

# INDUSTRIAL WORLD

## AND NATIONAL ECONOMIST.

DEVOTED TO HOME INDUSTRIES, SCIENCE, COMMERCE, FINANCE, INSURANCE, RAILROADS AND MINING.

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### THE INDUSTRIAL WORLD

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FREDERIC NICHOLLS, GENERAL MANAGER,  
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FREDERIC NICHOLLS.

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### THE ANGLO-FRENCH TREATY QUESTION—FEELING IN ENGLAND.

The excitement in commercial and manufacturing circles in England over the new French General Tariff and over the negotiations for a new treaty between England and France continues. In fact the whole country is more or less agitated on the subject. In the House of Commons a couple of weeks ago Mr. Moxey, M.P. for Gloucester, moved: "That this House views with regret the reactionary character of the new French General Tariff, and is of opinion that no commercial treaty between Great Britain and France will be satisfactory which does not tend to the development of commercial relations between the two countries by a further reduction of duties." After discussion the motion was carried by a vote of 77 to 49. Commenting on the resolution the *Times* says: "It represents the view entertained and supported by the Government in the negotiations for a new treaty now proceeding, and its terms were fully justified in principle by the recent despatches of Lord Granville, as well as the language used by Sir Charles Dikx in the course of the debate. It is becoming daily more and more clear that it is better to have no commercial treaty with France at all than to have one which confers on English trade fewer advantages in the aggregate than it at present enjoys. The new French tariff points distinctly to the latter contingency, and the only object which negotiation can have must be to produce such modifications as will maintain, if not improve upon the status quo in the general result. If it should fail in this endeavour the Government has no alternative but to withdraw from the negotiations and resume its liberty of action." The *Morning Post* points out that "it took many years and great efforts to convince the English people that Free Trade was the only sound policy on which their industries could be carried on. But the experience of more than a generation has so riveted

that policy in the English mind that nothing but a clear necessity could induce us to depart from it. The question now is whether that necessity has arisen. The outlook is grave enough to occasion deep anxiety to those who are capable of comprehending it. The industries of the whole world are arrayed against us, and it must be clear to every man of common sense that we are every year becoming more and more unequal to the struggle in which we are engaged." The *St. James' Gazette* says: "The majority by which Mr. Moxey's motion was carried last evening gives evidence of the strong feeling excited throughout the country by the reactionist commercial policy of France. The discussion which preceded the division was moderate; and in this respect it hardly represented the sentiment of the constituencies accurately. Beyond a doubt, there is a strong desire for retaliation should France persist in its refusal of more liberal duties. On the other hand, feeling in France would seem also to be rising. The note in the *Dieu-Nouveau Siecle*, said to be semi-official, quoted by the Paris correspondent of the *Standard* this morning, is not reassuring—especially this extract:—'We cannot exactly estimate what importance is to be attached to the suggestion of the breaking-off of all commercial understanding between the two countries; but we can affirm that the English are on the wrong tack, and are wholly mistaken if they imagine that they can influence France and her representatives by menace and violence of language. We do not know what may be the intentions of the French Government, but we are convinced that, notwithstanding its very sincere desire to maintain the commercial entente cordiale which has lasted between England and France for twenty years, it will not sacrifice any interest of our national industry, and that M. TISSOT will remain faithful to his repeated declarations at the time the General Tariff Bill was under discussion, and maintain with very few exceptions the *status quo* in our international conventions.' Fortunately, Sir CHARLES DIKX'S speech last night gives ground for hope that the French Government is more conciliatory than this extract would lead one to expect. "The *Standard* says editorially on the vote on Mr. Moxey's resolution: "The decision correctly indicates the state of feeling on the subject in the country. What effect this declaration will have it is impossible certainly to say. Sir CHARLES DIKX is not likely to be ignorant of the currents of French sentiment on this matter, and his speech of last night, on the whole, favours the idea, that the prospects of a new commercial treaty between the two countries do not improve." The newspapers received on Monday contain reports of meetings of Boards of Trade and Chambers of Commerce in many cities and towns of the United Kingdom, at all of which the existence of great disappointment at the character of the new French Tariff was expressed. As a rule, the sentiments of the speakers were in favour of Free Trade, but the confession was freely made that the hope once entertained that other leading commercial nations of the world would follow England's example had not been realized, but, on the contrary, Protection was the popular policy of the time. While the advocates of Protection in England are not numerous, it is evident that a feeling is growing that sooner or later something must be done in the interest of the home producer. Free Trade is the right principle in theory; but Free Trade all on one side is not popular. And it is against this sort of thing that the British manufacturer is now protesting in tones the meaning of which cannot be misunderstood. The latest

news we have regarding the progress of the treaty negotiations comes from the special cable column of the *New York World*. Mr. JANINON, the London correspondent of that journal, telegraphs:— "Three weeks ago I cabled you that the negotiations on foot for a new commercial treaty between England and France had failed, the French Government declining to recede from the principle of specific duties. This news of no little importance to the British people is only seeing the light in the English papers. The Foreign Office people still pretend that there is a chance of success, but everybody knows that this is only the way officials here of letting themselves down easy. In the manufacturing districts the feeling in favour of retaliatory duties is making astonishing progress, and the movement has at length reached London. A crowded meeting of artisans was held here yesterday to protest against foreign countries and the action of their tariffs, and the speakers, of course, demanded countervailing duties. Letters were received from the Marquis of Salisbury, Mr. McArthur, M.P. (the Lord Mayor of London), Mr. Edward Clarke, M.P. (who will be the Attorney General in the next Tory Government), and other prominent men sympathizing, if not with retaliation, at least with the protest against foreign duties. Other journals regretfully admit that the battle of Free Trade has to be fought over again in England, and all concede that the retaliation movement is destined to become a powerful factor in British politics, if not to be the leading question of the day before very long. It is more than likely that the Government will be compelled to increase the duty on French wines. The present duty works unjustly against the English distillers, and the imposition of a heavier duty would be both retaliation against the foreigner and fair play to a home industry that has suffered grievously for some years past."

This Trade question is the all-important one in England at the present time. If the negotiations for a new treaty with France fail, the situation will become serious.

#### A WARNING.

While some Canadian newspapers are engaged in the anything but patriotic work of making little of their country and pulling up the United States, it is just as well that such representations as that contained in a letter of "A Canadian" in the *Pembroke Observer* should receive publicity. He says:—"I do not write from hearsay, but from personal experience, and I feel it my duty as a Canadian to expose those frauds whereby our country is being robbed of its bones and sinew. There are agents along the lines of different railroads in Canada hiring men to work on the extension of the Michigan Central going north from Gaylord to Cheboygan. Their victims start with glowing prospects, arriving at their destination to meet with disappointment. Their wages as stated to them are from \$1.75 to \$2 per day, with board at \$3.50 per week. On their arrival the programme is changed, wages from \$1.25 to \$1.50, board \$1, and I have seen better feed thrown to dogs in Canada. Nor is this all. They are jammed into miserable hovels to sleep, which are alive with vermin, and mere dens of disease, many having to sleep in the open air with but one small blanket, with goats, black flies, and the pleasant buzz of the mosquito to lull them to sleep, and an occasional bite of another sort of insect as a desert, arising discouraged, disheartened and disappointed, a stranger in a strange land without money or friends. Many start and tramp it home; others work till they get enough to carry them away, and many have to leave without their pay. The country here is full of this class of people. At Bay City and Saginaw the lumbermen go through their racks and pick out such as suit them at their own wages. But there is still another class of men who are selling their farms and coming here to get cheap land. The cheap land here, so far as I have seen, would be dear as a gilt. This is in the northern part of the State. I have travelled over two hundred miles in this section, and

failed to see a self-sustaining farm so far. If it was not for the lumber trade they would starve. In the southern part of the State the good farming lands, but they are too dear for settlers to purchase. The land from Bay City to Gaylord consists of pine and hemlock ridges, interspersed with cedar, tamarac, elm, ash, and some maple and beech. There is not enough good land together to make a settlement, so when the timber is gone the land is worthless. From Gaylord north to Mackinac it is chiefly hard wood on a coarse gravelly sand soil, with a white sand sub-soil for a depth of one hundred and fifty feet. The winter season lasts from the middle of October to the middle of May, with frosts every month of the year. Last week it froze one-quarter of an inch thick. One requires a fire every night for comfort. I advise any that have any intention of coming here not to be carried away by glowing circulars and advertising dodges, but come and see for yourself. But do not forget to bring enough of the needful to carry you back, or you also may become a victim." It is too much to expect that the Opposition journals which are encouraging emigration will publish such statements as the foregoing. They prefer to circulate the attacks of those who while pretending to be loyal Canadians are in some instances the hired agents of American newspapers, and who for such pay as they can obtain are ready any day in the week to abuse their country and her institutions, and to do any amount of dirty work that may be required of them by their foreign employers.

#### MANUFACTURING PROGRESS.

One of the objects aimed at by the National Policy was the encouragement of manufacturing industries in Canada. The success that has already attended the patriotic efforts of the Government in that direction has proved highly gratifying; and present prospects point to still greater things in the future. We seldom take up a paper that does not contain some information regarding the starting of new industries. True Free Trade journals in their editorial columns sometimes declare that the National Policy has been a failure; but so unmistakable is the evidence to the contrary that if they were to allege that the waters of the St. Lawrence do not flow in the direction of the sea they would not take a position more diametrically opposed to the facts of the case than they do in their feeble attempt to make their readers believe that Canada has not derived material benefit from the operations of the present tariff. It often happens, however, that while for party purposes they publish articles pronouncing the National Policy a failure, their telegraphic and local columns contradict their representations. But the people can see for themselves; they can read and reflect for themselves, and no amount of writing on the principle of telling the people that the darkness of midnight prevails while the sun is shining, will convince them that the new fiscal policy is not producing the beneficial effects predicted by its promoters. Nobody ever suspected that the National Policy would make every man in the country rich; for the simple reason that to have entertained such an idea would have been superlative folly. But the advocates of the National Policy prophesied that among other things it would cause a revival in manufacturing circles and, consequently, would improve the condition of the mechanic and those employed in industrial establishments. The prophecy has been fulfilled. Never in the history of Canada was there so large a number of men earning good wages as to-day. And

not only is such the fact, but from different quarters comes the intelligence that not a few manufacturing establishments are handicapped in consequence of the scarcity of skilled labour; while as regards the class generally known as workmen, we have it on the authority of the *Toronto Globe* that the services of men cannot be secured at temptingly high wages, a state of affairs which has necessitated the sending to England for men to work on the Pacific Railway. From time to time we have published extracts from our contemporaries pointing out the activity which prevails all over the country. The following paragraph from the *Napanee Standard* tells the story of how the N. P. is working there:—

"Napanee manufacturers are at flood tide. Everything is humming; Hubbard & Son intend to go into the wholesale manufacture of furniture, but they can't get for enough ahead of their retail trade to make it worth while sending out a traveller. They keep two delivery wagons, and these are sometimes run so hard that a livery team has to be impressed into service. They have largely increased their staff of workmen, yet their retail trade keeps pace. About a month ago they filled a large order for a gentleman in Harrie who, after having looked through the factories in Toronto and Bowmanville, made his selections in Napanee. On Friday last the same man gave another large order. The Herring Company's business has so out-grown their present premises, that though working night and day, unfiled orders accumulate on their office floor, and they have plans for the erection of an immense new building. Harrie's agricultural works are humming, and the whole staff is kept at racing speed. Tromer's blanket mills, as well as Perry's woolen mills, and Dewar & Co.'s flour mills, and the Gillespie mills are kept running night and day. The cement works are doing a rushing trade, while every other industry in the town is in full hum. Building operations are standing still for want of material and workmen, so great is the demand for both, and the town never felt so much vitality throbbing through its business veins as at the present time. The Free Traders may deny that a protective tariff is of any benefit, but they say put the fact in their pipes and smoke it that we have the National Policy national prosperity, so coincidental and evidently interdependent that only the most despairing out-of-office politician is mad enough to ignore the palpable existence of the direct cause and effect."

Such paragraphs as the foregoing, and many such have appeared lately, and the best answers to those who say that the National Policy has been a failure.

#### THE FIGHT AT ALBANY.

It appears now as if the New York State Legislature may adjourn without having been able to elect two Senators to fill the present vacancies. In that case the battle will be fought out at the State elections the coming Fall; and perhaps it is just as well that it should be. The issue raised is one of national importance, and it is fitting that it should be decided by the court of last resort—the vote of the people themselves. It is to be regretted that the Canadian press, so far, has for the most part taken very one-sided and insufficient views of this matter, which now so much agitates our Republican neighbours. Scarcely is there a Canadian journal to be named that does not condemn CONFORT as being wholly in the wrong, while President GARFIELD has become the ideal of a great and good man, courageously doing his best to crush out an evil system. Now, that this is really the right view is by no means so clear as the large majority of our contemporaries would have the Canadian public believe. The supposition is that GARFIELD is fighting the battle of civil service reform, to begin with. He desires to establish a system under which appointments and promotions shall go by individual merit, and shall not be the rewards merely of political services. Further, he is in favour of doing away with the present custom of sweeping almost the whole body of civil servants out of doors when one party succeeds another in control of the Government, and would make the tenure



It will be presented to Grand Jury... The plan will contain a reference to... The Grand Master... The names of the architect... The plan and machinery... The factory is to be built at... The machinery... The factory is to be built at... The machinery... The factory is to be built at...

height of 100 feet. The machinery... The factory is to be built at... The machinery... The factory is to be built at... The machinery... The factory is to be built at... The machinery... The factory is to be built at...

NOTES FROM PHILADELPHIA... Philadelphia, Pa., 27th June. --To-day's transactions... The iron market at home and abroad... The machinery... The factory is to be built at... The machinery... The factory is to be built at...

On Tuesday (says the Calgary Guardian of June 5) at the Middleborough Royal Exchange... The Imperial Ironworks, South Bank, were put up to auction by Mr. Williams... The machinery... The factory is to be built at... The machinery... The factory is to be built at...

lands in the Province of Manitoba or the North-West Territories... The machinery... The factory is to be built at... The machinery... The factory is to be built at...

THE NEW BRUNSWICK FOUNDRY... How is business? asked the representative of Mr. Thompson... Well? replied Mr. Thompson... We have nearly ready... The machinery... The factory is to be built at... The machinery... The factory is to be built at...

If there be money in pork, Prince Edward Island should assuredly make it... The machinery... The factory is to be built at... The machinery... The factory is to be built at... The machinery... The factory is to be built at...

The western labour strikes are being reflected in the East in an increased demand for bar iron... The machinery... The factory is to be built at... The machinery... The factory is to be built at... The machinery... The factory is to be built at...

OTTAWA RIVER CANALS. Notice to Contractors. SEALED TENDERS addressed to the... The machinery... The factory is to be built at... The machinery... The factory is to be built at...

DEPARTMENT OF THE INTERIOR, OTTAWA, 25th May, 1881. WHEREAS circumstances have rendered it expedient to effect certain changes in the policy of the Government respecting the administration of Dominion Lands, Public Notice is hereby given:

11. In any case where a company or individual applies for lands to colonize... The machinery... The factory is to be built at... The machinery... The factory is to be built at...

Capital to the amount of \$132,000 has already been subscribed in Windsor for shares in the Windsor Cotton Co. (Limited)... The machinery... The factory is to be built at... The machinery... The factory is to be built at...

The number of template works in Great Britain is 96, with 372 mills... The machinery... The factory is to be built at... The machinery... The factory is to be built at...

There were 48 births, 7 marriages and 20 deaths at Toronto last week... The machinery... The factory is to be built at... The machinery... The factory is to be built at...

