

MISCELLANEOUS.

GREAT WESTERN RAILWAY OF CANADA

The gross receipts of working expenses and net profit of the Great Western Railway of Canada for the month of June, 1879, and for the preceding five months, were as follows:

Table with 2 columns: Working expenses, Net profit. Rows for June 1879 and preceding five months.

showing an increase in working expenses for the five months of \$77,700 in working expenses of \$29,000 and in net profit of \$74,000.

INTERESTING FIGURES IN REGARD TO THE GRAND TRUNK RAILWAY

The following facts and figures regarding the Grand Trunk Railway which we find in the Trade and Commerce Report of the city of Montreal, will give some idea of the magnitude of this stupendous corporation. The figures are for the year 1878, and refer exclusively to Canada.

Table with 2 columns: Description, Value. Rows include No. of G.T.R. station masters, Total number of employees at all shops, etc., Estimated number of persons dependent on the G.T.R., Gross amount of all wages paid in 1878, etc.

The whole number of employees stationed in the city of Montreal is 2,105. These are distributed as follows:

Table with 2 columns: Department, Number. Rows include General office, Traffic department, Engineers, etc.

The estimated number of the population of Montreal dependent for wages, as well as subsistence, on the G.T.R., including contractors, is about 10,000 persons. The wages paid in 1878 to these employees amounted to very nearly a million dollars (\$961,700), the wages disbursed in Montreal during five years (1873 to 1878 inclusive), being \$4,800,000. The company's dealing with business firms in Montreal city in five years amounted to \$5,500,000.

THE CANADIAN PACIFIC RAILROAD.

(From the Morning Post, Tuesday, July 27, 1879.)

Sir,—The Premier of Canada, assisted by some of his Ministers, is now in London with the view of forwarding the completion of the above undertaking. Will you allow me to remark that, apart from the magnificent project of peopling with our loyal English the rich portions of territory through which this line must run in its course to the West, the railroad is looked upon by officers of long experience as one of great importance to the strategic wants of the Empire. It is well known that the constant freighting of the Baltic on the one hand, and the pressure of China on the other, has led Russia to change front, so to speak, with her fleet, and that the ports of Nikolaevsk and Vladivostok, in the North Pacific, will in future be the base of operations in those seas. An article in a military journal pointed out last week that these ports were connected by wire with St. Petersburg, and that a large fleet is assembling at them. Our principal coalmine in the Pacific is at Nanaimo, close to the fine harbor of Esquimaux, British Columbia. This harbor and its coal mine is, I may say, the terminus of the line now engaging the attention of the Canadian Ministers. Without in the least suggesting war between England and Russia, the fact of the latter having been forced by China to take the course that she has done will force us to protect our fine harbor with its excellent coal mine in the Pacific, and therefore the prospect of its being connected by rail with Quebec becomes of the utmost importance. Lieutenant-General Sir Edward Selby Smyth, who has just vacated his command of the Canadian forces, a command which extends from Quebec to Esquimaux, stated in his last report, "Our security in the Pacific requires Esquimaux to be well guarded; our fleets must keep the sea, if necessary, in all weathers, and they cannot do so without coal." Sir Edward has accordingly fortified Esquimaux, as far as means would admit, and has mounted a rifled cannon on some of the rocks. It is a beginning of an important future, for here in years to come will undoubtedly assemble the fleets of England and her colonies for the protection of her vast Pacific trade. The railroad to Esquimaux would enable cannon, soldiers, cannon and stores to reach these fleets in twenty days from Woolwich and Portsmouth. Without this railroad the volunteer artillery, supported by a couple of English men-of-war, could hardly resist a coup de main. How near we were to this in 1878 may be gathered from the fact that while only two of our ships were at British Columbia, thirteen Russian cruisers lay at San Francisco. Let us profit by this warning; it is plain from K. Selby Smyth's report that to lose our finest harbor and coal mine in the West would be a serious matter, if not a positive and lasting disaster. No feeling of irritation, therefore, on the duties charged on our goods by the Canadian should lead us to ignore the enormous cost to them and the great advantage to us of their railway now in hand to our gate of the Pacific Ocean. Four millions spent at night was not considered too much by the people of England to pay for their shares in the Suez Canal; let us hope that the time will soon come when not only England, but Australia also, will recognize and act upon the necessity of the completion of this great western highway of the British Empire.

