

# INDUSTRIAL WORLD

AND NATIONAL ECONOMIST.

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## THE INDUSTRIAL WORLD

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### ENGLISH AND AMERICAN RAILWAYS.

It was announced a few days ago that the Duke of Sutherland and several leading English railway officials had arrived in New York for the purpose of investigating the working of leading lines in the United States. The object of the visit is stated by Mr. Nixie, Superintendent of the London and North-Western railway, who is one of the party. — Primarily, its purpose is to inspect the railway system of the United States, and learn from personal observation whether there are any features worthy of introduction upon the London and North-Western line. The transportation of baggage as well as of passengers will be studied. Of course, being Englishmen, the method of registering luggage now in vogue in England, under firm defenders in them. At the same time, the convenience of the American system of checking is not understood, and particular attention will be given to its details. The company, Mr. Nixie says, had made an effort at one time to forward baggage from any point on its line through to the United States, but had met with so much opposition from the steamship companies that the system had to be abandoned. As regards the passenger coaches, he thinks that those on their line give fully as much satisfaction as those on the American ones. They are a combination of the Pullman and the conventional English coach, combining all the conveniences of the one and the privacy of the other. Still, there was always something new to be learned from the workings of every railway system, and any American ideas of value would find ready appreciation. The devoted railroads may receive some attention, although they at present form no part of the English company's system. As some of the directors are financially interested in some of the railroads of the United States attention will doubtless be given to those particular roads. There was nothing to warrant the impression that the Duke of Sutherland had crossed the Atlantic to in-

vest in railroad stock, as he is already one of the largest stockholders in companies at his own door. As a rule Old Country people are very conservative in their ideas on railway as well as other matters, being slow to make changes simply for the sake of change. In some respects the English Railways are better managed than those of the United States; while as regards the convenience of the travelling public, it is safe to say the latter are in some, but not all, respects superior. The checking system on this side of the Atlantic is a decided improvement upon the English system; and it is only necessary to have it put in operation in England to insure its general popularity. A marked difference between travelling by rail in the United Kingdom and in the United States and Canada is the comparative privacy connected with the former. We have no hesitation in saying, however, that the majority of those who have had experience of both systems would, if appealed to, decide in favour of the style of carriage used on this continent, which are better adapted for long journeys than the narrow compartments into which English carriages are divided. In England no difficulty is experienced in recognizing the officials of the road, as every man in a company's service, from the station master to the brakeman, is dressed in official uniform. On this side the "herring pond" it is with the utmost difficulty in many cases that the traveller can tell "who's who," so far as the officials are concerned. While on this subject, it may be remarked that there is a great room for improvement on some of our Canadian railways. The accommodation for the travelling public at many of the stations is anything but what it might be—in some cases disgracefully deficient. Under the now and more prosperous condition of affairs which was recently inaugurated, the directors should be able to see their way clear to effect many much-needed improvements.

### "PROGRESS AND POVERTY."

Some little stir has been created by the recent appearance of a book bearing the above title, and from the pen of an American writer, Mr. HARRY GEORGE. It is one of the most "radical" books ever written, in any language, and the author is certainly getting himself talked about, though not much in the way of compliment. He starts with the rather discouraging statement that what we call the progress of the human race—civilization, enlightenment and modern improvements generally—does not tend to make man better off and happier, but the reverse. The greater our progress, the greater becomes the contrast between vast wealth and squalid poverty, existing side by side. That the rich are becoming richer and the poor poorer is an old story, and one that has been often told before. And yet it may not be wise to dismiss it too curtly, as if we attached no importance to it, and might safely refuse to consider it. The rise of Socialism in Western Europe, and of Nihilism in Russia, the murder of the late Czar and the acknowledged peril of his successor, are facts that cannot be overlooked, but must command attention. Even in that country of unhampered "land and liberty," the United States of America, dark shadows are creeping forward. We have learned that the "dangerous classes" exist in American cities, as well as in London and Paris, and the flames of Pittsburg have caused us to see what before would not believe to exist on this side the Atlantic. Nor may we comfort ourselves with the idea that the dissatisfied and discontented are wholly without ground of complaint, and have no "case" with which to challenge public opinion. Only within

a very few years has it become a matter of general knowledge that there are two railway kings in the United States who hold wealth to the amount of about a hundred millions each, and this in a Democratic country. They may not be far wrong who believe that such colossal fortunes constitute a real danger to the State, and that all property would be safer were there none such in existence. That OGDON and VANDERBILT have themselves really created this enormous wealth of theirs nobody believes; nine-tenths and more of it have been created by the labour of others and the progress of the country generally. But, in whatever way or from whatever cause it comes about, the fact is forcing itself upon public attention that the contrast of great poverty beside great wealth, is to be seen in the new world as well as in the old. Mr. GEORGE'S remedy for the poverty which he affirms to be co-existent with progress is a very sweeping and radical one indeed. He would confiscate the rent of all land, which would become again what it was at first—the property of the State. Present owners would retain their buildings and other improvements but would pay ground rent to the Government, and this ground rent would be the only tax levied by the Government at all. Mr. GEORGE styles him "the philosophic apostle of confiscation," and pronounces the theory that rent is the universal source of pauperism a "marvellous" one. The sources of pauperism are many and various, and the evil cannot, so says the Professor, be cured by the confiscation of private property in land. No such change could be effected without terrible civil wars, and after frightful bloodshed the present system would probably remain, in spite of all that the attacking party could do. Taking up the Irish land question, Mr. GEORGE says that it is not really different from the land question in England or America, and that Irish tenants are positively living under more favourable land laws than those which prevail in Great Britain. The power of the landlord to take the highest rent he can get, and to make distresses and evictions, is just as great in Lancashire and the State of New York as it is in Connaught. This is true enough, but the fact remains that circumstances alter cases, and that the working of the same law is very different in the two islands. Mr. NIXIE rightly points out that the Irish Land Leaguers certainly do not take Mr. GEORGE'S view of property. Were he to propose to them to make their farms the common property of the human race, he would probably get a few slugs in the body for his own share. Give an Irish tenant his bit of land free, and then ask him to share it with the first homeless labourer that passes who has none. It would be found that the new owner of ten or twenty acres would not, any more than the owner of half a county, allow anyone else to claim a share, and that he would fight and die sooner than give it up. It appears safe to conclude that, in either Ireland, or Canada, or the United States, for instance, halt the grown up men of the country would have to be killed, or made prisoners of war, before Mr. GEORGE'S plan could be carried out. It is not within the range of practical politics. Impracticable as the proposed remedy is, however, the existence of poverty along with progress is no wild fancy, by any means, but a grave fact. It is only too true, though there is nothing new in saying it, that the competition for employment—the struggle to obtain work and wages—becomes keener and more pressing with the advance of civilization and material progress generally. In a new country there is more work to do than hands to do it; in an old country there is not work enough for the hands. From these unquestionable facts what infer-

ence should be drawn as to the probable future of the question between Protection and Free Trade? A certain inference of vast importance there is, we think, to be drawn from them, and one that is perfectly unassailable. If the competition for employment is to become greater as the world progressed then each Government will be more and more pressed to keep for its own people as much as possible of such employment as the country's own home market affords. The more that any Government is pressed to find work for its people, the less can it afford to admit foreign commodities free, and thereby diminish the general sum of employment at home. Import from abroad a year's produce of a thousand looms, and a thousand looms that would otherwise be running at home will stand idle. It is futile to say that if the people are not weaving cloth they will be raising grain or making lumber. Starting a cotton factory, for instance, does not diminish by a dollar's worth the country's annual production from the farm and the forest; it merely adds a new production of cotton goods to the former production of lumber and grain. It is this addition of a new production, the old production going on as before which is the true secret of the prosperity which Protection brings. But if the world's progress brings keener competition in all countries for work and wages, then each Government must adopt Protection in order to keep as much as possible of its own country's work for its own people. And this is precisely what is going on now, witness France, Germany and the United States. The system of Free Trade has, therefore, no future before it in the civilized world outside of England.

### BRITISH FOREIGN AND COLONIAL TRADE.

A pamphlet has been published containing an analysis of the British Board of Trade returns for the last twelve years, a summary of which is before us, and from which we make some extracts, as the subject is one of interest at the present time. The following table of European trade is published:—

Country.	Average Trade 1870-80	Per Cent. 1880-81	Per Cent. 1881-82	Per Cent. 1882-83
Germany.....	13,125,022	-33	-11	-17
Holland.....	6,331,443	-31	-49	-21
France.....	6,237,738	20	-131	-61
Russia.....	5,774,014	19	-19	-27
Italy.....	3,632,643	-31	-18	-21
Spain, etc.....	2,992,837	-61	-17	-21
Belgium.....	2,292,674	53	1	18
Portugal, etc.....	825,848	-171	-91	-20
Austria, etc.....	330,273	-39	-37	-29
Total.....	114,502,406	-14	-30	-11

(The decreases are indicated by a dash.) The reviewer points out that British exports of manufactures to the principal European countries have either declined, or, if they have increased, the increase is almost wholly in machinery and coal. The figures furnished are regarded as evidence that the chief foreign nations with which Great Britain trades have, during the past decade, been gradually diminishing their purchases of manufactures. Then comes the statement that "this is a serious state of things, and calls for careful consideration." Next we have the important question, to what cause is the decline to be attributed? The answer is:—"It is difficult, perhaps, to point to any particular influence which has been at work to produce this result. Hostile tariffs have had no little effect. The advances made on the continent in manufacturing enterprise, and perhaps the collapse of many foreign loans, have also acted in the same direction." The British manufacturer is beginning to find that "hostile tariffs" are operating against him. By painful experience he is discovering that the growth of a Protectionist principle—the development of home industries

in other countries of Europe is seriously operating against his interests; and he finds the home market flooded with the manufactures of the United States, which are taken across the Atlantic and sold at his own door at as low a figure as he himself can sell to the wholesale dealer. Under the circumstances it is no wonder that dissatisfaction is growing in the United Kingdom, and that it is becoming a question of the gravest import how long shall this state of affairs be allowed to continue? The return next examined possess particular interest for Canada. The colonial export trade for the last ten years is thus analyzed:—

Country.	Average Exports 1870-71	1871-72	1872-73	1873-74	1874-75	1875-76	1876-77	1877-78	1878-79	1879-80
India, etc.....	11,532,466	12,208,000	12,770,000	13,125,000	13,500,000	13,800,000	14,100,000	14,400,000	14,700,000	15,000,000
Australia.....	1,257,000	1,117,000	1,114,000	1,117,000	1,117,000	1,117,000	1,117,000	1,117,000	1,117,000	1,117,000
Canada.....	6,732,000	6,633,000	6,534,000	6,435,000	6,336,000	6,237,000	6,138,000	6,039,000	5,940,000	5,841,000
British Possessions.....	3,322,000	3,223,000	3,124,000	3,025,000	2,926,000	2,827,000	2,728,000	2,629,000	2,530,000	2,431,000

On these figures the reviewer makes the following comments:—"It must of course be borne in mind that during the last three years trade throughout the world has been greatly depressed. But the important fact which these figures distinctly prove is that whereas our trade with continental Europe for 1878-80 shows a decline of 11 per cent, as compared with the trade of 1869-71, our colonial trade shows an increase of 35 per cent. This, however, is not the only consideration. In 1869 India was only the third on the list of customers for British manufactures. She is now the first. Australia has advanced from the seventh to the fourth place, and has increased her imports from Great Britain nearly 50 per cent. Our miscellaneous dependencies and colonies, classified under the head of 'other British possessions,' take now nearly 60 per cent. more than in 1869. Moreover, if we take the average of the last nine years, we find that the value of our exports to the colonies amounts to nearly one-fourth of our whole export trade, whereas in 1869 it was less than one-sixth. The result, as a whole, is looked upon as satisfactory. The article closes as follows:—

"We think we are certainly justified in claiming consideration for these returns. They show in the most conclusive manner that the oft-repeated maxim that 'trade follows the flag' is not the exploded fallacy which some political economists have wished us to believe. We have been told by some writers that the British colonies are not more anxious to purchase the products of home industry than the Frenchman, Italian or Turk; that a colony is in fact no better than a foreign country; and that we must infer that its possession brings with it no commercial pecuniary advantages of any kind. This argument, it seems to us, is completely destroyed by the statistics which we have quoted. Australia, we find, takes, in proportion to population, twenty times the quantity of our goods that France does, notwithstanding the advantages enjoyed by the latter from its proximity to our country, and the commercial treaty in existence between the two nations. Were this fact a little more widely recognized it would be greatly to the advantage both of this country and of the colonies generally. We should hear less of the grumbling which every now and then is indulged in, that our colonies have involved us in great expense and in great responsibility, for which we receive no compensation whatever." The cry that was raised in Canada after the adoption of the present tariff that it

was anti-British, has already been dis- posed of by the figures quoted by the Finance Minister in his last budget speech

EDITORIAL COMMENTS.

Sir CHARLES TUPPER, Minister of Rail- ways and Canals, has returned from Eng- land much improved in health

Mr Boyd, of the firm of Blake, Kerr & Boyd, Toronto, has been appointed Chancellor of Ontario, vice Chancellor Spangue, appointed Chief Justice of Ontario, vice Chief Justice Moss, de- ceased

His Excellency the Governor General and suite left Ottawa on Friday last and are in Quebec, where His Excellency will remain until the arrival of the Prin- cess Louise from England. The party will then go on a fishing expedition, and in July they will visit the Province of Manitoba.

A GOVERNMENT return shows the home consumption of wines and liquors in Great Britain during the year 1879 to have been, in gallons, as follows— French claret, 4,189,800; French white wine, 1,430,000; Portuguese wines, 2,874,000; Spanish red wines, 1,033,000; Spanish sherry, etc., 3,330,000; Ger- man, Austrian, 1,125,000; Rum, 4,851,000 brandy, 3,549,000; other liquors, 1,141,000, a total of 24,488,800 gallons, against 26,713,300 gallons in 1878.

A recent return furnishes some inter- esting facts concerning the tea trade in India. It appears that in 1878 the land under tea in Assam was 140,146 acres; in Bengal, 32,225; in the North-West Provinces, 6,380; and in other districts, 10,980, making a total of 187,981. In 1876-77 the total acreage under tea in India only amounted to 146,685 acres, so the increase in one year in acreage was 42,276 acres. The total quantity of tea made in all India was, in 1878, 36,143,045 lbs. The comparative exports of the last five years were as follows: 1874-75, 21,137,087 lbs.; 1875-76, 24,361,509 lbs.; 1876-77, 27,784,124 lbs.; 1877-78, 33,450,075 lbs.; 1878-79, 34,432,573 lbs.

Some figures connected with the re- cent census-taking in Scotland have been published. The increase is represented as having reached 247,733, and the de- crease 5,996. The following is the state of the case in the leading popu- lous centres:—Glasgow's population shows an increase over the census of 1871 of 78,133—now 555,289; Edinburgh, now 225,435, an increase of 28,447; Dundee, present population, 140,463, an increase of 18,488; Aberdeen, 105,818, an increase of 17,603; Greenock, 67,427, increase, 8,316; Leith, 60,033, increase, 13,770; Paisley, 55,578, increase, 7,343; Perth, 29,858, increase, 4,273; Kilmarnock, 25,810, increase, 1,745; Arbroath, 21,700, in- crease, 1,530; Ayr, 20,819, increase, 2,906.

At the recent Convocation of York the Dean of Chester moved a resolution on the opium trade, which read:—"That in the opinion of this House, the opium trade, as now carried on between India and China, is opposed alike to Christian and international morality, is instru- mental in effecting the physical and moral degradation of multitudes of Chinese, and is a hindrance both to legitimate commerce and to the spread of Christianity." The Bishop of Carlisle moved, in amendment, that "In the opinion of this Convocation, the opium trade, as now carried on between India and China, demands the serious and im- mediate attention of Parliament." The original resolution was carried, the Bishop of Carlisle being the only sup- porter of his amendment.

Tax Secretary of the American Iron and Steel Association has just obtained complete returns of the production of iron and steel rails for 1880. It reached the enormous quantity of 1,461,837 net tons, or 1,305,212 gross tons. This is 31 per cent. more than the production of 1879. The rail product of 1880 was composed of 354,460 net tons of Besse- mer steel, 493,762 tons of iron and 13,015 tons of open hearth steel rails. Of the total production of rails in 1880 Pennsylvania contributed 48 per cent., or 676,198 net tons; Illinois, 52 per cent., or 322,823 tons; Ohio, 9 per

cent., or 133,187 tons. New York, 7 per cent., or 102,211 tons. Indiana 3 per cent., or 41,521 tons. Missouri, Wiscon- sin and Kansas, each 2 per cent. Ver- mont and Tennessee, each 1 per cent. and the others less than 1 per cent.

The following is a verbatim copy of a prayer offered in the Jewish Synagogue, Edinburgh, after the death of Lord Beaconsfield—

"Thou, O Lord of mercy and loving kind- ness, in Thy hand is the soul of every living thing, and the breath of all flesh. Thou kill- est and makest alive. Thou bringest down to the grave and bringest up again. Thy offer- ing is mercy and Thy strength is Thy right hand. Thou, O Lord, have mercy upon him; pardon his transgressions, for their life is of a just person upon earth, who doeth good and sin- neth not. Remember unto him the meritori- ous and benevolent deeds of his life, and grant him his recompense. Take his soul unto Thy keeping; show him the path of life, fullness of joy in Thy presence, pleasure for evermore at Thy right hand. Aouch- ing unto him the happiness Thou hast treasured up for the just, even as it is written, 'O Lord, how great is Thy goodness, which Thou hast laid up for those that fear Thee, which Thou hast wrought for those that trust in Thee before the sons of men.' Thou, O Lord, who hearest the broken, hearted, and bindest up their wounds, send Thy heavenly comfort to the mourning soul of Thee, O Lord, who hearest the low and afflicted, send Thy comfort to the soul of Thee with a perfect heart, so that when it will please Thee to call them from earth, their end may be peace. Amen."

A British Parliamentary return has been issued showing the number of cases of eviction in Ireland which have come under the notice of the police in each of the years from 1849 to 1880. The facts are as follows—In 1849, 90,440 persons were evicted, of whom 18,375 were readmitted. In 1850 the evictions rose to 104,163, and the readmissions to 36,292. Since that period the numbers rapidly fell, till in 1860 they only amounted to 2,985. They, however, again increased, and in 1861, 9,201 persons were evicted. There was again a falling off, and in 1869 the lowest num- ber was reached, and 1,741 persons were evicted. Since then there has been a gradual increase, and in 1879 the figures stood at 6,239, and in 1880 at 10,457, the readmissions being 663 and 1,021 re- spectively. The totals from 1849 to 1880 are—evicted, 90,107 families, 460,570 persons; readmitted, 21,310 families, 115,859 persons.

According to the annual statement of the navigation and shipping of the United Kingdom for 1880, just issued by the Statistical Department of the Board of Trade, there were 354,510 vessels entered and 310,482 cleared with cargoes and in ballast at ports of the United Kingdom last year. The tonnage entered was 69,147,797, and cleared 64,102,594. These figures represent the total trade of the country, home and foreign, and show large increases over the figures of the previous year. In the foreign trade alone the entries were 66,874 and the clearances 67,531, the respective tonnage being 29,073,555 and 29,662,508. Here also the progress was considerable, particularly as regards British shipping. Owing to the steady increase in the ton- nage and number of our steam mercan- tile fleet, progress in such totals appears to be inevitable whether more business be actually done or not, but the actual tonnage of goods carried was unques- tionably more last year than in either of the two preceding years. One result of the substitution of large steamships for sailing vessels is a decrease in the num- ber of men and boys employed. The total is now 192,972—a decrease of 676 on the total for 1879 and of 2,613 on the total for 1878. The registered tonnage of steam vessels belonging to the United Kingdom has risen from 2,492,327 in 1878 to 2,949,282 in 1880, or an increase of about 457,000 tons in the two years. As only 796 additional vessels have been put upon the register, this average must mean to some extent the substitution of new vessels of larger build for those worn out. In the same period there is a decrease of 473 in the number and of 330,000 tons in the tonnage of sailing vessels belonging to the United King- dom.