17. From time to time as may be deemed expedient, leases of such Townships or portions of Townships, as may be available for grazing purposes, shall be put up at auction at an open price to be fixed by the Minister of the Interior... The machinery... The factory is to be built at... The machinery... The factory is to be built at...

22. Payment for public lands and also for pre-emption may be in cash, or in scrip, or office or military bounty warrants, at the option of the purchaser... The machinery... The factory is to be built at... The machinery... The factory is to be built at...

SPRIT OF THE COMMERCIAL AND INDUSTRIAL PRESS.

BANK MEETINGS

(Monetary Times)

It appears from the last report of the Montreal Bank that its affairs are being still conducted in accordance with the cautious line of policy laid down three years ago. Much progress has been made, but it is recognized that perfection has not been reached and the operations of pruning and of laying by reserve have been steadily carried on.

The Ontario Bank's earnings have been less than those of last year, which in turn were slightly less than the year previous. The bank is still weighted with unproductive assets, and although overdue debts, unsecured, are not so great this year as last, those past due for which it holds security are not lessened.

The active and extending business of the Federal Bank has reached the point at which it has been deemed well to make a new issue of stock. Accordingly, a resolution giving power to the directors to increase the stock by half a million dollars was passed at the annual meeting on Tuesday last.

want of legal provision to compel an equitable division of the assets of insolvent debtors and prevent fraudulent preferences, and they consider that it should receive the attention of the Dominion Parliament. Not a few of the wholesale merchants will wish that the paralytic vision of the collective wisdom of our Ottawa legislators may be so clarified that they can see what aggravation and confusion are wrought by the present state of the law on this point.

The Bank of Hamilton out of earnings somewhat larger than the year before, has added \$20,000 to rest and reduced the rate of dividend to seven per cent. This prudent policy was adopted in view of the extending operations of the bank. It being considered that a greater margin should be retained than in former years. After a long connection with the bank as president, Mr. Donald McInnes has resigned that post, owing to a pressure of engagements outside the city. He continues upon the board of directors, however, at the solicitation of his colleagues. Mr. John Stuart was chosen president and Mr. James Turner vice-president.

THE VALUE OF HOME INDUSTRY

(Hamilton Spectator)

On Wednesday we requested the Times to answer a very simple question, viz.: whether if an article could be manufactured in Canada for a dollar, and a like article imported for a dollar, there was any advantage in having it made at home. The Times declines a direct answer, but enters into a short argument to show that there is no advantage in the home manufacture. The establishment of a new industry, it thinks, is but a diversion of labour from an old industry into another channel; and if the new industry requires protection that is evidence that it is less remunerative than the old, else it would not need protection. It sums up its argument by saying: "Canadians producing \$2.20 worth of wheat add more to the wealth of Canada than one Canadian producing \$1.10 worth of wheat and another Canadian producing \$1 worth of table, at a time when a table can be imported for \$1."

Then came the N. P., and now our young men have ceased to go abroad because new industries keep them at home. We affirmed that the whole of the difference between the cost of our sugar in 1878 and in 1880 was saved to the country because that industry gave employment to men formerly idle. The cost of maintaining these men and their families is no greater than before, and more than two millions of dollars is saved to the country annually in the single article of sugar. The same state of things extended to other occupations, until it reached the whole body of the unemployed; and up to that point the entire wealth created by those become busy but formerly idle was the sum of the material benefit so far conferred upon the country.

dollar on his support. He gets for it rent, fuel, furniture, clothing, food, a holiday, amusement. There is a profit to each person with whom he deals. His value to the country is the difference between the wealth he creates and the wealth he destroys, and we sets is so constituted that on the whole the wealth created is always greater than the wealth consumed. The most careful statisticians of the United States estimate that each immigrant who reaches that country is worth a thousand dollars to his immigrant, on an average, creates that much more wealth than he consumes before he dies. A return made last year to the secretary of State of the State of Indiana showed that each person employed at mechanical pursuits in that State produced manufactured wealth to the value of about \$125 during the year; that is, the manufactured articles produced by one man in one year were worth \$125 more than the raw material, wages, interest, rent, wear and tear, cost of management, and all other items entering into the cost of manufactured goods. As the average wage paid was a trifle less than \$100 a year, it follows that the people of Indiana as a whole reaped a profit of 30 per cent. upon all the goods manufactured in the State. It is a surprise to us to be called upon to demonstrate the value of manufacturing industry to a citizen of Hamilton. Just as it is difficult to deal with a man who demands evidence that the sun shines it is difficult to deal with him who demands evidence that manufacturing industry is of untold value to Canada in general and to Hamilton in particular. For the testimony look around. The hundreds of new houses; the dozens of new manufactories; the thronged shops; the busy people; the crowded market—above all the content and prosperity that everywhere prevail—the plenty that presides at every fireside and blesses every home. The trailing banner of smoke from the factory chimney is the flag that floats in honour of industry's natal day; the whirl and roar of machinery is the thankful hymn of praise to that beneficent policy which has brought work, and well paid work, to the hands waiting to work.

IDLE CAPITAL

(Quebec Budget)

La Minerve, of Montreal calls attention to a very important question in the general interest. We refer to the very large amount of capital, which has accumulated and is actually lying idle in our banks. And as our contemporary remarks, the evil continues to steadily increase, the deposits largely exceeding the amount of the paid up capital and revenue and constituting nearly the half of the general fund of our banks. According to the last report, the state of the Quebec and Ontario Banks was as follows:—

FARMS AND MANUFACTURES.

(Halifax Mail.)

Everybody knows how quick the farming interests feel the benefits of a new manufactory or a new manufacturing town or village, that has sprung up in the midst of them, under a protective system. The farms instantly rise in value; some of them in the neighbourhood are turned into gardens, the most profitable species of husbandry; a new and lively market is opened for agricultural products; agricultural labour is in greater demand and better paid; the products command a higher price; and in this way the increase of manufacturing establishments over the face of the country, under the fostering care of the same system, diffuses the same benefits over

the agricultural interests of the whole land. The operation is simple and may be easily explained. In the first place, the market is brought home to the door of agriculture, instead of being remote in a foreign land. Next, the wants supplied and the profits made by the sale of agricultural products, are supplied and made at home and the capital on both sides is in the country, stays here, is used here, and by being turned over and over again, in different hands, to different productive ends, is the cause of a wealth and accumulative wealth among old parties, when as if the same wants had been supplied from abroad this capital would have gone abroad and been lost to the country for ever. Thirdly, it increases the diversity of labour, brings new customers to every vocation and makes each profitable by diminishing relatively the number engaged in it. Fourthly, one of the chief benefits of such a system to Agriculture is that it appropriates to itself thereby what would otherwise be expended in the cost of transportation of its products to a foreign market, by having a home market. The further away the market, the more expense is piled on to the product. If the cost of transportation is 100 per cent, then the products are only worth half as much in the place where they are grown as in the place where they are consumed. Bring the market half way toward the producer, and the cost of transport is only 50 per cent. The producer gets his share of the increased value. By encouraging and protecting domestic manufactures, the market is brought home, and the expense of transport is saved.

CANADIAN BANKS IN CHICAGO

(The Shareholder.)

Considerable stir has been created in banking circles lately by the attempt which is being made by the Internal Revenue official at Chicago to collect arrears of taxes which are claimed to be due on the business done by Canadian banks in that city, in excess of their capital and deposits. This unexpected claim on the Canadian agencies there had its origin in the success which attended the efforts of the revenue officials in similar attacks upon some of the home institutions, the International and Corn Exchange Banks having had to hand over no less than \$60,000 in arrears taxes and penalties to the Government. The Canadian banks which have agencies in Chicago, and which are therefore interested in the action of the United States Internal Revenue department in the matter, are the Bank of Montreal, Merchants' Bank, Canadian Bank of Commerce and Bank of British North America. These banks, as the Chicago Tribune remarks, "all do a large business with the grain and provision exporters, and are large makers of New York and London Exchange." The agency of the Bank of Montreal in Chicago has a capital of \$100,000 allotted to it, which it returns to the local officials for taxation, both national and municipal. The revenue inspector found in his examination of the books, however, that the volume of business done was greater than the capital and deposits. And upon this excess the officer proceeded to levy the usual tax of 1-24 of 1 per cent per month, on the ground that moneys used in excess of the capital and deposits must be regarded either as a deposit or an addition to the capital, and therefore subject to taxation. The bank authorities resist the claim on the plea that the excess of funds is either part of the bank's legitimate surplus, which is not taxable, or else moneys placed to their credit with the New York Branch, by the head office here in Montreal; and that in the latter case they were merely acting as financial agents for the parent bank. As the matter now stands the banks are preparing monthly returns for some years back, so as to show the real amount of business which has been done in excess of the allotted capital and deposits, and these when completed, will be sent to Washington for consideration. If it is decided that the excess is taxable, full arrears will have to be paid by the bank, which will also probably be mulcted in a penalty of 100 per cent. It is generally believed that if the action of the revenue officials be sustained by the Government the matter will be carried into the courts as a test case for future guidance. The question at issue is a much more delicate one than that involved in the claims upon the International and Corn Exchange Banks, and the amounts of money at stake are much larger. The banks look upon the whole matter with the utmost composure, the Merchants' Bank and Bank of Commerce taking the same stand as the Bank of Montreal, while the Bank of British North America, the claim against it being so slight as \$100, is affected only as to the correctness or fallacy of the principle of taxation involved. The result of the investigation will be looked forward to by bankers in Canada with the greatest interest.

LOBSTER PACKING.

Along the coast of Maine and Massachusetts and in the Provinces lobster packing is at its height. Never before were the lobsters in as fine condition as they are this season, being large in size and full mated. In the current number of Scribner's Monthly is a very interesting illustrated article entitled "The Lobster at Home," from which we condense an account of some matters of interest to every dealer in canned goods. During the winter months the lobster stays in deep water in order to escape the effect

of the and furious pale—that it is so near the shore. Thirty feet or more very fair depth for his winter quarters, while in summer the trap is set for his capture is sunk to a depth of ten fathoms and sometimes less. The lobster is possessed of an acute sense of smell, it frequently happens that a lobster is disposed to creep the peace of a bay in which the lobsters are taken. It is four feet long, two feet wide, and two feet high, with a semi-transparent door in the circular top capable of being man to fix the bait and remove the lobsters when caught. The trap is suspended to the bottom by a ballast of stones and a billet of wood at the other end of a rope serves as a buoy. The ends of the trap are closed with tarred rope-netting, and in one there is a circular opening of considerable size. The bait used is a cold head, or sometimes a row of canners. The traps are set in desirable locations and visited every morning, contents being secured and put aboard the smack ready to be conveyed to the lobster car. This is a box twelve feet long, eight feet wide, by two and a half deep, and submerged to the water's edge. Here they remain until taken out for removal to market, to be sold fresh, for disposal to the canneries, which are found all along the coast. A mature lobster should measure, without the claws, from one to two feet long, and weigh complete from two to fifteen pounds, but smaller sizes are so common that a length of ten and a half inches has been a standard for certain calculations. Lobsters grow slow, some five to six years passing before they measure eight or ten inches. For lobster catching on a small scale, two kinds of nets and a hook with a ten foot handle are occasionally used. One is an ordinary dip net lowered by ropes, and with a bait in the bottom when the lobster enters the additional weight is felt and the net raised. The other is a circle of wire playing in equal halves on an axle; a rope is attached to each side and it is lowered like the other, by pulling the ropes the parts shut together, inclosing whatever rests within. The smack having arrived at the wharf discharges its cargo of lobsters, which we take for granted is designed for the canning factory which opens at one end of the wharf, close to the water. The canning operations are described as follows: "Two men bring in the squirming loads on a stretcher and dump the mass into coppers for boiling. At intervals the covers are hoisted by ropes and pulleys, and dense clouds of steam arise, through which we catch vistas of men, women and children at work. Two men approach the coppers with stretchers and scoop nets, and they throw rapid scoops, done to a start, backward over their shoulders. The scarlet hue is seen in all quarters—on the steaming stretcher, in the great heaps on the tables, in scattered individuals on the floor, in a large pile of shells and refuse seen through the open door, and in an ox cart load of the same refuse, farther off, which is being taken away for use as a fertilizer. The boiled lobster is separated, on long tables, into his constituent parts. The most of the many jointed tail is thrust out with a punch. A hand called a 'cracker' frees that of the claws by a coup of offset cuts with a cleaver, and the connecting arms passed on to be picked out with a fork by the girls. In another department, the meat is placed in the cans. The first girl puts in roughly a suitable selection of the several parts. The next weighs it, and adds or subtracts enough to complete the exact amount desired (one or two pounds). The next forces down the contents with a stamp invented especially for the purpose. The next puts in a tin cover with blows of a little hammer. Then a tray is rapidly filled with the cans, and they are carried to the solderers, who seal them tight except for minute openings in the covers, and put them in another tray, which, by means of a pulley tackle, is then plunged in bath cauldrons, in order that the cans may be boiled till the air is expelled from their contents through the minute openings. Then they are sealed up and are boiled again for several hours, when the process of cooking is complete." In the packing room the cans are cleaned with acid, lacquered to keep them from rusting, after which they are labelled and packed in cases containing two or four dozen one pound tins, or two dozen two pound tins, when they are ready to be sent to all parts of the world.—American Geog.

The gross receipts of the South Eastern Railway last year were \$300,000 and net \$109,000.

Seventeen persons were killed and five injured by a coalery explosion in Prussia on Saturday.

In the British House of Commons, on Friday, Lord George Hamilton asked the questions relating whether the Government's attention had been directed to the complaints of British Columbia, that the construction of the Pacific Railway had not been commenced on the seaboard etc.; that the railway lands were still locked up; and whether under these circumstances the Colonial Office would urge upon Canada the advisability of following the Caranvaca terms. Mr. Grant Duff, Under Secretary for the Colonies, replied that the attention of the Colonial Office had been called to the complaints of British Columbia. He added that as Mr. John Macdonald and Mr. DeCosmos were both in England, the Government would confer with them and decide whether and what further action was to be taken by the Government of Great Britain in the matter.

TORONTO PRICES CURRENT.

Table of current prices for various commodities including Groceries, Paints, Wools, Hides, and Hardware.

Table of weekly review prices for various commodities including Oils, Paints, Wools, Hides, and Hardware.

WEEKLY REVIEW. The unseasonably cold of some time back has at last given way to weather much more seasonable.

that farmers are making in crossing fields, and the busy swiftness of our business our cattle to be caught after by leading butchers in Great Britain.

THE WOOL HOUSE. WINANS & CO. 11 Church Street, Toronto. Manufacturers' Headquarters.

S. Lennard & Sons MANUFACTURERS OF PLAIN & FANCY HOSIERY.

HAMILTON COTTON COMPANY, HAMILTON, ONT. MANUFACTURERS OF HOSIERY, YARNS.

CASTORINE MACHINE CO. TORONTO. NONE GENUINE UNLESS BRANDED.

Brayley & Dempster, MANUFACTURERS OF Wrought Iron and Saddlery Hardware.



Notice to Contractors.

SEALED TENDERS addressed to the undersigned and endorsed 'Tender for Public Works' will be received until FRIDAY, the 15th July next.



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SEALED TENDERS addressed to the undersigned and endorsed 'Tender for Public Works' will be received until FRIDAY, the 15th July next.

JAMES WRIGHT & CO. CHURCH, BANK, HOUSE. STORE AND OFFICE FITTINGS.

DIRECT TRADE BETWEEN Canada and the Brazils. Montreal & Halifax.