Your obedient servant, Rowan P. ... Late Capt. 7th Hussars. Army and Navy Club, July 26.

THE CANNING INDUSTRY

A Busy Day at St. Mary's.

For some two or three weeks past there has been an agitation of of for the establishment of canning works in this city being that there are such excellent fruits for carrying them on and that there is such a wide market for the sale of the goods after they have been prepared. It is a matter in favor of the same have been founded on the judgment of men thoroughly acquainted with the resources of the community so far as vegetables and fruit are concerned, and the probability of finding a ready and remunerative sale. It has been said very truthfully that fruit growing would be cultivated during the summer of the surrounding country, and that there would be brought into existence an industry naturally valuable to the city and its waters. In view of pending arrangements and the fact that canning is a novelty in this district a Free Press reporter visited St. Mary's yesterday afternoon and inspected the only works in Canada resembling in any way those proposed to be inaugurated here. They were established by Mr. J. J. Otwell in 1868 as a new departure in connection with his market garden, and from year to year have been increased in the various respects which would be supposed to mark a growing trade. The factory is situated on a farm about four miles south-west of St. Mary's, and is surrounded by large fields under excellent cultivation. The manager, Mr. G. E. Moore, received his visitor at the door, and, on request, courteously showed him through the various rooms and explained the work performed in each. On the first floor is the canning room, where tomatoes are for the most part treated, and sealed in cans as they are brought at the grocery. The vegetables are brought in from the adjoining field, washed in wooden vats, scalded, skinned and freed from stems by girls on long tables, placed in cans, sealed, placed in large iron boilers, submitted to a boiling heat for a certain length of time, taken out, labelled, and two hours after being picked from the vine they are ready for the market. With green corn the process is but slightly different. Here were also a dozen or more kegs filled with black and red currants, from which it was intended to make jelly. This is a new departure in Mr. Otwell's enterprise, which he has commenced simultaneously with the bottling of gooseberries without the use of sugar or other preservatives than pure water. The corn and tomatoes sell retail at eighteen or twenty cents, while the jellies, not having been placed on the market, it is not known what the prices will be. In an adjoining room were stored somewhere in the neighborhood of 40,000 cans in readiness for the work which commences next week. These cans are made on the premises in a room immediately west of the canning department by a practical tinsmith. The tin is cut in strips and rolled into circular forms on an iron roller and soldered. The bottoms are then put on, and also the tops, in which are left small holes for the insertion of the fruit, and small tin caps. It was said that one man could make four or five hundred of these a day, from which it will be seen that their cost must be very small indeed. In a new addition to the factory was stationed a new steam engine, with which all the boiling will in future be done. This is regarded as a great improvement on the furnace heretofore used, and is the outgrowth of Mr. Otwell's increasing business. The cellar is devoted exclusively to pickling. There were a large number of wooden vessels, holding several hundred gallons each, some of which were filled with cucumbers, cauliflower and onions in process of pickling. When ready for market they are packed in five-gallon kegs with suitable lids attached, and sold either by the pound or in bulk. Having gained a reputation for these pickles, Mr. Otwell experiences no difficulty in selling all he can manufacture. Before leaving the building, it was ascertained that in this line of canning no sugar was used whatever, but that boiling and exclusion from the air were the only means taken to keep the vegetables fresh and palatable. When taken from the cans they can be used for sauce or any of the various culinary purposes for which they are always in demand. The number of hands employed was from eight to twelve, including the girls. It was expected that 100,000 cans would be put up this season to meet the growing demand. A stroll over the farm showed immense patches of cauliflower, cucumbers, onions and carrots under cultivation. Mr. Otwell grows all his own vegetables, but thinks they could be purchased by contract quite as cheaply. By growing immense quantities the cost of production is reduced to the minimum. If fruits were gone into he should be compelled to buy from farmers and market gardeners, but by giving large orders would expect to purchase at prices which would enable him to sell as reasonably as under the present system. He regards his trade as yet in its infancy, and points to the immense field in Canada for the supplanting of American goods as his chief encouragement. Other points will suggest themselves to the reader.