The Grand Trunk conductors intend to ask for a raise of pay. The men in the Grand Trunk Railway freight sheds will strike to-morrow, if they do not get \$1 25 a day, \$1 being the present rate.

Albion despatch says: It is feared that the labour troubles are only beginning here. The wharf hands held a meeting, and de- cided to demand an increase from the graduated scale of 17 1/2c. and 20c. per hour, which was paid last year to 20c., 25c. and 30c. per hour for the present season. On Saturday they refused to load a vessel on the canal under 30c., and got it. The freight conductors on the Grand Trunk Railway applied for a 10 per cent. ad- vance on Saturday, and were informed to- day that their petition would be granted. The passenger conductors are now apply- ing for a similar advance.

NATIONAL INDUSTRIES.

The INDUSTRIAL WORLD will be pleased to receive items of news from its readers in all parts of the country, for publication in the columns. It will take but a few minutes to write a few lines, and to acquaint us with what is going on in your neighbourhood, and we will assign a room for all legitimate communi- cations, which must be accompanied by the writer's name as a guarantee of good faith.

MANUFACTURES IN NAPANE.

A correspondent writes to the Belle ville Ontario— The leading capitalists are negotiating the building of glass works and it is not distant date you may expect to hear of a "boom" in the glass business.

The brush factory is doing a large and paying business, and are employing quite a number of hands. The products of this house are shipped all over the Dominion, and are highly spoken of as being equal to any other house in the trade in style and workmanship.

Messrs Gibbard & Son's furniture trade has assumed large proportions, and no doubt, when Mr Pascoe (late with Mr. G. S. Tickell) takes charge of the upholstering department, there will be a still larger increase, as Mr Pascoe work has pleased all who have seen it.

Mr. Herring's Agricultural Imple- ments Works are on a large scale, in fact much larger than I had any idea of until I inspected them. Mr Herring seems to be the right man in the right place, and for enterprise and good judgment he seems to be without a rival, as far as Napanee is concerned. He is one of the head men in the "glass" enter- prise, and when such men as he take hold of anything it is bound to be suc- cessful.

The carding and woollen mills, sash, door and blind factories, flour mills, pump factories, carriage shops, etc., have their share to attend to, and, taking alto- gether, quite a large export and import trade is done.

The business men seem to have the right kind of enterprise, and will make Napanee a town of no small import- ance. I hope the Napanee, Tamworth & Quebec Railway (which is sure to be built) will not place the town in as bad a position as Belleville has been placed by the G. J. R. & B. & N. H. Railway.

Sir R. J. Cartwright has large interests here, and were it not for his canal (which brings him, I am informed, \$10,000 annually) many of the manufac- tories mentioned above would have to go to the trouble and expense of steam power.

The machinery for the Hudson Cotton Co's extension will, it is expected, arrive during June, July and August.

The shafting for the Stormont Cotton Co's extension at Cornwall is being made by Messrs. John McDougall & Co., of Montreal.

The Halifax Herald publishes a list of twenty-seven vessels, of 23,900 tons, that will be launched in Nova Scotia this season.

A quantity of the machinery for fitting up the new Ferguslee Woollen Mills— now being erected by Messrs. E. Reid & Son, in place of the property destroyed by fire in December last—arrived at the Newfrew station on Monday.

The sales of coal mined in Nova Scotia during the quarter ended March 31st are given at ninety-three thousand five hundred and thirty tons, an increase over the sales of the first quarter of 1880 of nearly seventeen thousand tons.

A new joint stock concern, called the James Smart Manufacturing Company, of Brockville, limited, has been formed for the purpose of manufacturing iron, and a charter has been applied for. The paid-up capital is \$90,000 cash, and limited to \$200,000.—Kingston Whig

The contract for seven new locomo- tives for the Intercolonial Railway is awarded to Messrs Fleming & Son, of St. John, N.B. The contract for seventy-five coal cars was awarded to the Coburn, Ont., Car Works, and for fifty flat and box cars to Mr. Harris, of St. John.

The erection of the Campbellford Woollen Mills is progressing satisfactorily. The machinery has nearly all been purchased in Canada, and what has been purchased abroad is such as is not man- ufactured here. Messrs McDougall & Co. have the contract for the shafting of this mill as well as for that at Hochelaga.

The recent fire at Mr Meoney's tan- nery occasioned a loss of \$30,000, which was covered by insurance as follows: Phoenix, \$4,000; North British, \$16,000; Lancashire, \$8,000. One hundred men are thrown out of employment. The firm, however, contemplate speedy re- building, and will probably be in work- ing order in a few months.

At the next meeting of the London Council a communication will be read from Mr Fox, of Hamilton, who pro- poses to establish a scale factory in the former city. All he desires is exemption from taxation for five years, and for this he will guarantee to employ a large number of men. It is probable the re- quest will be granted on certain consid- erations.

The Nova Scotia Glass Company is now regularly organized, and is to com-

mence operations at once. Tenders for the erection of buildings are asked for, and the contract for the furnace has al- ready been let. Stock is being readily subscribed, and every effort will be made to put forward the works with all possible speed so as to overtake the fall trade.

It is expected that the subscription list for the projected cotton company at Toronto will be opened soon. The capital is to be \$1,000,000 in \$25 shares, and a large proportion of the stock will be taken by English capitalists. Twelve hundred will find employment. The site of the new mill, as already stated, is to be in the neighbourhood of Garrison Common.

On Saturday night several of the wealthy residents of Longueuil had a meeting to consider the transfer of Bovin's shoe factory from Montreal to that place. Mr Bovin asks for a bonus of \$25,000, and the meeting favoured the granting of this bonus on condition of certain security being given for carrying on operations for an extended period. It is expected Mr Bovin will employ about 400 hands, and will prosecute the manu- facture of trunks as well as that of boots and shoes.

Mr Thomas Robertson, M.P. has com- menced a manufacture at Barrington for extracting oil from refuse fish. This is the first enterprise of the kind ever started in this province, and one which will prove a decided benefit to fisher- men, for a market will be opened for refuse fish of an oil producing nature, which in former years the fishermen had the trouble of catching while fishing for cod, haddock, etc., only to throw away. After the oil is extracted from these re- fuse fish, what is left will be thoroughly dried by a mechanical process, and then shipped to the New York market, where it is used in the manufacture of an arti- ficial fertilizer.

There is an air of business in the let- ter of Mr H. Leary, managing director of the French Canadian Sugar Union. Mr. W. Harty has already laid his plans for the establishment of a \$250,000 fac- tory before the Central Fair Association, and to-day made preparations for a prac- tical test. A number of gentlemen to- day subscribed \$5 each for the purchase of seeds, and sent off an order for 100 lbs. This will furnish seed for fourteen farmers to sow a quarter or half an acre each. The seed will be given free on Saturday at the W&G office to farmers from Wolfe Island, Kingston, Pittsburg and Storrington townships who will guarantee to give the growth a fair trial. In the fall the best will be sent to the factory in Lower Canada and tested. If they prove as excellent as this limestone soil ought to make them, the prospects of a factory in Kingston will be bright- ened. A special prize will be given at Midland Fair for the best growth from this seed.—Kingston Whig.

R. M. Wanser has recently purchased the patent for the Dominion of Canada of the automatic screw machine, inven- ted by Spencer, of Hartford, Conn. Patent for the United States is controlled by a Hartford company, which has fifty of them in operation, but does not make them for sale. The machine makes screws and bolts, finely finished in iron and steel, from a thirty-second of an inch up to three inches in diameter. These goods are largely imported and used by foundry men, stove and agricultural implement makers, plane makers, and by the Wanser firm for sewing machines, and have hitherto been imported, as there is not a manufactory of the kind in Canada. Wansers have fitted up the old Webster sewing machine factory on Barton street, and in about two weeks will have 30 machines running. It is intended to build a large addition to the Webster building, and when that is done from 75 to 100 machines will be put in operation. The screw machine is so thoroughly automatic that a shop full of them at work can be left without attend- ants for an hour or so, while the men get dinner. Thus another new factory, which will employ some new hands, and add to the wealth of the city, has been added to the list of new enterprises; and of these it is one of the most costly, the patent right alone costing a good round sum. But a large trade in the bolts and screws is sure to spring up, both domes- tic and foreign. Messrs. Wanser have of late been adding largely to their stock of wood working machinery, at a considerable outlay, and they have a patent dryer for seasoning hardwoods that will dry the green lumber in ten days.—Hamilton Spectator.

The Canada Rubber Works are now undergoing repairs and renovation, and about \$10,000 worth of new machinery is being inserted in the shoe factory and about \$5,000 in the rubber grinding room. This will make about \$25,000 worth of machinery placed in the build- ing during the past two years. Yesterday morning a reporter visited the extensive establishment, on St. Mary street, which has a frontage of 350 feet and a depth of 253 feet. The manager showed the reporter through the factory, the main portion of which—the shoe room—was closed ten days ago and 300 girls were dismissed, who, however, will be re-en- gaged in about two weeks. Two very large boilers, manufactured at the Cal- edonia works, are being placed in the premises. The manager said that the boil- ers they supplant were manufactured in 1872 in Glasgow, and before they had been used two years it cost \$1,000 to repair them. The boilers of Canadian make are, he said, far superior to the Scotch and less expensive. There are

now in the establishment four sets of four hundred horse power, and im- mense boilers, as a very large quantity of steam is required for washing the rubber. In order to keep the plant free from moulds the company will have steamers annually from cellular iron, and a number of men are now engaged in doing this, as the replacement of boilers compelled the factory to close a time. The manager states that one million of over-shoes were man- ufactured last year, and that at present there is also a great demand for belting, owing to the increased manufacture of ma- chinery. The company employs about 1,000 hands, 300 of whom are women.

The directors of the Kingston Cotton Company met last evening and con- sidered the contracts for the mill and for Mr Bullough undertaking to supply the carding and spinning for \$30,000. The tenders of these were not the lowest, but they proved to be the most satisfactory, the mill being for which they called being of the improved kind. Mr Bullough de- clined to take the contract at the price, f.o.b. at Liverpool, but he has made a concession which is of considerable im- portance—he will send competent men to Kingston with it, and have it put in operation without expense to the company. Mr Leigh has arranged like Mr. Bullough, to place his machinery in the mill during October, so that with reasonable haste it is confidently ex- pected that about the end of January, or beginning of February the first year will be made. The \$40,000 covered by Messrs. Bullough and Leigh's contract is not all the expenditure which will be incurred in supplying the mill with plant, but what has not already been enumerated, sundries valued at \$20,000 will be purchased by two of the directors during their approaching visit to En- gland. The completion of the negotia- tions for the machinery is a matter for congratulation; it is the first practical and decisive step that has been taken towards the accomplishment of a scheme in the success of which the whole com- munity is interested. The selection of a site for a factory has not yet been made, but it is as good as settled that it must be in the east, and most probably adjacent to Ford's tannery. The directors have worked most harmoniously to- gether, feeling conscious that a great deal depends upon the judiciousness and promptitude of their action. May they not lack in energy until the object of their ambition has been reached.—King- ston Whig, May 7.

THE CANALS.

The revenue of the Canadian Canals for the year 1880 amounted to \$33,257.74, an increase of \$175,173 over the previous years, being as follows for the various canals, viz:—

Table listing canal revenues: Welland Canal \$16,713, St. Lawrence Canal \$16,713, Chamby Canal \$16,713, Rideau Canal \$16,713, Ottawa Canal \$16,713, Burlington Bay Canal \$16,713, St. Peter's Canal \$16,713, Newcastle District Canal \$16,713.

All the canals gave an increased revenue with the exception of the Welland and Newcastle district. The St. Lawrence Canals gave \$16,713 increase, while the decrease on the Welland Canal was \$16,713. The reduction of tolls on the Erie Canal is considered the cause of the in- crease. The number of vessels passing through the several canals during the past season was as follows: Welland Canal, 4,104; St. Lawrence Canals, 1,340; Chamby Canal, 3,298; Burlington Bay Canal, 980; Ottawa River Canal, 5,202; Rideau Canal, 2,882; St. Peter's Canal, 153; Newcastle District Canal, 8; making a total of 25,774. Of these 21,387 were Canadian vessels and 4,387 United States.

CANADA'S CREDIT ABROAD.

Herapath's Journal, of April 23rd, has the following appreciative notice of Canadian affairs: "There is certainly more life now about the affairs of Canada than at any previous time in the history of the Dominion. The public credit of Canada is deservedly strong, Canadian 4 per cent standing at 104; and the Macdonald Administration appears to be entitled to praise for the vigour with which it is pressing forward the construction of the Canadian Pacific Railway. It certainly seems to be sound policy on the part of the Cabinet of Ottawa to make a manual effort to open up this vast North-west Territory, and to render the Dominion of Canada a more homogeneous whole than it can hitherto be said to have been. Such comments are a fitting answer to the constant attacks, emanating from Grit sources, upon the credit of this country. The reason that Canadian 4 per cents stand so high in the English money market is to be found in the vigorous National Policy that has been so fruitful of benefits here at home, in stimulating our industries and filling the public coffers to overflowing. The moneyed men of the world see in this evidence of national strength and stability; they see the will as well as the capability to pay off obligations. The policy of development that has been entered upon by the present Government is regarded in English financial circles as a "sound policy," one that if not interfered with and retarded by partisan rancour is destined to lead on to fortune and favour. How this general policy has acted upon other English investment in Canada is stated by Herapath in the following terms: "As regards the chan-



the latter which has taken place... the last two years in the fortunes... the Grand Trunk and Great Western...

AMERICAN CANALS

At a meeting of the New York... Exchange a series of resolutions... adopted calling upon the Legislature...

reshipped from said port and pass... through the Welland Canal... Fourth—Articles coming under...

CANADA'S CANALS

The New York Herald says... The recent action of the Canadian authorities... in reducing the tolls on the Welland...

THE "COLOUR TEST" IN SUGARS.

A decision has just been rendered... in the federal courts of great importance... to sugar importers. As our readers are...

authority for fixing the duties upon... the importations in question in the manner... adopted by the Treasury Department...

ON A CATTLE SHIP

"Our ship was a vessel of two thousand... five hundred tons, a tolerably handsome...

and swinging sea along with it. It is... my belief that, could we have used our... eyes we might have seen a heavier sea...

they would suffer. At all events, after... such a night's work as our cattle went...

THE SPECULATIVE MANIA IN ENGLAND

There is no doubt about the reality of... a great speculative excitement in England...

STOCK SPECULATION.

New York, May 6.—The Fox says... Stock speculation has not been so active...

THE BRITISH GRAIN TRADE

A leading grain circular says... Grain continues dull and dragging, and business...

SPIRIT OF THE COMMERCIAL AND INDUSTRIAL PRESS.

THE CORNER STONE OF FREE TRADE ARGUMENT

In the elaborate joint resolution relating to the tariff which was offered in and passed upon the House of Representatives at the last session of Congress, by the Hon. Frank Bland of Texas, the following paragraph was placed in the preamble as a fundamental principle:— "That the tariff is the corner-stone of the tariff system."

most of the articles which we expect to them. In the official report of Israel P. Hatch on the effects of abrogating the reciprocity treaty with Cuba, submitted by the Secretary of the Treasury to the Fortieth Congress at its third session, are embodied letters from sundry collectors of customs on our northern frontier. The collector at Oswego, N. Y., writes:— "As it now is, the import duty is paid by the Canada producer or manufacturer, and not by the American consumer."

last stroke in that direction is exhibited by Prince Bismarck's letter to the English-German nation, wherein he boldly advocates returning to Protection, and we are given to believe that legislation in that sense is put in force to-day. The existence of our tariff is therefore restricted to India and China, and such weak points with a couple of articles as are in some degree controlled and no doubt in these open markets we can still hold our own.

It is necessary, cheap and better than can be made or produced in this land of the free. BANK DIVIDENDS (The Shareholder). Up to the present time no disposition has been manifested by the bank generally to follow the example of the Bank of Montreal in enhancing its dividend by the addition of a two per cent bonus.

one-half that amount, and on capital none having anything like the percentage of reserve as the Bank of Montreal. The Bank of Toronto, nearest to it has nearly 10 per cent reserve, and if any had decided to increase dividend it should be the Bank of Montreal. We are inclined to think that the Bank of Toronto might have increased its dividend, but that it is not having the confidence of the holders to so large a degree as to have it entrusted to do what is right, and not retaining further to increase it. Then it seems as if that of the Bank of Montreal in a dividend, but one thing investors may not do, and that is that the company should simply better policy on which to divide a future advance in the price of bank stock than the distribution of an ambitious dividend.

THE TIMBER LINE OF MOUNTAINS.

Some very interesting facts were set out at a meeting of the Academy of Natural Sciences of Philadelphia, regarding the timber line of mountains. The highest Alpine vegetation consists of the most part of short-stemmed perennials, lower down are found dwarfed trees of species which, still farther down, the mountain sides, form forests of considerable height, and which, as trees suitable for merchantable purposes, make what is known to mountain travellers as the timber lines. In the mountains of Colorado, the forests commence at about 7,000 feet above sea level, and continue up to about 11,000 feet, when they suddenly cease. At this point the coniferous trees are from thirty to forty feet high, and above the same species exist as stunted shrubs, seldom exceeding three or four feet in height, and often but a few inches tall, though trailing widely over the ground. In this dwarfed condition they are often found some 1,500 feet higher up, or away from the recognized timber line to the top of the mountain. On Mount Washington, in New Hampshire, which is a little over 6,000 feet high, the timber runs up to about 4,000 feet, while Mount Webster, a mountain forming the southern peak of the same chain, and about 4,000 feet high, has little timber above 3,000 feet. Round Mountain, in North Carolina, is about 5,300 feet above the level of the sea, and on some parts of it timber extends to its summit. At a height of 6,000 feet a black oak was measured that was five feet in circumference at three feet from the ground and forty feet high.

ENGLISH TESTIMONY TO THE VALUE OF OUR PROTECTIVE POLICY.