NEW STEAMSHIP SERVICE PASSENGER AND FREIGHT. Exceptional advantages to Traders.

DUNDAS COTTON MILLS CO. DUNDAS, ONT. MANUFACTURERS OF ORRY DOMESTICS.

The productions of these mills continue to have a deservedly high reputation in the trade.

Department of Public Works, Ottawa, June 24th, 1881.

Department of Public Works, Ottawa, June 24th, 1881.



at Shovel Lake for the... the ore with clear... the quality is well chosen...

THE MANUFACTURE OF IRON.

Export in iron states that the... of Texas produces iron fully... to the famous foreign brands...

Mr W. H. Coe discovered a new iron... mine on his property in the 13th... concession of Tudor.

The Folger Bros. have sold, or leased... for a term of 99 years, the Lavant... iron mines to the Bethlehem Iron Company.

An extensive gold mining mania has... broken out in Great Britain, which... promises to become the great of the... year in stock speculation.

Having put the Starr-Grove, of Nevada... into apparently permanent dividend... paying shape, and equipped the famous... mine, of California, for largest... operation, Messrs. Clark & Bothwell...

mines are found by water on the east of... Although Nova Scotia gold... mines have been regular producers...

GOVERNOR CORNWALL.

The Canada Gazette of Saturday contains... the official announcement of the... appointment of the Hon. CLYDE...

A violent earthquake occurred at... Albany, on May 4th.

Although Oliver Wendell Holmes... talks rapidly, never hesitating for a... word, he writes laboriously, crossing... out, interlining, and studying...

The "question nuisance" is becoming... more and more of a nuisance as the... session of the British Parliament... advances.

INSURANCE MATTERS.

AN INSURANCE ABUSE.

A couple of weeks ago we gave a brief... account of the manner in which certain... insurance companies were carried on in... the United States on the mutual principle...

LIFE INSURANCE.

A very startling editorial on buying... and selling lives has recently appeared... in the New York Times. According to... the writer's statement, which is undoubtedly...

more frequently with subsequent dis...covery, we can scarcely comprehend how... it can be carried on in the systematic... manner described by the New York...

THE TIMES ON THE GOVERNOR GENERAL'S NORTH-WEST TOUR.

Toronto, June 27.—The Globe contains... the following telegram, dated London... June 21st.—The Times in an editorial says...

as practicable for the tourist to reach... the skirts of Mount Hood or of Mount... Brown as it is to continue the ascent...

When Mr. Disraeli first came forward... at Wycombe as a Parliamentary candidate... he was opposed by a territorial magnate...

MONTREAL PRICES CURRENT.

Table of Montreal prices current, including sections for Groceries, Syrups, Molasses, Fruit, Rices, and Liquors.

Table of Montreal prices current, including sections for Groceries, Syrups, Molasses, Fruit, Rices, and Liquors.

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Textual content on the right side of the page, including a 'Weekly Review' section and various news items.



MISCELLANEOUS.

MISCELLANEOUS.

Advised to the Fisheries Department... Columbia state... salmon... fishing... operations... demand.

SIR HECTOR LANGEVIN.

The following is the proposed programme of the Minister of Public Works... Langevin, on a tour of inspection through the Maritime Provinces.

- Monday, July 4th—Leave Riviere-du-Loup at 7 a.m. and arrive at Edmundston... Tuesday, July 5th—Leave Edmundston... Wednesday, July 6th—Leave Woodstock... Thursday, July 7th—Leave Fredericton... Friday, July 8th—Leave St. John... Saturday and Sunday, July 9th and 10th... Monday, July 11th—Leave Pictou... Tuesday, July 12th—Leave Charlottetown... Wednesday, July 13th—Leave Summerside... Thursday, July 14th—Leave Moncton... Friday, July 15th—Leave Moncton... Saturday, July 16th—Leave Moncton...

SIR LEONARD TILLEY AT SARATOGA.

During the recent thirty-seventh session of the National Division of the Sons of Temperance of the United States at Saratoga, Sir Leonard Tilley was present. At the farewell meeting held in his honour on Thursday evening last he spoke. He is thus reported in the Daily Saratogian.

TERRIFIC STORM.

St. Catharines, 20th.—On Monday night there was a strong indication of a coming storm from the southwest. It passed by St. Catharines along the lake shore, where it seemed to gather strength near the Eight Mile Creek, and the wind blew with fearful violence at the farm of Mr. George W. Rickman, Lot No. 1, first concession of Grantham. The storm seemed to burst with full fury in his orchard, and fully twenty apple trees were uprooted and blown a distance of 200 yards. Many of these trees were very large, and some of them sixty years old. The wind next struck the gable end of the barn, blowing the whole of the roof and timbers 500 or 600 yards away. The roof of Mr. O. Donaldson's barn was also blown off, and rail and board fences scattered in every direction. In the orchard, where the trees were torn up, oaks were planted, and the dragging of the uprooted trees completely destroyed the crop. The storm struck the place about 11 at night. Mr. Rickman places his loss at between five and six hundred dollars. What the losses of his neighbours amount to he does not know. Such a storm has never visited this locality within the recollection of any person living. It was all done in the space of 15 minutes. About 2 o'clock on Tuesday another storm broke over this section of country, and a heavy rain storm visited the city, accompanied by thunder, lightning and hail. The wind did little damage to the city, but in some parts of the township of Louth the storm did considerable damage on the farm of Mr. Woodruff, near Smoky Hollow. The wind tore up a large number of fruit trees, some of them fully two feet thick being snapped off like pipe stems. The fences were blown down in every direction. For a few moments the air was filled with flying debris. The clouds of dust were taken up in the air, and barn doors and loose goods of every kind were blown away like chaff before the wind.

temperatures, though the others are all good. What a fearful day this would be with all the world's property and standards, if only it's light part was removed.

NEW UNITED STATES CONSUL.

Mr. Richard B. Robbins has been appointed by the United States Government to succeed Mr. Barnett as United States Consul at Ottawa. In the Mr. Robbins' sketch of the new Consul.

Richard B. Robbins, Senator from the Sixth District, County of Lenox, was born at Kingswood, New Jersey, April 2, 1841. He was admitted to the bar in Lenox County, in 1862. In 1862 he received from Governor Blair a commission as Second Lieutenant, and joined a company for the Fourth Michigan Cavalry. In September following he took the field with his regiment, and commanded the company in all the early engagements in which that regiment became so distinguished, and especially at Stone River on December 31, 1862, and at Shelbyville on June 24, 1863. He commanded his company at Stone River where Minty's brigade, to which the regiment belonged, repulsed gallantly repeated assaults of the enemy, driving them back in confusion, and with great loss from two lines of defence. At Shelbyville he had his horse shot under him, while leading a charge against impregnable odds, and which routed the enemy with great loss. During the rest of 1863 and part of 1864, Captain Robbins commanded a separate battalion of his regiment on scouting and picket duty with frequent encounters with the enemy. He was promoted to a majority of his regiment on August 23, 1864. Major Robbins was with his regiment in the Chickamauga and Georgia campaigns, participating in all its gallant fights, was severely wounded in the battle at Kingston, Ga., on May 18, 1864, and was breveted Lieutenant Colonel U. S. volunteers March 13, 1865, "for gallant and meritorious services" in that engagement. After the battle of Kingston he was granted leave of absence on account of disability from wounds, when he returned to Michigan, and being unable to serve in the field, was detailed on court-martial duty at Jackson, and was mustered out with his regiment July 20, 1865. He has served as Justice of the Peace in the Adirondack and Oneida counties. He has been chairman of the Republican County Committee for the past four years, and has such a record of valuable services to his party. He was elected to the Legislature for 1876 and 1877, and is now on the committee on State affairs, and chairman of the committee on liquor traffic, and advocated the present liquor law as the best system that could be obtained in the cause of temperance. He was elected to the Senate by a vote of 4,263, 1 J. Hagaman, Democrat, receiving 2,803, and H. C. Hall National, 2,513.

Mr. Robbins has been in the city a few days. He will enter upon his duties on the 1st July, and for the transaction of business has secured an office in the Montreal Telegraph Company's building, on Metcalfe street. He is very much pleased with the situation of Ottawa, and speaks highly of the courtesy that has been shown him since his arrival. We are sure Mr. Robbins will find Ottawa an agreeable city to live in. We give him a cordial welcome.

eral house, and stable and carried away numerous things. Jacob Schuyler, driving a wagon, was struck by lightning. A fatal tornado passed through the western portion of the township of Oxford last night, sweeping about 400 feet wide over everything before it. It cut short Mr. Stewart's farm, taking his barn and shed and throwing them into thousands of pieces, also killing sheep, hogs and horses, causing a loss to Mr. Stewart of \$1,000. It next struck J. Street's buildings, stripping the barn and cheese factory, and leaving nothing but the frame, also stripping Mr. Atkins' barn, and throwing it against the air. No persons were killed. Mr. Spears says that his dwelling stood a line a boat on the water.

RAILWAY CATASTROPHE.

Mexico, 27th.—Further particulars of the bridge accident, Merrellow Railway, state that part of the loaded alcohol set fire to the wreckage and everything was consumed. One hundred and ninety-two private and thirteen officers were killed outright or slowly roasted to death. Fifty other persons were fatally or seriously injured. The bridge was known to be unsafe but was never repaired. Continued in use since the road was first opened on the 15th instant.

City of Mexico, 27th.—The news of the railroad disaster caused great excitement here. Never in the history of the Republic has so frightful a casualty been chronicled. It is feared it will further prejudice the popular mind against railway enterprises. The Morelos road was built by Government subvention, and is entirely the work of Mexican engineers. The engineer and fireman of the ill-fated train were scalded to death.

Mexico, 27th.—Only sixty persons on the train escaped alive, and of those forty are injured. Many wives and children of the soldiers were among the killed or injured. The disaster occurred at 11 o'clock at night as the train, which was a long one, and drawn by two engines was passing over a wooden bridge. For a moment, after the plunge, all was darkness. Suddenly 100 lbs of brandy loaded in two of the vans caught fire, and the burning fluid inundated the mass of passengers struggling in the ruins, only a few who were not disabled or helplessly wedged in by timbers escaping. The dead and living were wrapped in a sheet of flame and slowly burned before the eyes of the survivors, who were unable to save them.

DIACOSMOS' MISSION.

London, 22nd.—The following is the first result of the Diacosmos mission here in the House of Commons, Lord George Hamilton gave notice of his intention to ask the Under Secretary for the Colonies, whether the attention of his office had been directed to the constant complaints of the inhabitants of British Columbia; that although it is ten years since they were incorporated with the Dominion, the main condition which induced them to assent to that incorporation (the construction of the Canadian Pacific Railway system) had in spite of frequent protests, not been commenced upon that seaboard, whether or not, the fact that a large portion of the most fertile part of Vancouver Island, including large coal fields, had in years past been transferred by an act of the Legislative Assembly to the Canadian Government, at their request, under the railway clause of the terms of union to accelerate the construction through Vancouver Island of the said line of railway; whether under those circumstances the Colonial office had an intention of representing to the Canadian Government the necessity of complying as soon as possible with the terms of the Carnarvon settlement, which with the sanction of the Secretary of State for the Colonies, were in 1874 agreed to both by Canada and British Columbia.—Globe Special.

NEWS BY TELEGRAPH.

- Mr. H. Gibson, of the township of Kingston, exhibits tall wheat 6 feet 8 inches high. It is probable the Government will be compelled to increase the duties on French waxes. Treadmill tannery, at Salem, Mass., was burned on Monday night. Loss, \$30,000. The Belleville Street Railway has been sold to a company in Toronto, who will operate it. A Lincoln despatch says crops in the country never looked better, and promise a splendid harvest. Edmond Beate, M.A., of Hyde Park reform notoriety, died on Monday, in the 78th year of his age. It is rumored that the New York Central will issue \$30,000,000 in bonds bearing interest at 4 per cent. The first competition for the Hastings Rifle Association Challenge Cup will be held to-day at Belleville. Information has been received by Mr. B. Daly, M.P., of the death at Demerara of his younger brother John George Daly. Garfield, Heat and James left Long Branch Monday morning for Washington. Mrs. Garfield remains at Long Branch. The wife of Mr. Foote, druggist, of Toronto, was found dead in bed on Saturday morning. The cause of death is not known. A Vera Cruz despatch announces the killing of 150 persons by the giving way of a railway bridge while a train was passing on it. A San Francisco despatch says that in the District of Tiquazare, island of Cogan, of the Philippines, 300 houses were burnt and two lives lost. The court house and Government property, on which were old buildings, were

old on Saturday by auction for \$100,000 at the rate of 150 per cent.

The Ferox of Colm Miller, Detroit, was destroyed by fire on Saturday night. Loss about \$200,000. The cause is supposed to be the ordinary.

The extensive brick works of William Stevenson, Detroit, were entirely destroyed by fire on Saturday morning. The loss is a very serious one. No insurance.

The monster steam barge City of Rome, cleared from Chicago on Saturday for Buffalo with 12,000 bushels of oats, the largest cargo ever taken from that port by any vessel.

A Berlin despatch says Baron Magnus, late Minister to Copenhagen, has become insane in consequence of his removal for attending a banquet to Sarah Bernhardt.

About seven hundred excursionists visited the Ontario Agricultural College and Model Farm at Guelph Monday, under the auspices of the Girardeaux of Grey and Simcoe.

It is said in London there is not the slightest foundation for the rumour that Sir John Macdonald is to be raised to the peerage or nominated to the Governorship of Canada.

A St. John despatch says it is announced officially that Sir Charles Tupper and Sir Leonard Tilley will hold a series of meetings in St. John during the first part of July.

The New York World says—Every sensible and respectable man of both parties in the Commonwealth is utterly weary and disgusted with these proceedings at Albany.

An old man named McNemara, at St. John, N.B., died Monday afternoon, and his wife expired ten hours later, congestion of the lungs carrying off both. They had been married for 46 years.

A memorial to Mr. Gladstone is now being signed at most of the London banks urging the Government to offer all practical aid in its power towards enabling bimetallic states to rehabilitate silver.

Rev. C. Barker, who for many years was connected with the press as editor of the Observer, and merchant, Bowmansville, was the recipient of a handsome present on the occasion of his leaving for London.

It is officially stated that two Frenchmen and an Italian were killed, and five Frenchmen and thirteen Italians wounded in the recent riots. Twelve hundred Italians have left Marseilles.

The public exhibition of placards of emigration agents or foreign steamship companies in Germany have been prohibited. A bill impeding emigration is to be introduced next session in the Reichstag.

The net earnings of the Michigan Central Railway last year were \$1,296,000, and the previous year \$1,700,000. Net earnings of the Canada Southern for the past year was \$185,000; previous year, \$177,000.

Money is being subscribed in New York for the construction of an immense air ship to determine the feasibility of an aerial voyage to Europe. The balloon will first sail from a distant western city to the shores of the Atlantic.

A Perth despatch says:—A young farmer named McFavish while putting up a swing Monday afternoon to be used at a picnic fell to the ground and had both legs broken. The doctors say the injury will likely prove fatal.

At Smith's Falls, on Tuesday night, the factory of Messrs. Graham & Bros., manufacturers of staves, rakes, cheese boxes, etc., was totally destroyed by fire. The direct loss is between four and five thousand dollars. No insurance.

On Thursday night about midnight a sawmill in Stavner Village, owned by Messrs. Jones Bros. & Mackenzie, of Toronto, and occupied by Mr. Henry Allen, was burned. The whole building with a large quantity of laths was totally destroyed.

Preparations are being made at Wimbledon for the arrival of the Canadian Team on Monday next. It is considered better that the team should practice one week at Wimbledon before the meeting begins than that they should use the ranges at Alder as in former years.

