

## Letters to the Editor

### Provincial Consulting Engineering

Sir,—I have read the interesting article by Mr. R. O. Wynne-Roberts in your issue of February 14th and I would like to say at once that in referring to his objection to the proposal I put forward at the Hamilton conference, that we should have more skilled engineering advice in provincial authorities, I had no idea of suggesting that his objection was not well founded. Indeed, since I have conferred with several engineers on this matter I find there is good ground for the objections which they put forward to engineering advice being provided through the agency of government departments. Their objection, however, is not to the principle of such advice being given but to the possible evils which may arise in connection with giving it. For instance, it is contended that when engineers are attached to government departments they sometimes exercise the dual function of supervising the work of local authorities and of designing and carrying out the work themselves. It never occurred to me that this kind of thing was done to any very large extent and I admit that if it were to be a regular practice in connection with government engineering, I should entirely oppose any suggestion to create more official engineers or improve their status. In my judgment, an engineer who is employed by any government authority as a salaried official should not only be prevented from undertaking constructive private work himself, but should be made to feel that it is most improper to do so. Of course, it is essential that official engineers should be paid a sufficient salary to make them independent of private work. The point, however, is that any advocacy I have made to increase the number of provincial and municipal engineers is based on the assumption that they would not be permitted to do private work and that their functions would be largely of a judicial character.

In regard to the second objection which Mr. Wynne-Roberts raises in his letter, I admit the soundness of his contention that men who are paid by the government should not be permitted to take the bread out of the mouths of those who are engaged in private practice as a general rule. There are exceptions, however, and I think Mr. Wynne-Roberts himself agrees that no hard and fast rule can be laid down in this respect.

It will be noticed that I deliberately used the term "small municipalities" when I suggested that advice and assistance should be given. These small municipalities cannot employ skilled consultants and until they can, there is no objection to giving them advice through the provincial government. On the other hand, when larger municipalities are able to employ skilled engineers the presence, in the provincial government, of a department of municipal affairs would be a great stimulus to local authorities to employ proper engineering assistance.

I do not think that any engineering advice and assistance given by the government should be other than gratuitous but it should only be given where a local authority has inadequate means to employ an engineer. In other cases the function of the department would be to encourage the use of engineers in private practice. I am aware that there is the difficulty of not being able to draw the line, but we had to meet exactly the same kind of circumstances in connection with town planning in England and we succeeded because we always erred on the

safe side by not giving advice or assistance except in very necessary cases. As Mr. Wynne-Roberts says, the function of the government engineer in England is primarily judicial, and it will only be necessary for it to be advisory in Canada while we are waiting for improved status for the engineer and while we are trying to get rid of our present low standards of sanitation in some municipal areas.

I am grateful to Mr. Wynne-Roberts for the generous way in which he deals with my suggestions. With him I would like to see the engineers themselves more persistent in demanding a better recognition of their skill and executive ability.

I have the utmost respect for members of the legal profession, but when one hears it so frequently reiterated that engineers have no judicial or executive ability and, therefore, that lawyers only are fitted to become members of judicial or executive bodies, it makes one feel that engineers must be without an agency to adequately represent them collectively in securing proper recognition of the profession.

Only recently we have seen engineers made heads of great trunk railways, of the food department of the United States and of some of the chief administrative departments of Great Britain. We are told that among the most successful executive heads of the intelligence branch of the British army is a man who was a consulting engineer in Toronto up to the outbreak of the war. When we look round and see the position which the engineer takes as an executive and in a judicial capacity when the opportunity is provided for him, one can only lament the fact that that opportunity is so wanting in Canada and feel that the engineers themselves must be partly to blame. At any rate it is certain that improvement will only come if the engineers take the initiative and if they be loyal to one another in insisting upon every member of the organized profession practising up to an ethical standard equal to that of any of the great professional institutes in other countries.

THOMAS ADAMS,  
Town Planning Adviser,  
Commission of Conservation.

Ottawa, Ont., February 22nd, 1918.

### Quebec Bridge Main Shoes

Sir,—Referring to the article on expansion joints and traction trusses, Quebec Bridge, appearing in your issue of February 7th, 1918, the contents of the concluding paragraph of this article might leave the impression on the reader's mind that the main shoes were not placed on the centre line of the main piers.

As a matter of fact, inasmuch as the final alignment of the whole structure from shore to shore depended on the placing of the main shoes, these shoes were set with exceptional accuracy and on the centre line of the main piers.

The deviation of 3 inches from the theoretical span of 1,800 feet is in the final distance centre to centre of main piers. As stated in the article, a total allowance of 4 inches was made in the expansion joints between the cantilever arm and suspended span to take care of a possible error of this kind.

A. J. MEYERS,  
Chief Draftsman,  
Board of Engineers, Quebec Bridge.  
Montreal, P.Q., February 12th, 1918.