(Chicago Western Manufacturer.) The following extract from a business circular issued by a Liverpool business house will show that our English cousins have a correct appreciation of the benefits which this country has derived from its protective policy. This Liverpool circular says:— "Then this country (England) has suffered very severely of late years from the increasing stringency of foreign tariffs. There has been a growing tendency in most countries to protect their own industries, and in every such case we are the chief sufferers for we live, as already said, by exchanging our manufactures for the necessities of life. The United States was at one time a large customer of our iron ware and textile fabrics, but the hostile tariff she has enforced since the civil war has nearly driven us out of her markets, and has built up a vast system of manufactures, which completely supplies her own wants and leaves something to spare for competition with us in foreign markets. The Free Traders of this country console themselves by thinking that she is the chief sufferer, but whether this be so or not (which is very doubtful) the fact remains that her markets are almost lost to us, and we, on the other hand, are constantly more dependent upon her for food and raw material. For this we have no means of paying except by money or bonds or indirectly by our credits with China, Brazil, and other countries, from which America imports tea, coffee, sugar, etc. Our colonies all follow in the wake of the United States, and do their best to stimulate their own manufactures by closing their markets against us. The countries of Europe, on the other hand, aided by our best machinery and skilled labour, which we have largely supplied, are becoming more and more independent of us, and in those cases where we can still undersell them, are raising their tariffs, or threatening to do so, and the

A NUT FOR THE SO CALLED FREE TRADERS

(Chattanooga Tradesman) A good many superficial people call themselves Free Traders who enlarge on the oppressive tariff on steel and iron railroad bars; the grave objection being of course, that the bounty paid to American makers by the railway companies finally came out of the shipping and travelling public. The terrible oppression of high freight tariffs has been dwelt on in this connection with great force and elaboration, if not with sound logic. Several times the Tradesman has pointed out the unfairness of such an argument, even if the facts(?) as assumed were really facts. But are they? A late number of the Ironmonger, the leading English authority on all matters touching iron and generally the heavier trades of the United Kingdom, presents some figures on this subject that are worth attention. It says that it appears from a series of tables compiled by the British Iron Trade Association, that in many respects the British enjoy the privilege(?) and distinction of being the heaviest railway rated people in the world. The editor, after stating this rather startling conclusion, proceeds to show that the average rate on coal and coke in the United States is 1 cent per ton per mile; in Belgium 1 1/2 cents; in France 1 1/2 cents; in Germany 2 1/2 cents. These rates, says our British cotemporary, as well as those fixed in the countries mentioned on other raw material and heavy manufactures, are most strikingly below the charges of the English companies. These, he says, not only tax shippers from 3 to 8 cents per ton per mile, but also saddle upon the freighter the handle all sorts of extra charges in the guise of terminals, and the like. These figures are gone into by the Ironmonger, in greater detail than we care to indulge in, our simple object being to show that freights are carried cheaper in America than in any Free Trade country, despite their cheap labour, cheap material, and contracted territories. We suppose that 250 per ton would be about the average our roads have paid for steel bars, and 25 per ton for iron up to date. English companies have paid less than half our prices for steel and not to exceed 35 per ton on the average, for iron. And yet our railways carry freights, taking all classes through, for about one-fourth the rates charged English railway shippers! Will some Free Trade statesman of the sanctum shed the enlightening rays of his intellect upon this simple statement drawn from British statistics, and explain it and make it consistent with his theory of political economy? We undertook to maintain some months ago that railroad charges in this country were as low, upon the whole as can at all or ever be afforded, allowing decent profits on capital and fair compensation for labour. The most absurd of all the patented Free Trade notions are those which assume, first, that this country ought, of course, to buy all goods where they can be had cheapest regardless of how or by whom produced, and second that everything in the paper swarmed Free Trade coun-

Mr. James Watt has been appointed general freight and passenger agent of the Grand Junction Railway, with headquarters at Belleville.



TORONTO PRICES CURRENT.

Table of current prices for various commodities including Groceries, Flour, Sugar, and Petroleum.

Table of current prices for various commodities including Oil, Paints, Hides and Skins, Leather, Produce, and Provisions.

WEEKLY REVIEW.

Weekly Review text starting with 'Toronto, May 11th, 1901' and discussing market conditions, bank stocks, and commodity prices.

Text discussing market conditions for May delivery, mentioning prices for various goods and market activity.

LONDON GROCERY MARKET

London, May 6. - In the Mincing Lane markets there have been few changes, and the spring trade so far has been less satisfactory than was expected.

CANADA AND ATLANTIC RAILWAY.

Mr. H. Boyd, Contractor, writes to the Ottawa Citizen. If you can find space in your paper, it might be of interest to many of the readers and lovers of the progress and advancement of the city of Ottawa and county to hear of the good start being made on the Canada and Atlantic Railway.

show that the exports of the Dominion for the fiscal year in question exceeded in value those of any other year since 1874, and that value was only exceeded in two years, viz., 1873 and 1874, since the date of the confederation.

Without going into a long array of statistics, a few examples will show wherein our manufacturers have been sufferers by the new protective policy. The importation of cotton fabrics into Canada from the United States in the fiscal year 1878-79 amounted to 23,936,814 square yards, while in the fiscal year of 1879-80, the corresponding importation was only 6,812,701 square yards.

While the total volume of Canadian trade with the United States diminished in the fiscal year of 1879-80, the Canadians largely increased their direct trade with Great Britain, their exports to that country being over \$3,000,000 in excess of the total for 1878-9.

The output of the anthracite mines in Pennsylvania for the first three months of the present year was 6,016,661 gross tons, against 4,807,758 for the corresponding period of last year; an increase of 1,208,903 tons.

The ocean freight market at New York is completely demoralized, partly through moderate offerings for shipment and partly through the eagerness of steamship owners to get their vessels off to Europe to take advantage of the tremendous passenger traffic.

F. Byer, of the firm of Gillies & Byer, machinists and founders, of Carleton Place, is in Winnipeg. This firm, says the Times, supplied the Keewatin lumbermills, and are now supplying the machinery which is being put into the Hudson Bay grist mill in this city.

Mr. Swickard, from San Francisco, has begun the manufacture of gloves in Victoria, B.C. He is at present making kid and buckskin gauntlets, driving and walking gloves, and will proceed to the manufacture of the finer descriptions as soon as stock has been received.

OPERATION OF THE NATIONAL POLICY.

The following remarks on the operation of the National Policy in Canada, viewed from an American standpoint, are from the Boston Journal: - "While our enterprising merchants are reaching out for new markets, or endeavoring to develop old ones into greater profitableness, there has slipped away from us, right at our doors, a foreign trade worth fully \$15,000,000, a sum about equal to our present export trade to Brazil and Mexico combined.

Advertisement for Castor Oil and Machinery, featuring the text 'CASTOR OIL' and 'MACHINE' with a logo.

Advertisement for The Wool House, Winans & Co., located at 18 Church Street, Toronto, specializing in wool and cotton goods.

RAILWAY MATTERS.

THE CANADIAN PACIFIC RAILWAY.

Within the last few days the Canadian Pacific Railway Company has for the first time appeared before the English public. It is now officially announced that the company proposes to complete and have in operation 200 miles of its road west of Winnipeg by the close of the present year, and to carry it on under various names, to the foot of the Rocky Mountains—by the end of 1884. To encourage the rapid settlement of the country, the company is prepared to sell its lands at the low rate of 10s. an acre, payable by instalments, and to grant a rebate of 5s. for every acre brought under cultivation within three to five years following the date of purchase, according to the nature and extent of the other improvements made thereon. Moreover, contracts at special rates will be entered into for lands required for cattle raising and other purposes not involving immediate cultivation, and intending settlers and their effects, when they reach the company's railway, will be forwarded to their destination on very liberal terms. Thus a further opportunity, in addition to those already given by the Canadian government, is presented to the British farmer of emigrating to the Fertile Belt of North America. Twenty-five million acres of the best farming lands in the North-West of Canada are now thrown open for him to select from. If provided with a small amount of capital, willing to work, and prepared to face the minor difficulties that must be overcome in starting afresh in a new country, he has now the chance of settling in a "land of plenty," where many of his fellows, who have gone thither before him under far less favourable conditions, have already won for themselves wealth, comfort and influence. That many British agriculturists, burdened with heavy rents and disheartened by bad seasons, will avail themselves of the offer we have no doubt. The Canadian Pacific Railway has, in our opinion, acted most judiciously, alike in its own interests and in the interests of Canada, by quoting such liberal terms to intending settlers. Apart from political considerations, which can have no weight in this country, it is gratifying to learn from Canada that the chief objections urged against the contract with the Syndicate have even now proved groundless. For instance, attention has been called in England to the complaint that the monopoly given to the company would enable it to charge exorbitant rates, and thus hinder, if not paralyse, the development of the North-West. These gloomy predictions have been promptly falsified. As soon as the Syndicate assumed control they brought about a substantial reduction in the rates hitherto in force. Last year the lowest quotation large dealers were able to obtain for the conveyance of grain from Manitoba to Duluth was 21 cents. Arrangements have now been made by the Syndicate for the reduction of this charge to 15 cents—in other words, by 25 per cent. Again, the company, it was said, would hold out for a high price for their lands, in order that in the future they might get the benefit of the increased demand when the Government lands, alternating with those of the company, were sold. But in reality the reverse is the case. The terms we have given above are certainly not prohibitive; they are, indeed, 40 or 50 per cent. less than the price of lands within the twenty mile belt in the United States. Once more, the company, it was declared, would delay the connection with the American system of railway at Sault, by which better communication with the North-West would be obtained at an earlier date than is otherwise possible. But it has just been officially stated that the company has decided to construct at once a branch from the main line to Sault, forming the required connection. The course of events up to the present time has, in fact, justified the policy of the Dominion Government, and the assumption upon which their negotiations were based, that they were dealing with practical and straightforward business men. It is almost superfluous for us to again point out the importance of the work undertaken by the company. One or two aspects of the question, however, deserve further notice from their relationship to topics now being discussed here. The first and most obvious effect of the construction of the Canadian Pacific Railway will be the marauding impetus it is sure to give to emigration to the Dominion. We may note en passant that no time could be opportune than the present for the consideration of the proposals for the transplantation of some of the poorer Irish tenantry to British North America, which Mr. J. H. Duke again advocates most forcibly in the letter we publish elsewhere. Canada will, of course, be the earliest and most direct gainer by the rapid growth of her population and the development of her resources. But, in considering either the commercial, agricultural, or financial outlook in this country, it is necessary to bear in mind the influence likely to be exercised by the important railway extensions now being made or planned in Canada and the United States. Similar extensions in the past have always been productive of great results. The immense strides taken by the Western States of the American Republic during the last decade are due to this cause. We find that whereas in 1860 Iowa had a popula-

tion of 671,000, in 1870 the figure was 1,197,000 and in 1880 it had grown to 1,700,000. In the same way the population of Minnesota increased from 17,000 in 1860 to 435,000 in 1870, and 700,000 in 1880. Nevada from 5,000 to 40,000 and 62,000. Kansas from 17,000 to 367,000 and 505,000. Wisconsin from 725,000 to 1,050,000 and 1,400,000 and Dakota from 5,000 to 14,000 and 134,000 respectively. In the chief cities a proportionate increase has been going on. In the last ten years the population of Chicago has, in round numbers, increased 60 per cent., that of San Francisco 70 per cent., and of Omaha over 80 per cent. Now, the principal cause of this growth has been the development of the Western Territories consequent upon the provision of adequate means of communication. Exactly the same result, in proportionate dimensions, may be expected in Canada. With a marvellously fertile soil offered at exceptionally low rates, settlers will pour in in large numbers. Along the route of the railway, and extending into the interior, new settlements will be made, new towns will spring up, and new industries will be created. This change, acting simultaneously with a similar one in the United States, must greatly influence the course of events here. Our commerce must be benefited by it, for the figures we gave last week show how our trade with the colonies increases step by step as they grow in wealth and importance. A further marked increase in the supply of agricultural produce sent here may also be expected; and British agriculturists will probably find it more difficult than ever to compete with farmers who own the land they till, who are lightly taxed, and are able to send their grain from Manitoba to Great Britain at exceedingly low freight rates. And lastly, we may expect that this activity will lead to a heavy and persistent drain upon English capital. Money will be constantly needed, and there is but little prospect of any cessation in the absorption of gold in America which has been going on of late. Such are a few of the most obvious results that may be expected from the railway extension and general commercial activity now so prominent in both the Canadian Dominion and American Republic. In Canada, at least, it is clear the effects are likely to be such as to mark the beginning of a new era in the history of the colony.—Colonial Register.

THE MIDLAND RAILWAY

We have on many occasions during the last few years drawn attention to the enormous increase in the business of the Midland Railway, a fact that is apparent to anyone who will take the trouble to look after the traffic receipts, published by us week after week, or to anyone who will take a walk in the vicinity of the station and note the number of trains and loaded cars that are to be seen there during almost any hour of the day, more particularly during the summer season, and then compare the number with those that were to be seen at the same place six or seven years ago, or even less. So great has the increase of traffic been that the company have been unable to supply all the cars needed, and thus shippers are sometimes delayed for days, but now the company hope in a short time to be able to supply all their patrons, for a time at least. We understand that at a meeting of the directors held at Port Hope, on Wednesday last, it was decided as essential in the interests of the Company to enlarge the workshops at Port Hope and such is accordingly to be done at an early date. It was also decided to manufacture at Port Hope, in addition to the eighty platform and box cars, now about ready for delivery, one hundred box and one hundred platform cars, besides two first class passenger coaches and two mail and smoking cars. Four large locomotives will be delivered in the course of a few weeks, and four more have been ordered from the celebrated Portland Locomotive Works. Of course when the shops are enlarged and the construction of the cars commenced, and work is to begin at once we understand, Port Hope will be greatly benefited, and employment given to a larger number of men than ever before in the history of the railway. It was also decided that in future all the cars, coaches, box and flat, required for the railway should be constructed at Port Hope, and that a new passenger station was also to be erected at that point as soon as the plans can be drawn and arrangements made with the property holders interested in the ground required. While the terminus of the line at the front is thus being rapidly built up, the people of Peterborough, the largest and most important station on the line, are commencing to wonder when the railway is going to do something for us, for instance they might commence the erection of that much talked of elevator, those large freight sheds, and numerous other buildings that are required here, and thus make the coming "railway centre" happy. Peterborough Review.

THE GREAT WESTERN RAILWAY OF CANADA.

The half yearly general meeting of the shareholders of the Great Western Railway Company of Canada was held this afternoon in the Cannon street Hotel, Lieutenant Colonel Francis D. Grey presiding. The directors' report and general statement of accounts for the half year ended on the 31st of January last were submitted. They showed the sum available for dividend to be £108,865; and the directors recommended the payment on

the 15th of May of the half year's dividend on the 5 per cent. preference stock amounting to £12,017 and a dividend on the ordinary shares of 1s. per share free of income tax (being at the rate of 10 per cent. per annum), which would require a sum of £1,117 being to be carried forward to the next half year accounts a balance of £1,671 to be set aside on the main line and branches exclusive of 3 used lines, exhibit an increase over the corresponding six months of last year under every head (but not on the 3 used lines) of 15 per cent. This increase amounts to £1,924,014 1/2 per cent. of which £1,117 is in respect of earnings. The freight and live stock tonnage carried amounted to 1,187,000 tons against 1,011,245 tons, an increase of 175,755 tons, or 17 per cent. The receipts from this traffic amounted to £3,397,534 and £2,917,221 respectively, an increase of £480,313, or 15 1/2 per cent. As regards the working expenses these exceeded those of the corresponding half year by £317,796, or 14 1/2 per cent. As the chairman explained, the expenditure on this account was in reality 9 1/2 per cent. on the gross revenue, as against 6 1/2 per cent. for the period of comparison. This, however, included a largely increased outlay for renewals, and then the winter that had just been experienced was an exceptionally severe one, and the comparison was with the very mild winter of the previous year. The result of the half year's working on the whole system, after providing for interest on bonds and debenture stock, showed a net balance of £98,722, as compared with £70,210 in the corresponding half year, an improvement of £28,512, or nearly 25 per cent. Having explained these and other items in the report, the chairman made a long statement respecting the relations between the Grand Trunk and Great Western Companies, and with regard to the reworked agitation for an amalgamation.—St. James' Gazette, 26th April.

The traffic receipts of the Great Western Railway of Canada, for the week ending April 29th, 1881, were —

Passengers	£5,215
Freight and live stock	74,811
Mails and sundries	3,400
Total	83,426
Corresponding week last year	61,111
Increase	22,315

The Panama Railroad Company has increased its quarterly dividends to 5 per cent., making it probably the best paying railway in the world. Suppose any railway company in this free republic should venture to pay twenty per cent dividends annually, or even half that, what a storm of abuse it would raise from people and legislatures. And yet, manufacturing companies, gas companies, street car companies and many others pay still larger dividends and nobody protests. Yet investments in railways are far more precarious than in most other enterprises, while the public is sure to be benefited by them.

A bill to reduce the fare for the New York elevated road to five cents at all hours of the day failed in the legislature, but it was reported that the company is about to voluntarily make the experiment of five cent fares in its Ninth avenue and second avenue lines. This, however, is denied. At present the fare is ten cents, except at certain hours of the morning and evening. A general reduction of five cents would very seriously reduce the business of the street car lines unless they should conclude to come down three cents. It is not certain but that they could afford to do this.

New York, according to a bill recently passed by the house, is to have a board of three railroad commissioners, one of whom is to receive \$8,000 per year and the other two are to have \$5,000. If the appointees are simply to be political favorites, and not expected to know anything about railways, these are enormous salaries. If, however, men are to be selected who are capable of grasping the great problem of transportation in all its phases, and are worthy representatives of the great state of New York, then the pay is not too large. It remains to be seen what the commission is to be.

The seventeenth annual report of the Chicago, Milwaukee & St. Paul Railway Company for the year 1880 shows the revenues for the year to be as follows: Gross earnings, \$13,086,118; gross expenses (including taxes), \$7,742,425; net earnings, \$5,343,693—an increase in the gross earnings over the year 1879 of \$3,072,298 83, and in the net earnings of \$801,568 11. The increase in the interest on mortgage bonds was \$549,978 25. There were 700,419 more tons of freight moved than in 1879, and 572,053 more passengers transported. The income account shows a balance at the end of the year of \$4,332,283.16.

The Texas & Pacific road is being pushed with great energy over its long route through the uninhabited plains of Texas to El Paso. The total length from Dallas to El Paso will be 633 miles, of which 263 miles to the Colorado river have been completed, leaving 369 miles to build. One hundred miles more are nearly ready for the use, and 120 miles are under contract from El Paso westward. It is considered certain that the road will be completed to that point by January next, and possibly sooner. The eastern extension, of which the Vicksburg and Shreveport forms a part, is rapidly being pushed to Vicksburg, and the line when completed will

afford with its connections a southern route from the Atlantic to the Pacific. The Railway Age, in a recent issue publishes a list of railway concessions made by the Mexican Government between October 1867, and November 1880, from which it appears that grants have been made to forty-one companies to the amount of \$17,000,000 for 1123 miles of railways, of which only 273 miles have been built. If the remaining four hundred thousand or more miles proposed, or any considerable portion thereof, be constructed, Mexico will be thereby well supplied with railway facilities. It is barely possible that enterprisers of this kind are doing a little overdone in that country at present. Of the roads, twenty-one are narrow gauge and fifteen standard gauge, and the width of the remaining five has not yet been fixed.

Models of proposed electric railway and letter post delivery were recently exhibited before a scientific club in Vienna. A Siemens electrodynamic machine was used to furnish the motive power. The chief advantage claimed for the system was that the power was generated at the stations and not carried along the line by locomotive engines. The letter post was intended to supply for long distances the want now filled for short distances by pneumatic tubes. Miniature lines of railway were to be built along the passenger lines, and on them at an exceedingly high rate of speed, would be run small electric engines and cars to take up letters. It would have the advantage of being entirely independent of the regular passenger road, and could be used at any time.

The Chicago, Milwaukee & St. Paul railway company during the year 1880 added 1,195 miles to its system by purchase, and 349 miles by construction, an increase in a single year of 1,544 miles, making the company now the owner of 3,770 miles of completed road—truly an enormous system. Besides this, the company has under construction several hundred miles more of lines and still continues to project others. This vast property is represented as follows: Common stock, \$16,401,261; preferred stock, \$12,404,483; mortgage bonds, \$70,172,000, making a grand total of \$98,977,744 on 3,775 miles of road and equipment, an average of \$25,955 per mile. This is a very low average compared with foreign roads and with a great majority of the roads in this country.

The great island of Newfoundland is soon to have its first railway, the government having signed a contract with a New York syndicate to build a road from St. John's to the mining regions of Notre Dame bay, about 300 miles, with a branch of about 30 miles. The estimated cost is \$6,000,000. The government guarantees an annual subsidy of \$185,000 for thirty-five years, and a land grant of 2,000,000 acres, which can be selected from almost any portion of the island. The enterprise ought to prove very profitable to the syndicate, and certainly will be of great advantage to the island. Hitherto Newfoundland has been practically cut off from the civilized world and its people are generally ignorant and degraded. The country is very thinly settled, but contains much mineral wealth, which foreign capital and enterprise propose to develop.

Communities may sometimes carry the idea that railway enterprises are exactions which must be fought, oppressed and punished, too far for their own good. Thus the little town of Waverly, Ill., when a new road desired to pass through it, refused to grant the right of way and got out an injunction to prevent the road from entering it. So the company proceeded to locate its line so as to leave the town three miles away, whereupon the citizens changed their minds. The common council quickly decided to grant the desired right of way, and a committee was sent to petition the company to do what it had been refused permission to do before. When communities are eager for railways to be built, and admit the great benefits which accrue, and yet attempt to load them down with unreasonable conditions and obligations, they deserve to be left out in the cold.

