These questions appear to me to be very simple, and free from any diffi-

An extensive series of Railways in Canada, on the north side of the St. Lawrence, is developing itself rapidly; part of it is already in operation, a large portion fast progressing, and other lines in contemplation, the commencement of which must speedly take place.

The commerce of this extensive and productive country has scarcely any outlet at present, but through the St. Lawrence, which is scaled up during six months of the year, and therefore very imperfectly answers the purposes of a great commercial thoroughfare.

Experience, both in this and other countries where railways have come into rivalry with the best navigable rivers, has demonstrated, beyond the possibility of question, that this new description of locomotion is capable of superseding water carriage wherever economy and despatch are required; and even where the latter is of little importance, the capabilities of a railway, properly managed, may still be made available, simply for economy.

The great object, however, of the Canadian system of railways is not to compete with the River St. Lawrence which will continue to accommodate a certain portion of the traffic of the country, but to bring those rich provinces into direct and easy connection with all the ports on the East Coast of the Atlantic, from Haltav to Boston, and even New York,—and consequently through these ports, nearer to Europe.

If the line of Railway communication be permitted to remain severed by the St. Lawrence, it is obvious that the benefits which the system is calculated to confer upon Canada must remain in a great extent nugatory, and of a local character.

The Province will be comparatively insulated, and cut off from that coast to which her commerce naturally tends; the traffic from the West must either continue to adopt the water communication, or, what is more probable—nay, I should say, certain—it would cross into the United States, by those lines nearly completed to Butlalo, crossing the river near Nagara.

No one who has visited the country, and made himself acquainted only partially with the tendencies of the trade which is growing up on all sides in Upper Canada, can fail to perceive that if vigorous steps be taken to render milway communication with the Eastern Coast through Lower Canada uninterrupted, the whole of the produce of Upper Canada will find its way to the Coast through other channels; and the system of lines now comprised in your undertaking will be deprived of that traffic upon which you have very reasonably calculated.

In short, I cannot conceive anything so fatal to the satisfactory development of your Railway as the postponement of the bridge across the river at Montreal. The line cannot, in my opinion, fulfil its object of being the high road for Canadian produce, until this work is completed; and looking at the enormous extent of rich and prosperious country which your system intersects, and at the amount of capital which has been already, or is in the progress or prospect of being expended, there is in my mind no room for question as to the expediency—indeed, the absolute necessity of the completion of this bridge, upon which, I am persuaded, the successful issue of your great undertaking mainly depends.

I am, Gentlemen, yours faithfully.

ROBERT STEPHENSON.

To the Directors of the Grand Trunk Rudway of Canada.

Canadian Institute.

At a general meeting of the Institute, held on the 6th of May, 1854, the following resolution was adopted:—

"That the amalgamation of the Toronto Athenaum with the Canadian Institute be agreed to, and be carried into effect according to the conditions set forth in the communication from the Council, which has just been read."

The Communication from the Council consisted of a recommendation to adopt and act upon the Report of the Special Committees of the Canadian Institute and Toronto Atheneum, appointed to confer on the subject of the union of those Institutions.

The Report alluded to, together with the resolution of the Council, are given in full on page 195 of this *Journal*, and need not, therefore, be repeated here.

At a meeting of the Council of the Canadian Institute, held on Saturday, June 3d, it was resolved—

"That the thanks of the Council be transmitted to Alexander Mackenzie Ross, Esq., Chief Engineer of the Grand Trunk Railway, for his kindness in furnishing the original copy of the plate of the Victoria Bridge, which appears in the June number of the Canadian Journal."

A member of the Canadian Institute, distinguished as much by an ardent love for natural science as for the remarkable liberality with which he encourages and promotes its study, has signified his intention of presenting the Institute with a very commodious piece of land in the city of Toronto for the construction of a building, subject to the condition that, either through the munificence of the Provincial Government or by means of private liberality, the necessary funds for the erection of a suitable building be ensured. We hope to enjoy the privilege of being more explicit and definite in the July number.

Coal in Canada.

We have observed with much regret that the question of the existence of coal in Canada West is again revived. The darkcoloured bituminous shales of the Utica slate have been once more mistaken for the "black diamond." The shales alluded to in a letter which has lately acquired a very wide circulation throughout this country by means of the provincial press, are many thousand feet below the true coal measures, and no wilder speculations could be indulged in than attempts at finding coal where those black shales appear. Sensible persons will soon be perfectly satisfied on this matter by the speedy publication in this Journal, of a paper "On the Physical Structure of Western Canada," by W. E. Logan, F.R.S., and G.S. Provincial Geologist. The delays which have arisen in the publication of that distinguished geologist's paper, have proceeded from the great difficulty which has been experienced in obtaining a correct copperplate engraving of a geological map of Western Canada. We hope, however, to be able to enrich the pages of the first number of the third volume of the Canadian Journal, to be published in August next, with an accurate plate of Mr. Logan's most valuable and instructive map.

The Quebec Meteorological Table for April was received at the office of the Canadian Journal, on Tuesday, the 13th Junc. This unusual delay will probably form an excuse for its non-appearance in the present number. As yet, we are quite unable to conjecture with whom the fault lies. We hope that it will be found side by side with its May brother in our next issue.