A Harrisburg, Va., despatch states was a hail storm of great violence attended with the destruction of corn and wheat, in Rockingham County on Saturday last. Many fields of corn were literally bladed and thousands of bushels of wheat thrashed out on the ground.

A letter from Mr. Charles Carpmel, superintendent of the Meteorological Service, informs us that for the benefit of the farming community the daily forecast of the weather will be issued at midnight during the next two (harvest) months, and forwarded to all stations as early in the morning as possible.

The Free-Traders held a crowded meeting at Madrid, and imposing meetings of Protectionists have been held at Barcelona. In the latter, the example of the United States was pointed to, and resolutions passed asking the Government for protection for merchants and manufacturers.

A man named J. S. Took was arrested at Paris, and tried at the Police Court, Bradford, charged with writing to Col. Legate institute pupils, and offering to give them for \$15 the correct questions and answers to be used at the coming examinations. He pleaded guilty. Decision was reserved until next week.

A letter recently addressed to the Czar and high officials of Russia, assuring them that they have not been sentenced to death by the revolutionists, concludes:—"The Executive Committee deem it unnecessary at present to repeal criminal enterprises as the measures of the new ministers are fast driving the country into revolution."

The special census agent reports that all United States Government bonds are owned by less than 100,000 people. New England owns 11 per cent. of regis-

tered bonds; Middle States 41 per cent.; Southern States 2 per cent.; Western States nearly 50 per cent.; banks, insurance companies and other corporations own 24 per cent.

A St. John, N.B., despatch bears the rank and title of the Lady Franklin Bay Colony have arrived. It is expected the steamer will be ready when Lord Grosvenor, commanding the expedition, arrives. The vessel will start on July 24th. Vessels from the arctic regions report unusual quantities of ice this season, which will likely impede exploration ships.

The Pall Mall Gazette says there is dissatisfaction in Ireland at the amendments of the Land Bill, to which the Government has assented, being almost entirely in favour of the landlords. It suggests that the Government having facilitated the progress of the bill by announcing these amendments, it should announce the concessions they are prepared to make to the other side.

A St. Petersburg despatch says.—The present Government is endeavoring to show that the mild policy of the late Government was imminently dangerous. The police are now showing the fearful danger which accumulated during Melnikoff's rule. The reactionists are making the most of the discovery of dynamite mines, in order to frighten the court and secure their own position.

At Winnipeg on Saturday, a conference between the railway committee of the city council and Messrs. Angus and Stickey, of the Pacific Railway, was concluded satisfactorily. The company ask that a bonus of \$200,000 be granted to build the road from Winnipeg to Turtle Mountain, and they will locate the workshops of the main line, as well as those of the South Western Division, in Winnipeg.

A St. John's, N.B., despatch brings us the news of the death of Colin Campbell, of Weymouth, who died on Saturday last. Mr. Campbell held a seat in the last Nova Scotia Legislature and was Speaker of the House of Assembly of that Province. He was defeated in 1878. He was about 58 years of age, a Conservative in politics, a man of considerable activity, and an extensive shipowner. His vessels in the port of St. John yesterday were flying their flags at half-mast.

A St. John, N.B., despatch says that on the other day, on the Neplagill, J. DeWolf Spurr, while fishing on his own land with a rod, line and fly, was ordered by Inspector Venning to desist. Mr. Venning claimed to be acting under an Order-in-Council, and by instructions from the Crown. Mr. Spurr would not desist, claiming that his position was supported by the New Brunswick Supreme Court. A lively struggle ensued, and the struggling men narrowly escaped going into the river at a dangerous point near Papillon Falls. Venning in the end carried off Spurr's rod, and the case will come into court.

During the next few weeks Halifax will be immensely attractive. On Monday evening the 4th, there will be a grand reception at the opening of the Exhibition of the Academy of Arts, in the province building. During the week there will be a review and sham fight by the troops, and a torpedo attack and naval display in the harbor. On Friday it is proposed to hold a conversation in the province building, which His Excellency is to attend, in the interest of the proposed school of art. Then there is to be a regatta, of yachts, boats and canoes, which is also to include races by boats of the naval squadron. Altogether Halifax will for the time being be the gayest city in the Dominion.

A Washington despatch says: The amount of 5 per cent coupons received for continuance aggregates \$90,000,000. The examination of the books of branch of the Montreal Bank at Chicago disclosed the fact that for nine years full returns for taxation have not been made of the money belonging to the bank and employed in business by it. The attorney for the bank said that \$100,000 has been allotted to the capital, and under the revised statutes the amount of taxable capital is fixed by such allotment, so that other moneys of the Bank of Montreal used by its branch can be taxed neither as capital, nor as deposits, because the money is the property of the Bank of Montreal. The Commissioner of Internal Revenue, before whom the question has been pending, rendered decision to-day, holding that the Bank of Montreal, being a foreign corporation, cannot establish a branch in the State of Illinois by virtue of the authority conferred in its charter. This authority can be conferred only by the laws of that State. Such law has not been cited, and it is not believed to exist. The Legislature of the State of Illinois probably possesses a constitutional power of restricting the exercise of the powers of banking by foreign corporations in the said State. This, however, has not been done. The Bank of Montreal is, therefore, engaged in its business of banking in its own name in Chicago. It has brought a portion of its funds within the jurisdiction of the laws of the United States. It is under the protection of those laws and subject to their provisions in respect to taxation. No exemption has been provided for the funds of foreign banks employed in the business of banking in this country. The fair and just rule would be to tax the amount of money brought within the jurisdiction of the United States, and used in the business of banking, month by month during each semi-annual tax period. It seems inconsistent with the true interpretation of the laws enacted for raising revenue to suppose that it was the intention of Congress that so extraordinary an exemption should be granted as appears to have been taken by the bank. It is therefore the opinion that the Bank of Montreal is liable to taxation as capital on all its money brought within the jurisdiction of the United States and used by it at Chicago. The following is a statement of the capital and deposits of Canadian banks:—Bank of Montreal—assessable, \$49,087; not assessable, \$50,120. Canadian Bank of Commerce—assessable, \$31,542; not assessable, \$19,750. Merchants' Bank of Canada—all assessable, \$5,834.

THE METAL TRADE.

THE BRITISH MARKETS

(American Manufacturers)

We are not yet overtaking our make, nor have we left off increasing our output. The returns completed last night touch the Cleveland iron trade in May show that from the same 119 furnaces the output of the month of May was an augmentation upon April of 3 478 tons, but the consumption still running behind has made the month's increased output over thirteen times more than the augmented make. The precise addition to stocks in May has been 43,823 tons, and of this 2,808 tons represent the addition to makers' stocks. The whole make in May has been 236,415 tons, somewhat more than 51,000 tons being hematites, and other iron than Cleveland. There are now, it is computed, 3,000,000 tons in England and the United States. The computation is very near the mark, and it is argued from it that it is likely to be some time before the present unsatisfactory state of things can be rectified, unless prices reach those extreme figures which have previously resulted in a considerable suspension of production. The heaviest consumption has related to the necessities of the shipbuilders. An important factor, therefore, in calculating the future is embraced in the prospects of the shipbuilding industry. These, as sketched by a good authority on that department of trade, are, that though the builders in general are still very busy, yet there is no doubt that as soon as the bulk of ships which were contracted for six months ago are delivered many of them will be glad of work at a reduction on the present quotations. Second hand ships are moving off slowly at reduced prices. The general tone of the freight market is dull, the tonnage offering being largely in excess of the demand. While all this is happening pig makers know well that throughout the country as a whole consumers' stocks of pigs are light, and that many consumers are waiting for what they believe to be the right moment for entering the market. This knowledge it is which is keeping prices from giving way in a more conspicuous degree; yet the readiness of sellers to book orders for a larger period forward than hitherto during this year is itself expressive of slightly less strength at the week closes. Increased purchasing is taking place by Frenchmen, who in the past three months have bought largely above the average. Last month they received through the port of Middlesbrough only ten tons short of 8,000 tons. Thereby they acquired second position on the list, the third place being occupied by Holland, which bought 7,010 tons of pigs and 820 tons of wrought iron and steel. France took no manufactured iron nor steel. The first place, as heretofore for some time past, is taken by Germany, with her buying of 11,468 tons of pigs and 2,251 tons of wrought iron and steel.

To-day all the workmen of the famous Cyfarthfa Works in Wales, about whose restarting to make rolled iron all Wales was jubilant, are being paid off, and the whole place closed, preparatory to its being turned into a steel works, it is hoped. Near to Middlesbrough, at the other end of the kingdom, the new Thomas Gilchrist Company, recently projected by a combination of London, Sheffield and Cleveland capitalists, are actively engaged in preparing the plans of their works, the necessary capital having, "it is said," been quickly subscribed. Considerable as is the outturn which last week I sketched of steel at the Eaton works, it would be more but for the delay in drying the preparation placed upon the lining of the furnaces which under the severe working in connection with the Thomas-Gilchrist process shows quite as much distress as had been expected. After each blow the converter is lined with a material known as "scurry," which is a basic powder mixed with water. This lining is dried by means of a coke fire; and time is lost after every blow. In baling strip for the United States there are mills which have two months' work in hand, mainly in filling the orders that have been placed by the leading Liverpool merchant firm. At the same time there is some buying direct, and one merchant firm on your side has this week been personally represented here, seeking to place orders for baling strip with buckles on and japanned, and all complete ready for use. Plenty of such orders could still be placed, but not very easily at the prices which middlemen are ready to give; nor is it easy to get them for the money which a few weeks ago was possible. Yet the commodity is cheaper now than a year ago. Strip as it leaves the mill can be bought easily at £8 5s., but it is not so easy to buy at that figure delivered in Liverpool. A twelvemonth since buyers had to give for the strips complete and ready for use £9 10s., but it may be possible to get them this year at within £8, f.o.b. Liverpool.

The negotiations over the French treaty reveal, as was expected by those traders who had been watching the progress of events in France, a strong protectionist tendency on the part of the French Commissioners here; and the temper of the trading classes is not sweeter upon this matter than when I last mentioned it. By way of attempting to strengthen the hands of the British Commissioners, traders in the several centres are chambers of commerce, passing resolutions enunciating that "unless the new treaty be distinctly in the direction of free trade it would be desirable to refrain

from negotiating the treaty altogether, and thereby relieve ourselves of existing liabilities." In this shape a resolution was yesterday passed by the Chamber of Commerce of Wolverhampton and forwarded to the British Commissioners. Hoping for the best that can be got from the subsisting palaver, iron and hardware men are giving much attention to colonial requirements. These, as expressed this week, are highly encouraging. They take the form in conspicuous part of a demand for galvanized sheets to go into Australia via Sydney. Throughout the Birmingham and South Staffordshire district there are to-day few sheet mills and galvanizing concerns that are not closing up a very active week, or who cannot indeed see their way to resume after next week's Whitsuntide holidays with considerable more work in hand than at the same time last year. The activity in the sheet trade is almost the only noteworthy feature in the South Staffordshire trade apart from the tolerable amount of business in the strip mills. Because they are so well sold forward sheet firms are able to ask a little more money, and there are cases in which buyers desiring to get prompt deliveries have had to consent to pay 5s. a ton more for the iron; but those instances are few. Nevertheless makers now boldly ask 10s. a ton more than the minimum in last previous transactions for medium qualities. The Scotch pig iron market has been disappointing this week. Instead of increase, transactions in the warrant market have shown a falling off; while speculation has mainly promoted those that have taken place. Hope is entertained that the American and Continental demand may show some improvement in the next few weeks. It would be scarcely correct to say that these hopes are based upon any solid foundation. The shipments of last week fell short of what had been expected. They did not reach 12,000 tons, as against 13,000 tons in the corresponding period of last year. On the other hand the imports of pigs from the North of England are increasing.

The malleable iron makers mostly keep well employed, but new orders are not coming forward with any vigour. The Steel Company of Scotland locked out 800 men at their Blochairn Works on Saturday, so that both these works and those belonging to the same company at Newton are now idle. The men desired an advance of wages, and the company met them by proposing a reduction. In the Cleveland district the early part of the week had about it a more encouraging tone, and consequently a better business was done at prices above a week ago. Towards the end of the week, however, as soon as it became known that the stocks had increased, the market became despondent, and sales were less frequent. Still large shipments continue to be made to the Scotch and to foreigners. At Middlesbrough on Tuesday business was of small extent, but somewhat higher rates were given—36s 6d to 36s 9d, and even 37s. Warrants were plentiful at prices ranging from 37s 3d to 37s 6d for No 3 G. M. D. Forge pigs were selling freely at 36s. The Cleveland pig iron in Messrs Connell's stores amounts to 175,050 tons, or 522 tons increase on the week. Plates are selling at about £8 per ton delivered at the shipyards, and angles and bars are about £5 7s 6d.

The heavy trades of Sheffield are without any important alteration this week. The demand for crucible steel from your side and from South America and some of the colonies is very fair, but the European continent and the home markets are ordering less than they were. The steel rail trade continues to afford full employment for the operatives, and a few of the firms are credited with having sufficient contracts on their books to last even up to the end of the year. Bessemer ingots are in revived demand from the United States, and makers are therefore more hopeful. In the iron trade boiler and ship plates and armour plates are in large make, but all the other branches are depressed. Indeed, some people are stating that things are in a worse condition than for twelve months past. Prices are without change. The shares in the newly formed company of Brown, Bayley, Dixon & Company, limited, are not being taken up either by the old shareholders or by the outside public with that vigour that had been hoped for, and unless more spirit is shown in this direction it is feared that the reconstruction scheme will fail.

Edge tools are not in great request; we hear of more inquiry from the seaside and other summer resorts for cutlery and plated goods. Stove and grate makers report that trade is brisk, particularly in kitchen ranges and in grates in which encaustic tiles are worked up. Sheep shears and files are in more request. In cutlery and the general hardware trades there is an improved call all round, and the agricultural implement makers continue to receive encouraging lines from the rural districts.

As usual in the week preceding Whitsuntide production in the hardware branches has been tolerably active, but demand has shown a slackening tendency, and the outlook for manufacturers is not so bright as at the date of our last report. Owing to the favourable weather, the home trade is now in a much more healthy state than it was at the beginning of the quarter. But there is as yet little real animation in any department, and orders are still of a hand-to-mouth character. In some of the seaside resorts of North Wales and the English south and west coasts buying is to a degree brisk; but it is still every-

where below the average of the season. Horticultural tools, garden rollers, rakes, lawn mowers, and the like, have been in good request in London, Lancashire and Yorkshire, but there is little doing in agricultural implements.

In the shipping department heavy goods are going to Australia, especially tanning wire, cast and stamped hollow-ware, nails, etc. With the Cape business is reported fairly steady in mining implements, horse-wagon ironworks, stamped goods, chains, wire, etc. Machinery is going in good quantities to leading and colonial markets. The brass founders are busy. Tin plate workers and japanners are fairly busy. Stove grates and ranges are doing better.

The iron and steel firms of South Wales are mostly in active operation, but it is not so clear that the orders are running low and that no improvement is as yet possible either in the iron or steel trade. Buckers' well known iron and tin plate works which, with the money obtained so freely from the late West of England Bank, made the localities of Hentyrch and Mellingriffth centres of so much activity, are to be definitely sold within a few weeks. The liquidators of the bank have wisely determined to divide the property into moderate lots; and it is noteworthy that the concern not only embraces iron and steel plate mills, but likewise collieries, brick works and coke ovens. Whether that arrangement will enable something like a moderate return of the money advanced to be got back is a doubtful matter. However little the concern may realize, there is no room to question that at one time it might have brought under the hammer upwards of £1,000,000 sterling.