The St. Louis Railway Register, in commenting upon the purchase by the Michigan Central Railroad of the Bay City road, calls attention to the new link that line forms between Detroit & Mackinaw, and says: "It will not be long before the projected lines across Northern Wisconsin and the Upper Peninsula of Michigan will be finished and Duluth and Detroit will be united by iron bands. Over these lines and the Michigan Central Branch to Mackinaw through freight and passengers from the Northern Pacific will certainly pass, and all the benefits to be derived from such a connection will be received. The Michigan Central has always been conspicuous in the work of developing that State, has steadily endeavored to build up local interests and extend its branches wherever needed. This last venture seems to have been a particularly good one and well deserving a mention."

It is stated that the Denver & Rio Grande Company has expended more than \$50,000 in importing labourers to work on the construction of its line. Large numbers, after being obtained from a distance at great expense, desert almost as soon as they reach the road and make for the mining camps, tempted by the prospect of getting rich in mining. This difficulty has induced the company to inaugurate a plan for importing several thousand trained workmen,

together with a corps of engineers from France. The company has had success in Norway, Sweden and Italy, but has not had much success in the named countries, although the latter Italy has secured nearly a hundred miles who will shortly arrive. It is believed that they will have great success in France, yet it is considered a question whether the French government will give them the land required as rapidly as is needed.

A further trial of the first and most successful method, which is expected to be adapted by tramway companies in London, and now exhibited in various places, took place at Stamford on the 14th, in the presence of several gentlemen connected with the Metropolitan Tramways Company. The cars were attached to the engine, and made the trip to Leytonstone and back in thirty-two minutes. The passengers in the reservoir on starting was 35,000 square feet, and on returning only 10,000 were used. 470 lbs of air was exhausted on the whole journey and at home, the distance travelled being 10 miles. The passengers carried averaged 101 each way and the time mentioned included a stoppage at the Plooch and a duration of thirteen minutes. When the traffic is definitely settled the exchange of engines for the completing line will not exceed six minutes.

The bitter experience of the railway with snow blockades during the winter, says the Railway Age, suggests the wisdom of taking some steps to prevent a similar experience. An inexpensive and effective way of protecting the track is the planting of trees to break the wind. In Nebraska and other parts of the West the white and yellow willow have been successfully planted for protecting farm houses, stock yards and orchards against the storms of winter and the hot winds of summer. It is said that the cost per mile is only \$5 for cutting, and two days' work of a man and team to prepare the ground, and two days' labour of two men to plant. The plantings need only be protected from fire by ploughing a wide strip on each side, and at the end of the third year the wind break would be ten to twelve feet high, forming an ornamental border to the cuts and a perfect protection against destructive winds. Red cedar is also recommended for regions where moisture is abundant.

The election of J. J. Hill, general manager, and R. B. Angus, vice president of the St. Paul, Minneapolis and Manitoba Company, as directors of the St. Paul & Duluth Railway Company at a recent directors' meeting in Philadelphia, in place of Messrs C. H. Graves of Duluth, and J. Q. Adams, of St. Paul, resigned, has given rise to numerous conjectures as to its significance. Inquiries at the office of the Manitoba and Duluth roads are met by the official denial that the change in the direction has any other significance whatever than an effort on the part of the St. Paul and Duluth railroad to attract business to their road, and it is even stated that Messrs. Hill and Angus are only interested as individuals, like Downs and Mitchell, but the general views of railroad men outside is that the Manitoba company has acquired an interest in the road, and if not a controlling one, so far as stock is concerned, at least certain rights and privileges which will enable them to use the road on favourable terms as an outlet to the lake. The situation of the Manitoba system is such that an outlet upon Lake Superior is important to it in order to release it from its dependence on the Chicago lines for east bound business, or business from the east. It is natural to suppose that, since the Chicago people are represented in the directory of the Duluth road, it is upon conditions which will enable them to utilize it as an outlet to the lakes, and to make such rates as will enable them to compete with or control the rates of the Northern Pacific for the Red River valley on the one road and to make advantageous terms with the Chicago lines. Moreover, there is reason to believe that they have argued such an intent as will enable them at some future time, when they get ready to use it as a base for a road south of Lake Superior to Sault Ste. Marie, to meet there the Canadian Central, which is owned by them. As they control the only route through Canada to Sault Ste. Marie, and as it is their announced purpose to extend the Canadian Central to that point, it is natural to infer that they intend to make it the future outlet of the vast system of railroads they will control, to connect their Minnesota system of roads with the Canadian Central by a line south of Lake Superior, as well as to connect the Canadian Pacific system with the Canadian Central by a road north of Lake Superior. These are, of course, simply conjectures, but they are reasonable inferences from the necessities or demands of the situation. The further fact that the directors' meeting at which Messrs. Angus and Hill were elected recommended the issue of \$1,000,000 of first mortgage bonds for improvements of track and equipment, shows that the company feels strengthened by the new accession for a more vigorous and progressive policy. The track needs a great deal of improvement to put it in a first rate condition for business.

The revenue at Hull Post Office from the sale of postage stamps, etc., last year, amounted to \$1,413.82. The salary paid amounted to \$438.



MINING NEWS.

NOVA SCOTIA MINES

The Nova Scotia mining industry is in a vigorous and the air is full of... American and English capital... Nova Scotia mines... The British American mine has been granted to a New Yorker for... An English company has... Nova Scotia mining industry...

THE GOLD MINES

Saturday last a well known miner... Rowland arrived here from the... Nova Scotia mining industry... The Nova Scotia mining industry...

OUR MINERAL INTERESTS

The near prospect of a termination to... Nova Scotia mining industry... The Nova Scotia mining industry... Nova Scotia mining industry...

the contrary, these men spend weeks... Nova Scotia mining industry... The Nova Scotia mining industry... Nova Scotia mining industry...

in all the various branches of mineral... Nova Scotia mining industry... The Nova Scotia mining industry... Nova Scotia mining industry...

ONTARIO'S MINERAL WEALTH

Being deeply interested in the mineral... Ontario's mineral wealth... The Ontario's mineral wealth... Ontario's mineral wealth...

A valuable quicksilver mine has been... Ontario's mineral wealth... The Ontario's mineral wealth... Ontario's mineral wealth...

The tributaries working the Symonds... Ontario's mineral wealth... The Ontario's mineral wealth... Ontario's mineral wealth...

Mr Donald Archibald brought a brick... Ontario's mineral wealth... The Ontario's mineral wealth... Ontario's mineral wealth...

There is a gold fever, silver fever, and... Ontario's mineral wealth... The Ontario's mineral wealth... Ontario's mineral wealth...

Mr W H Palmer, the well known... Ontario's mineral wealth... The Ontario's mineral wealth... Ontario's mineral wealth...

The mining lot 13 on the Gilbert... Ontario's mineral wealth... The Ontario's mineral wealth... Ontario's mineral wealth...

More indications of gold have been... Ontario's mineral wealth... The Ontario's mineral wealth... Ontario's mineral wealth...

There are about 10,000 tons of iron... Ontario's mineral wealth... The Ontario's mineral wealth... Ontario's mineral wealth...

Mr A M Burton has sold a two... Ontario's mineral wealth... The Ontario's mineral wealth... Ontario's mineral wealth...

The Cleveland Rolling Mill Company... Ontario's mineral wealth... The Ontario's mineral wealth... Ontario's mineral wealth...

A letter from an experienced miner... Ontario's mineral wealth... The Ontario's mineral wealth... Ontario's mineral wealth...

The Fort William Herald of March... Ontario's mineral wealth... The Ontario's mineral wealth... Ontario's mineral wealth...

Mr Henry A Foster is now busy... Ontario's mineral wealth... The Ontario's mineral wealth... Ontario's mineral wealth...

Michigan produced last year 21,400... Ontario's mineral wealth... The Ontario's mineral wealth... Ontario's mineral wealth...

A new gold mining company has been... Ontario's mineral wealth... The Ontario's mineral wealth... Ontario's mineral wealth...

The report of the Census Office gives... Ontario's mineral wealth... The Ontario's mineral wealth... Ontario's mineral wealth...

Every part of Nova Scotia is within... Ontario's mineral wealth... The Ontario's mineral wealth... Ontario's mineral wealth...

Mention has previously been made in... Ontario's mineral wealth... The Ontario's mineral wealth... Ontario's mineral wealth...

BRITISH COLUMBIA

The city of New Westminster, once... British Columbia... The British Columbia... British Columbia...

Down in Arkansas they call an ordi... British Columbia... The British Columbia... British Columbia...

more attractive by the wealth of the... British Columbia... The British Columbia... British Columbia...

MONTREAL PRICES CURRENT.

Table of Montreal prices current, categorized by Groceries, Syrups, Molasses, Fruits, Rice, Beans, Fish, and Liquors.

Table of Montreal prices current, categorized by Flour, Oils, Soap, and various other commodities.

Table of Montreal prices current, categorized by Hardware, Iron, and various other commodities.

Weekly Review. The leading event in financial circles during the week was the sharp advance in Bank of Montreal stock to 215 1/2, from which point it reacted to 210 1/2.

Live Stock Market. The chief business in cattle during the week has been on export account, prices ranging from 4 1/2 to 6 1/2 per lb live weight.



LUMBER TRADE.

ENGLISH NOTES.

(Lumber Trade Journal.)

We hear of the failure of a firm of timber merchants in the West of England, with liabilities estimated at something like £200,000. Among the creditors are said to be three London firms, who jointly are interested to the extent of about £7,000. Another large failure is also reported from Hull, Lancs, by which the Liverpool timber merchants are heavily affected.

We learn from Liverpool that the pitch pine season for import is now about over, and ships being difficult to obtain for future freightage we have probably seen the lowest prices for this wood, both here and abroad.

Wood freights generally are very poor, and there seem to be no signs of improvement in any direction.

No fresh life appears to be imparted to trade. Travellers still report things excessively dull on the coast, and we have heard of one or two gentlemen being on the road the best part of a month without taking a single line, buyers are dumb dogs everywhere. Meanwhile shippers are trying to convince the trade through their agents here that stocks will be limited abroad, and prices consequently must improve, still buyers will not respond, and things continue at a standstill, while the season is frittering away.

In Glasgow plenty of business seems to be doing, but at prices which compare unfavourably with those of last year—Quebec let quality yellow pine deals, 12 ft. 3x11, at 2s per cubic ft., equal to £16 10s per standard. Last year similar goods, as far as description goes, fetched sometimes as high as 3s, and even more, at the public sales. However, the northern ports were not so greatly overstocked at the close of the season as many of those in the south, and as trade, though quiet enough, is still holding its own there, a moderate importation of new goods will not be unwelcome.

Aberdeen has a good deal of last season's stock still remaining on hand, and is therefore not suffering any inconvenience from the lateness of the import season. Matters are improving there, but trade is not brisk. At a public sale there by Messrs. Aiken, Jun., & Co., most of the deals were withdrawn, as the reserve on them could not be obtained.

At Leth there is business doing, and public sales are frequent enough, holders of stock being desirous of clearing off that which remains on hand to make room for the new goods on the way. Prices are therefore irregular, some goods fetch their value, while others were not appreciated. Wancy board, of 30 in., at 3s 1d per cubic ft. was well sold, but birch timber at a shilling per foot was but a poor return for the importer. The state of the market generally may be regarded as very uncertain, and its steadiness will depend on the ratio of importation, which may now be considered as near at hand. If Baltic and Swedish wood is sent in too freely, nothing can keep prices from receding, unless a very different demand from that hitherto experienced round the coast should spring up, but if goods come forward in tolerably regular rotation, so that our docks and wharves do not become inconveniently crowded with them, as the season advances, there seems to be no reason why a good steady trade should not be carried on during the summer.

Messrs. Brownlee & Co. held a sale on Tuesday, in Springfield street, London, of American timber, deals, battens, etc. There was a fair attendance, but buyers seemed to confine themselves to small purchases. The square yellow pine, which was of fine quality, fetched very good prices, ranging from 2s. 2d to 2s. 9d., the average being about 2s. 6d. Quebec birch was not in demand, indeed nothing else was to be expected, seeing the large quantities that have been thrown on the market at the late sales held here, though the descriptions previously offered were of inferior quality. A number of lots of flooring and battens were disposed of, but as they were job lots the prices need not be quoted. The auctioneer (Mr. Stewart) intimated that Messrs. Riek & Co. would now be in a position to cut for buyers, their mills having been closed for some weeks past. The following is a note of prices realized—

Square yellow pine, 2s. 2d to 2s. 9d. per cub. ft.

Ash, 2s. 4d to 2s. 9d per cub. ft.

American red pine, 19s. per cub. ft.

1st yellow pine deals, 2s. 9d. per cub. ft.

3rd " " 1 3/4d. per cub. ft.

2nd red deals, 3d per lin. ft.

6 1/2 x 2 1/2 white lattice, 1 1/4d per lin. ft.

AMERICAN NOTES.

Minneapolis, Minn., May 5th.—The floods in the river during the last week have amounted to an embargo on commerce of every description in the West, especially in lumber. It is hard to tell just where so much lumber has gone to as the reported shipments of last week indicate was sold. From the Upper Missouri through to Chicago, and down to Cairo, the railroads have been damaged and suspended, while all reporting points show an advance upon last year's business, but not for the week. Handling lumber on the Mississippi is almost impossible, and only such lumber as is regarded unsafe is being moved, and none sold. Great damage has been done already to

lumber yards along the river, as well as mills, booms, etc., by the floods. These things are adding to the cost of lumber this year, and also reducing slightly the amount to be cut, both of which strengthen the market. From reports it is thought that nearly all the lumber held on the Missouri river will be lost, and several million on the Mississippi, be the large quantity of logs which have and are being carried away. The advance in lumber at Chicago is well maintained, and it only needs a corresponding move in the Mississippi Valley to send it still higher in Michigan and Ohio. The advance has been much greater in Baginaw than in the West. Thus, two years ago lumber was sold for \$5, \$11 and \$13 which now brings \$7, \$9, \$17 and \$18 there, while the advance has been about \$3 on common and \$5 on clears in the West. The greatest increase in the demand has been in the West, and also should lead instead of lag behind. The warm weather of the last week has hastened the melting of the ice in the lakes and the departure of the snow, so that active driving operations are in progress on the brooks and small streams, with a good supply of water, giving fair promise of speedy driving. The damage from floods to the drives is not serious until they reach the main river and then get beyond all control, and it is too early for that by a month.

A LARGE LUMBER COMPANY.

The Winona Republican gives the following history of the Chippewa Lumber and Boom Company, which recently sold its interests. The Chippewa Lumber Company began its existence as the Union Lumbering company, and obtaining some important rights in the river at the falls, constructed mills, dams, booms, piers, etc., at that point, with the idea of establishing a general sorting works for all the logs run down the river. The Mississippi River Logging Company, a corporation organized by some of the Mississippi river mill owners, for the purpose of cutting logs on the Chippewa, running them to its mouth and rafting them thence to the flats below, objected to having its logs delayed, as they necessarily would be if the Union Lumbering Company was allowed to sort them, and fought the latter company for some years to prevent it from carrying out its purpose. Some three or four years ago the Union lumber company broke up and its property passed into the hands of its creditors, among whom were some heavy capitalists from Pennsylvania, who not long ago reorganized the company under the name of the Chippewa Lumber and Boom Company, and again undertook the construction of sorting works at Chippewa Falls, with the intention of carrying out the plans of the old concern. The Mississippi River company has probably bought the property and privileges of the new organization in self-defence, as the establishment of sorting works at Chippewa Falls, over which it could have no control, would delay the movement of its logs to such an extent as possibly to prevent their reaching their destination in time to be manufactured the same season. For whatever the reasons the purchase may have been made, it will result in the settlement of a difficulty that has troubled the operations on the Chippewa for a long time, and that promised to worry them for some time to come. This property includes all the franchises of the Chippewa Lumbering and Boom Company, which gives the purchaser almost the entire control of the river. It also includes the mill, dams, booms, piers, etc., and over 100,000 acres of land, together with a large amount of city property in Chippewa Falls. Of the 100,000 acres, 50,000 is uncut pine, while the balance is partially cut over pine, and good farming land, the whole, it is estimated, containing a stumpage of 500,000,000 feet. Of old logs on the river there are 32,000,000 feet, while the winter's stock foots up about 55,000,000, making some 87,000,000 feet on hand for the coming season. Included in the purchase are the franchises pertaining to all the dams on the Chippewa river and its tributaries constructed and owned by the old company. Among them are the Palat creek dam, the Yellow river dam and the dam at Chippewa Falls—altogether costing a large outlay of money, and possessing great value to the purchasers, in that it gives them unimpaired control of the river. The amount paid was \$1,250,000. The same parties that have purchased the stock own and control somewhere about 200,000 acres of pine land on the Chippewa river and its tributaries. This, in addition to the Chippewa Lumber and Boom Company's lands, will make this the strongest and largest lumbering institution in the country.

The first cheese market of the season was held yesterday at Woods'ock, offering 400 boxes of April make and 300 boxes of the first week of May. Of the latter 253 boxes were bought by Lieut. Ballantyne, of Stratford, at 11c. per lb.

Mr. Senecal, General Manager of the North Shore Railway, who has been financially embarrassed for some time past, has made a private arrangement with his creditors, paying fifty cents on the dollar. The amount which he has paid away under this compromise is said to exceed \$90,000.

Chief Justice Heparthy has decided that a boarding house keeper cannot give beer or wine at dinner to his boarders. It was shown that no extra charge was made for it, and also that the practice was common at farmers' hotels, where a person who paid 25 cents for dinner had the option of tea, beer or water as his beverage.

A special committee of the Montreal City Council has been engaged in preparing amendments to the city charter. It proposes that one Alderman shall be chosen by the real estate owners, and that the property qualification should be raised for all the members of the council from \$2,000 to \$5,000. It is also suggested that the Mayor should be elected from among members of the Council.

An association entitled the Homoeopathic Medical Society of the Province of Quebec has been organized in Montreal, when the following gentlemen were elected officers:—President, Dr. J. Wauless; Vice-President, Dr. F. Muller; Secretary, Dr. G. G. Gale; Treasurer, Dr. D. C. McLaren. Arrangements are to be made for holding annual meetings alternately in Montreal and Quebec, and the President was appointed to deliver a lecture at the next meeting.

The Pembroke Standard says: "We are informed of several gold veins, likely to be exceedingly valuable, lately discovered in the township of South Sherbrooke, County of Lanark. One—known as the Manion mine—turns out quartz which assays \$128 to the ton, and another on the property of Thomas Deacon, Q.C. of this town, produces specimens declared by a competent judge to be much richer than those of the Manion mine. A company of men are already at work on the Manion mine, and the owners are vigorously pushing the work. We believe Mr. Deacon has already had an offer from a capitalist desirous of purchasing an interest in his mine, but so far has not accepted. Gold digging pays in the almost inaccessible parts of the Rock Mountains if the rock yields \$30 to the ton, consequently \$128 to the ton—even if the indications showing it to be much richer should not be correct—would pay immensely well in such a place as South Sherbrooke."

A Council meeting at Wingham, Ont., was convened by the Mayor for the purpose of considering matters respecting the Toronto, Grey and Bruce Railway. The proposed amalgamation of the Northern Railway was strongly condemned as being highly detrimental to the interests of that section of the country. The opinion was expressed and generally entertained that 3 per cent. of net earnings, under the management of the Grand Trunk, would

be more than equivalent to 1 per cent. of net earnings under the Northern. As no amalgamation can take place with the Northern without first obtaining the consent of the Governor in Council, it was unanimously resolved to send a strong delegation to Toronto on the 12th inst., to act in conjunction with other municipalities, and to interview the Government on the matter, and strongly urge on it the necessity, in the interest of the country, to withhold its consent from any such arrangements. The delegation leaves for Toronto Thursday morning, headed by the members for East and West Huron, and accompanied by a large number of influential men.



