

RAILWAY TRAFFIC RETURNS.
FOR THE MONTH OF JUNE, 1869.

NAMES OF THE RAILWAYS.	Miles in Operation, 1869.		Miles in Operation, 1868.		Total 1869.	Total 1868.	Passengers.	Freight.	Mails and Sundries.
	1869.	1868.	1869.	1868.					
Great Western Railway (3 weeks).....	3511	3511	3511	3511	3511	3511	122530	151405	1810
Grand Trunk Railway (3 weeks).....	1377	1377	1377	1377	1377	1377	182556	243746	19600
London and Port Stanley Railway.....	241	241	241	241	241	241	1271	1692	300
Welland Railway.....	25	25	25	25	25	25	988	8720	109
Northern Railway.....	97	97	97	97	97	97	19007	45000	3358
Port Hope, Lindsay, and Beaverton Railway, and Peterborough Branch.....	56	56	56	56	56	56	3688	24604	247
Coleburg, Peterborough and Marmora Railway.....	22	22	22	22	22	22	64	7401	298
Brockville and Ottawa Railway.....	86	86	86	86	86	86	4142	17112	2879
St. Lawrence and Ottawa Railway.....	54	54	54	54	54	54	5395	2879	840
Carleton Place and Chubbly Railway.....	12	12	12	12	12	12	3291	430	100
St. Lawrence and Industry Railway.....	106	106	106	106	106	106	2095	8596	606
New Brunswick and Canada Railway.....	116	116	116	116	116	116	7479	17140	50
European and North American Railway.....	108	108	108	108	108	108	447	122	50
Eastern Extension Railway.....	23	23	23	23	23	23	340739	537182	35560
Nova Scotia Railway.....	23	23	23	23	23	23			
Total.....	2352	2352	2352	2352	2352	2352	919271	802225	35560

*No returns.

RISE IN GRAND TRUNK.—*Herpath's Journal* says: "The whole of the Preferences of the Grand Trunk have sprung considerably in the week. The 1st Preference has gone up 2, the 2nd Preference 4, the 3rd Preference 3, and the 4th Preference 14. The large increase in the traffic, and the fact of the Chairman going to Canada and devoting months of his time to looking closely into the management of the line, also the probable payment this year of the 1st Preference dividend in cash, are the causes of the spring in the prices. Indeed, we shall not be surprised to see the 1st Preference presently above 60, and the other Preferences advanced in proportion. If all go well the proper price of the 1st Preference is 80, at least, for after 1872 the interest rises from 5 to 6 per cent., and surely a six per cent. bond is worth 80."

A WIRE RAILWAY.—*Herpath's Journal* speaks of an invention now in use in Leicestershire, England, which obviates the necessity of cuttings, embankments, tunnels, viaducts or bridges, no matter how hilly the country to be travelled. It is a wire tramway, which consists of endless wire rope, supported on a series of pulleys, carried by substantial posts, ordinarily about 150 feet apart, but which may be extended to 600 feet. One of the ends of this rope passes round a Fowler's clip-drum, worked by a portable steam engine, and this drives the rope at a speed of six miles an hour. Boxes are hung on the rope at the loading end near the station by a pulley, which is ingeniously arranged to preserve a perfect equilibrium, and at the same time to pass without hindrance over the supports. Each of these boxes is loaded with a hundred weight, and the delivery is at the rate of two hundred boxes, or ten ton per hour, for a distance of three miles. This description applies to a wire extending that distance to some stone quarries in Lancashire. Already wire tramways on the same plan are said to be in course of erection in France, Italy, and Spain, and it is probable, (says the

Journal) that this generation may see goods carried by wire as commonly as messages. The tramway is not unlike an exceedingly stout electrical telegraph; and there is something exceedingly droll in the sight of a regiment of well-laden trucks or boxes passing gravely along it at stated intervals and at a regular pace, much as if they were at aerial drill.

THE PATENT ACT OF 1869.

The new Act which makes the law respecting patents uniform throughout the Dominion took effect on the 1st of July. Any person, a resident of Canada for at least one year before his application, having invented or discovered any new and useful improvement on any art, machine, manufacture or composition, not known or used by others before his invention or discovery and not in public use or on sale in any of the Provinces, may obtain a patent granting an exclusive property therein. An original and true inventor or discoverer is not deprived of his right to a patent by reason of having taken out a patent for his invention or discovery in any other country at any time within six months and preceding his application here. The patent may be granted to any person to whom the inventor or discoverer has assigned his right of obtaining it.

Any person, having been a resident of Canada for at least one year next before his application, and who has invented or discovered any improvement on any patented invention or discovery, may obtain a patent for such improvement, but shall not thereby obtain the right of vending or using the original invention or discovery, nor shall the patent for the original invention or discovery confer the right of vending or using the patented improvement.