THE LONDON MARKET.

The following were the closing prices in the London metal market June 3, 1881:—

Table with columns for IRON, COPPER, LEAD, and TIN PLATES, listing various grades and prices.

UNITED STATES MARKETS.

Pittsburg.

Pig Iron—There is still no improvement in the pig iron trade, either in amount of business or in prices, but the prospect is much better. The rolling mills are all running and orders are coming in at a lively rate, and the same may be said of the foundries of all kinds except the stove foundries. This heavy consumption of iron by the mills and foundries, in connection with the small stocks generally held by consumers, insures a good demand for pig iron before very long. At present consumers are not buying at all if they can avoid it, for two reasons: first, it is near stock taking time, and second, they do not fear an advance in price; while those who are compelled to buy purchase only very small amounts, for the same reasons—where they would ordinarily buy a thousand tons they now buy only a hundred. After stock taking, if the demand for finished products continues good, and there is no reason to doubt that it will, consumers will almost certainly purchase heavily. Just what effect this will have on prices cannot now be foreseen. That it will strengthen them there can scarcely be a doubt, but if there is any positive advance it will likely be very small, owing to the large stocks of iron in this country and England, and the low prices of the same on the other side of the water. The mills and foundries throughout the entire country are consuming, and will continue to consume, immense quantities of pig iron, but the domestic furnace owners, if they wish to supply this immense demand, must compete in price with their foreign rivals, who are surrounded by conditions that will tempt, if it does not compel, them to sell their iron at very low prices. To sum up the situation, the prospect is, not only in Pittsburg, but throughout the entire country, that there will, the latter part of this summer and next fall, be a very heavy demand for pig iron, but the conditions are such that but little, if any, advance in price will take place. Gray forge may still be quoted at \$21@23 per ton, and other descriptions in proportion.

Manufactured Iron—All the rolling mills in the city continue in operation, and orders for all kinds of iron are coming in rapidly; in fact, manufacturers

could get orders for several months ahead if they would accept current prices, but they do not care to take orders so far ahead while prices are so low. All the mills were also running in the early spring, and have been ever since; at that time, however, orders came in pretty slowly, while they have been increasing in volume now for some weeks. A not inconsiderable part of the present increase of orders is due to the strike of the iron workers in the Cincinnati district, but we think not altogether. Under the pressure of orders prices have advanced at least a tenth of a cent per pound. We quote as follows: Bar iron, 2 1/2 @ 2 3/4; sheet, No 24, 3 7/8; tank, 2 7/8; hoops, 2 3/4 @ 2 9/8; boiler plate—C. H. No 1, 5 1/2; homogeneous steel, 6 1/2—all 60 days, with a discount of 2 per cent for cash.

Nails—The nail trade is an exception to the manufactured iron trade, so far as this city is concerned. From some cause or causes the demand has been light during the whole of this season thus far, and consequently stocks in the hands of manufacturers are of considerable dimensions. A considerable number of the factories in the city have, however, stopped producing, and will doubtless remain idle until stocks grow much lighter. Prices may be quoted at \$2 75 per keg for 10d. to 60d., 60 days, with two per cent. off for cash.

Rails—Quotations for steel rails remain unchanged, as follows: \$61 @ 62 at mill, for future delivery, and \$62 @ 63 for early delivery. These quotations are for the present year.

Railway Supplies—Spikes, 2 1/2c per lb.; splice bars, 2 1/2; track bolts, 3 1/2c—all thirty days.

Steel—The works are running steadily. There was not the usual activity in the spring, but orders have been coming in regularly all the time, and the works have been fairly busy, while prices have been too low to admit of foreign competition, and yet high enough, perhaps, to afford a decent profit. Prices have been very regular, which we quote as follows: Best quality refined cast steel, 11c to 12c per pound, as to quantity purchased; crucible machinery steel, about 7c, and Bessemer and open hearth do. at 5 @ 5 1/2c; Bessemer open hearth spring, 4 @ 4 1/2c; and do. plough 4 1/2 @ 5 1/2c.

Philadelphia.

Pig Iron—The pig iron market wears a brighter aspect to-day than it has for several days past. So far as heard from no other furnaces have gone out of blast. In New Jersey, Port Oram and Boonton may be added to last week's list.

Edgell was reported out a little in advance of the fact. About a dozen more are to be blown out according to the statement of agents and owners unless an improvement takes place. The loss of \$1 per ton is borne in many cases in hope of an early change for the better. The average volume of business for this season is not yet maintained, but this week's business is much better than last. The market is full of inquiries. A good many offers are made but at unacceptable prices. Buyers in some cases are doing all they can to depress the market, but without avail. Makers are not in a mood to sacrifice stocks, and have shown a bold front all the week. A great deal is heard about concessions, but the sales known about do not justify the assertions made. There is more or less iron always offering which goes at the best price that can be had for it. Much of this kind of iron has been sold recently. Outside of this, there is less done by way of concession. The large consumption keeps the enormous production slowly moving from furnace to yard and mill, but there is not that snap to business which we have become accustomed to. Iron is being made somewhat in excess of requirements, when the foreign supplies are considered, but there are grounds for the belief that the importations during the summer and fall will not be of a dangerous magnitude. This is denied, of course, by some, and in fact is but an opinion, based, on the one hand, on enormous stocks abroad which must be marketed, and, on the other hand, on the fact that at present figures imported iron gives no profit to the foreign exporters. No new orders are being sent abroad except to supply the ordinary demand for English and Scotch irons and Bessemer.

Foreign iron has improved 50 cents in asking price. Large sales have been made as low as \$17, even lower, and from that to \$18. Inside price for Middlesbrough is \$17.50. The stocks here have been greatly diminished by sales to actual consumers, and, by large withdrawals on payment of duty, held for a better market. Some large buyers have secured as much English iron as they will want for the next six months. The feeling among furnacemen in the East is that an active demand will show itself in a short time if the present healthy tone prevails a few days longer. The result of a careful inquiry into the condition of the Bessemer pig trade developed these facts, that prices abroad have exhibited an upward tendency, that this is due to the very active American demand which has been in progress for several weeks, that several offers for large lots were made at less than current market rates, and that these offers have been declined, and that prices have, in consequence of this seeming rapidly increasing demand, stiffened. Large transactions have been closed. There are yet several large pending inquiries and offers. Bidders have been asked to go 50 cents higher, and are discussing the situation. The price to-day is \$22.50. Buyers who have been pretty well supplied will let the market rest. American furnaces

have been pinched in their efforts to meet these low figures. They will have an opportunity to place orders above terms and hold the rest of the American trade.

Railway Material—Furnacemen deal with all their advantages of cheapness and ability to meet prompt deliveries, are getting but a small portion of the American trade. The mills, on the other hand, crowded with orders for steel and iron rails. Inquiry is being crowding in and orders are accepted in such a way as to enable buyers to meet out construction requirements. The leading company has been asked for 40,000 tons of rails for next year's delivery. From another source a demand for 60,000 tons of rails is to be met. Buyers have learned by this time that orders must come in six months ahead at least. It is evident that 1882 will see more rail road construction than 1881. The requirements of next year will tax even all the facilities now being created. Winter contracts for both iron and steel rails are being entered. Quotations are \$5 for summer delivery and \$5 to \$7 for later deliveries. The American rail industry is proposing to control the American demand as the blast furnacemen are seeking to do. The new processes about to be put in operation will confer economic advantages which must be offset on this side, if we would hold our own market. The high priced lake Bessemer ore is producing results which it were wise if possible to avoid. High priced ore means foreign steel rails. Old rails have not touched bottom. Last week 5,000 tons were sold on cars at \$25.50. They cannot be imported at \$26, but can be bought at the figure. Some holders are selling to prepare for July settlements. Consumers are generally well supplied, and in the prevailing uncertainty are not disposed to bid high. Scrap is dull, but choice lots are held at \$28.

Hardware—The demand for summer hardware has been very active. As usual at this season, only certain lines are in request and these have a good run. The volume of business is not heavy. Jobbers are realizing on their stocks and net ordering except in cases where stocks may run short. The consumption of hardware goods throughout the country is large. Axes, hatchets, scythes, lawn mowers, farm and plantation wares, and tools used in canning establishments, are being freely called for. The season has turned out as well as was expected, and a large fall trade is being already prepared for at the hardware and cutlery works.

New York.

Pig Iron—American: The special feature of the past week was the announcement of the failure of E. P. Collier & Co., of Boston. Their liabilities are estimated at from one-half to three-quarters of a million dollars, and five of the prominent furnaces of the Lehigh region and two North River companies are known to be heavy creditors. It does not appear that the market is materially affected by this circumstance, as the firm has been in a rather weak condition for some time back and was expected to have succumbed earlier in the year. There is a resemblance in many respects between this and the late Lisberger failure, and not a few prominent members of the trade are of the opinion that the ultimate result will be more favorable than otherwise so far as the general market is concerned, though the outlook for the creditors is not in any way encouraging. In respect to the volume of business there is nothing new to report. Consumers generally keep closely to the hand-to-mouth policy in their operations and seem to rarely take more supply than is necessary to meet orders in hand. Sellers are likewise becoming extremely cautious, and in more than a few instances cash on receipt of delivery orders are the only terms they will accept from buyers other than those known to be unquestionably sound financial condition. Regarding prices there is a great uncertainty but no radical changes. The best Lehigh brands of No. 1 X foundry are quoted at \$24, while \$23.50 has been accepted in more than a few instances, and even \$23 touched on spot cash terms for a good iron. There is a "No. 1 plain" for which even less would probably be accepted, but on its own merits this iron is considered no better than a prime brand of No. 2 X. The range quoted on No. 2 X foundry is \$21 @ 22 and on gray forge \$19 @ 20, according to brand. A sale of 200 tons No. 2 X Jagger at \$17.50 is talked of, but the alleged buyer denies making such a purchase.

Scotch: The transactions coming to notice embrace very little more than the ton lots, and even of these the number is small. The spot supply seems to be gradually getting under fair control, and this fact, coupled with higher freights and less surplus accumulations at Glasgow, partially offsets the effect of the present slow movement. The market is by no means firm, however, and \$20.50 for Gartloch, \$22 for Glangarnock, \$21 for Gartshore, \$22.50 for Ummersley, and \$23.50 for Coltness seem the best prices quotable for good sized lots.

English: A few sales of Middlesbrough forge, aggregating 1,300 tons, have been made at \$16.50 @ 17. No. 1 is still quoted at \$18 @ 18.50, but seems to have comparatively little call. Bessemer appears unsettled and weak, with \$22 probably the best price that can be realized, and one sale at even as low as \$21.75 reported.

Steel Rails—English makers are taking orders for 66 lb. rails delivered at United States ports at prices equal to about \$55 at mill for American, and the

...to be meeting this... of the same figure... only to winter deliveries... delivery being quoted at... A lot of 500 tons of... to arrive in New...

THE VOLUNTEER MILITIA.

Replying to the toast of his health, the Hon. A. P. Caron said at the banquet given in his honour, at London, last week... I can assure you that I feel it very difficult to find words to express to you as I should like, my deep sense of gratitude and heartfelt thanks for the brilliant banquet which you have tendered me to-night...

years. No necessities were supposed to exist why Canada should have a militia force, but if it had not been for the organization which took place then, at that very period when a misunderstanding was likely to be created between two great nations which must always be friendly...

THE COMET.

Commenting upon the appearance of the comet which excited so much interest in astronomical circles, a contemporary says:—Precisely what comet this one is seems to be a matter of dispute. Some astronomers assert that it is the comet of 1812 returning, while others believe that it is the comet of 1680, commonly called Newton's comet...

POSTAL TIME TABLE. POST OFFICE, OTTAWA.

Table with columns: Mail, Class, Delivered. Lists various mail routes and their delivery times.

Registered matter must be posted half an hour previously. Office hours from 9 a.m. to 5 p.m. For Savings Bank and Money Order business, 9 a.m. to 4 p.m. O. P. BAKER, Postmaster.

Individual comets we may mention the six tails of the great comet of 1744, and the division of Biola's comet into two distinct comets, each having a coma nucleus, or tail. The latter phenomena was first observed on January 12th, 1846...

AN ENGLISH FASHION MYTH.

London Telegraph.—The caricaturists and satirists have discovered a race of beings who are supposed to be typical of the follies of the day, but with whom the ordinary run of mankind is perfectly unfamiliar. Mathematicians, as it is supposed to exist in our midst, is absolutely unknown to ninety-nine hundredths of the community at large...

POSTAL TIME-TABLES. POST OFFICE, MONTREAL.

Table with columns: MAIL, DELIVERY, CLOSING. Lists various mail routes from Montreal to other provinces and the U.S.

LOCAL MAILS. Beauharnois Route, Hochelaga, Contrecoeur, Vercheres, etc.

UNITED STATES. Boston and New England States, except Maine. New York and Southern States, except Florida and Maine.

GREAT BRITAIN, ETC.

By Canadian Line (Friday) and Saturday. By Canadian Line, Germany (Friday) and Sunday. By Cunard (Monday) and Supplementary, see P.O. weekly notices.

WEST INDIES.

Letters, etc., prepared in New York are forwarded daily on New York, whence mails are despatched for Havana and West Indies, via Havana, every Thursday p.m.

RAILWAY TIME-TABLES. Canada Central Railway.

CHANGE OF TIME. On and after MONDAY, 21st JUNE, trains will run as follows: LEAVE OTTAWA. Western Express Train, making close connection with Grand Trunk Railway for Toronto and all points West...

ST. LAWRENCE & OTTAWA RAILWAY.

On and after THURSDAY, 10th JUNE, 1889, trains will run as follows: LEAVE OTTAWA. For the East, West, South and North-East. For the West. For both East and West.

Q. M. O. & O. RAILWAY. CHANGE OF TIME.

Table with columns: Mixed, Mail, Express. Lists train schedules for various routes including Hochelaga, Quebec, and Montreal.

[Local trains between Hull and Aylmer] Trains leave Mile Rod Station seven minutes later. Magnificent Palace cars on night trains. Trains to and from Ottawa connect with trains to and from Quebec.

INTERCOLONIAL RAILWAY.

SUMMER ARRANGEMENTS, commencing 14th June, 1889. Through Express Passenger Trains run daily (except Sunday) as follows: Leave Point Levis, River du Loup, Arrive Trois Rivieres, etc.

The Hon. A. P. Caron, Minister of Militia, was entertained at a banquet at London, on the occasion of his visit to the militia camp last week. On Thursday evening he was entertained at Toronto. In another column will be found the full text of Mr. Caron's speech at London.

DOMINION TRADE REGISTER

INDUSTRIAL DIRECTORY.