ENGLISH BANK NOTES

Few of the persons who handle Bank of England notes ever think of the amount of labor and ingenuity that is expended on their production. These notes are made from pure white linen cuttings only, never from rags that have been worn. They have been manufactured for nearly 200 years at the same spot—Laverstock, in Hampshire, and by the same family—the Portals, who are descended from some French Protestant refugees. So carefully is the paper prepared that even the number of dips into the pulp made by each workman is registered on a dial by machinery, and the sheets are carefully counted and booked to each person through whose hands they pass. The printing is done by a most curious process in Mr. Coe's department within the bank building. There is an elaborate arrangement for securing that no note shall be exactly like any other in existence. Consequently there never was a duplicate of a Bank of England note except by forgery. It has been stated that the stock of paid notes for seven years is about \$4,000,000 in number, and they fill 18,000 boxes, which, if placed side by side, would reach three miles. The notes, placed in a pile, would be eight miles high; or, if joined end to end, would form a ribbon 15,000 miles long; their superficial extent is more than that of Hyde Park; their original value was over £3,000,000,000, and their weight 112 tons.

—Mississippi's penitentiary, which cost the State \$300,000 for the forty years ending 1876, has been leased, with the convicts, for \$29,470 to a Baltimore firm. Another firm has leased the penitentiary for the last four years at a profit of about \$40,000 to the State, the number of convicts having increased from 331 in 1873 to 1,443 last year.

ADULTERATION OF FRENCH WINES.

The French law imposes a heavy tax equal to prohibition, on the addition of alcohol to wine intended for home consumption, but exempts from this burden all wines at the moment of exportation. That is the phrase used by the minister of finance in a State paper, dated 25th of July, 1879. The excuse for the legalization of this adulteration is that, without it, the weaker wines would not keep during the voyage, but the dishonesty of the exporter is apparent when we consider that the wine is in no more danger of spoiling on a voyage from Marseilles to London, Italy, Greece, or Morocco than to many French ports, and that the same adulteration is allowed for wines crossing the Bosphorus or German frontiers as for those destined for California or China. In the same State paper, Leon Say, whose reputation for learning and ability is hardly above that of most men in similar positions, discusses the result of putting the tax on adulteration with alcohol for home consumption, many of the wine-growers having demanded such a reduction because the wine crops were insufficient to meet the demand, and were inferior in strength, the grapes not having ripened well. He suggests, as a remedy, that 40,000,000 gallons of neutral wine from Southern France, and 30,000,000 of a wine from Central France, each containing 75 per cent. of alcohol, would be mixed with 3,000,000 gallons of pure spirits and 2,000,000 gallons of adulterated wine, containing 11 per cent. of alcohol.

TRANSHIPMENT OF GRAIN AT KINGSTON

It is the old story over again. Our vessels are suffering the usual delay at Kingston in getting their grain discharged, now that there is a little rush of business above the ordinary. Our readers have noticed that an unusual amount of wheat has gone forward of late from Toledo to Kingston en route for Montreal and Europe. This slight rush aided to the Chicago trade in corn to the same port has over-taxed the small-potato appliances at Kingston in the way of floating elevators and barges, which are all the accommodation they have there for grain. And now with the lucrative rates of freight offering, time with our lake vessels is literally and truly money, they are delayed for days at Kingston waiting an opportunity to get rid of their cargo and start westward for others. They do things differently at Buffalo. There on the very hour of their arrival, fleets with two million bushels of grain commence to discharge. In twenty-four hours this grain is out of them, cargoes of coal, salt, cement, etc., loaded, and the vessels off again for the west. A one million bushel storehouse and elevator is an acknowledged want at Kingston, or in its stead fifty more barges of twenty thousand bushels capacity each, to meet the actual present requirements of trade. So it goes, so it has gone, and we suppose will go to the end of the chapter at Kingston, and, we may add, Montreal, for the barges are mainly owned there, we believe. As in the past, our really live, energetic lake vessel owners and masters must continue to be cramped in their actions, their business devastated, and their prospects of making money darkened, when freights are good and plenty of grain is offering to move to the seaboard, by the sleepy, old-time, short-sighted and narrow-minded people they have to depend upon to take away the grain they bring forward from the upper lakes. These Kingstonian Rip Van Winkles, along with the Montreal barge owners, are the individuals who maintain the excellence of the system of transshipping grain at Kingston into the St. Lawrence river barges, and oppose tooth and nail the enlargement of the St. Lawrence canals to the size of the enlarged Welland. No government should listen to them. Give our lake people the opportunity to meet the ocean ships, with large cargoes of 30,000 bushels, and Canada will realize the grain trade she now merely dreams of.