In cases of joint applications, patents shall be granted in the names of all the applicants; an assignment from one to the other shall be registered.

The applicant for a patent shall make oath or affirmation that he verily believes that he or his assignor is or was the true inventor or discoverer, that he is or the assignor was a resident of Canada for one year before the application. The petition shall specify the dominion of the applicant, the title of the invention or discovery, its object and a short description of it and distinctly allege all the facts necessary under the Act to entitle him to the patent, and accompany it with a written specification in duplicate, describing the invention or discovery in such full and exact terms as to distinguish it from all contrivances or processes for similar purposes.

The application shall correctly and fully describe the mode of operating contemplated by the applicant; shall state distinctly the contrivances which he claims as new, and for the use of which he claims an exclusive privilege; shall bear the name of the place where it was made, the date, and be signed by the applicant and two witnesses—in the case of a machine the specification shall fully explain the principle and the several modes in which it is intended to apply and work out the same; in the case of a machine or in any other case where the invention or discovery admits of illustration by means of drawings, the applicant shall also, with his application send in drawings in duplicate showing clearly all parts of the invention or discovery; and each drawing shall bear the name of the inventor or discoverer and shall have written references, corresponding with the specification, and a certificate of the applicant that it is the drawing referred to in the specification; but the Commissioner may require any greater number of drawings than those above mentioned, or dispense with any of them as he may see fit; one duplicate of the specifications and of the drawings, if any drawings, shall be annexed to the patent, of which it forms an essential part, and the other duplicate shall remain deposited in the Patent Office.

The applicant shall also deliver to the Commissioner, unless specially dispensed from so doing

for some good reason, a neat, working model of his invention or discovery, whenever the invention or discovery admits of such model, and shall deliver to the Commissioner specimens of the ingredients, and of the composition of matter sufficient in quantity for the purpose of experiment, whenever the invention is a composition of matter.

An intending applicant for a patent who has not yet perfected his invention or discovery may file in the Patent office a description of his invention so far with or without plans. This document, called a *caveat*, is to be preserved in secrecy by the Commissioner until the patent issues. If application be made by any other person for a patent with which the *caveat* may interfere, the Commissioner shall give notice to him who filed the *caveat* and such person shall within three months after such notice take the other steps necessary in the application for a patent, unless the person filing a *caveat* shall within four years from the filing have made application for a patent the *caveat* shall be void. Under certain circumstances the Commissioner may object to grant a patent, but his decision is subject to appeal to the Governor in Council.

In case of interfering applications for any patent the same shall be submitted to the arbitration of three skilled persons one to be shown by each of the applicants and the third by the Commissioner whose award shall be final. If either applicant shall fail to choose an arbitrator the patent shall issue to the opposite party.

No letters patent shall extend to prevent the use of any invention or discovery in any foreign ship or vessel, where such invention or discovery is not so used for the manufacture of any goods to be vendible within or exported from Canada.

Every person who, before the issue of a patent, has purchased, constructed or acquired any invention or discovery for which a patent has been obtained under this Act, shall have the right to use and vend the specific article, but the patent shall not be invalid as regards other persons by reason of such purchase, &c., by the first named or those to whom he may have sold the same; unless the purchase, &c., was made more than one year before the application for the patent or the use extended for a longer period than a year.

Every patent shall be assignable either as to the whole interest or as to any part by an instrument in writing. Any grant and conveyance of an exclusive right to make and use and to grant to others the right to make and use the invention or discovery patented within the Dominion or throughout any one or more of the Provinces or any part of the Provinces shall be registered in the office of the Commissioner. Every assignment affecting a patent shall be void as against a subsequent assignee unless such instrument before prescribed is registered before the registering of the instrument under which such subsequent assignee may claim.

The fees payable to the Commissioner of Patents, are:—

On a petition for a patent for 5 years.....	\$20 00
“ “ extension for 5 to 10 years....	20 00
“ “ “ “ 10 to 15 years....	20 00
On lodging a caveat.....	5 00
On asking to register an assignment.....	2 00
“ “ attach a disclaimer to a patent	4 00
“ “ for a copy of a patent with specification.....	4 00
On petition to reissue a patent after demand and on petition to extend a former patent to the Dominion, for every unexpired year of duration of patent.....	4 00

The patent when granted shall be issued for five years, renewable for a second and third period of five years each; but every patent is subject to the condition that it shall cease at the end of three years unless the patentee shall within that period have commenced and shall after such commencement carry on in Canada the construction or manufacture of the invention or discovery patented in such manner that any person desiring to use it may obtain it or cause it to be made for him at