AGRICULTURAL IMPLEMENTS
A. S. WILSON & MANUFACTURING CO.
WILLIAM VALE MANUFACTURING CO.
ANILINE DYES
EMIL THOURET & CO.
BRASS WORKS
H. N. FAIRBANKS
BRIDGE BUILDERS
TORONTO BRIDGE CO.
CAPS AND FURS
J. JOHNSTON
CARPETS
PETLEY & CO.
COTTON BROKERS
M. WRIGHT
COTTON MILLS
DUNDAS COTTON MILLS CO.
HAMILTON COTTON MILLS CO.
EDGE TOOLS
R. T. WILSON
ENGINES AND BOILERS
O. C. MORRISON
THOS. WILSON
ENGINEERS AND MACHINISTS
JOHN FENSON
FILES
THOS. GRAHAM
FREDERICK HANCOCK
FILE & SPRING CO.
AMERICAN BRACKET CO.
TEKS & CO.
JAMES WRIGHT
GLASSWARE
HAMILTON GLASS CO.
GLOVE MANUFACTURERS
W. H. STORBY
HAMMERS
HENRY H. WARREN
NAILS, SPOKES AND BENT GOODS
F. W. HORE & SON
IRON WORKS
CANADA SCREW CO.
COWAN & CO.
DOMINION BOLT CO.
H. R. IVES
HAMILTON BRIDGE & TOOL CO.
McKECHNIE & BERTRAM
THE OHAWA MALLEABLE IRON CO.
OLMSTED & SON
THE WHITMAN & BARNES MANUFACTURING CO.
KNITTING MILLS
S. KENNARD & SONS
LASTS, DIES, ETC.
CHAR. CHILDS
LEATHER BELTING
DOMINION BELT AND HOSE CO.
ROBIN & S. DIER
ORGANS AND PIANOS
EOLTO & SMITH
DANIEL BELL & CO.
DOMINION ORGAN AND PIANO CO.
S. H. WARRIN & SON
W. M. MORRIS & SON

PAPER MANUFACTURERS

CANADA PAPER CO.
DOMINION PAPER CO.
JOHN FISHER & SONS
LINCOLN PAPER MILLS
W. M. HARDER & BROS.
SAW MANUFACTURERS
R. H. SMITH
SCALES
CANADA SCALE WORKS
C. WILSON & SON
HOWE SCALE CO.
SPICES, ETC.
R. D. VAN DE CARR & SON
STEREOTYPERS, ENGRAVERS, ETC.
F. DYER & CO.
STOVES
W. M. CLENNING
TELEPHONES
HOLT TELEPHONE CO.
TRIERS
BUTTER & CHEESE TRIERS
WIRE WORKS
B. GREENING & CO.
MAJOR & HIBB
TIMOTHY GREENING & SONS
WOODEN GOODS
C. T. BRANDON & CO.
J. R. McLAUREN
WOOLEN MANUFACTURERS
J. ROUTH & CO.
JOHN WARDLAW
WOOLS AND COTTON WARPS
WINANS & CO.

PETROLEUM.

PETROLIA WEEKLY OIL REPORT

(Petrolia Advertiser.)
There is no change worthy of note this week. The demand both for crude and refined continues light, but a more hopeful prospect is anticipated on the opening of the fall trade. Crude may be quoted at \$1.70. An unusual number of dry holes have been struck recently, but Messrs. Hoskins, Smiley & Cooley report a 5 barrel strike near the sink. Everything reported quiet at Oil Springs.
We learn from the Canadian that the pioneer well of the Taylor Company on the McGregor farm still continues its yield of oil without abatement, and the proprietors are so confident of the productivity of the territory that they have awarded the contract for a second well to be put down on the same property. The new well, for which Mr. William Ward of Petrolia is the contractor, is to be put down to the depth of 650 feet. The machinery is now on the ground, and the work is to be pushed on without delay. The Syndicate of local capitalists for the development of the territory, of which we spoke in our last issue, have gone to work in business like style. The company, which has a capital of \$2,500, comprises twenty-five stockholders, representing twenty-five paid up shares. The managers have concluded a contract with Mr. Thos. Fair, of Petrolia, for the sinking of six wells, the stated depth of each being 625 feet, on such localities within a radius of 2 miles of Sarnia as may be decided upon by the company. The first lot is to be made upon the farm of Mr. Neil Leckie, Jr., on the 4th line, near the first toll gate on the Sarnia and Florence Road. The engine and boiler are on the ground, and the rig is being erected with all possible despatch. The Company's arrangements are that if any of the first three wells produce oil in paying quantities, the company shall cease drilling at the completion of the third well, and shall invest the remaining capital in machinery for operating the wells. Mr. James King has about completed his arrangements for shutting off the salt well at the proper depth, and testing it for oil. The indications of oil are very strong, and Mr. King has strong faith in the success of his enterprise.
CRUDE OIL MARKET.
The market here for crude oil, by the car load, is from \$1.65 to \$1.70 per barrel. The price of American crude oil in

the various producing districts of Oil City, Titusville and Bradford by the latest quotations, is 85c to 90c per barrel in tanks at the wells for United Pipe Line crude oil certificates. To this price has to be added the pipeline charge of 20c per barrel for pumping on board the cars. When a producer has his own pipeline he obtains from 10c to 20c per barrel more for his oil than the price at the wells, but he does not get the advantage of a certificate in case he wishes to hold his oil for a rise and get money advanced on it.

REFINED OIL MARKET

Petrolia, Ont. 30 1/2 per gal.
London 0 1/2
Toronto 0 1/2
Ottawa 0 1/2
Montreal, (P. Q.) 0 2 1/2
Quebec 0 2 1/2
Windsor 0 2 1/2
The above are wholesale prices per Imperial gallon at which refined oil is sold by the carload, the price per single barrel is generally from 1c. to 2c. above these figures.
The latest refined oil quotations in New York market are as follows:
Cargo lots for export, 110° burning test by the Saybold tester, 8c
Refined oil for the New York city trade in lots of 50 to 100 barrels, 100° flash test by the Tagliabue pyrometer, 9c.
Refined oil of 150° burning test, 13c to 17c, according to brand. This is the kind of American oil usually purchased for the Canadian market, and is coming into general use in the United States.
Cases of refined oil for export, 110° burning test, cargo lots, 11 1/2 to 12c, according to brand.

PETROLEUM PRODUCTS

Lubricating 42.00 @ \$10.00 per bbl.
Tar 0.85 @ 0.90
Kerosene 0.12 @ 0.15 per gal.
Oil - 20° grave 0.22 @ 0.25
Paraffine Candles 0.18 @ 0.20 per lb.
Wax (refined) 0.10 @ 0.12

THE BRITISH MARKET

ARTHUR BROWN & CO'S PETROLEUM REPORT

London, June 13th, 1891.
Refined Petroleum Oil - Since our last issue of 30th ult., values here have improved in all positions to the extent of about 1d. per gallon. The spot demand has been moderate, but a considerable business has been transacted in futures. Prime and Standard White Pennsylvanian sold at 6 1/2 to 7 1/4, this latter price being paid for Royal Daylight brand, which is scarce and much inquired for. Month 6 1/2 to 7d September-December 7 1/2 to 7 3/4.
To-day's market closes steady, spot 7d. to 7 1/2d, September-December 7 1/2d. Naphtha - Quiet and steady.
Coal Oil - No business of importance. Turpentine - Has again been active and price on spot advanced from 33s. 6d to 35s. 3d. to 6d. Month from 33s. 6d to 35s. 3d. July from 29s. to 32. 6d. Sept.-Dec. from 27s. 6d. to 31s. 6d. With considerable sales at intermediate prices To-day's market closes firm, 35s. 6d spot.
The stock at the wharves to-day is 8,717 barrels, and deliveries for the past week 1,030 barrels.

PETROLEUM OIL

Table with columns: Stock this day, Landed last week, Delivered last week. Rows: 1891, 1890.

COAL OIL

Table with columns: Stock this day, Landed last week, Delivered last week. Rows: 1891, 1890.

Diogenes Siculus relates that an Agrigentian on the marriage of his daughter, feasted upwards of twenty thousand persons. The brother of the Emperor Vitellius once treated him with 2,000 fishes and 7,000 birds, all scarce and exquisite.
A special cable despatch to the New York World says: The extreme agitators are greatly incensed at Archbishop McCab's terrific onslaught on the League, but their efforts to overpower his influence with the people are vain and foolish. The breach between the extreme and the League agitators is widening every day. The former, who are mostly Fenians and believers in the doctrine of dynamite, have lost their grip and their appeals to the peasantry to take up arms are denounced on every hand by the clergy.
Sir Algernon Northwick, proprietor of the Morning Post, London, publishes a communication, saying the present legislative union between Great Britain and Ireland exists only in name. The present Land Bill is an attempt at compromise between two social systems, resting on purposes and instincts totally distinct, and it must naturally result in disappointment and failure. Justice to Ireland means, in effect, the withdrawal by England from her intentions and the hoped for results of the union of 1801. It is painfully apparent that the Home Rulers in the so-called Imperial Parliament are a standing protest against any common ground from which common legislation can proceed.
A Fort Smith, Ark., despatch says: Affairs in the Ukraine and Cboctaw nations have about reached a crisis. The

TORONTO STOCK REPORT

Table with columns: BANKS, Capital sub-scribed, Capital paid-up, Rest., Dividend, Closing Price. Includes entries for Bank of Commerce, Dominion Bank, etc.

DEBENTURES, &c

Table with columns: Dominion Gov't stock, 5 per cent., 30th April and Ottawa, Montreal, and Toronto, etc.

MONTRREAL STOCK REPORT.

Table with columns: COMPANY NAME, Capital sub-scribed, Capital paid-up, Rest., Dividend last 6 Months, Closing Price June 15. Includes entries for British North America, Canadian Bank of Commerce, etc.

United States cavalry at Fort Still are ordered to report for duty at Nogogee, to co-operate with the Choctaw militia, in removing white settlers and their stock. All persons not Indians or intermarried with them are classed as intruders, and will be driven out. The orders of banishment will be speedily and effectually executed. Great terror and distress exist. Three hundred families have crossed the border during the last ten days, leaving everything behind. The roads are lined with flying fugitives, who abandoned their cabins to the flames, growing crops and stock. A number of whites refuse to leave, and threaten to fight if force is used, claiming to hold a genuine policy.

Hasen relative to the establishment of several signal stations in Alaska, and the intended establishment of others at Lady Franklin Bay and elsewhere within the arctic regions. Point Barrow, the northernmost limit of Alaska, has already been selected as one position to be occupied, and the design is to extend a chain of stations for meteorological and general physical observations along the entire southern coast of the Arctic Ocean - "Honored Sir, - Please permit me to offer you, in the name of the International Polar Commission, my sincere thanks for your important co-operation relative to the part the United States of America has taken in the international system of simultaneous observations in the Arctic region around the poles. I hereby request you, in the name of the Commission, to accept from this day your appointment as a member of the International Polar Commission for the United States. We very sincerely hope that the gap now existing between your two stations may be filled up by Canada by the establishing of stations somewhere on the Islands of the Archipelago. Boothia, Felix Melville or Franklin Bay have lately written on this subject to Mr. Carpmal, in Toronto. If you, from your side, can contribute anything further a favourable answer you will contribute to a large extent to the purpose we all have in view. I am now only awaiting an answer from Canada, Germany, Holland and Russia concerning a second fall station in Nischookolensk in order to make final arrangements for the establishment of at least eight stations in the Arctic region to commence in the autumn of 1892 and to invite all those who take a part in it to the last meeting of the Polar Commission, to be held in St. Petersburg during the present summer. I remain, very respectfully, your obedient servant. With, President International Polar Commission, St. Petersburg.

THE DRY GOODS TRADE.

NEW YORK ADVICE.

Business in the domestic dry goods market... through quiet in comparison with the early part of the year... demand is always anticipated at a high level...

The market for foreign dry goods presents no features of special interest at the present time... Business with importers and first hands is of very moderate proportion...

In cotton goods there is considerable statement in the new demand from first hands... The market, however, has lost none of its strength, and values are nearly sustained at the recent advance...

The upward tendency for woollen goods continues... Buyers show increased disposition to place orders, as they realize there is little or no chance for lower prices...

ahead. Fancy cassimeres of the best grades have all along sold freely... more attention is paid to outside makes as the latter known ones...

The business in cotton for the week past has been quite limited at almost exactly the former rates... Reports neither from abroad nor the South have been of a nature to change the aspect of the market...

The wool market still tends upward... Buyers are quite ready to take stock, but holders avail themselves of the advantages which for a few weeks have been increasingly on their side...

THE QUALITIES OF A GOOD SALESMAN.

A salesman should not only be thoroughly upright, but he should be active and industrious... It is the worker who best succeeds... It is not the most brilliant mind in the fierce battle of life that wins the contest...

Reports from Big Bend bring news of continued troubles with the Indians and whites, resulting in the loss of life... A lad named Lawrence Connolly, employed in Gilmore's saw mill, Belleville, met with a fatal accident on Friday evening...

SCIENTIFIC AND PRACTICAL.

UNIFORM STANDARD TIME.

Paper by Mr. Sanford Fleming, C. E.

At the recent convention of the American Society of Civil Engineers, at Montreal, the following paper was read by Mr. Sanford Fleming, C. E. of this city.

The question which I have been requested to bring under the notice of the convention, although not strictly of an engineering character, is in its nature, cannot fail to be of interest to the members of the American Society of Civil Engineers... To the large number of its members connected with the administration and development of the gigantic railway system extending between the two oceans...

It is proposed, — 1. That the exact time should be determined astronomically at a central observatory, 2. That every town of any importance should have a public time signal station; 3. That arrangements be made for placing each station in electrical connection with the central observatory at a certain hour every day... It is perfectly obvious to my mind that a system of uniform time which would be good for this country should be equally good for all countries on the face of the globe...

mean central observatory, and through these standards it is proposed to keep every town, city, railway and steamboat clock throughout the land as nearly as practicable in perfect agreement... The plan of arrangements favoured by the Metrological Society, New York, and the Canadian Institute, Toronto, is to have the standards so established that they will be exactly one hour apart... that is to say, while it would be nine o'clock at one standard it would be eight o'clock at the next to the west, seven o'clock at the following, and so on, by steps of exactly one hour...

It is proposed, — 1. That the exact time should be determined astronomically at a central observatory, 2. That every town of any importance should have a public time signal station; 3. That arrangements be made for placing each station in electrical connection with the central observatory at a certain hour every day... It is perfectly obvious to my mind that a system of uniform time which would be good for this country should be equally good for all countries on the face of the globe...

Twenty-four standard meridians (one every 15 degrees of longitude) to be established around the globe for reckoning sectional or local time.

One of the 24 standards to be selected as a time zero or initial meridian for reckoning cosmopolitan time.

The time zero to coincide with the prime meridian to be common to all nations for computing longitude.

The 24 standard meridians to be designated by names, or by letters of the alphabet or by degrees of longitude, numbered from the prime meridian westerly.

The prime meridian or zero for time and longitude to pass near Baffin's Strait 150 degrees from Greenwich.

The division of the day into two halves of twelve hours each to be discouraged, and a single series numbered from I to XXIV, substituted. In the cosmopolitan day, or period of time between two successive passages of the sun over the prime meridian, the single division to be made absolute.

I may avail myself of this opportunity of mentioning that the scheme of cosmopolitan standard time is being brought before various European societies under distinguished auspices. His Excellency the Governor General of Canada has been good enough, personally, to evince a deep interest in the question, and has been pleased to send communications to France, Belgium, Prussia, Austria, Russia and Switzerland. The subject will be considered by the Association for the Reform and Codification of the Law of Nations, at their meeting in August next, at Cologne, in Rhine-Prussia; and it will, on that occasion, find warm advocates in Dr. Barnard, President of Columbia College, and Mr. David Dudley Field, of New York. The question will be brought under the consideration of the International Geographical Congress, at Venice, in September next, supported by such men as Mr. Otto Strove, Director of the Imperial Observatory, St. Petersburg; General Haazen, of Washington, and others. In bringing these propositions under the notice of the American Society of Civil Engineers, I do not feel justified, on an occasion like the present, to refer at length to the voluminous papers which have been written, and the arguments which have been advanced, in connection with this question. Necessarily I have been brief, and respectfully suggest, in order further to save the time of the convention, that a committee be appointed to examine and report at a future meeting. I feel it proper to add that as the great object is to determine and establish a system which will secure the greatest advantages to the community, it is of first importance to have the proposition carefully digested by those whose opinions have value with the public. An expression from this body of educated, scientific and practical men must carry with it great weight, and will exact respect in every quarter.

