

We give Mr. Drummond's paper on this subject, read before the Quebec Mining Association, as it is desirable just now to remember what are the teachings of history in studying the development of the iron trade of England and the United States.

NEWFOUNDLAND RAILWAYS.

The *London Times* of a recent date had a short article on the railway development of Newfoundland. At present there is a line eighty-four miles long, from St. John's to Harbor Grace, with a branch line of twenty-five miles connecting with Placentia. Another railway has been in the course of construction for over two years toward the Exploits River and on to Hall's Bay, thus going northward through the centre of the island. About 140 miles of the railways are said to be completed, and the whole is expected to be laid down by the end of 1894. The new contract is for a railway of 250 miles to connect these railways with the west coast by way of the Bay of Islands, St. George's Bay, and Port Basque Bay, in the south-west corner. Thus the main part of the island, leaving out the long northern peninsula, will within a very few years be covered with a network of railways, which will leave no excuse for the non-development of the resources of the interior. That interior is in many parts almost unexplored, though it is believed to contain mineral and timber resources of which much could be made. What are the agricultural capabilities of the interior remain to be seen. Over the internal resources of the colony no foreign nation has any lien; and the unrestricted development of these cannot but place Newfoundland in a condition of prosperity which she has never yet attained. The contractors for the new line, who are also to work for ten years the Hall's Bay and Placentia Line, seem to have made a very good bargain for themselves. In addition to the cost of construction, they are to receive two and one-half million acres of land, with the mineral and timber rights upon it, along the new line, and a subsidy of \$36,000 per annum for the carriage of the mails. If they set to work in earnest in the development of their extensive property, the result cannot but be for the benefit of the colony at large.

THE PROFESSIONAL STATUS.

BY ALAN MACDOUGALL.

This report, which came before the Canadian Society of Civil Engineers on Dec. 21st, and again on the 4th inst., was the result of the distribution of a draft report on the present status of the profession of Civil Engineering. Among the suggestions offered by correspondents, etc., were the following:—

1. That Provincial and Dominion land surveyors should be prevented from practising as Civil Engineers, unless they belong to the Can. Soc. C. E.;
2. That an appeal should be made in each province to have members of the Can. Soc. C. E. of all grades recognized as professional men, with the right to collect and sue for fees;
3. That no practitioner be entitled to designate himself a Civil Engineer unless he belongs to the Can. Soc. C. E., pointing to the formation of a close profession. These have been answered in the affirmative by almost every correspondent.

The members resident in Toronto adopted the final suggestion of the draft report at an open meeting, which reads:—

"That at present it is advisable to promote a high professional standard of practice through the medium of the society, by issuing a code of ethics and regulations to govern engineering practice in the Dominion."

One correspondent is opposed to the formation of a close corporation with arbitrary powers in the hands of a "few members of our society," as entirely opposed to liberal and enlightened principles; he also objects to the proposal to ask universities to stop granting the degree of C.E., as likely to lead to a debasement of education in the profession.

One point has cropped up frequently in the discussion, says the writer, which underlies in a great measure the difficulty with which this movement would be confronted. The question is frequently asked: How can you define Civil Engineering as a profession? What is Civil Engineering? Many engineers who do not belong to the society have said to the writer: The Canadian Society is not a society of "Civil" Engineers, because it embraces in its membership all classes—mechanical, electrical and mining; and they say as they belong to one of these branches they do not consider themselves "Civil" Engineers, consequently they are not eligible for membership, and do not wish to become members. The next step of their argument is, that they are now in full practice in their respective branches of engineering; should a close profession be formed with protective rights to the Society only, they would be thrown out of employment, or be obliged to practise against the law, and be liable to prosecution.

It is also asked: What is to be the position of an engineer from a foreign country, in full practice, and belonging to one of the national societies or other great engineering associations in other lands; is this engineer to be debarred from practising, or how is he to be licensed? Must he pass examinations?

It may be somewhat difficult at present to give an answer which will satisfy every objection to the term "Civil" Engineer, as many objectors contend that the definition in the charter and by-laws goes beyond the limits of the "Civil" Engineer when it recites that it "shall mean all who are or who have been engaged in the designing or construction of railways, canals, harbors, light houses, bridges, roads, river improvements and other hydraulic works, sanitary, electrical, mining, mechanical or military works in the study and practice of navigation by water or air, or in the directing of the great sources of power in nature for the use and convenience of man." The objectors point out that the limits of the society are too elastic; they are opposed to mining, mechanical or electrical engineers being called "Civil" Engineers. Some members of our society practising in these branches have expressed doubts as to their right to belong to a society of "Civil" Engineers. There seems to be an under-current of feeling in favor of dropping the affix "Civil" and calling the society the Canadian Society of Engineers. Several practitioners, who are not now members, have expressed their readiness and willingness to join if the name could be changed as suggested above.

On the subject of education Mr. Macdougall would advocate the fullest use of the advantages now offered to students in our magnificently equipped and endowed universities; he has strenuously advocated a thorough