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General Trade Agent,  
Canada and Brazilian S. S. Co., Ottawa.

about \$11,790 50, against 127 head cost, \$1,111. The average price paid by American buyers last week was \$107 10, as compared with that of the week previous of \$103 24. The range of prices was from \$40 to \$350, the latter being for a stallion. A further advance in values has been established by the sale of desirable animals, and if the demand continues from the United States, prices will undoubtedly go higher. An American buyer stated today that he was inquiring for good Canadian horses as he was preparing for the native trade. The following were the shipments of horses from Montreal to the United States during the past week ended May 20, 1891.—May 2nd, 10 horses, \$2,500; 10 do, \$2,913; 10 do, \$1,600; 5 do, \$1,200; 2 horses, \$215; 6 do, \$210; 8 do, \$214; 13 do, \$1,185; 16 do, \$1,835; 2 do, \$1,912; 6 do, \$215; May 4th, 1 do, \$10; 1 stallion, \$350; 11 horses, \$1,129; 15 do, \$1,807; 5 do, \$1,120; 3 do, \$105; May 5th, 22 horses, \$2,084; 6 do, \$537; 10 do, \$1,160; 3 do, \$195; 1 do, \$1,240; May 7th, 2 horses, \$50.

A Hamilton despatch states the Grand Trunk Railway carried 377 emigrants through from east to west on Tuesday. No settlement of the labour trouble on the Grand Trunk at Montreal has yet been arrived at, and the men hold out for \$15 per day. They were offered by a contractor \$1.75 per day to go to Manitoba to work on the Pacific railway, but refused to leave the city. The company has offered \$1.10 per day all round.



Notice to Contractors.

**SEALED TENDERS**, addressed to the undersigned, and enclosed in tenders for the construction of the Parliament Buildings, will be received at this office until **TUESDAY**, the 17th day of May next, inasmuch as the construction of the building. Plans and specifications can be seen at the Department of Public Works, Ottawa, on and after **MONDAY**, the 9th instant. Tenders must be made on the printed forms supplied. Each tender must be accompanied by an accepted bank cheque, made payable to the order of the Honourable the Minister of Public Works, equal to five per cent. of the amount of the tender, which will be forfeited if the party declines to enter into a contract when called upon to do so, or if he fails to complete the work contracted for. If the tender is not accepted, the cheque will be returned. The Department will not be bound to accept the lowest or any tender.  
By order,  
**F. H. ENNIS,**  
Secretary  
Department of Public Works,  
Ottawa, May 4th, 1891.



Mail Contract.

**TENDERS**, addressed to the Postmaster General, will be received at Ottawa until noon, on **FRIDAY, 29th MAY, 1891**, for the conveyance of Her Majesty's Mails, on a proposed contract for four years, six times per week each way, between Billings' Bridge and Ottawa, from the 1st July next. Conveyance to be made on foot or otherwise, via the usual travelled road. The mails to leave Ottawa daily (Sunday excepted) at 11:00 a.m. and to arrive at Billings' Bridge at 11:45 a.m. To leave Billings' Bridge at 12:15, noon, and to arrive at Ottawa at 1:00 p.m. Printed notices containing further information as to conditions of proposed contract may be seen, and blank forms of tenders may be obtained, at the Post Office at Billings' Bridge, Ottawa, and at the Office of the subscriber.  
**T. P. FRENCH,**  
P. O. Inspector.  
Post Office Inspector's Office,  
Ottawa, April 12th, 1891.

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**BLANKET MILLS**

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**ETC. ETC., ETC.**

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**Every Description of Blanket,**  
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**VERY LOW FIGURE.**  
**Arthur Toomey,**  
**NAPANEE.**

**SHURLY & DIETRICH,**  
**GALT, Ont.,**

Sole proprietors of  
**THE SECRET PROCESS OF TEMPERING,**  
which toughens and refines the steel.



Our Silver Steel  
**CIRCULAR SAWS, CROSS-CUT SAWS**  
**AND HAND SAWS,**  
Are WARRANTED superior to any made in Canada  
(ESTABLISHED, 1873.)  
**THE LARGEST SAW MANUFACTURERS IN CANADA.**

**R. H. Smith & Co.**  
(Successors to J. FLINT)

Sole Manufacturers in the Dominion of  
Canada of the

**'SIMONDS' SAWS**  
ST. CATHARINES, ONT.

Sole Manufacturers of the genuine  
**HUNGAN, IMPROVED DIAMOND,**  
**IMPROVED CHAMPION,** and the  
**NEW IMPROVED CHAMPION**  
**CROSS-CUT SAWS.** We also make all  
other kinds of Cross-Cut Saws. Hand  
Saws from the cheapest to the very best.  
**THE LARGEST SAW WORKS IN CANADA**



THE METAL TRADE.

THE BRITISH MARKETS.

(American Manufacturer)

A slight improvement in manufactured iron is reported from Middlebro' this week, the low prices having brought forward a few more customers. Prices have therefore slightly stiffened and the market quotation becomes £1 5s to £1 7s 6d for bars, and £6 to £6 2s 6d only for ship plates. The quarterly meeting at Wolverhampton, on Wednesday, cannot be spoken of in terms much more than usually shy. I have already advised you of the crucial price—£3 for all mine hot blast pigs and £7 for maked bars. A ridiculous show of opposition to these prices was made by some pig firms on the one hand and by some maked bar firms on the other. The latter were led by the New British Iron Company, of Congreaves, and by Messrs John Brimley & Co. These announce that their prices remain unaltered—in other words, 10s in advance of the market; and the New British let off a little superabundant steam by intimating that certain of the firms who have announced a drop of 10s a ton "are now only doing openly what they have been doing earlier in the quarter, or the average price of bars ascertained for wages purposes by the trade accountants would not have been so low." Some all mine pig firms declare that they cannot make pigs at a profit at £3, and that rather than accept less than £3 2s 6d, they will blow out. Perhaps they will—not because they cannot make the profit, but, if at all—because consumers will not give £3 for Staffordshire all mine pigs of other than the very rare quality. Buyers were heedless of these little bits of temper. They had but little reason to purchase for immediate consumption, and they were wholly indisposed to purchase forward, since there was but little valid inquiry for finished iron of any reportable quantity that did not proceed from the galvanizers. These have this week had a fair Australian mail. Correspondents notified the taking up of larger quantities of galvanized corrugated roofing sheets in Melbourne than for some time past at £20 10s per ton for 20 v.g. of ordinary quality and £21 10s to £22 for best. To supply the place of the sheets sold shipments are being sent forward, but the demand lacking corresponding proportions from other markets, the galvanizers have their grip upon the market, and though they could in Wolverhampton have bought at as low a figure as they almost ever bought, they yet hold off, resolved to test the next day the pulse of the sheet firms who might be present at the Birmingham quarterly meeting. Of that gathering nothing especially satisfactory can be said. There was a fairly large attendance of the trade, but buyers were scarce, and although prices in all departments ruled low, transactions were on a very limited scale. Galvanizing sheets were—ingles, £7 up to £7 10s and £7 15s; doubles, £8, and latens 29 10s. Other descriptions of unmarked (or second class) finished iron were irregular in price. The effect of the drop in marked iron upon this branch was not great. Makers asserted that prices had previously got down so low that there was positively no room left for further concessions; and that even present prices were nearly all profits. Yet buyers would not generally be satisfied without some little change being made in their favour. Hence some second class makers yielded to the extent of between 2s. 6d. and 5s. per ton, according to circumstances. Common bars were plentiful at as low as £5 12s. 6d., and at £6 a capital quality of bar was abundant. Hoops, cut to lengths, such as United States buyers would require, were quoted £6 5s. to £6 10s. at works, but they might have been had for less. Really good sheets were £8 to £8 18s., according to make; capital boiler plates were quoted at £8 10s. to £9; and common plates were procurable at £8. Tin plates were inquired for more freely, and some prices were stronger on the fortnight by 15d. per box. Staffordshire coke plates were quoted 18s. per box; Welsh coles 10s.; and Staffordshire charcoal sorts 21s. to 22s. per box, all delivered at Liverpool. Hematite pigs were remarkably firm, but the prices were too high to permit of business. Tredgar (Welsh) sorts were firm at 67s. 6d.; Barrow (Lancashire) sorts were quoted 78s.; Carnarvon (Lancashire) sorts were quoted 72s. 6d.; and Blaenavon (Wales) hematite were quoted 77s. 6d. Good part mine pigs of Staffordshire make were £1 10s. Cinder pigs were as low as £1 17s. 6d. The worst feature of the meetings was an unpleasantly cautiousness as to whom to trust. For several weeks past firms have been steadily giving way, and men's tongues have been busy with others as "about to go." Nor is it forgotten that upon your side matters in this respect compare very favourably with the first quarter of last year. That the fear is not wholly groundless will be gathered when I explain that in one of the iron and hardware towns of this kingdom, where the inhabitants, all told, number within 80,000, as many as 28 writs have in the past few days been served by creditors upon tradesmen. The unhappy Bookers concern again forms its way to the front—just as at several times it might be expected to do. The times being against the official liquidator, he cannot carry on the concern at a profit, nor can he realize so satisfactorily as he had hoped. He therefore issues his mandate to the shareholders the

shape of a call at £1 per share. Tels huge iron and tin plate concerns collapse. It was, you will remember, which brought down the South Wales Banking Company, with whose money chiefly it had been kept going, and as that bank held 20,000 shares, one bankrupt concern has to submit another sharp turn of the same screw that another bankrupt concern may meet liabilities that both had anticipated a little active trade at the opening of the year would have met for them. But the active trade delays its coming, and creditors clamour. James Russell, Son & Co., of the Mills Iron Works, Mells, Somerset, and Victoria Street, London, edge tool manufacturers, have petitioned the London Bankruptcy Court for protection, with liabilities amounting to £60,000. The Webb & Sons, of the Brettel Lane Iron Works, Riberly Hill, Staffordshire, have also resorted to the same expedient, with liabilities amounting to £24,000. The firm is composed of Messrs. Henry Arthur Webb, Brettel Lane, Riberly Hill, and Richard Smith, Casson, of Saltwells, Dudley.

From authoritative statistics just issued I gather that the total number of furnaces built in the United Kingdom now stands at 558, and of this total 570 are in blast. The number blowing shows a decrease compared with the close of 1880, of 15, notwithstanding that 8 furnaces have been blown in since this year opened. Nine new furnaces are returned as now in process of building. Of these at present in blast 370 are in England, 76 in Wales, and 120 in Scotland.

The stocks of pigs now accumulated are larger than at any previous period. It is estimated that the total production for the first quarter of the year was 363,000 tons. The shipments up to the end of last week were about 134,000 tons, and the local consumption and rail deliveries are estimated at about 112,000 tons, or 500 tons less per week than in the corresponding 15 weeks of last year. Deducting the shipments and the local consumption from the make it will be seen that the stock has been increased by 117,000 tons. Of the increase 47,000 tons have been sent into Connal's warehouse stores, and the balance lies in makers' yards. The stocks last Christmas stood at 739,000 tons, and adding the estimated increase this quarter the present stocks reach the enormous total of 856,000 tons. Yesterday in Glasgow the ruling price for pigs was 47s. 6d. to 47s. 8d. cash, which is a drop upon a week previous of between 8d. and 9d. per ton.

There is still a capital demand for steel rails in Sheffield, and one or two houses are doing what may fairly be termed a "great" trade. One establishment has orders on its books that will keep the mills running till August next. Prices unfortunately do not show any improvement. Large makers state that £6 5s. per ton at works is the average figure for rails at the present time, but there can be no doubt that in reality this price is above the average at which orders are being executed. A small South American order was filled the other day at £6 13s. 6d. per ton. Ship plates and boiler plates are actively inquired for. The armour plate mills are running full time on contracts for our own and foreign goods. There is keen rivalry at present between the two chief local houses in the production of defensive armour for vessels.

Neither of the manufacturers of iron nor hardwares in Birmingham and the district are doing so good a business with the United States as they were some little time ago. From a return issued this week by Mr. Wilson King, the United States Consul in Birmingham, I learn that the value of exports to the United States during the quarter ending 31st March was \$1,047,567, as against \$1,444,161 for the corresponding quarter of last year—a decrease of \$396,593, or about 27 per cent. The falling off is chiefly in hardware, steel and iron. In certain items, such as anvils and vises, chains, hoes and scythes, guns, etc., our trade with the States continues on a satisfactory scale. The value of the anvils and vises that you bought during the quarter was \$31,767, chains, hoes and scythes, \$40,329; guns and materials, \$161,088; metal, for sheathing, etc., \$13,213; pens and tips, \$23,186; and hardware, cutlery, steel and iron, (which are all classed under one head), \$306,231.

THE LONDON MARKET.

The following were the closing prices in the London metal market April 15th, 1881:—

Table with columns for metal types (Iron, Steel, Copper, Lead) and prices in London. Includes entries like 'Best Welsh (in London)', 'English spring', 'Sheathing and sheets', etc.

Table listing prices for various iron types: English ingot, English bars (in barrels), English refined, Banca, Straits, Bessemer, etc.

Additional prices for Bessemer blooms, pig iron, and other iron products. Includes prices for 'This week's price for Bessemer blooms' and 'Pig iron'.

UNITED STATES MARKETS.

Pittsburg.

(American Manufacturer.) Pig Iron—The market is flatter than over. There is literally nothing being done in mill and Bessemer pig, and but little in foundry. Immediately after the presidential election last fall the market tensed up in a very encouraging manner and continued active till the close of the year, consumers buying liberally at prices fairly satisfactory to the producers, in the belief that the spring demand for iron and steel would be unusually large. Every aspect of the situation at that time fully justified the hopeful feeling of the consumers, and their course was considered wise and far-seeing. But they have been disappointed. The demand for merchant iron, for nails, for steel, has fallen far short of what was anticipated—rails and railway supplies generally being about the only exception—and as a consequence the large stocks of pig iron laid in are not yet melted, nor do consumers feel like anticipating their wants while the market for their product remains in its present condition. For this disappointing trade the elements are blamed. It will be remembered that very cold winter weather set in early in November, more than a month earlier than usual, and that it continued with scarcely an interruption till well into April. This checked business of all kinds, impeded transportation, and seriously interfered with many plans and undertakings, resulting in stagnation at a time when trade is usually most active. To make matters worse, the season is now so far advanced that many orders for finished products that would have been placed will go over till next fall. But it is hoped that many orders will yet be placed—that the beautiful weather we have had for two or three weeks will soon put things in shape in the west, where freight is still detained by floods and by freight blockades, and develop a trade that will go far towards lifting the manufacturers of crude and manufactured iron, and steel, out of the "slough of despond." It is possible, too, that a settlement of the wages of mill hands, which always causes a more or less unequal feeling at this time of the year, will help matters to some extent. Of course pig iron is weak under present circumstances, but dealers quote at the same prices as last week, as follows:—

Table listing prices for Bessemer and Gray Iron, and Anthracite Iron. Includes entries like 'Bessemer', 'Gray Iron, all ore', 'Anthracite Iron'.

Manufactured Iron—Manufacturers report no improvement in demand, and prices, though quotably unchanged, are undoubtedly weaker than they were a few days ago. We quote as heretofore: Bar iron, 2 1/2 @ 2 3/4; sheet, No. 24, 2 7/8; tank, 2 7/8; hoops, 2 8/8 @ 2 9/8; boiler plate—C. H. No. 1, 5/8; homogeneous steel, 6/8—all 60 days, with a discount of 2 per cent. for cash.

Rails—The rail mills here still have orders far ahead, and are not quoting prices. Railway Supplies—The prices of these are unchanged, remaining as follows: Spikes, 2 1/2 per pound; splicer bars, 2 1/2; track bolts, 3 1/2—all thirty days. Steel—It has been a long time since the steel works were running as leisurely as they are now. The bad weather, to a great extent, cut them out of the usual spring trade, and they do not generally do much during the early summer months. Hence, they do not look for great things before the fall business sets in. Prices, however, are held up to former figures. We continue to quote as follows: Best quality refined cast steel, 11 1/2 cents per pound, as to quantity purchased; creable machinery steel, about 7 cents and Bessemer and open hearth do. at 5 7/8 @ 6 cents; Bessemer open hearth spring 4 1/2 @ 5 cents, and do. plough 3 1/2 @ 4 cents. Old Rails—We have heard of no transactions here, but prices in the East would

be the condition of the market at the time deliveries are made. The few sales effected, it is fair to presume, have therefore been mainly on special orders for certain brands of iron, and the buyers are said to have made a moderate advance in price in consideration of these purchases. The sales referred to reach about 500 tons No. 1 X foundry at \$24 and 300 tons No. 2 X foundry at \$23. At this writing there seems to be no indication that the average buyer will pay over \$24 for No. 1 X foundry, and \$23 for No. 2 foundry, or \$20 for gray iron of ordinary brands. For that matter, there are some lots of ordinary brands offering indirectly at about those figures, without finding a buyer, though the parcels are said to be remarkably cheap and not to be duplicated from the makers.

Scotch pig finds very slow sale, and remains without feature having the least tendency to create an impression that affairs are likely to soon undergo change for the better. The few small sales effected were generally at about last week's prices, but no round lots saw as much as 600 tons at a time, could be placed except at concessions of 50c to \$1 per ton. On ordinary store lots the quotations are about \$21 for Eglinton, \$22 for Glengarnock, \$22.50 for Gartshore, \$23 for Summerlee, and \$23 for Coltness.

English pig has sold to the extent of 500 tons (Middlebrough) at \$17, and 150 tons at \$18.50—the lowest price yet touched since the importations began. There are some lots of a brand not well known that \$17 will buy, but for those which have been tested about \$17 seems the bottom price. Bessemer reported sold to the extent of about 3,000 tons at \$24.50 to arrive, and in a small way at \$25 from store. Halls—In this branch of the market there has been no change of importance, the transactions that come to notice including very few noteworthy lots, while prices stand substantially as quoted heretofore. The quotations are about \$80 @ \$82 at mill for American steel, \$80 here for English to arrive, \$63 @ \$64 for do. on the spot, \$16 @ \$17 for heavy section iron at mill, and \$13.50 @ \$14 for light do. laid down here.

Old Halls—A further reduction in prices has led to considerable business, transactions being reported to the extent of 2,000 tons here at \$28, 1,000 tons do. in Philadelphia at \$26, 4,000 tons double heads at \$27 here and 3,000 tons do. at \$27.25 to arrive. The demand has since slackened up somewhat, and the business accomplished has not strengthened the market a great deal. Scrap Iron—The inquiries are very few, and beyond a few sales of No. 1 wrought at \$28 from yard, no sales are reported. Holders pretend to be very firm at the price named, but there is no chance that they could secure that much for any considerable quantity, even if carefully selected stock was offered.

Iron Halls—One firm to-day took an order for 2,500 tons at \$47, 60 lb rails, which is regarded as a good price. There are several parties in this market this week, & rumours are rife as to larger orders being placed at \$46 and \$46.50. So far as inquiries go all sales have been made at about \$47. Offers are made at \$46 to \$47, and possibly may be accepted before the close of the week. Commission men remark that the outlook for a larger demand for iron rails is more favourable.

Old Halls—There were a number of small sales this week at \$26.60, but even at this buyers are not very anxious. The reason seems to be that supplies from abroad which were checked off by a hard winter, are coming in more freely. Whatever the real cause may be, the buyers are indifferent, but it is not safe to predict twenty-four hours ahead on old rails. The mills seem well supplied, but the increasing demand for iron rails if kept up may exert a strengthening influence on old material.

Scrap—Some dealers report business very active. Stocks have accumulated considerably, however, and prices show a weakening tendency. Buyers are not willing to pay the prices of a month ago. There were sales of No. 1 wrought this week at \$27 and some at \$28; cast, \$19 @ \$21, stove plate, \$16; crop ends, \$28.60.