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COOKING BY ELECTRICITY.

Of the many curious things certain to be seen at the forthcoming exhibition of electricity at Paris, not the least remarkable will be the electrical cooking range of M. Salignac. That ingenious gentleman is going to fit up his apparatus in the grill room of the restaurant, and intends to furnish a great variety of meats which have been cooked by heat generated from the electric current.

At the last Paris Exhibition, M. Mouchot roasted mutton in condensed sulphuric acid, and literally turned his spit on the hearth of the sun, but an enthusiastic admirer might say that M. Salignac has far surpassed this in broiling steaks by lightning and warming coffee with the aurora borealis. As a matter of fact, the electric current is as well fitted to produce heat as it is to produce light, and just as electricity will, in all probability, be made to yield the principal artificial light of the future, so will it doubtless be applied to household heating. The same machines which light the house by night will heat and cook by day, besides performing other duties, such as driving a coffee mill or a sewing machine. — Scientific American.

NEW INVENTION FOR COATING IRON AND STEEL WITH IRIDESCENT COPPER.

This important invention, says the Review Polytech, is the work of Dr. Weil, of Paris. The inventor has found that the best mode of preparing the metallizing bath and the best proportion of ingredients are indicated in the following directions: First 35 parts of crystallized sulphate, or an equivalent amount of any other salt of copper, are precipitated as hydrated oxide by means of caustic soda or some other suitable alkaline base; this oxide of copper is to be added to a solution of 130 parts of Rochelle salt, and dissolved in 1000 parts of water; to this 60 parts of best caustic soda, containing about 70 per cent. NaO, is to be added when a clear solution of copper will be formed. The object to be coated is to be cleaned with a scratch brush in an alkaline-organic bath, attached as a cathode, immersed in the coppering bath, and treated with the usual precautions, when it will become rapidly coated with an adherent film of metallic copper. As the bath gradually loses its copper, oxide of copper, as above prepared, should be added, to maintain it in a condition of activity, but the quantity of copper introduced should not ordinarily exceed that above prescribed as compared with the quantity of tartaric acid the

bath may contain. If the quantity of copper notably exceeds this proportion, certain metallic iridescences are produced on the surface of the object. These effects may be employed for ornamental and artistic purposes. According to the time of the immersion, the strength of the current, and the projection of copper to the tartaric acid the iridescences may be produced of different shades and tints which may be varied or intermingled by shielding certain parts of the object by an impermeable coating of paraffine or varnish, while the iridescent effect is being produced on the part left exposed. All colours, from that of brass to bronze, scarlet, blue and green may be thus produced at will. It is desired to deposit nickel the only modification of the above process requisite is the substitution of precipitated oxide of nickel for the oxide of copper, produced by precipitation as above mentioned. In the above process it will be observed that the introduction of sulphuric acid into the bath is avoided, at least except in such insignificant quantities as may still adhere to the precipitated metallic oxide.

WHAT DO YOU THINK?

When you see a steam engine working in a large room exposed to drafts on every side, with naked cylinders and steam chest, what do you think? Probably that the parties who own it do not realize the amount of fuel they are wasting.

When you see water pumped from an inefficient heater, that not only chokes the exhaust, but takes up very little heat from it, what do you think? Probably that coal is cheap in the vicinity, and that power is a secondary consideration.

When you see naked steam pipes crossing a windy alleyway, or run along a stone wall in a cellar or cold place, "sizzling" steam every joint, what do you think? Probably that it would be better economy to bring engine and boiler nearer together, lag up the pipes, stop the leaks, and keep the money that is thrown away to add to the bank account.

When you hear the engine long before you can see it, thumping at every stroke, or marking time with the valve gear as a soldier marks time on parade, what do you think? Probably that the engineer is a man with an ambition, don't care how soon six o'clock comes, and thinks all mechanical papers foolery, and a waste of time and money to read.

When you go into a fire room and find yesterday's ashes and cinders under the grate or in heap about the premises, the steam gauges dim with dust, a dripping water pipe in one end, dirty fire, and a general appearance of gods to seed, what do you think?

Why that the missionary, whose business it is to make the wilderness blossom as the rose, ought to drop in and mildly intimate that in an engine or boiler room cleanliness is a cardinal virtue. That it is cheaper to live in a boiler room swept and garnished than in a kennel of a place where ashes and dirt lie thickly. In some engine rooms that we know of, there are carpets down the centre, and a bright oilcloth close to the engine, and all about it. There are even pictures on the wall and plants in pots in the windows. The engine does not say a word. Beyond the sighing of the exhaust and the "creep" of the main belt, as it parts from the pulley, there is not a sound to indicate that there is a tremendous force at work. Contrast this with the hammer and tongs, a clatter like bedlam broken loose, broken windows, and floors like an oil works for a fifth, and we have just the difference between thrift and sloth, between care and carelessness, between proper economy and the "wilful waste," that sooner or later makes "woful want." Which is the better plan? What do you think?—Mechanical Engineer.

SIR WILLIAM THOMSON ON THE STORAGE OF ELECTRICITY.

The following letter by Professor Thomson appeared in the London Times of the 9th instant:—

Sir,—The marvellous "box of electricity" described in a letter to you, which was published in the Times of May 16th, has been subjected to a variety of trials and measurements in my laboratory for now three weeks, and I think it may interest your readers to learn that the results show your correspondent to have been by no means too enthusiastic as to its great practical value. I am continuing my experiments to learn the behaviour of the Faure battery in varied circumstances, and to do what I can towards finding the best way of arranging it for the different kinds of service to which it is to be applied. At the request of the Council of Administration of the Societe de la Force et la Lumiere, I have gladly undertaken this work because the subject is one in which I feel intensely interested, seeing in it a realization of the most ardently and unceasingly felt scientific aspirations of my life—an aspiration which I scarcely dared to expect or to hope to live to see realized. The problem of converting energy into a preservable and storable form, and of laying it up in a store conveniently for allowing it to be used at any time when wanted, is one of the most interesting and important in the whole range of science. It is solved on a small scale in winding up a watch, in drawing a bow, in compressing air into the receiver of an air-gun or of a Whitehead torpedo, in winding up the weights of a clock or other machines driven by weights, and in pumping up water to a height by a windmill (or otherwise as in Sir William Armstrong's hydraulic accumulator) to the purpose of using it afterwards to do work by a water-wheel or

water pressure on a piston. It is solved on a large scale by the application of burning fuel to smelt zinc, to be afterwards used to give electric light or drive an electro-magnetic engine by becoming as it were, unsmelted in a voltaic battery. Ever since Joule, forty years ago, founded the thermodynamic theory of the voltaic battery and the electro-magnetic engine, the idea of applying the engine to work the battery backwards and thus restore the chemical energy to the materials so that they may again act voltaically, and again and again, has been familiar to science. But with all ordinary forms of voltaic battery the realization of the idea to any purpose seemed hopelessly distant. By Plante's admirable discovery of the lead and peroxide of lead voltaic battery, alluded to by your correspondent, an important advance towards the desired object was made twenty years ago; and now by M. Faure's improvement practical fruition is attained. The "million of foot pounds" kept in the box during its 72 hours journey from Paris to Glasgow was no exaggeration. One of the four cells, after being discharged, was recharged again by my own laboratory battery and then left to itself absolutely undisturbed for ten days. After that it yielded to me 250,000 foot pounds (or a little more than a quarter of a million). This not only confirms Mr Reynier's measurements, on the faith of which your correspondent's statement was made; it serves further to show that the waste of the stored energy by time is not great, and that for days or weeks at all events, it may not be of practical moment. This, however, is a question which can only be answered by careful observations and measurements carried on for a much longer time than I have hitherto had for in mitigating the Faure battery. I have already ascertained enough regarding its qualities to make it quite certain that it solves the problem of storing electric energy in a manner and on a scale useful for many important practical applications. It has already had in this country one interesting application of the smallest in respect to dynamical energy used, but not of the smallest in respect to efficiency, of all that may be expected of it. A few days ago my colleague, Professor George Buchanan carried away from my laboratory one of the lead cells (weighing about 18 lbs) in his carriage, and by it ignited the thick platinum wire of a galvanic arc, and bloodlessly removed a narrow incision from the tongue of a young boy in about a minute of time. The operation would have occupied over ten minutes if performed by the ordinary voltaic arc, as it must have been, had the Faure cell not been available, because in the circumstances the surgical electrician, with his paraphernalia of voltaic battery to be set up beforehand would not be practically admissible. The largest useful application I am waiting just now for the Faure battery—and it is to be hoped that the very minimum of time will be allowed to pass till the battery is supplied for this application—is to do for the electric light what a water cistern in a house does for an inconstant water supply. A little battery of seven of the boxes described by your correspondent suffices to give the incandescence in Swan or Edison lights to the extent of 100 candles for six hours, without any perceptible diminution of brilliancy. Thus, instead of needing a gas engine or steam engine to be kept at work as long as the light is wanted, with the liability of the light failing at any moment through the slipping of a belt—or any other breakdown or stoppage of the machinery, and instead of the wasteful inactivity during the hours of day or night when the light is not required, the engine may be kept going all day and stopped at night, or it may be kept going day and night, which will undoubtedly be the most economical plan when the electric light comes into general enough use. The Faure accumulator, always kept charged from the engine by the house supply wire, with a proper automatic stop to check the supply when the accumulator is full, will be always ready at any hour of the day or night to give whatever light is required. Precisely the same advantages in respect of force will be gained by the accumulator when the electric town supply is, as it surely will be before many years pass, regularly used for turning lathes and other machinery in workshops, and sewing machines in private houses. Another very important application of the accumulator is for the electric lighting of steamships. A dynamo-electric machine of very moderate magnitude and expense, driven by a belt from the drum on the main shaft, working through the 24 hours, will keep a Faure accumulator full, and thus, notwithstanding irregularities of the engine at sea or occasional stoppages, the supply of electricity will always be ready to feed Swan or Edison lamps in the engine-room and cabins, or are lights for mast-head and red and green side lamps, with more certainty and regularity than have yet been achieved in the gas supply for any house on terra firma. I must apologize for trespassing so largely on your space. My apology is that the subject is exciting great interest among the public, and even so slight an instalment of information and suggestions as I venture to offer in this letter may be acceptable to some of your readers.

I remain your obedient servant,  
WILLIAM THOMSON.  
The University, Glasgow, June 6.

The steamer *Feraday* has sailed from London to complete the laying of the new Atlantic cable.

A Jamaica despatch says the Jesuits have been expelled from Nicaragua. They are flying in great numbers in all directions. They are accused of being the enemies of free Government, and inciting the populace to acts of disorder resulting in bloodshed.

In the British House of Commons, on Friday night, Sir Charles Dilke, replying to a question, said that Sir John Macdonald knew nothing about France having expressed a desire to conclude a commercial treaty with Canada. Sir Charles added that Canada had certainly not taken any step to induce France to make overtures for such a treaty.

ROYAL MILITARY COLLEGE

KIMURTON, 25th.  
The usual closing exercises at the Military College took place to-day, the occasion being one of marked interest and importance. There was a large assemblage of citizens, the meeting of military men being the most important that has taken place for some time. The college buildings, both the educational block and barracks, were thrown open for inspection, and many took advantage of thoroughly and minutely inspecting them. The Minister of Militia, Major-General Luin and his aide-de-camp Major Holleck, arrived early in the morning, Hon. A. P. Caron becoming the guest of Mr. G. A. Kirkpatrick, M.P.

The distinguished visitors proceeded to the college, where they were received with the usual salute, and were surrounded by a number of prominent gentlemen, including Lieut-Col and Capt Kelly, of the Governor-General's Foot Guards, Ottawa, Messrs. H. Cameron, M.P., T. White, M.P., and others. All the officers of the district staff and local corps were present. The riding squad was inspected, and also the cadet barracks, and the company adjourned to the dining hall to partake of an excellent luncheon. The programme at 2 p.m. opened with the examination of various engineering works and the witnessing of a number of explosions, including (1) a countermine at salient of Ravella in connection with the model attack; (2) fougasse in connection with the model attack; (3) cutting down of a tree with dynamite; (4) breaking of a block of granite with dynamite placed in a bore hole. Same charge of dynamite placed on another block of granite to show the difference of effect; (5) submarine mine. Following this came the gymnastic and athletic feats very cleverly and skillfully performed amid the applause of the audience which packed the building in which they were conducted; the dismounting and remounting of a siege gun, accomplished in remarkably quick time, one minute and three seconds. The infantry movements came last; the marching past, saluting and battalion evolutions, under command of Adjutant Kidout, giving the highest satisfaction. The presentation of prizes took place in the Gymnasium, before which, however, Col Hewitt read his report, which was brief, but on the general requirements and circumstances of the college having been given to the public in February last in the militia report for 1881-82. The present referred to the examination which had just concluded, and covering the instruction given during the first annual instead of semi-annual term, from the 10th of September, 1880, to this date. The four commissions in Her Majesty's army available annually have been accepted as follows:—Royal Engineers, Colour Sergt. Major H. Mackay; Royal Artillery Battalion, Sergt. Major H. Campbell; Infantry, Colour Sergt. Major A. Van Baubenzie; Colour Sergt. Major H. Hogan, Colour Sergt. Major J. Coryell, Corporal McEibinny, Colour Sergt. Major Daniel and Sergt. Dancomb, might, in the order named, have obtained commissions in the infantry of the regular army, had they desired to do so. The list of graduates in the order of merit is as follows:—Colour Sergt. Major Mackay, 40,937 marks; Batt. Sergt. Major Campbell, 39,541; Colour Sergt. Major Coryell, 36,145; Sergt. Duosecomb, 30,060; Colour Sergt. Major Daniel, 29,285; Corporal McEibinny, 28,789; Colour Sergt. Major Hogan, 27,634; Sergt. Yates, 27,473; Sergt. Sears, 28,201; Lance Corporal Ford, 26,413; Sergt. Shaw, 25,420; Sergt. Cartwright, 24,063; Corporal Craig, 21,775; Sergt. Hubble, 17,058; Sergt. Drury, 16,630. All excepting the last had received first-class certificates; B. S. M. Campbell for conduct and discipline, a sword; B. S. M. Campbell, drill and exercise, two volumes Napier's "Peninsular War"; G. S. M. Mackay, mathematics, two volumes of Waverley novels; Fertilization, two volumes "Loyalists in America"; for descriptive geometry, one volume Witherow's "Canada"; for artillery, two volumes of Waverley novels; for civil engineering, two volumes of Parkman's works; for military history, two volumes of Thier's works; for French, two volumes of Tension; for physics, two volumes of "Chambers' Encyclopedia"; for chemistry, two volumes of "Chambers' Information"; for militia topography, two volumes of Parkman's works; Battalion Sergeant-Major Campbell, for German, two volumes Byron's works; for free-hand drawing, four volumes of Kuskin's works; Colour Sergt. Major W. Coryell, geology, 1 volume of Prescott's "Conquest of Mexico."

Class Prizes—Colour Sergt. Mackay, 2 volumes of historic works; Lance Corporal Robinson, 1 volume of Shakespeare; Cadet Stewart, 1 volume of "Duty and Thrift"; Cadet Von Island, 1 volume of "Self-help and Character."

The three medallists for proficiency were Colour Sergt. Major Mackay; Governor-General's Batt. Sergt. Major Campbell; Governor-General's Batt. Colour Sergt. Major Coryell.

