

Letters to the Editor

Erection of the Quebec Bridge

Sir,—In recent issues of your magazine I have noticed articles by Mr. A. J. Meyers, a member of the staff of the Board of Engineers, describing the erection equipment and centre span lifting devices used in connection with the erection of the Quebec Bridge, but note with regret that credit was not given to the St. Lawrence Bridge Company, who originated and developed the design and worked out the details for this equipment.

I would like to take this opportunity of stating that the plans for the superstructure and the entire plant and equipment used in connection with the erection of the bridge were worked out in the offices of the St. Lawrence Bridge Company, who, according to the terms of the contract, were entirely responsible for its successful completion, and great credit is due their engineers for the work they have done in this respect, since they had little or no precedent to guide them.

C. N. MONSARRAT,
Chairman and Chief Engineer,
Board of Engineers, Quebec Bridge.

Montreal, January 19th, 1918.

Provincial Consulting Engineering

Sir,—With reference to the editorial which appeared in *The Canadian Engineer* of December 13th, it must be clear to anyone who has read my report that the writer of the editorial does me an injustice. He selects one paragraph, interprets it wrongly, and proceeds to criticize that interpretation as if it were mine. I claim that I have been as anxious as the writer in *The Canadian Engineer* to defend the status of the engineer, and to demonstrate the need for a greater amount of use being made of his services in connection with municipal work in Canada. The report itself reflects that anxiety.

The employment of skilled engineering advice in connection with the planning and development of land instead of continued reliance on those who are not so skilled is advocated throughout the report. At the very beginning, on page 3, I put the scientific planning and development of land in the forefront of the points which need emphasis. That can only be attained if more engineering advice is sought.

On page 74, with regard to railways, I say that the detailed planning of railway lines "is a matter which is safe in the hands of the railway engineers who are entrusted with the work."

On page 155 I refer to the memorandum prepared by a number of well-known engineers on "Industrial Preparedness," and I selected that memorandum for reference out of a great deal of material on the same subject because it was prepared by engineers, and I state in the conclusion of the paragraph: "The memorandum very properly emphasizes that greater use should be made of the engineer and chemist, in whose hands is the material development of modern civilization."

There is a running argument throughout the whole of the report advocating the need for expert administration by engineers.

The paragraph to which your paper objects, is a recommendation made on page 238 arising out of the considerations put forward in Chapter VII. of the report. Turning first to that chapter, I draw your attention to the following quotation (page 180) referring to the need for business enterprise in connection with land development:—

"In the performance of such a task it is of the highest importance that the business side of the undertaking should be in skilled hands, that the control of all beginnings of development and of the utilization of resources should be under the direction of the highly qualified administrators."

It is obvious that this is an advocacy for the employment of more professional experts, engineers and others, to control development.

Referring to the English system of government, which places more reliance on permanent expert advice than in most countries, I say (page 180):—

"One result of this system is that an efficient permanent staff of expert administrators has grown up in the old country, in all classes of government, and matters of technical detail are dealt with more largely by experts."

This, again, is an advocacy of the employment of engineering experts to deal with engineering matters.

It will be observed on page 187 that the first fact which I use in support of improving the system of colonization and highway administration is a long quotation from a leading engineer and land surveyor in Saskatchewan, who wrote to me as a result of long experience, pointing out what he calls "the absurdity of the present system."

On page 188 I point out that the co-ordination of the different government departments is needed "so as to secure more efficient and scientific land development," and I go on to say that the planning of the provinces, on the whole, should be undertaken. How could this be done without much more use of consulting and municipal engineers than prevails at present?

In the last paragraph, on the same page, I suggest a Director of Surveys and a Director of Planning for each province, with a skilled staff to deal with all development. All this means placing more reliance on skilled engineering advice, which is the best way to raise the status of the profession.

The following paragraph, on page 196, is a direct recommendation that engineers should be more fully employed on municipal work:—

"In the rural districts and small towns, there is a tendency to try and manage the complicated and highly technical questions relating to township and town development by men without adequate knowledge or training for the task. Real economy is only possible where a full advantage is taken of skill and experience in carrying out constructive improvements and the work of developing land. It seems to be assumed that municipal affairs can be managed by lawyers, tailors, grocers, and others who, whatever their expert knowledge in their own business, have not—as a rule—the kind of experience and capacity necessary for municipal administration. A tailor who very naturally would not accept the advice of an engineer to cut cloth for a suit of clothes, will act as chairman of a public works committee of a town or village and direct complicated engineering construction requiring many years of special training to understand even its general details."

On page 201 I point out that, if the Federal Government are to take up the question of constructing highways, they should place the administration of road improvement "under an expert board instead of under a department of the government." Naturally, I had in mind a board of engineers, as only they would be expert in such a matter.