Railway Supplies—Splicer, 2 1/2; fish plates, 2 1/2; bolts and nuts, 3 1/2. The mills are full of orders. New York. Pig Iron—A few commission firms have, according to their own accounts, been a little more successful in finding buyers for American pig, but the majority of this interest, and others as well, are still complaining of excessive dullness and of inability to draw out what might be considered half way reasonable bids. It would seem that consumers in general have determined to buy only as necessities of the moment require. These necessities are apparently very moderate, however, as no considerable portion of the larger consumers are drawing sufficient supply from old contracts made at prices to be regulated

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INSURANCE MATTERS.

SUIT FOR \$41,000,000!

Of a policy holder against the directors of the Equitable Life Assurance Society, of which insurance was recently made in all the city... The suit is to decide upon the action of \$41,000,000—to decide upon the vast accumulations of this company made up exclusively of the contributions of its policy holders, really belonging to them, or whether they are the property of the directors or of the stockholders in the company.

is the fund, they insistently ask, "in which the plaintiffs as policy holders, have any interest?"... The fund produced by the payment of all the premiums, they reply, does not in any sense belong to the policy holders, but belongs exclusively to the company.

ASSESSMENT LIFE INSURANCE

Within a few years there has sprung up in these United States what may be fairly called an army of societies—in numbers at least—having for their object the payment of benefits to the families of deceased members.

POSTAL TIME TABLE.



POST OFFICE, OTTAWA.

ARRIVAL AND DEPARTURE OF MAILS

Table with columns for destination (e.g., Montreal, Toronto, St. John's) and time of arrival/departure.

Registered matter must be posted half an hour previously. Office hours from 8 a.m. to 4 p.m. For Savings Bank and Money Order business, 9 a.m. to 4 p.m.

G. P. BAKER, Postmaster

at best, but two or three years will elapse before the normal conditions of loss will show themselves... The result of the present suit will do much to settle this important point.—N.Y. Daily Indicator.

POSTAL TIME-TABLES.

POST OFFICE, MONTREAL.

MONDAY, July 3, 1890.

DEPARTURE

Table of departure times for various provinces and local mails.

LOCAL MAILS.

Table of local mail routes and times.

UNITED STATES

Table of mail routes to the United States.

GREAT BRITAIN, ETC.

Table of mail routes to Great Britain and other regions.

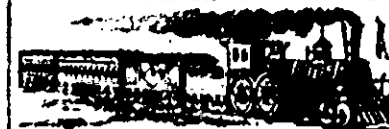
WEST INDIES.

Table of mail routes to the West Indies.

Postal Car Days open till 8.45 a.m. and 9.15 p.m. Registered Letters should be posted 15 minutes before the hour of closing ordinary mails and 30 minutes before closing of Express Mails.

the public by continuing to produce and reproduce such miserable substitutes as these are for legitimate life insurance companies! The co-operative life plan is in very fact a delusion and a snare, and all who are seeking life assurance will do wisely to shun the co-operative plan under any of its many taking names and delusive features.—Toronto Budget.

RAILWAY TIME-TABLES.



Canada Central Railway.

CHANGE OF TIME.

On and after MONDAY, 21st JUNE, trains will run as follows—

Table of train schedules for the Canada Central Railway.

ST. LAWRENCE & OTTAWA RAILWAY.

On and after THURSDAY, 10th JUNE, 1890, trains will run as follows—

Table of train schedules for the St. Lawrence & Ottawa Railway.

Q. M. O. & O. RAILWAY.

COMMENCING on Wednesday, June 23rd, 1890, trains will run as follows—

Table of train schedules for the Q. M. O. & O. Railway.

[Local trains between Hull and Aylmer] Trains leave Mile End Station seven minutes later. Magnificent Palace cars on all passenger trains and elegant sleeping cars on night trains.

General Office, 18 Place d'Armes Square. Ticket Office, 13 Place d'Armes and 202 St. James St., Montreal, and opposite the St. Louis Hotel, Quebec.

INTERCOLONIAL RAILWAY.

SUMMER ARRANGEMENTS, commencing 11th June, 1890.

Table of summer train schedules for the Intercolonial Railway.

DOMINION TRADE REGISTER AND INDUSTRIAL DIRECTORY.

AGRICULTURAL IMPLEMENTS
S. S. WHITING MANUFACTURING CO.
WELLAND VALLEY MANUFACTURING CO.
ANILINE DYES
EMIL THOUREY & CO.
BRASS WORKS
H. N. TARDY & CO.
COTTON BROKERS
M. WRIGHT, Dundas, Ont.
COTTON MILLS
DUNDAS COTTON MILLS CO.
HAMILTON COTTON MILLS CO.
JOHN MACKAY, Dundas, Ont.
EDGE TOOLS
R. T. WILSON, Dundas, Ont.
ENGINES AND BOILERS
O. C. MORRISON, Hamilton, Ont.
THOS. WILSON, Dundas, Ont.
FILES
THOS. GRAHAM, Toronto, Ont.
FREDERICK BAUSCH, Cote St. Paul, Montreal.
FILE & SPRING CO.
PATENT TRAM & RAIL WORKS
FURNITURE
OSHAWA CABINET CO.
AMERICAN BRACKET CO.
TESS & CO.
JAMES WRIGHT & CO.
GLASSWARE
HAMILTON GLASS CO.
CLOVE MANUFACTURERS
W. H. STOREY & SON.
HAMMERS
HENRY H. WARREN.
NURS, SPOKES AND BENT GOODS.
F. W. HORN & SON.
INKS
F. F. DALLEY & CO.
IRON WORKS
CANADA SCREW CO.
COWAN & CO.
DOMINION BOLT CO.
H. R. IVES & CO.
HAMILTON BRIDGE & TOOL CO.
MCKECHINIE & BERTRAM.
THE OSHAWA MALLEABLE IRON CO.
OLMSTED & SON.
KNIFE WORKS
THE WHITMAN & BARNES MANUFACTURING CO.
DANIEL BELL & CO.
DOMINION ORGAN AND PIANO CO.
S. R. WARREN & SON.
PAPER MANUFACTURERS
CANADA PAPER CO.
DOMINION PAPER CO.
JOHN FISHER & SONS.
LINCOLN PA. R. MILLS CO.
W. M. BARBER & BROS.

SAW MANUFACTURERS.
R. H. SMITH & CO.
CANADA SCALE WORKS.
SPICES, ETC.
R. D. VAN DE CARR & SON.
STEREOTYPERS, ENGRAVERS, ETC.
F. DIVER & CO.
STOVES
W. M. CLENNINEN.
TELEPHONES.
HOLT TELEPHONE CO.
TRIERS
BUTTER & CHEESE TRIERS.
WIRE WORKS.
L. GREENING & CO.
MAJOR & GIBB.
TIMOTHY GREENING & SONS.
WOODEN GOODS.
C. T. BRANDON & CO.
J. R. McLAREN, Jr.
WOOLLEN MANUFACTURERS.
J. ROUTH & CO.
JOHN WARDLAW.
WINANS & CO.

PETROLEUM.

THE BRITISH MARKET.
ARTHUR BROWN & CO'S PETROLEUM REPORT.
LONDON, April 25th, 1881.
Refined Petroleum Oil.—Owing to the Easter holidays business has been quiet in all positions during the past fortnight. The trade demand for consumption has been fairly good, with fine brands scarce, and fetching high prices; futures, however, have been difficult to deal in, but the tone of the market has been firm. Prime and Standard White Pennsylvania on spot sold at 6 1/2d to 6 3/4d per gallon. May 6 1/2d to 6 3/4d, June 6 1/2d to 6 3/4d, August 7 1/2d to 7 3/4d, September-December 7 1/2d to 7 3/4d. To-day's market closes steady, 6 1/2d to 6 3/4d on spot. Naptha.—Quiet, ordinary 8 1/2d to 8 3/4d, refined 9 1/2d to 9 3/4d. Coal Oil.—Continues neglected. Turpentine.—After declining to 31s. on spot again improved, and is firm at 31s. 6d; month 31s. 6d; May 30s. 2d., June 28s. 6d. to 29s.; September-December 26s. 3d. to 26s. 6d. The stock at the wharves to-day is 10,281 barrels, and deliveries for the past week 1,040 barrels.

Table with columns: Prices of S. W. Petro. leum, 1881, 1890, Refined, Crude, etc.

CANADIAN MARKET.

(Petrolia Topic.)
During the week the demand for crude has not increased, but prices remain about the same, \$1.65. Refined moves slow with quotations at 18 to 19 cents. Operations in the territory are lively. On the Hebble property the Imperial Oil Co. are down 350 feet. In Oil Springs John Wallen is down 235 feet. He has struck the big water vein, but will cease to go deeper. Near Oil City, A. T. Gurd, at a depth of 502 feet, has struck a dry hole. On Durham Creek the Mutual Oil Co. have struck a small well. John McCann is boring the surface near the Bismarck, Eureka street. In Oil Springs John Bolton is commencing to bore the surface. H. W. Lancy is in the top rock on lot 8, 13th concession. In the East End Barrett & Dall are in the top rock. On the flats Lancy & Bennett are down 300 feet. In the East End John Brake has struck a dry hole. On the flats Hoskins and Smiley have a rig ready. Their last well is good for three barrels.

THE MONEY MARKET.

TORONTO STOCK REPORT. Table with columns: BANKS, Capital, Rest, Dividend, Closing Prices, etc.

MONTREAL STOCK REPORT.

Table with columns: NAME, Value, Capital, Rest, Dividend, Closing Prices, etc.

It. Lawyer is drilling on lot 10, 11th concession.
Jav. McCort is down 400 feet with a good show, on lot 10, 12th concession.
Mas Houston is getting a rig ready in Marthaville.
On lot 9, 12th concession, D. M. Kennedy is down 400 feet. He has another rig building on the same lot.
A. A. Smith's last venture in Marthaville is good for two barrels.
Perkins & Son's last well on lot 10, 12th concession, is good for two barrels.
F. Lamb's last well on lot 2, 12th concession, is good for one barrel. He is getting another rig ready.
On lot 12, 12th concessions, J. J. Englehart is in the top rock. He has a rig ready on lot 9, 14th concession.
In Marthaville Wilson & Moore are in the lower line.
A. Johnson & Co. have a rig ready in Marthaville.
THE SUPPLY OF PETROLEUM.
Referring to the constantly increasing production of petroleum, the Oil & Drug News states that there is now stored above ground over 22,000,000 barrels of oil, for which there is no demand. This is sufficient to supply the present requirements of the whole world for a year. Yet the accumulation is on the increase, for the daily production is fully 25,000 barrels in excess of the demand. To store the aforesaid surplus stock, nearly one thousand iron tanks have been erected, and others are constantly being added. This storage of a dangerous substance above ground is very expensive and hazardous business. If the oil was left in its natural reservoirs underground, it would not only be safe but the amount out of the ground would appreciate in value. Last year nearly 1,000,000 barrels of oil, besides thousands of dollars of property within reach of the flames, were destroyed by lightning and forest conflagrations. The investment of capital required in the building and sustaining of these iron tanks is tremendously large being something over \$8,000,000. There are over 9,000 wells in operation in the Bradford region alone. They represent an expenditure of about \$30,000,000. The pipe lines probably have a capital of \$5,000,000 more in their conduit lines, so that, all in all, at least \$43,000,000 are invested in these branches of the trade. It is, however, very improbable that an understanding can be arrived at between the companies now engaged in this industry by which the supply might be kept within reasonable limits. But were such an agreement made, the new discoveries of petroleum deposits would soon render it ineffective. The oil belt is constantly enlarging, and it is only natural that every one who "strikes oil" should be anxious to secure as soon as possible the benefits of his good luck. Therefore instead of looking for an improvement of the trade to a decrease of production, we should rather endeavour to increase the demand. This can be done by an intelligent mercantile policy. There are hundreds of millions of people in Asia, for instance, who never saw a kerosene lamp, and even in Europe we might say that the consumption of petroleum is still in its infancy. The quality of the American product is thus far so superior to that of the oils found in any other part of the world that any increase in the demand for this commodity, must first benefit our producers.—N.Y. Commercial Enquirer.

PROSPECTUS

Merritt Cotton Mills

For the Enlargement of
Merritt Cotton Mills
Inability of Shareholders to the amount of shares held by them.
CAPITAL \$150,000.
In 1,500 Shares of \$100 each.
REFERENCES
J. MORRIS, ESQ. T. R. MERRITT, ESQ.
81, ST. CATHERINE ST.
KING & DOLAN.
It is proposed by the present owners to enlarge the Merritt Cotton Mills by adding a new mill building, dye house, wadding mill, etc., to the existing three thousand and four hundred looms, for the manufacture of such high quality and coloured goods as are now used in this country, to thirty bag looms now in operation, and to increase the capacity for making dyeing and wadding from 140,000 lbs. per annum as at present, to 500,000 lbs.

The mill property consists of about four acres of land with, in addition to the main mill building, dye house, wadding mill, etc., house, office, stabling, etc. The main mill building is built of wood, and it is intended to remove it and erect the new and enlarged building (of stone) on a portion of the same land, and on the site of the present wadding mill which is intended to remove to the opposite side of the main mill. The new wadding mill could then be kept in operation along with the present main mill, while the proposed new building was being erected and fitted up. The existing machinery is of good description, is in good running order, working daily, and the whole property, including machinery and etc., is valued at \$40,000. The production for the year 1879, during which the mill was worked for ten months only, was 221,450 lbs. of all kinds of goods, and the proposed enlargement would increase this to a capacity of producing 500,000 lbs. per year. The result of the year's operations is as follows:—Gross profit, \$10,282.25, equal to 4 cents per lb. of the out turn; at the same rate \$50,000 lbs. would yield a gross profit of about \$27,000, to provide for interest, insurance, repairs, expenses of management, etc. This is on the assumption that no gross profit would be earned in the future than during the year named; but as a certain portion of the product of the new machinery would be coloured fabrics, which yield a much better return than unbleached goods, a considerable increase on the above figures may be safely estimated. The economy in working the mill entirely by water power is very great, and counting the cost of fuel, labour, and wear and tear of engines, etc., would represent an annual saving of at least \$15,000. The situation of the mill affords exceptional advantages for obtaining all necessary supplies, and distributing the manufactured goods. Cotton can be laid down in the place from the leading markets in the Southern States in a comparatively short time, and at a cost for freight, etc., not exceeding half a cent per pound. The municipality of Merritt has agreed to exempt the whole property (present and prospective) from taxes for twenty-one years to come, and a by-law to that effect will be passed before the erection of the buildings is proceeded with. There is an abundant supply of hired labour to be had in the village at moderate rates. The terms of payment of the subscription to be at such times as the progress of the building and machinery will warrant, and not more than twenty per cent. on each call will be made. Total sales for 1880, \$43,154.22. The market price of the shares of companies now in operation is worth quoting by example:—
Dundas Cotton Co. ... 140
Merritt Cotton Co. ... 120
Canada Cotton Co. ... 120
V. Hadon Cotton Co. ... 150
Lybster Cotton Co. ... 150
Merritt, March, 1881. (12)

THE DOMINION BOLT CO.

87 St. Peter St. Montreal
WORKS IN TORONTO.
Machine-Forced Nuts, Hot-Pressed Nut-Carriage Bolts, etc., Flough Bolts, Machine Bolts, Coach Screws, Bolt Ends, R. R. Track Bolts, Sleigh Shoe Bolts, Boiler Rivets, Bridge Rivets, Roof Bolts, R. R. Spikes, Blank Bolt Rivets, Bolts, Spring Bolts, Norway Carriage Bolts, Tire Bolts, Bright Rivets, Store Bolts, and the quality of the iron, finish of the bolts, and the style of packages, etc.
SUPERIOR TO THE AVERAGE.
And equal to the best Foreign Bolts, Nuts and Screws.
THOMAS WILSON, Dundas, Ont.
Manufacturers of STATIONARY and PORTABLE Steam Engines, BOILERS AND MACHINERY of every description. COTTON MILL CALENDERS, HOSE, IRON STEAM PIPES AND PROPELLER WHEELS, ALL SIZES.



THE DRY GOODS TRADE.

NEW YORK ADVICES.

New York Mercantile Journal. The demand for goods has been... The weather conditions have... The market has been... The demand for goods has been... The weather conditions have... The market has been...

and a more cheerful tone generally prevailing. Trade and money... The market for... The demand for goods has been... The weather conditions have... The market has been...

statement broadly that it has yielded a net profit of \$25,000. It is to be so, we must say that it is a very remarkable result... MATERIAL PROGRESS IN QUEBEC. (Monetary Times) The Session of the Legislature of Quebec was opened by a speech chiefly retrospective...

MERCANTILE AGENCIES. How they Operate. Forty years ago the first mercantile agency office known was opened in New York by Lewis Tappan. There was not much style about it, but it survived...

THE NORTH-WEST TERRITORY. The extensive cheese exporter, Mr. George Morton, of Kingston, is at present in Ottawa. He has had several interviews with the Governor-General and members of the Cabinet...

SCIENTIFIC AND PRACTICAL.

UTILIZED DAYLIGHT.

The London Building and Engineering Times describes a system designed to give light in passages and portions of offices, stores and other parts of buildings where, from close packing and want of space sunshine scarcely penetrates. It consists in inserting semi-prismatic lens lights in such positions as will allow refracted daylight to be admitted, even on a dull and cloudy day. These semi-prismatic lights are made in a variety of forms. They consist of cast iron frames, into which are glazed either rectangular or hexagonal semi-prismatic reflecting lenses made from clear crystal glass, so placed that the light is reflected through the lens at such an angle as to slope from the front to the back of wherever they are in situ. At the distance of 60 feet from the front of the premises, we are able to read the smallest print, and the only source of light in a cellar used as a storage was that which passed through one of the pavement lights under notice. The same principle has been applied in an improved safety coal plate, in flagged or asphalt pavements, and these are being extensively used in the streets of the metropolis; also in the form of sloping boards instead of window sashes, and giving as much protection as unsightly iron railings, besides affording ventilation, whilst they reflect additional light into basements outside of which they are fixed.

THE ELECTRIC LIGHT.

The Daily Beacon of Akron, Ohio, contains a four column account of the trial of the electric light in that place a few days ago. From it the following extracts are taken:—

"Just as the hands on the Central Engine House clock touched the hour of 2 o'clock this (Saturday) morning, the great drive-wheel of the engine in the basement began to revolve, signaling the first actual test of Akron's long-looked for electric light system. At noon yesterday the concluding work had arrived at such a forward state that Mr. Marshall, the Brush Electric Light Company's mechanical engineer, felt himself justified in telegraphing to Mr. George W. Stockly, Vice President and Business Manager, at Cleveland, that as matters looked then the light would probably be "a go" by evening, and stating that more definite information would be given later on. By 6 o'clock the work of adjusting the lamps of the iron tower—the final task of all—was taken in hand, and word was accordingly sent to Mr. Stockly that the test would surely be made after midnight. That gentleman had greatly desired to be present at the test, but for some reason did not arrive. At two o'clock a.m. was chosen, because the moon would set at 2.19, thus affording all the concomitants for a successful trial.

Simultaneously with the starting of the engine, a rush was made by the small group of interested spectators, to the platform on the north of the building. Looking down over the business works of Howard and Market streets, the big tower itself could scarcely be discerned. The moon was low and a slight haze hung over the city. All of a sudden, apparently in mid air, a great white light sprang out as if by magic. For an instant every building stood out in bold relief, and an exclamation of admiration escaped the lookers on. But it was only for an instant, for the light almost as suddenly went out, leaving the darkness more "visible" than before. There was some fault in the insulation.

Meanwhile another break was made for a good point of observation from which to see the effect of the Buchtel College light. Here everything was found to be working most successfully. Every angle of the structure stood out in bold relief and intervening houses and portions of streets within range were suffused with a mellow, silvery light, not unlike that of the moon. Admiration of the sight was universal, and watches were produced to test the light, with satisfactory results.

