

## Grand Trunk Extensions.

THE special commercial edition of the Montreal *Herald*, a valuable publication, is a well-written and very useful compendium of the business of the Canadian metropolis. This edition contains a full account of the history of the Grand Trunk from which the following is extracted:—

In 1874 a change of management was effected, Mr. Bydges being succeeded by Mr. Joseph Hickson. Shortly after the latter gentleman's assumption of office the gauge of the road was changed throughout so as to bring it into harmony with the lines in the United States. This was necessarily a costly matter, as steel rails were also adopted, but from a business point of view the advantages of the change were very great. At the commencement of the present decade dividends were paid in full on the first and second preference stock and in part upon the third. The Great Western railway from Niagara to Detroit, with a link running to Toronto, has been acquired, adding a total mileage to the system of one thousand miles. Of the earnings it was determined to give seventy per cent. of the net earnings to the Grand Trunk and thirty to the Western. In the year 1878 the Government took over the Riviere du Loup section, and with the funds a great deal was added to the western portion of the line, and direct communication was effected with Chicago in the face of the most obstinate opposition by some of the most wealthy capitalists and railway men of the United States. The Chicago and Grand Trunk Railway, which connects the system with Chicago, is under the management of Mr. W. J. Spicer, for many years general-superintendent of the G. T. R., and right-hand man of Mr. Hickson, in Montreal. Since his appointment to the general managership of the C. & G. T., Mr. Spicer has had many flattering offers from American roads, but has remained loyal to the great system whose service he left England to enter upon. Both the Vanderbilt and Gould systems opposed Mr. Hickson's efforts to the utmost, but he finally succeeded in attaining his object, and his conduct of the negotiations has always been regarded as a master-piece of railway zeal and enterprise. The Northern railway system has lately been obtained by the company giving further connections on Lake Huron and elsewhere. The mileage is about 450. The connections of the line have latterly been still further increased by the construction of a line from Fort Covington to Massena Springs in the State of New York, a distance of some twenty-five miles. This gives the line a connection with a large system of railways in the State of New York, the Rome, Watertown and Ogdensburg in particular. A new communication with the west is by this obtained. Another link from Beauharnois to Valleyfield is of use as a feeder.

The commercial advance of the Grand Trunk and the increasing demands made upon its resources necessitate the double tracking of the line throughout its entire length, and this work is being proceeded with as rapidly as the finances of the company render it possible, some sections being already completed.

## Patent Secrets.

THE following applies to the United States, but as nearly all Canadian inventors seek American patents, it will be read with interest:

Every inventor who takes out a patent, does so under the impression that by so doing his secret is safe, and he will be protected in the manufacture of the article against infringements, or the ingenious imitations of others.

Now the fact is, that as soon as a patent is granted, it, together with the claim upon which it is granted, is published, and is no longer a secret, as any one can easily learn what the claim covers, and with this information can go to work to improve upon it, and if successful produces an article that is more valuable, and is a successful competitor against the original, and the poor inventor finds his patents of little value.

In order to protect themselves against such thievishness, many inventors have taken advantage of the system of patent law, which allows a man to file his application and pay a certain amount, which secures him for a term of four years, without taking out his final papers and having his patent published, and his claim made public. At the end of this four years he can renew his application for another term of equal length. In this way his secret is safe, for the patent examiners and those in charge of the matter are under heavy bonds to the government not to divulge the secrets or claims of the applicant for a patent, and those who would steal the patent, or attempt to imitate it either in part or as a whole, dare not do so, not knowing what is covered by the claims of the inventor.—*Manfr's Gazette*.

## C. P. R. Montreal Station.

THE Montreal *Herald* commercial edition in the course of a history of the Canadian Pacific system, says:—This magnificent depot, now in course of construction on Windsor, Osborne and Donegani streets, will be a credit to the railway and an ornament to the city, and will hold first place among Montreal's costly structures. On the first named street it will have frontage of 200 feet, extending from Osborne to Donegani streets. This will be, when finished, one of the finest railway stations on the continent. The waiting rooms will front on Windsor street, but be level with Osborne street. The train house will be ninety feet wide and 500 in length. The tracks on which the trains will enter the station will be eighteen feet over the level of Donegani and Windsor streets. The principal entrance will be on Donegani street, where a long and commodious carriage way will be roofed in. On the corner of Donegani and Windsor streets a magnificent tower will be built, ninety feet on the front of Windsor and seventy feet on Donegani street, and rising to an altitude of 204 feet. Six stories of this tower will be used for offices and four others in the Osborne street wing. This will afford accommodation for the headquarter office of the company. The structure will be built of Scottish stone in the style of architecture generally known as "Scottish masonry," imposing in style, but

simple. Kitchens, dining-rooms and quarters fitted up specially for immigrants are in the design, and the station will be an ornament to the city and a fitting terminus for so great a line in so great a city. It has been the aim of the company to make it such, and it has succeeded if the plans be faithfully carried out. The tracks will not run out of the city on the level, but on an elevated trestle work of iron.

## Advice to Milwaukee.

RAILROAD *Topics*, a thoroughly "live" journal has the following:—

The latest scheme of the Canadian Pacific, that of extending the "true trans-continental" system to Milwaukee is, we are grieved to learn, being looked upon with much disfavor by railroad men throughout the North-west. Even the intellectual, enlightened and enterprising business people of Milwaukee are opposed to it. The latter are men of peace, and being such are opposed to war. They fear that any additional railroad facilities at Milwaukee would make the Badger City the seat of all future railroad wars in the North-west. So they have applied themselves earnestly to the task of belittling and discouraging a unique, international and latitudinal-continental railroad scheme of colossal magnitude and importance.

They seem not to have acquainted themselves with the fact that the proposed Milwaukee acquisition is intended only as the initial section of an all-rail project, which will, in the near future, open up direct communication between Hudson Bay to the Mosquito Coast, and which will make the Badger City, itself, the half way house of the entire system.

If the Milwaukians are possessed of only a small share of the native shrewdness and business tact with which they are usually credited, they will lose no time in supplementing in every possible way the sublime conception and the incomparable and irresistible activity of the Canadian Pacific management.

Really there is no point on the entire route, not even Chicago herself, better fitted by nature as a stop over point for our long estranged brothers of the continental extremities, and we may be permitted to remark, that Milwaukians to make their ground doubly sure, should add to the present splendid attractions of their city by opening a few first-class bear gardens and bull rings, so that the Eskimo and Carribean greasers, when they ramble up and down the new road can enjoy their native sports under the cool, refreshing influences of Milwaukee's famous product.

Apart from these minor considerations is the belief now generally entertained, that the invasion of more American territory by the great "true trans-continental" line can only result in the obliteration of the sentimental and misleading boundary line. The latter is at best only a parallel line without roadbed or equipment, and without equipment, and without a revenue or the slightest prospect of one—simply the miserable and ridiculous makeshift of a handful of clumsy, antiquated and long forgotten politicians—a makeshift that has given the people of this North American