samples without placing orders and have instructed their European buyer to call on the same agents' principals and buy the same articles at a price which, of course, will not include the agents' commission."

In dealing with enemy trade he cites the experience of two young Germans who came to Montreal in the fall of 1912 to introduce a line of goods and took a small office. Neither of them had been in Canada before, but they had received advice that there would be a market for certain classes of articles. After working for eighteen months they had built up a considerable and profitable connection. Asked one day as to the reason for their success they explained that they had come to Montreal equipped with information as to (1) likely buyers in Montreal and Toronto and other towns in the neighborhood, (2) the financial standing of each firm and the names of the men employed by these firms upon whom it was advisable to call, (3) the articles of Canadian or foreign manufacture that they would have to meet in competition, and the prices of such articles, and, (4) the customary terms of credit prevailing. All this information had been available to them before they left Germany. Furthermore, they were guaranteed sufficient living and office expenses, they knew that their principals would second their orders with prompt delivery and they were very well posted indeed as to the details of trade, such as the preparation of invoices, declarations, etc., in accordance with Cana-dian Customs requirements. The above facts teach their own moral.

While some British manufacturers of engineering equipment have established very desirable connections in Canada, others have not had such experiences, and it is fair to assume that in some cases, at least, much of their disappointment can only be attributed to the lack of firsthand information as to the market, knowledge of the rating of firms with whom they would do business, the competition and especially the matter of credit terms which prevail in the Dominion.

## THE MUNICIPAL ENGINEER.

Perhaps there is no phase of municipal work where an engineer has the opportunity to develop greater versatility than in the city of from, say, 20,000 to 30,000 population.

In a peculiar way he is thrown upon his own resources, as a result of which his engineering instinct is quickened. The work he has to do, while not of the magnitude to be found in the larger municipalities, is still very important.

He has to deal with sewerage, road and street construction and maintenance, water supply—in fact, he virtually has under his care practically every kind of public work incidental to a city of the size referred to.

The fact that the city engineer of a medium-sized city is called upon to exercise control over so many different phases of engineering work (which in a larger city are cared for by specialized departments) makes it exceedingly urgent that those who determine to follow municipal engineering as a life work be given special training which will justify and enable them to give reliable guidance and advice. The expansion of municipal responsibility indicates the necessity of securing accomplished men for these important civic services.

It is doubtful if the skill, energy and adaptability of an engineer can be more highly developed than as the municipal engineer in a medium-sized city.

The position is one which offers unusual opportunities for the acquiring of a most useful engineering experience.

## LETTERS TO THE EDITOR.

## Proposal to Dam Niagara Rapids.

Sir,—Previous to receiving your clipping regarding the suggested dam across the lower Niagara River, the writer had seen several references in New York papers and elsewhere to this proposed scheme.

Your editorial covers the matter thoroughly.

A few years' residence in Niagara Falls and some studies in connection with the power developments at that point, leads the writer to believe that the problems in connection with the construction, to say nothing of the operation after the work is built, are such that for the time being the scheme is impracticable. There are several schemes for developing power at Niagara which are so much simpler and more economical from all points of view, that the necessity for damming the Lower Niagara River does not seem to exist.

While it may be that some time in the future, when the demand for power has exceeded more easily available schemes, and when the problems which are raised in your editorial have been solved very much better than they are now, such a project may be worth serious consideration

now, such a project may be worth serious consideration. The writer agrees with you that the problems presented can, no doubt, with sufficient time and sufficient money, and proper engineering skill, be met and overcome successfully. The same amount of skill, money and time, in the writer's opinion, can be devoted better to other problems in connection with the Niagara Falls development at present with the hope of greater accomplishment.

> JULIAN C. SMITH, Vice-president and Chief Engineer, The Shawinigan Water & Power Co.

Montreal, July 29th, 1916.

## Proposal to Dam Niagara Rapids.

Sir,—I note the editorial in your issue of July 6th, in regard to the proposal of damming the lower Niagara River at Queenston with a view to the development of some two million horse-power.

Mr. Johnson, in your issue of July 27th, points out clearly some of the main difficulties in the carrying out of such a stupendous scheme, and while it is conceivable that such a proposition might be worked out ultimately, there is no doubt that the cost of the undertaking would be out of all proportion to the benefits derived.

Personally, I believe that any feasible scheme leading to the development of the Niagara Falls and river, to the utmost limit of power available, should be encouraged by the engineering profession in both Canada and the United States. The industrial development on both sides of the line is rapidly approaching a point where the curtailment in the use of such natural resources as represented by Niagara is suicidal. As the time is approaching when the development of the power will become a vital feature in the economic growth of the country, it is high time that the problem be taken up by the governments of both Canada and United States, and solved on a broad scale, so that any work of development may be started in a manner such that extensions can be made from time to time on the basis of an ultimate maximum efficiency. Whether these future developments be made by private corporations under government control, or by the governments themselves, is immaterial to the broad question itself.

The question of scenic beauty is one which has been subjected to a great deal of false and hypocritical discus-