express their viewpoints in print but from whom we would like to hear oftener. Mr. Lovett's plea for better treatment of inspectors—particularly chief inspectors—will find fertile ground among engineers, as the latter realize how important is intelligent inspection in all contracts.—EDITOR.]

**Municipal Consulting Engineers.**

Sir,—I am sorry that in your editorial of March 15th, 1917, you attributed to my article on "Consulting Engineers' Fees" a meaning it was not intended to, and does not, convey.

You say that, stripped of excess verbiage, I assert that consulting engineers *purposely* underestimate. I said no such thing, but I did state that on the percentage system a temptation is placed before the engineer to underestimate. My article further stated that in many cases which have come before me, the preliminary estimate bore little relation to the final cost. You say it is hardly likely that I can give chapter and verse in substantiation, which is precisely what I am able to do in a good many instances. I am prepared to give, and to substantiate, many cases of underestimating, in which, as I stated in my article, the preliminary estimate bears little relation to the final cost, but I do not think you should suggest the Canadian Society of Civil Engineers as the tribunal, as however fair-minded its members may be, it could scarcely be called an impartial tribunal. Probably the Canadian Union of Municipalities could better appoint a tribunal to consider the matter, and if you wish it carried further, the following is one of the cases I have in mind.

In the town of "X" a well-known Eastern consulting engineer prepared a preliminary estimate for a water-works system, which was to include delivery to the town and the laying of mains, to cost, as per the estimate, say, \$100,000. The report continued: "Laterals and house connections will, of course, be paid for by the properties served." In other words, this latter sentence would lead anyone not familiar with municipal finance to believe there was no need to borrow money for laterals and house connections, and that \$100,000 was all the capital required. What was the result? The town, having endorsed the preliminary estimate, had to go on, and spent