SWEDEN.

The remembrance which the traveller has of Sweden is to a considerable extent of a morose character. As I sit by the fire and recall the days I wandered through that northern land, there rise before me in a vague way, apparently endless miles of white rock-ground, and forests of dark pine trees, varied only by great sheets of water—a fourth part of Sweden, be it observed, is under water. It is the most sombre portion of Scandinavia, wanting the grand mountain ranges of Norway and the open green fields of Denmark. But there are two things which stand out in recollection as bright and cheerful. The happy, lively peasantry and beautiful Stockholm. The people are vivacious and pleasure-loving like the French. If they wore blue blouses and cut their hair short as a scrubbing brush, and drank red wine, they might pass for children of fair Provence. As it is, their locks are long, their dress rough home-spun, and their drink is of the strongest. But they are joyous, kindly, courteous folk, fond of social gatherings, a dance around a May-pole, a marriage, or a market. They are hospitable to the stranger withal, and when he crosses the threshold of farm or cottage he is a stranger no longer; a people full of hilarity and good humor whom it is pleasant to remember. But it is worth while going all the way to that far off corner of Europe just to see Stockholm, as one looks at it for the first time from the Baltic; worth all the toiling on the terrible North Sea, and the days spent up on shipboard in poky cabins, or on land in musty, fusty hotels. When the little asphaltic steamer that has carried you from Gottenborg through long canals and across broad lakes, and by narrow tortuous channels among wooded islands, turns a point, Stockholm comes suddenly into view—a bright, classic, beautiful city, "kissed," to quote a rapturous guide-book, "on the one cheek by the ripples of the lake, on the other kissed by the billows of the sea," the lake being the Malar Lake, and the sea the Baltic. Indeed, I don't know that any capital of Europe is more picturesque than this of Sweden; not "the grey metropolis of the North," nor Constantinople on the Golden Horn, nor Berna with her grille of snow-capped mountains. Stockholm rises from the water embosomed in woods of pine and oak and birch, with a background of grey hills. She sits on her seven islands like a queen.—Dr. J. C. Lova, in Good Words.

—Some of the directors of the "Forest Beech Sugar Company," of Ontario, have recently visited the plantations in the Eastern Townships, to satisfy themselves as to the adaptability of soil and climate. They report that their expectations have been more than realized; that every plantation is in a most prosperous state, some fields promising a crop of 30 tons, and that the soil is most eminently adapted for this valuable root.

MECHANICS AS WRITERS.

