

make these classifications—shall be men of good judgment and undoubted integrity as well as men of good technical skill.

To travel over the work after it has been completed will not give one a correct idea of the conditions during construction. We do not mean by this that clay will turn into solid rock in a night, but the trimmed cut one month or one year after it has been completed will present an appearance entirely different to the working cut.

Just as the chief engineer of a road or a large work must spend more time adjusting men than adjusting plans, so must the resident engineer spend more time in deciding classification than in taking measurements.

POLITICS AND RAILWAY BUILDING.

Each great movement in railway building in Canada has had coupled with it scandal scare. A year or so ago it was the G.T.P., and for some weeks it looked as if the Laurier Administration would have difficulty in retaining the confidences of the Canadian Parliament.

This month it is the Alberta and Great Waterways Railway that has attached itself to the Rutherford Administration in Alberta, and made it possible for the opponents of this Administration to criticize with some force the agreement that has been signed by the Government and the railway.

Elsewhere in this issue will be found the main features of the agreement, and in detail the specifications under which this road is to be built. Whatever may be said of the agreement from a financial point of view, most will recognize that the railway has made a very successful bargain. The guarantee is large; the conditions of payment are favorable; and the possibilities for heavy passenger and freight traffic are great.

The great wonder is that at a period when the large Canadian roads are laying down 80 and 100-pound steel that this 350 mile road should be allowed to use 56-pound steel, and that the road, passing through such fertile country where the traffic is likely to be heavy, the specifications should allow for a curvitude as high as 6°.

It appears that to-day, as twenty-five years ago, one of the most promising construction and financial enterprises that can be taken up in Canada is a railway charter, supported by Government guarantee.

AN ENGINEERING CENTRE.

It is just a little over seven years since the dream of housing the engineering societies of New York in one building became a reality through the generosity of Mr. Andrew Carnegie.

Last month the Founders' Societies held a dinner to celebrate the anniversary of the event and to congratulate each other on their seven years of harmony and success.

They have succeeded in that time in bringing together fifty-three societies that are connected with the profession embraced in the broad term engineering.

It is gratifying to learn that the Engineers' Club, Toronto, is preparing to move into larger quarters, and that they will be able to offer inducements to the various technical societies of Toronto to join them.

A central building, equipped with a splendid technical library, a large lecture hall and committee-rooms will soon build up a centre that will be a new influence in the Province and the Dominion.

The problems that arise in applying science to every-day work are so varied that the architect, the chemist, the engineer—electrical, mechanical, hydraulic, sanitary and railway—the financier and the business man have so much in common that they naturally come together, not only in business, but socially.

The scheme will be a financial success, but that is less important than the fostering co-operation and fraternity among the various professional men.

EDITORIAL NOTES.

The Private Bills Committee of the Legislative Assembly, Toronto, have refused the city of Toronto power to expropriate the Toronto Street Railway. They did, however, give the city permission to build an underground railway.

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The system of accepting the lowest tender but one has on other occasions been adopted by the council of the city of Toronto. Would it not be fairer to everybody to announce that as their method of awarding tenders? A city like Toronto, which spends so many millions annually on public works, cannot afford to even, in open council, depart from what is understood to be established custom. The company who were in the recent awarded favor because they were a local firm would be the first under other conditions to make known their discontent with the award, and to state emphatically that the contract should be awarded to the lowest tender.

ONTARIO GOOD ROADS ASSOCIATION.

The Ontario Good Roads met in Toronto, March 2nd, 3rd, and 4th, 1910. This was the most successful convention yet held and the large attendance and great interest taken in discussions is evidence of the hold the good roads movement has upon the people of the Province.

Mr. W. H. Pugsley, Richmond Hill, Ont., in his presidential address said in part:—

Within a few years every county in this Province will have established a good roads system.

In this Province there are about 35 counties eligible to receive aid from the Provincial Good Roads Fund. Of that number 16 have already taken advantage of the provisions of the Act. The Provincial Government has paid to these 16 counties an aggregate sum of about \$700,000.

It is necessary to educate the people to the importance of good roads—how it pays, by lessening the wear and tear on horses and vehicles, saves time owing to the greater speed at which it is possible to travel, increases the selling price of property, and in a hundred ways conduces to the comfort and prosperity of the community.

It is also necessary to educate the automobiles as to the part that they could play in helping to secure good roads.

One of the greatest obstacles in the way of persuading the farmers to undertake the betterment of the roads is the automobile.

The argument of the farmer is "if we make a good road it will be immediately monopolized by the automobiles, and we ourselves will have to take the back roads."

It has been seriously proposed in England to have roads specially set aside for automobiles.

I have no doubt that in time the horses will become educated as well as the drivers of horses, and an educated horse may sometimes retrieve the situation even when it has a foo.