The Howard-Market street tower was the next point of interest to be visited. A few minutes work sufficed to discover and right the fault in the wire, and then upon word by telephone from the Beacon office the engine was again started. At first only two of the carbons ignited, but soon all four were ablaze, and the transformation was marvelous. Howard and Market streets, which before had been quite dark, were now brilliantly illuminated; sidewalks and roadways were as bright as moonlight could make them, and buildings were lighted up from roof to basement. In all directions the light seemed ample and satisfactory. A few tests were made to ascertain the power and extent of the illumination. West Hill was brought out in strong contrast with the dark sky beyond. As far south on Howard as the postoffice and east on Market to High there was no perceptible diminution in the light. On East Market between High and Broadway, the angle in the street cut off the direct rays for a short distance, but the reflections from the adjacent buildings in a measure destroyed the shadows. Near East Market street railroad bridge the effect of the Buchtel College light began to be seen. Houses, instead of being illuminated on one side were lighted up on two. The face of a watch could also be seen from either direction. At a point in the

yard of the Central High School building, where the circles of radiation were expected to lap, a very short shadow in the direction of the college was discernible, showing, first, that the counter lights had the effect of very nearly destroying the shadows, and, secondly, that the iron tower light was somewhat the more effective. On East Market street, at Fir, the college light appeared to predominate, though the tower light was visible, and its rays were measurably effective at least as far as Fay street. The latter street was well lighted, and possibly the cross streets beyond.

Summing up the work performed, it is a moderate statement of the case to say that the guaranty of the Brush Company, of ample light within a radius of half a mile from each light-centre, was fully met. The experiment was most satisfactory, and all who beheld it were delighted and voted the Brush Electric Light a pre-eminent success.

THE ELECTRIC NIGHT IN A SCOTCH COLLIERY.

Mr. Watson, of Earnock, has resolved, if at all practicable, to use the electric light in the lighting of his colliery, not only on the surface, but at the pit bottom, in the roads, and at the working faces. He recently selected Swan's electric lamp for this purpose, and the first steps have been taken incidental to its introduction in the colliery. Besides Mr. Watson there were present Mr. Graham, electrician, and Principal Jamieson, Glasgow; Mr. Grant, Kilmarnock; and Mr. Gilchrist, manager, Earnock. It is intended to erect the dynamo-electric machine in the engine house connected with the Guibal fan at the colliery, and the gentlemen named were engaged in discussing the horse-power of the fan engines to ascertain the surplus power for driving the machines. From the engine house the electric cables will be led down the nearest pit shaft into the workings. In the Swan lamps, the glowing, or incandescence is carried on in vacuo, and it is claimed for them that even in presence of inflammable and explosive gas they are absolutely safe. The preliminary operations attending the introduction of the light will occupy nearly a couple of months. —Scotsman.

ELECTRICAL SCIENCE.

The story of electricity forms the most romantic chapter in the history of science. The curious thing about it is, that it has been a progress from utter and absolute ignorance to the most familiar and extensive practical results. In all the other sciences—mechanics, optics, physiology, astronomy—there was a basis of common knowledge, consisting of many familiar facts to start with, and there is every rudiment of science in the loose observations of uneducated people concerning things that fall within the range of ordinary experience. But electrical science has no such starting point—nothing was known by common people of any such agent. Lightning was hardly regarded as a terrestrial thing. It was the bolt of Jove, minister of God's wrath, or a malign agency of the powers of the powers of the air, a kind of preternatural phenomenon; and, when a bar was rubbed and found to attract light bodies in a mysterious way, it was assumed to have a soul and to be a sacred thing. This little seed of the science did not germinate for thousands of years. It was an instructive test of the culture of the human mind and shows what an enormous amount of preliminary mental activity had to be expended before men were prepared to engage in the study of nature. The natural was filled with the force which we now call electrical; all things were pervaded by it, but it was beneath the surface; it did not strike the senses and compel attention; it could be discovered only by thought and the investigation could not commence until the human intellect had been turned in a systematic way upon natural things. But when experimental inquiries in electricity were once begun their results were so curious and peculiar that they excited a powerful fascination over the wonder-loving and by this stimulus the science grew rapidly. It has given rise to a brilliant series of electrical and magnetic discoveries, inventions and useful applications of the widest range and highest utility to civilization, such as no other science has afforded. The intellectual movement has been from the state of total ignorance, through long observation and experiment, up to the richest harvest of wonderful works. —From Editor's Table in Popular Science Monthly for April.

THE PLANETS IN MAY.

Venus is morning star. In December, 1882, she will be seen all over America making a transit or crossing the sun's disc. Astronomers are already laying their plans for the observation of this transit, the greatest astronomical event anticipated in this country in the present century. Jupiter is morning star, close to the sun, and close to Saturn. Mars, Mercury and Neptune are morning stars, the first rising a few minutes after 3 o'clock, the second at 4.30, and the last rising with the sun. Uranus is the only evening star, rising now a quarter before 3 o'clock. The May moon falls on the 13th. The most beautiful celestial picture of the month occurs on the morning of the 26th, for the waxing moon will then be near Venus, Mars and Jupiter, though she passed her conjunction with them all on the previous day. As Venus rises on that morning about ten minutes after three o'clock, Saturn ten minutes later, and Jupiter about ten

minutes after Saturn, if the sky is clear it will be safe to promise a superb planetary show, well worth taking pains to witness. The new moon of the 27th throws her shadow over a portion of the earth, and causes a partial eclipse of the sun. It is invisible here, but visible in the northern part of North America and in Northern Asia.

"WONDERS OF THE HEAVENS"

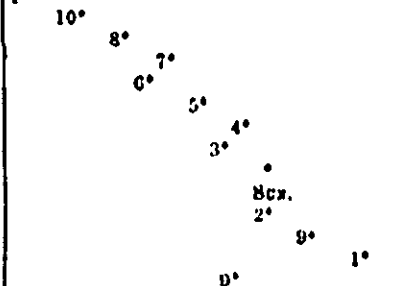
Rev. C. Collins, of Pennsylvania, recently preached a sermon of inquiry as to the outlous astronomical indications for 1881-2, which is attracting considerable attention. In this discourse he presented a summary of astronomical facts and comments, which we copy as follows:—

"The year 1881 will be one of remarkable interest from an astronomical standpoint, for during this year the planets of our system will reach a point in their orbits not attained (some astronomers tell us) for 6,000 years, while others say that a similar combination occurred about 1800 years ago.

The sun is the centre of our system, and around the grand colossal star, which is nearly a million and a half times larger than the earth, and about 350,000 times as heavy, revolve all of our planets, each apparently going regardless of all others, and yet all bound together by that mutual attraction, commonly called gravitation. Each planet has an orbit independent of the others, and goes on its journey regardless of what its neighbours may be doing. These orbits differ relatively every month, so that astronomers find it at once fascinating and profitable, to figure out the relative positions occupied by each at a given time.

To the uninitiated it seems almost miraculous that a "star gazer" should be able to tell just when an eclipse is to occur, but when we consider that the planets move just like a majestic clock, each orb going its round as a part of the grand celestial mechanism, making just such a distance in such a time, it ceases to be more than a study, which has been mastered by attention and application.

Just now the heavens are full of interest, for all the planets are drawing nearer to the point which they are to reach Sunday morning, June 19, 1881, at about three o'clock. At that hour the stars will be in Taurus, and will be in this position:—



- 1. Earth. 8. Mars. 9. Uranus. 2. Moon. 6. Jupiter. 10. Alcyone. 3. Mercury. 7. Saturn. Sun. 4. Venus. 8. Neptune.

By this it will be observed that all the planets, Uranus alone excepted, will be arrayed with the sun and Moon, against our little earth. We know what an effect, even the Moon, small as it is, has on our tides; then what must be the result, when so many, aggregating many million times larger than the earth, shall be pulling against it?

Another feature, which should not be overlooked, is this! Directly in range with these planets is Alcyone, or *eta* Tauri, the central star of the Pleiades. This star is said to be the grand centre of the universe of worlds we see swinging around us on a clear night; and a few have gone so far as to locate Heaven itself on this star. The fact that this star also seems to take a hand in tugging at the earth makes it look all the more ominous.

Attempts have been made to show that the builders of the Pyramid of Egypt had an eye to this conjunction, and that it was so placed, that at this particular time, Draconia or Massaroth passes the meridian of the entrance passage of this great Pyramid. We know that the Egyptians were great star-gazers, and that they knew the heavens like a book; but is it not striking a point to suppose that they had an idea of the grand event? It will not be believed by everybody.

This transit marks a quarter era on the celestial dial of the grand precessional year of our sidereal heavens, which is also indicated by Alcyone, the supposed centre.

It would take too much space to speculate upon the results of this remarkable grouping of the planets. Suffice it to say, that when they have in times long since past, reached similar positions, dire and wondrous have been the effects upon the earth.

During one of these conjunctions the continent Atlantis sank into the Atlantic Ocean. At others, many provinces, islands, etc., have suddenly either disappeared beneath the waves or shot up into being, from the briny deep. Volcanoes and geyser become active, and indeed the entire universe seems out of gear. These facts will make the approach of June 19th, 1881 be watched with interest, and every unusual event in the interim will be attributed unto it.

The New York Herald, which has attested so much celebrity for the accuracy of its weather forecasts, commenting on these facts, says:— "The present celestial activity should be closely watched and compared with

the phenomenal weather now transpiring on our own atmosphere. The new year, if we may judge from present indications, promises to be one of marked meteorological phenomena, which should be diligently investigated from every point of view, stellar and terrestrial."

PAPER MAKING

Paper making in Canada is yet in its infancy. There are twenty-six mills in the Dominion. None of them, however, manufacture writing paper, and only three of them make medium printing papers, the balance being occupied with wrapping and ordinary printing qualities. The Province of Nova Scotia has one mill which is lying idle for want of enterprise. New Brunswick has one mill making wrapping papers. Quebec has seven mills, one of which makes medium printing and flat papers. Ontario has seventeen mills, two of which make the medium printing. There is a splendid opening in the Dominion for English or American manufacturers of writing and other paper of fine quality. The City of Toronto could keep a paper mill of very large capacity running on number three printing quality alone for newspapers. The River Humber could furnish a good site and water for such an enterprise. The Provinces of Nova Scotia and New Brunswick would each keep a mill of two tons per day capacity going, making news and job papers. The young Province of Manitoba is to have a paper mill erected some distance from Winnipeg this summer. The City of London is to have a one hundred thousand dollar mill erected this season on the River Thames. Why cannot Toronto capitalists follow suit near the city on the banks of a suitable river like the Humber? The envelope industry is on the increase in this city. An enterprising firm commenced making about three years ago. Lately another company has started, and very shortly another firm will be turning out envelopes by the million. The ordinary white and Manila papers are obtained from the Ontario and Quebec papers makers, but the better qualities have to be imported from England and the United States. How long this state of things is to exist is for the Canadian capitalists to decide. Money is cheap, and the demand for better qualities of papers is extensive enough to induce others to make paper outside a few self-styled mill-millners who have become rich by making common grades only. There is far more money to be made out of the manufacture of fine than common papers. About five tons of bookbinders' cord are consumed daily in the Dominion, outside of straw board. At present this article has to be imported from Scotland and the United States. The freight and duty would in themselves be a large profit, and Toronto would be a good centre in which to manufacture. Cannot some moiled men be induced to embark in an enterprise which would prove a paying one.—Toronto Evening Telegram.

TUNNELING THE ENGLISH CHANNEL.

Progress has been reported in the work of constructing a railway tunnel under the Straits of Dover between England and France. The operations so far have been conducted with satisfactory results, and the managers of the enterprise are hopeful of final success, although it is altogether too early to speak with any confidence, as the point where the real difficulties of the undertaking may be looked for have not yet been reached. The feasibility of tunneling under the English Channel between Dover and Calais was asserted many years ago by engineers of experience. The ground of their belief was the identity of the geological formation of the opposing shores, and other evidence of a continuity of the geological formation common to both sides. Soundings made at very short intervals along the line between the opposing headlands confirmed this theory. The chalk bluffs on both sides of the channel rest upon blue clay, and the lower part of the chalk formation, to a great thickness, is of a clayey character sufficiently impervious to water to permit boring. The soundings showed this formation to extend across from shore to shore, descending gradually to a depth of 180 feet below high water in mid-channel, and rising at the same gradient to the other side. In 1872 a company was organized to make a tunnel that would permit railway transit under twenty-one miles of water between the two countries at their nearest approach to each other. Preliminary surveys were made and the results presented to the governments of France and England with appeals for countenance and aid. A joint commission was appointed to investigate on behalf of the governments. Concessions were subsequently obtained from both countries, with assurances that if private enterprise should succeed in demonstrating the practicability of the undertaking, material aid would be furnished. With this encouragement the work was begun. Trial shafts were sunk on both shores to determine the character and thickness of the chalk formation intended to be pierced. It was determined to follow the line of two hundred feet below the bed of the channel at the lowest point of the line. These preliminaries occupied several years. When all preparations had been made, the work upon the tunnel was commenced. The plan proposed is to follow by a descending tunnel the eastern dip of the gray chalk towards Dover, until the depth of

two hundred feet below the sea level is reached, and then to push straight across the channel with a horizontal passage, way until the opposite shore is reached. The tunnel will then sweep around and ascend to the surface by an incline, following the dip of chalk formation on the English side. The grey chalk is of this method entered and followed to a natural position throughout, from day light on one side of the channel to day light on the other. It is proposed to carry a circular bore, seven feet in diameter, from side to side, and when this has been accomplished the two governments agree to subsidize the work. It may be enlarged to the dimensions required for practical operations. Tunneling is done by a boring machine at the rate of half an inch a minute. The horizontal bore has reached but a short distance beyond the low water tidal level on the English side, and it is not yet known whether difficulties may be expected from jets of water forcing their way through fissures. The problem which the first boring is intended to solve is the possible—and feared—existence of a break or fault in the chalk about midway of the channel, causing a deep fissure. Should this exist all hope of a tunnel communication would be at an end. With the boring continued on steadily at the present maximum rate of sixty feet a day, it will be considerable time before the ten and a half miles to mid-channel are bored through and the existence or non-existence of the dreaded central fissure demonstrated.

SCIENTIFIC NOTES.

Old and faded daguerotypes will often become as bright as new if placed in a very weak solution of cyanide of potassium.

Nature raises water for refueling the earth from 13,000 to 14,000 feet in some portions of South America, and even 16,000 feet for the highest inhabited regions of Tibet.

Oil of sheep's feet is said to be much superior to horse-foot oil and neat's-foot oil, with which it is generally confounded in commerce. When pure it is of a very pale yellow colour.

When cotton waste or shavings are saturated with oil, a large surface is exposed to the action of the air, and if the oil has the property of absorbing oxygen, it may absorb the gas so rapidly as to take fire. This is the way in which spontaneous combustion takes place. As petroleum naphtha does not absorb oxygen, it never takes fire by spontaneous combustion.

A contemporary says that one of the most effectual recipes for cleaning sponges, and certainly one of the cheapest, is a strong solution of salt and water, in which they should soak for a few hours, and then be thoroughly dried. Sponges should not be left in a sponge dish; they should be kept suspended where the air can freely circulate around them. Quick evaporation of the moisture is the main thing to keep them in good order.

At the instance of the Secretary of State for the Colonies of Great Britain, Professor E. Ray, Lancaster, has prepared a report on the artificial growth of sponges, which shows that they could be grown in localities where none now exist. Experiments in the Adriatic Sea were made by sinking small bits of sponge in suitable localities, and in the course of seven years these fragments of a single sponge had each grown into a sponge itself, large enough to be saleable.

Beaumont recommends the following as a cheap indelible ink:—Twenty parts of potash are dissolved in boiling water, ten parts of fine-cut leather chips and five parts of flowers of sulphur are added, and the whole heated in an iron kettle until it is evaporated to dryness. Then the heat is continued until the mass becomes soft, care being taken that it does not ignite. The pot is now removed from the fire and allowed to cool, water is added, the solution strained and preserved in bottles. This ink flows easily from the pen.

The Chinese have at length discovered the social advantages of the telegraph and a contract has been signed between the Chinese Government on the one hand, and the Great Northern Telegraph Company, of Copenhagen, for the establishment of a telegraph line between Shanghai and Tientsin, the harbour for Peking, a length of about 1,000 miles. There will be nine or ten telegraph stations on the line, and a school will be opened for instructing Chinese youths in the art of telegraphing. The Danes are skillful telegraphists, and have the advantage of being apt at languages, so that the undertaking promises to be successful.

An important trial of armour plates of the kind proposed for the new British vessels *Conqueror* and *Majestic* took place recently at Portsmouth. The plates were made on the Ellis system. Around an iron armour plate backing is placed a two inch plate of iron of the same size as the iron plate. The three pieces having been bound together are brought to a welding heat, and the space between the two plates filled with cast steel. When the whole is cooled it is reheated and rolled down to the desired thickness. Three rounds from a 25 pound Palliser gun, loaded with 50 pound charges and fired at a distance of 30 feet, made perforations of only 5 inches, 4.9 inches and 5.6 inches respectively in one of these composite plates, 8 feet long, 5 feet 9 inches wide and 10 inches thick.



MISCELLANEOUS.

THE DEATH RETURNS.

The current number of the Canada Journal contains a table showing the number of deaths registered at the administrative places in Ontario for the last three months of the present year.

Table with columns for Place, Registered Deaths, and Total Deaths. Includes entries for Toronto, Hamilton, Brantford, etc.

Causes of death are enumerated as follows:—Diphtheria, 30; dysentery, 5; scarlet fever, 19; typhoid fever, 19; scarlet fever, 19; other fevers, 17; consumption, 17; cholera, 5; pneumonia, 28; other lung diseases, 74; old age, 59; total 187. Commenting on the returns the Journal of Health makes the following analytical remarks:—"The above table shows that the registered death rate for the 21 large cities and towns in Ontario, with an aggregate population of 28,689, for the first quarter of the present year was only 13 per 1,000 living, per annum. This doubtless is lower than the real death rate, and some of the places require the presence of the Inspector. Brantford and St. Catharines give the fullest returns and show the highest mortality, namely, 20 per 1,000 living, per annum. In Brantford, 15 of the 62 deaths registered in that quarter were from scarlet fever. With a system of registration of contagious diseases and proper isolation, this would not occur. When will this come into operation in Canada? There were 26 deaths from this disease in the 21 places. In St. Catharines 16 of the 41 deaths registered, about one-third, were from consumption, sufficient to demand enquiry. This certain and constant destroyer of many lives caused 10 deaths in a total of 936 (in the 21 towns), or 1 in about every six and a half. In Toronto one death in every 11 was from this disease; in Hamilton, one in 8; in London, one in 7, in Brantford, one in less than 3. There were in all 4 deaths from inflammation of the lungs, 16 of which were in Toronto, with a population considerably over one-fourth of the whole of the 21 places. From other lung diseases there were 74 deaths, 24 of which were in Toronto. From brain disease 31 deaths, 14 of which were in Toronto. From heart disease 57 deaths, with 18 of them in Toronto. From diphtheria 30 deaths, with 12 of them in Toronto. That city, therefore, shows a proportionately high mortality from these last five named diseases—lung disease, heart and brain disease, and diphtheria. Thus, while in the whole of the 21 towns there was one death from lung disease in every 2,500 of the population in Toronto there was one death in every 1,900 of the population. In Brantford and Belleville, however, the mortality from these diseases was much higher than in Toronto; or about one in 1,100 of population. From brain disease there was one death in about 9,000 of population, in all the towns collectively; while in Toronto there was one in 5,500. In two of the other towns the proportion was quite as great as in that city. Only 19 deaths in all were from typhoid fever, and only 4 of these were in Toronto; while there were no deaths in Toronto from scarlet fever." It is highly desirable that the Provincial Registration Act should be carried out, and that by inflicting the penalties imposed upon those interested should have impressed upon them the necessity of a prompt compliance with the letter of the law.—Editor.

OFFICIAL ANNOUNCEMENTS.