There is no department of productive business in which a larger proportion of actual brain work is employed than in the building and working of machinery, and there is no class of our production which offers so little of that experimental knowledge and observant wisdom to the world in printed form as agricultural papers teem with communications which frequently contain valuable hints, exact intuitions, and suggestive facts. But the publications devoted to mechanical matters and the interests of mechanics have far less of these voluntary contributions. One of the reasons for this is, undoubtedly, that practical mechanics may be properly considered one of the easiest sciences, and statements that in other departments of industry would pass for mere common opinion, become of great importance as illustrations of mechanical law or demonstration of facts which are, too often, deemed by the experimenter as tests, lacking the authority of practical use. Yet in many cases, these tests are more than experiments, and frequently carry with them their own demonstration. The mechanic deals with material substances and mechanical processes that are continually presenting new problems for solution, and are capable of being solved by more than one method. At such a time this solution invites attempts in more than one direction. So the mechanic dislikes to provoke criticism and invite comparison when he knows the field is so large and the cultivators so many. There may be another reason why the mechanic does not "rush into print" so readily as some others. He is not given to talk. His work requires, largely, concentration of attention that leaves little time for talk. Indeed, a mechanic generally prefers to illustrate by sketch or work rather than to elucidate by words. In fact, the method is easier than talking. It is not easy to convey a proper idea of a machine and its operation by words alone. The choice of language and the avoidance of mere "shop talk," necessary to convey to the general reader mechanical ideas, demands a very thorough knowledge of the English language and some acquaintance with cognate tongues. It is not meant that the writing mechanic must necessarily be a college graduate, or even to have borne off the honors in a high-school class. But choice of language in mechanical writing is a necessity—not a mere convenience. The writer on mechanical subjects ought to know that "rotary" and "revolving" are not synonyms, and that "force" is not necessarily "power," these, and similar errors, being quite common. There may be other reasons why mechanics are not fond of writing for publication. But it is a fact that the number of really practical workers who are writers on their specialty are very small indeed. The number of practical mechanics who are regularly employed on mechanical papers in this country is insignificant, when compared with the value of so mechanical interests, as to surprise one who takes the trouble to inquire. There can be no doubt that the welfare of working mechanics would be greatly enhanced by a greater willingness on their part to present the results of their own experience to the world through the medium of the special papers devoted to their interests.

SOCIETY'S RESPONSIBILITY FOR CRIME.

Much is to be said of the responsibility of society for making criminals. In a certain sense many a man or woman is well-nigh forced into criminal practices by their necessities. What is one to do, with starvation staring him in the face, and all the avenues of honorable employment shut up, as in many instances they seem to have been? If we do not justify a man for stealing, or a woman for prostituting herself, in such circumstances, we, at least, accept their situation as palliating the crime, and justify what society may be almost as much to blame as the criminals themselves, allowing, as it does, the cause to exist which lead to so much suffering and woe. And so when children are brought up with only evil influences surrounding them, and their falling into crime becomes almost as certain as their learning, we say the young scamps are criminals indeed, but society may be yet more criminal for allowing them to live with such surroundings. And so in many other instances. Illustrations in point might be given in great numbers. Indeed, it is sometimes claimed, with some show of truth, that society is a co-partner in nearly all this low range of crime. How about the respectable criminals—the men who, from our higher classes, have gone of late years in such numbers to State Prisons for forgery and the misappropriation of funds? A contemporary, commenting upon a recent case of this kind, hits some very hard rap, which are most richly deserved, as to its responsibility in connection with such inquiries. We ask our readers to ponder with a few sentences which we quote as follows: "These higher-class criminals could not plead that neglect, the lack of opportunities, or vicious associations drove them into crime. They did not even feel the pressure of poverty or want in any legitimate sense. The means of a comfortable subsistence were assured, whatever reverses they might sustain in business. Yet, nevertheless, society is not wholly free from responsibility for their fall. In the minute details that were given upon their trial as to the motives which led to the offences, the fact was brought out that the great object for which, above all others, they struggled, was to save their social position. Come what might, that must be upheld at all hazards. Business might be dull, and race pin over balanced by expenses, but the style of living must be kept up. I rather than carry on a systematic process of saving, and swindling, with the object of obtaining that social position, they had come down in the world and given up the superfluities of fashion, instead of being received on the old familiar footing and honored by their courage and manliness, they would have completely dropped out of sight or recognition. Such is the world. It is useless to preach retrenchment, economy and adaptation to altered circumstances, while the first indication of a move in that direction is quite certain to cause social ostracism. Family interests there is reason to believe, have been prominently connected with the respectable forgeries and misappropriations of the last few years. Many a man who would perhaps care little personally for social ostracism, is influenced by the supposed necessity for securing the best positions possible for his family to take the first step which leads on to a career of crime. All the moralizing in the world over fashionable follies and financial failures will yield little or no way as society continues to test men's worth by the standard of money, or of display which induces the command of money. So long as the traditional 'way of the world' is maintained, and poverty is treated as being akin to crime, retrenchment in respect to 'respectable' criminals will continue periodically to stir the public with a wholly unreasonable passion."