[From the Canada Gazette.] His Excellency the Governor General has been pleased to make the following appointments, viz.:— OTTAWA, 3rd May, 1881. John Alexander Boyd, of the City of Toronto, in the Province of Ontario, one of Her Majesty's Counsel learned in the law, to be Chancellor of the Province of Ontario, vice the Hon John Godfrey Sprague, promoted to be Chief Justice of Ontario. 5th May, 1881 His Honour James B. Sinclair, Judge of the County Court of the County of Wentworth, and His Honour John J. Ringwall, Judge of the County Court of the County of Bruce, to be respectively Surrogate Judges of the Maritime Court of Ontario, pursuant to the Maritime Jurisdiction Act, 1877.

ACTIVE MILITIA.

Regulations for the Annual Drill of 1881-82, Dominion of Canada. 1. In order that the expenditure for drill and training of the Active Militia of Canada for the fiscal year of 1881-82, may be kept within the appropriation made by Parliament, the strength of corps to be drilled and paid for that year has been limited, under, viz:— Corps of Infantry and Garrison Artillery (excepting the Battery at Victoria, B.C.) are not to exceed 45 non-commissioned officers and men, including staff sergeants and buglers. Field Batteries—1 Captain, 2 1st Lieutenants, 1 Surgeon, 1 Veterinary Surgeon, 1 Sergeant-Major, 1 Quartermaster Sergeant, 4 Sergeants, 1 Corporal, 4 Bombardiers, 1 Trumpeter, 1 Farrier, 50 gunners and drivers and 20 horses, including the officers' and non-commissioned officers' horses. CITY CORPS 2. All city corps (excepting field batteries of artillery, and such companies as belong to rural battalions of infantry) may be permitted to perform twelve days of annual drill at their local headquarters at such times, prior to 1st December, 1881, as may be most convenient. The No. 2 Field Battery of the 1st Provisional Brigade (Ontario) and the Halifax Field Battery may be permitted to drill at their local headquarters as city corps. The officers of city corps shall be paid at the rate of \$1; the non-commissioned officers and men, 50c.; and for horses of mounted officers or of corps, 75c. each, for each day a drill consisting of three hours. Any city company which forms part of a rural battalion, can only be permitted to drill for pay, in case it is selected for, and performs such drill in camp with the battalion to which it belongs. RURAL CORPS. 3. The maximum number of officers, non-commissioned officers and men of rural corps, including city field batteries (other than the two specially exempted), to receive pay for drill in each district, will be—

Table with columns: Military District Number, Amount. Lists districts 1 through 12 with corresponding amounts.

Selections to be made from rural corps of the different arms in each district, in proportion as their strength bears towards each other. Those not drawn for drill last year to be first taken.

The corps in each of the districts, numbered 1, 2, 3, 4, 5, 6, 7, 8 and 9, representing the above totals (excluding isolated companies of infantry and engineers and garrison batteries of artillery), are to be concentrated for twelve days drill in a camp of exercise, including the day going to and the day returning from camp.

STATEMENT of the revenue and expenditure on account of the consolidated fund of the Dominion of Canada, as by returns furnished to the Finance Department to the night of the 30th April last:—

Table with columns: Revenue—Amount, Expenditure—Amount. Lists various revenue and expenditure items with amounts.

J. M. COURTNEY, Deputy Minister of Finance. Finance Department, Ottawa, 2nd May, 1881.

THE QUEEN AND LORD BEACONSFIELD.

The most touching incident connected with the death and burial of the late Lord Beaconsfield was the arrival at Hughenden of a wreath of flowers to be placed on the coffin. There were wreaths innumerable, each of which testified to the esteem in which the deceased statesman was held. Working-men and working women in all parts of the country had clubbed together to provide a parting benison of flowers. Clubs, political and social, have sent their floral offerings. Princes and peasants, corporations and individuals, men of the same political principles and men alien from him in politics and religion, sent wreaths with appropriate inscriptions. The Prince of Wales laid on the coffin his garland, on which had been inscribed "A tribute of friendship and affection." Another member of the Royal family sent "A mark of respect from Her Majesty." A third carried with him "A mark of respect from Leopold." But the most touching offering of all that mass of flowers, described as towering high above the bier, came from Her Majesty the Queen. The garland

of our sovereign lady was of primroses, flowers that, at this time of year, are cheap and abundant as air. In the lowest slums of this great city primroses are so plentiful that the poorest are able to purchase a bouquet. A sackful may be had for a few shillings. Why, then, did the Queen select so common a flower to form the material of the last mark of respect she could ever pay to her departed minister? The inscription by her own hand explains the reason. "His favourite flowers a tribute of affection from Queen Victoria, are the words used. Could any other be so pathetic?"—London Globe.

GETTING MARRIED.

(New York Times) There seem to be two sorts of girls—those that ought, because specially fit, to be married, and those that never should and never will be, and yet invariably get married. The former are usually the demure, industrious, unworldly, domestic, the latter are the easy, careless, merry, impudent, frolicsome, saucy girls, of whom men become enamoured for no reason at all, and in spite of themselves. When a man falls in love and can't crawl out readily, he avails himself of marriage, and is often extricated thereby without intending it. He is no more logical in matrimony than in celibacy; the same thing that makes him a lover turns him to a husband, and he is thenceforward if he does not discover a sharp and sudden difference between the two. It is passion, not reason, and it is called the divine passion because it is so thoroughly human.

Men generally like one kind of women and love another kind. The one kind they are anxiously recommended to wed, and don't; the other kind they are advised not to wed, and do. Which is the better—to take a wife because you like her, or to take a wife because you love her. Hymen alone knows and he won't tell. If you do either, or neither, you may repent. There is no absolute safety in wedlock or out of it. No man's experience is good for another man, and our own experience in erotic affairs is rarely valuable; for every time a man falls in love—and he has got already in this way—the accident varies, though the effect is unaltered. No man can say what sort of a woman will be his wife; and if he be wise he won't express any opinion on the subject. He may cherish many views or have many beliefs thereupon, but the more of these he has the less likely are they to be confirmed. He who insists in his bachelor days that his wife shall be a beauty is apt to find her plain. He who cannot endure women without intellect surrenders to one not suspected of it. The devotee of order discovers himself mated with the embodiment of confusion. The stickler for elegance sees, when the glamour or courtship has been removed, that he is joined to a dowdy.

Marriage goes, to a certain extent, by contrast, if not contraries. A woman, still less than a man, gets the husband she paints to her fancy. Her conjugal ideas are commonly regulated by her age and experience. The man she desires at 16 or 17 would be a burden at 20, and her ideal at 20 might prove a bore at 25. She begins with sentimentalism and ends with soberness; vanity impels her first, but sympathy holds her last. She is frequently surprised at the offers she receives, and still more surprised at the offers she does not receive. The love that comes at first sight rarely remains, it is apt to be born of the eye, not of the temperament. The love that grows generally endures and produces fruit. Love and marriage are not related as we think they should be. Love matches often turn out ill, and matches without love turn out well. No one can tell what love is, nor can anyone guess what marriage will bring. We are all, when young, full of thoughts and theories about both, and individual experience is ever contradicting what we have learned. Marriage is as impetrable as love. Few of us are prepared for their disclosures. We may love and marry again and again; but our ideal of love and marriage is almost always wholly unlike the thing itself.

THE PHYSIQUE OF BRITISH SOLDIERS.

The decrease which has been talked about the degeneration in physique of recruits caused by short service may be considered as disposed of by the report of the Inspector-General on recruiting. It is to be observed, in the first place, that whereas long service before its abolition had failed to supply the 11,000 men required annually for the army, short service gives all that are wanted, namely, from 25,000 to 26,000 annually, and offers a great many more than are taken. The physical average of the recruits is regularly and steadily improving year by year. In 1871 the proportion of soldiers in the army under twenty years of age was 190 per 1,000. In 1880 it was only 100 per 1,000, or little more than half what it was before short service was introduced. The proportion of narrow-chested men—that is under thirty-five inches—has fallen by nearly one-half since 1874. Here are facts which, if not presumed, will not be disputed; and it may be hoped that in the face of them the senseless cry that the army is degenerating will not cease, it will at least be discredited by all sensible men.—Pall Mall Gazette.

CALLING.

The Montreal Star, in its Saturday edition, has some "Inquiry columns" which are more or less instructive, and sometimes amusing. One column is called "The Kiquette Department," where people who are at a loss, look for information on conduct and behaviour. The following is a specimen of the sort of questions that may be found in that paper. It is sensibly answered:—

Ottawa asks—Whether ladies whose husbands fill high official stations in the Government are thereby excused from the observance of the customs of ordinary society, in the matter of returning visits. This lack of ordinary courtesy, as I have been taught to regard it, is not universal. Nevertheless, it seems to be thought by some, who ought to be well instructed on such matter, that social slight may be indulged in with impunity and that morning calls, even when twice repeated, need not be returned. Answer.—Much allowance should be made for ladies whose visiting books, if properly journalized, would probably contain hundreds of names, making the duty of exchanging card for card or visit for visit a physical impossibility. This however is not the question put by Ottawa. There can be no doubt that a lady's or a gentleman's visit ought to be recognized. It does not follow that the recognition need be repeated where no civilities are interchanged, but that it should be made there in no manner of doubt. Many excuses may be made for women whose social duties, consequent on their husband's official positions, are varied and exacting. They have not the time to gratify their own wishes in this respect, and can only afford to keep up a regular calling acquaintance with those whom they may desire to know or those of whose hospitality they have been gratified to partake. The practice of continually exchanging cards is troublesome and ought not to be looked for. The advantage of exchanging one visit at least to people who occasionally meet at social gatherings is that a way is made for exchanging a few words of conversation when, in the absence of such recognition of a call, the person slighted is obliged either to take refuge in silence, or to accept notice from one who has failed to be courteous. Nor should people in official position forget that excuses are transparently that are easily seen through. It may as well be borne in mind that their Excellencies the Governor General and his wife are the only persons to whom exceptions may be, and are properly claimed.

HOW KENTUCKY HORSES ARE TRAINED.

One after another beautiful saddle horses were ridden out over the track, moving along at a gentle, easy gait, flying at a rapid canter, racking, or breaking into a trot, as the rider willed. All these horses, I believe, were thoroughly bred, and their prices ranged from \$300 to \$1,000. No well worn they gaited and trained that the rider had but to touch the mane in given place or make a certain signal to have them take a rack, canter, trot, run, or lope. Any one can learn to manage these gait in a very short time, as I found from experience. But the method by which these horses are so perfectly trained I could not learn. Either the trainers do not know exactly how to impart the information, or they are determined to keep it to themselves. Some answered my questions by saying: "It is easy enough. You can make a horse do anything you want to. Only let him know what you want him to do. You had better wear spurs when riding, give him his head freely, and if he takes one gait when you spur him on the right side, just spur him again there when you want the same gait." Here, a horse passed on a rack, and as the rider touched him with the tip of his finger on the head, he struck out on a square trot. "Now," said I, "how was that horse trained so as to strike a trot by that signal?" "Why," answered the Kentuckian, "our saddle horses all learn that from the time they are colts." I asked Mr. Lindonberger, "What is the secret of the superiority of Kentucky horses?" "There is a combination of causes," he answered. "The great majority of the horses here have some good blood in them, and you will find it crossed somewhere back in their pedigree. The best strains of running and trotting blood have been taken from here to other states, and they there fail to produce the desired results. There is something in the blue grass, the water, the atmosphere, and the general climatic influence, and then, as Mr. Tracey told you this morning, there is everything in judicious breeding and training. We force our horses to a gait when they are 1 year old, and at 3 years old they are pretty well developed. The northern men, however, always improve them." "How long have Kentucky horses held their high place?" I queried. "No one hereabout can tell. I know men who have lived here 85 years, and they state that from their earliest childhood they have heard of the superiority of our horses. Their fathers before them had the same story to tell. The fact is, that somewhere in the past there was brought into this state a pure strain of thorough blood, derived from best stock of the mother world, and it has transmitted its qualities from sire to son to the present time. It is a lamentable fact that we have not the exact data upon which to base a history of the Kentucky horse." The fastest horses in the world have been bred and trained in this neighborhood. Maud S, record 2:10; Wedgewood, 2:19; Woodford Membrino, 2:24; Trinet, 2:19; Dick Moore, 2:22; John Morgan, 2:24; Indianapolis, 2:21; Voltaire, 2:21, are but a few of the racers that have been sent out of Kentucky, while the number of fine carriage

saddles and trotting horses that have been sold here and are now scattered throughout our large cities could no more be calculated than one could count the trees of the forest.

CHEATING AT CARDS.

The following has been gleaned from an article on the above subject, published a few days ago in the New York Sun in all large cities, but more particularly New York and Chicago, there exist establishments for the manufacture of gambling implements. Although the law condemns these implements when men are caught in the act of using them, there is no law against their manufacture and sale. When the police break up a gambling den they take away all the tools, but within 24 hours everything can be replaced, and the game goes on as before. It is acknowledged that the game in which there is most cheating is "draw poker," a game which is played everywhere. There are many ways of cheating at poker. One is by marked cards. One way of marking cards is on the back at the time of their manufacture, and there are as many styles adopted as there are different colours. To an ordinary observer the backs are of an intricate and symmetrical pattern, but the marks can easily be detected by experts. It only requires seven or ten marks to a pack. Four marks will expose the four suits and thirteen marks will expose the cards in each suit. Although the marks are so plain that they can be read as far as one can see a card, they are so covered up in the scroll work and patterns that they cannot be noticed unless pointed out. Sometimes the marks are in the folds of a flag; sometimes in the turn of an ornamental scroll. All the high cards are denoted by the different positions of a little scoup. The low cards are marked with various positions of a little device that looks like the butt of a pistol. These cards are sold at about \$1.50 a pack. Anyone thoroughly acquainted with this trickery can tell every man's hand as it is dealt before he knows it himself. If he gets a low hand he can be bluff of his stake at the start. If he gets a high hand you know when to keep out; but in the event of some one furnishing cards that are not marked, there are several other expedients resorted to, amongst which is a little tool called pokering. It is apparently an ordinary diamond ring, but it is provided with a sharp steel point, by which means every good card is marked with a little hole in the corner. There are various other little instruments employed; for instance, the spy, a little mirror which is fastened to the knee. It is convex and catches the reflection of the cards at various angles. Another complicated machine is the vest-holder. The plan of it is to rig a contrivance inside the vest that will take in a number of cards according to the desire of the operator and convey them out of sight. Then, when a card is wanted out of this receptacle, the string which is attached to the machine is tightly drawn, and the holder carries to the hand the cards required. Some gamblers have a dexterous and skillful way of concealing cards down the back of the neck; others dispose of surplus cards by throwing them to a distant part of the room. Cheating is also extensively carried out with roulettes, or wheels of fortune, loaded dice, and in the game of whist.

The Hamilton employers have given no answer as yet to the piece working shoemakers, who threaten to strike if their demand of 15 per cent. advance is not granted by Monday.

Much surprise and regret was expressed at Kingston last week on intelligence being received of the sudden death, in New York, of Col. G. W. Flower, of Watertown. He was in Kingston two weeks ago in good health. Deceased was vice-president of the Kingston and Pembroke Railway, and in tribute to his memory the engines and cars have been draped in mourning.

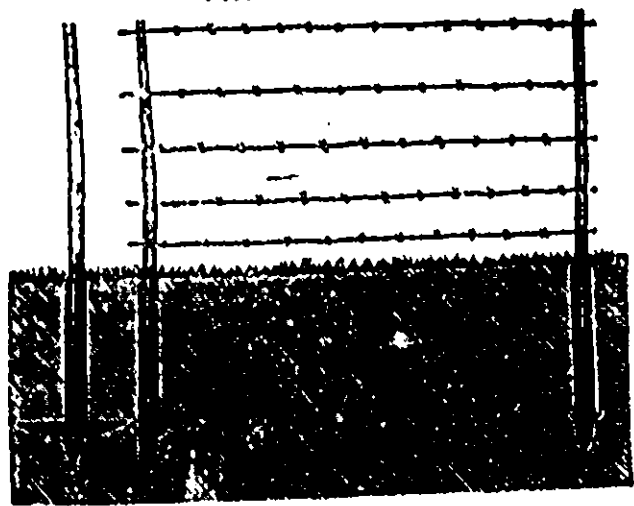
The Queen sent to Lord Beaconsfield during his last illness every kind of delicacy that might tempt an invalid to eat, were it but the least morsel. Many other ladies did the same, and the last solid food eaten with difficulty by the ex-premier was part of a chicken cutlet which had been prepared by careful hands. When nourishment of this kind could be no longer swallowed, egg beaten up in brandy was given; but after one or two trials this was also given up. At the earlier period of his illness Lord Beaconsfield desired to drink a little port, and spoke of some rare old wine he had drunk at Sir Philip Ross's. With all haste it was fetched, but when it came the desire had passed away.

Sir Alexander Gordon having said in Parliament that since the Aberdeenshire militia exchanged their trousers for kilts the regiment could scarcely get a recruit. Col. Gordon Alexander writes: "I can vouch that from the first day the regiment appeared on parade in the kilt, in 1876, the recruiting annually improved in such an extraordinary manner that I left the regiment some 160 men over its establishment in November, 1879, while I had found it about 450 men under in October, 1875, when they wore trousers. Last year the establishment was raised from 800 to 1,000 men, and it is now proposed to proceed with the recruiting for a second battalion. During the whole former history of the corps while the men wore trousers, it had never reached the regulation establishment of the day."

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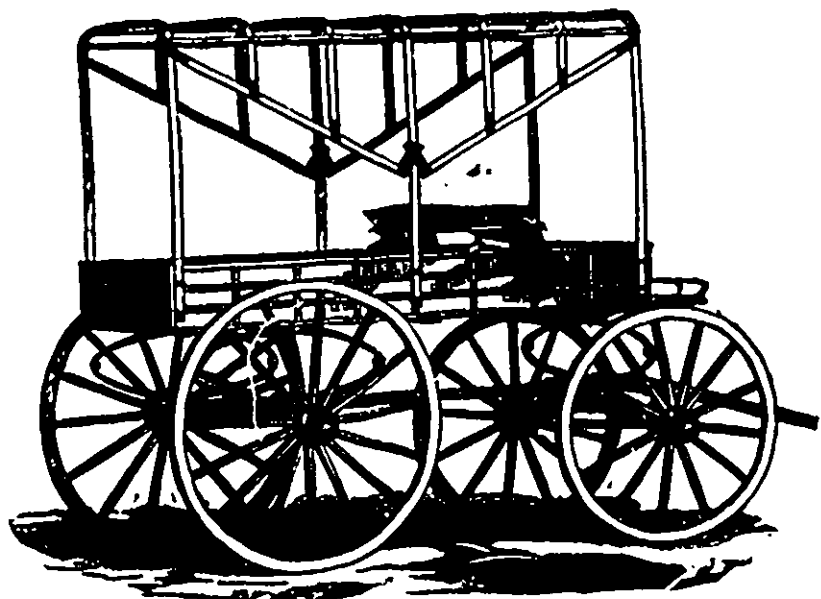
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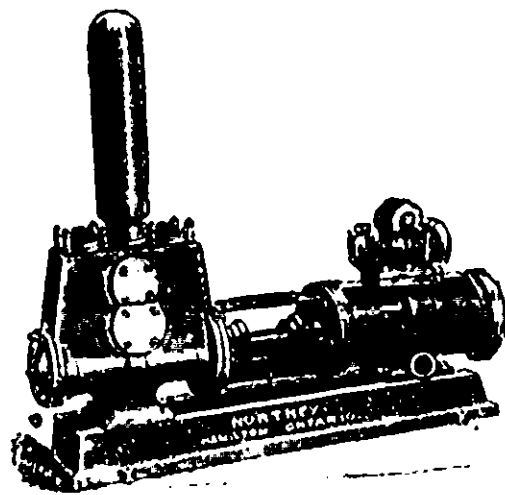
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