Hon. A. P. Caron said he felt great pleasure in being able to assist in the distribution of prizes which had been won by hard work, and after passing the usual term in the Military College of Canada. He only regretted that he had to ask them to do very much more labour than they would otherwise have had to do, but he sincerely desired not to allow this opportunity to pass without a day's insight into the operations of the institution. This being his first official act since he became head of the Department under which they were, it was to him, as Minister of Militia, a great pleasure, indeed, to tender to the successful competitors his most sincere congratulations, and not only as Minister of Militia but as a Canadian, he felt proud to see the college taking such prominence in the land. The cadets have had advantages such as were given to no other institution in Canada. It had as professors men who had distinguished themselves in the service, and whose competency to instruct in the different branches none could doubt. The college

held a high place, not only in the estimation of Canadians, but of the authorities in England, and the favour of the Imperial Government was manifested in the granting to the cadets four commissions in the regular army as prizes to the most successful graduates in each year. To him this liberality of the Imperial Government was such that the importance of it could not be overvalued. It showed quite clearly that the course of study followed there was quite equal to any given abroad, and qualified gentlemen to wear Her Majesty's uniform in the different branches of the service. It showed also that the examination passed here was such that Her Majesty could confide to the cadets leaving the college places of responsibility and distinction. Thus possessed of an education and training such as few obtained, they deserved at the hands of the Government all possible encouragement, but they should not rely too much upon the Government after leaving the college. They had received advantages which enabled them to strike out for themselves under more favourable circumstances than any other young men of their age. They were fitted to step into many positions leading to prosperity. He, as a member of the Government controlling the institution under which they were trained, and knowing exactly the nature of the education imparted them felt that every reasonable encouragement should be extended to the cadets, that if possible they should be retained in the country, contributing with their co-workers to its advancement (Applause). This should be the attitude towards the college of any Government, whether it was of one side or the other. The maintenance and usefulness of the institution was not a matter of politics. But even if the cadets left Canadian soil, and if they sought abroad opportunities which were not for the moment to be obtained in this country, he looked upon them as so thoroughly loyal that if Canada required their services they would flock to it and fight its battles, and give to the benefit of the splendid training they had gained from the college (Applause). Before ending his few remarks he wished to congratulate Col. Hewitt upon the manner in which he had conducted this national institution during the year. He had been able in his position as Minister of Militia and defence to look into it more particularly, and to judge of the care and attention devoted to the training of the cadets. He felt glad that the young sons of Canada were so well qualified to act the part of soldiers and so ably taught to handle, if needed, the rifle in defence of their country. (Hear, hear.) And you gentlemen cadets, he added, let me tell you that I am proud to know that you have given all the industry and needful application to the instruction of your professors, and I hope you have learned here in this West Point of Canada the fundamental principle of all good service, the essential feature of all discipline, obedience. It is the first requirement in any position in life, and without its enforcement you can never command. I wish the graduates of this college all the happiness and prosperity which they can desire, and I hope the others will enjoy their vacation coming back to Kingston with renewed ardor to continue what has been so well commenced, and to benefit to the fullest extent by all the privileges of this college. I am pleased to see so many present at the closing exercise, indicating by their presence the interest taken in this institution, which is one of the most important in Canada.

This evening the Minister of Militia, the Major-General and his Aide-de-Camp dined with a number of military and representative men at the residence of Col. Hewitt. The majority of the cadets start for home at once. The graduating class dined at the Windsor Hotel.

OUR ESTATE IN THE COLONIES.

The remarks which we felt it our duty to make last week, while treating of New South Wales, on the subject of the land fund of which the Colonial Governments have been endowed with the trusteeship, have a far wider application than to this or that colony. New South Wales is by no means the greatest transgressor in respect of the manner in which she has interpreted her duties to her "kin beyond the sea." The vice of looking upon the lands within their own boundaries as so much treasure to their individual credit, to be spent in any way they may please for their own benefit, is one common to all the colonies. Victoria, which out of her original estate of some fifty odd millions of acres, equaling the whole territory of Great Britain, has parted with some four-fifths of her patrimony already, affords perhaps the most flagrant instance of the abuse on which we have commented. There is much reason to fear, however, that Canada and Queensland are treading closely on the heels of the colony which in this and other respects has acquired the character of the prodigal of the family. Under the pretext of "opening up the country for settlement," and through the instrumentality of "liberal" Land Acts—their liberality being usually a stay at home virtue—both of these colonies are administering the magnificent domains entrusted to their charge—domains not acquired by their own exertions, to which they have really no exclusive title—as though they were responsible to no one but to the people at present inhabiting these territories. The question is a very important one, involving as it does the future homes of the British race and the development of the British Empire. Sooner or later—and it may fairly be said, sooner rather than later—the teeming population pent up within these islands will be beginning to ask what has become of their estate in the colonies. The truth is now forcing itself on the attention of all patriots and legislators, that the lands at home do not afford profitable employment for capital or industry. Even if there is enough of them in quantity to feed the land hunger, from

causes which we need not here discuss, they are not available to meet the demands of our growing population. Agricultural interest was perhaps never at so low an ebb as it is at present. A letter now before us, written by a competent authority, gives a detailed picture of the present state of the British farmers. "I really do not know," says the writer, "what is to become of the farmers." They cannot pay their taxes, and prices are going down for all kinds of produce, excepting sheep and wool. Even with greatly reduced rates they cannot go on paying wages, rates, and taxes. Many are going abroad, having lost nearly all they had (some, I may say, all they had and more) and a great many more will have to follow those who are gone. I believe that only one of a hundred of the farmers are now solvent throughout England, Ireland and Scotland, and I see no hope for any improvement in their position, except they emigrate to our colonies. None of the political economists or the optional philosophers, for whom everything is the best so long as the abstract principle of buying in the cheapest and selling in the dearest market is maintained, are able to suggest any practical remedy for this most serious national evil. Emigration is doubtless the only remedy, but emigration whither, and on what terms? The experiment of forming British settlements in foreign countries has been extensively tried, and it cannot be said to have been successful. The immigrants in the United States may succeed as individuals, but it is at the sacrifice of their national character and to the great loss of the Empire. The British colonies are the natural homes of the British people, and here there is doubtless a wide enough field for every kind of industry and enterprise. But the colonies on their part, have a me duties to discharge, not for their own sake alone, but quite as much for theirs, for the Mother Country. The vast territory of which they have been constituted the managers, with a foolish generosity as we have always thought on the part of the Mother Country, is certainly not being administered in such a way as to benefit the people of the Empire. Each colony, indeed, rather assumes that the whole area within its limits is in some exclusive sense its own, to do with as it pleases. That this is not the idea under which the colonies were instituted, nor the privilege with which they were endowed, must be clear to every man who has taken the trouble to understand colonial history and development. In no case whatever was the fee-simple of the lands parted with by the Crown to the Colonial Government. There was much laxity, it is true, in the way the original endowments were made, and in the drawing up of the Imperial Acts under which the colonies derive their charter to deal with the public lands; but the ultimate right of the Crown, as the owner of the soil was recognised in many ways, though seldom guarded as it should have been. In proof of this we have only to remember that in all the original land acts passed by the colonial legislatures, under the powers derived from the Imperial Act, there was a section setting aside a portion of the proceeds of the sale of lands—in some cases one-half, in few less than one-third—as an emigration fund. By this part dedication of the land revenue to emigration the colony recognised the principle that the land was not only the property of the colonists, but of all who might come to such hereafter. The colonial governments, in fact, were intended to be, and still are, so long as they are subject to the Crown, merely the administrators and trustees of that portion of the Imperial estate which was within their boundaries, on behalf of the whole people of the Empire. They were at liberty to use their discretion in the management and in the disposal of the lands, but they were bound at least to keep the door open to the population of the future; to deal with their lands, not as so much material for revenue, but as their capital, to be employed in extending their growth by attracting settlers from other parts of the kingdom. In this respect not one of the colonies who have been invested with the privilege of self government can be said to have faithfully performed his duty. They have all treated the land revenue as merely a branch of income, with scarcely a thought for those who are to come hereafter to share in the lands. They have dissipated their estate in defraying their current expenditures, in most cases without having anything whatever to show for the money they have spent. The increase of their population by immigration in the majority of the colonies has been most insignificant. In the case of Victoria, indeed, for a whole decade the statistics show that the adult male population was absolutely stationary. Meanwhile, the lands were being got rid of at a most "liberal" rate, eventually to pass, in the hands of a few large holders, and then to be locked up more effectually than ever against intending settlers. With this evil, which seems generally to be on the increase, full in view, the British people have a particular interest in watching the colonial estimates, in which revenue from land sales figures so largely, and in which colonial treasures appear to delight.—Colonies and India.

England, in the scale of nations, was a secondary power until 1763. The conquest of Canada and the establishment in India, her naval superiority, her colonies and her trade, raised her to the first rank among nations.

LUMBER TRADE.

BRITISH MARKET NOTES

(Timber Trade Journal)

Importers are still holding off, and will only buy as they were, from head to mouth...

We have again to record a large delivery of deals and flooring from the Surrey Commercial Docks for the week ending the 21st...

Messrs Churchill & Sim's circular, just issued, gives the trade to understand that the last year's stock of Swedish deals and battens is nearly exhausted...

Another sentence in the same circular has awakened some curiosity in city circles—we allude to the remark that early cargoes of Swedish deals and battens will probably sell favorably...

From Wyborg very little is doing; shippers are still holding for prices which the merchants here do not feel inclined to give...

We have known Wyborg deals shipped at £3 per standard f.o.b., but that was about a dozen years or more ago...

We understand that a large line of white battens of the well-known Kramfors brand has been sold to a Scotch house at £5 f.o.b. per standard, averaging 3rd.

It is expected that Petersburg white-wood will be weaker as the season comes on, as the demand remains quiet.

We hear of Riga crown goods being offered at £6 3s 9d, although some importers state that they can buy at £6; but then the shipment varies, and unless the shippers' names are mentioned the quotation is no certain index to the ruling value.

Among the peculiarities of the present season which are worth noticing is the striking difference between the ports of London and Liverpool in respect of the lumber trade, as exhibited by the latest returns.

At the commencement of the important season, therefore, Liverpool had itself considerably overstocked with the staple articles of wood produce which best suit that market...

"We shall have prices lower before they are higher, in spite of all the talk of shippers, whether they be Russian, Scandinavian or Canadian, and the sooner they decide to lower prices, on what is much more to the purpose, the better it will be for them."

This is not making the matter, but whether his advice as to increasing the supply from abroad is adopted by the shippers or not is a very doubtful matter.

"A man convinced against his will is of the same opinion still."

And from what is reported of the temper of the foreign millowners they are not unlikely to supplement such orders as they can get by testing our markets at their own risk...

Now let us turn and look at the aspect of affairs regarding the lumber trade in London at the present time in comparison of the same period last year.

Chicago, 24th.—Lumber dealers yesterday advanced prices all along the line 50c to \$1 per thousand.

LORD DERBY ON CO-OPERATION.

The thirteenth annual Co-operative Congress, which will last three days, commenced at Leeds yesterday, under the presidency of Lord Derby.

Lord Derby delivered his inaugural address, which occupied nearly two hours. He said it was not the language of idle flattery, but the expression of a deliberate and sincere conviction...

He assumed, as a thing needing no proof, that co-operative industry set its face against all shams, all dishonest work, all making of an article to look like something which it was not...

He presumed he might take it for granted that when co-operation came in the system of dealing on credit died out, and he thought it hardly possible to overrate the economical and social gain by that result alone.

He would not enter into the difficult question of how far and under what circumstances business might fairly be done on the basis of credit instead of cash. But he contended that in the ordinary affairs of life the very best service which could be rendered to any man would be to make it impossible for him to buy anything, necessary excepted, until he had got the money in hand to pay for it...

It was not the least merit of a co-operative community that it had a tendency to weed out the shiftless, careless, helpless beings to whom exactness, punctuality, and strict observance to engagements entered into were so unpleasant as to be almost impossible.

There was no law to appeal to. There was not usually much doubt as to the facts. Co-operation met the difficulty, or rather it turned it. They said there shall be no conflict of interests where we are concerned, for the two parties shall be identical.

was not usually much doubt as to the facts. Co-operation met the difficulty, or rather it turned it. They said there shall be no conflict of interests where we are concerned, for the two parties shall be identical.

The West Lynne (Manitoba) Times mentions a remarkable phenomenon observed at St. Jean Baptiste recently, on the cheek of a Mrs. Marcil.

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THE LARGEST SAW WORKS IN CANADA

When Mr. Garrison visited England he was invited to Stafford House by the Duchess of Sutherland, mother of the present Duke, and at her request he sat for his picture to Richmond, the celebrated crayon artist, and the picture occupies an honourable place in the gallery.

The following is the verbatim of the term 'whitelait'. In former times these little fishes were used as bait for the crab pots, then, as now, they were very bright and silvery, and were called 'whitobait'. In contradistinction to other baits that were not white.

The art of printing was not discovered all of a piece. For some time after it had been brought to perfection, the secret of it was kept, in order that its pos-

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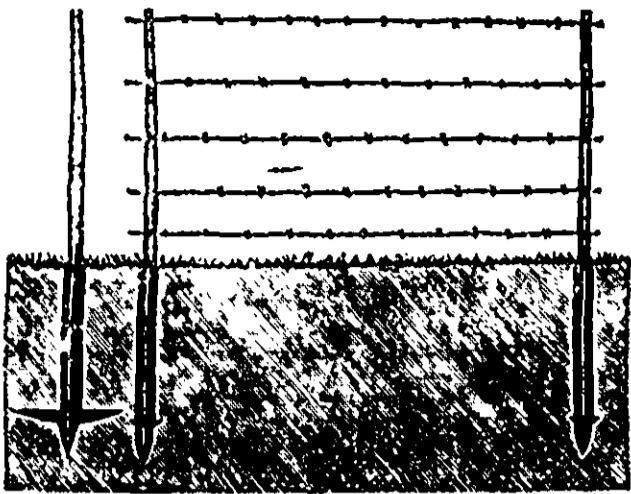
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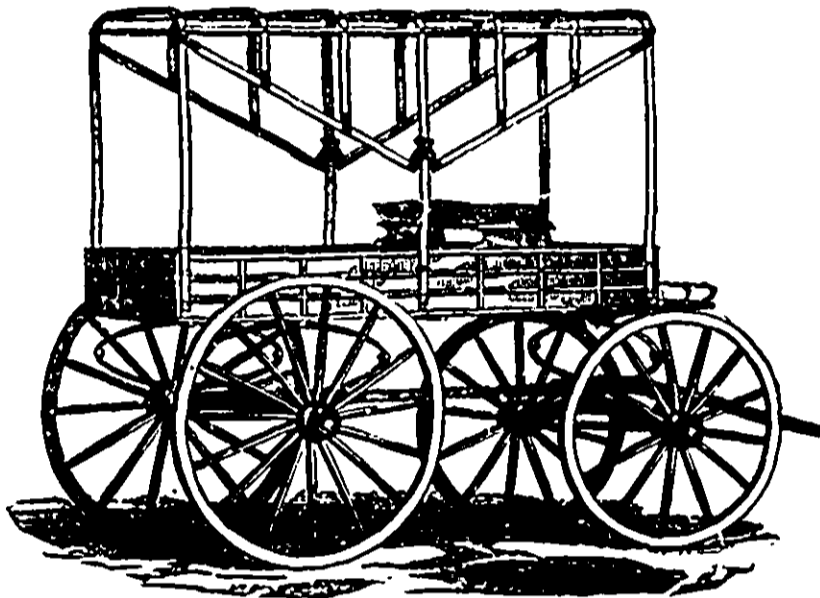
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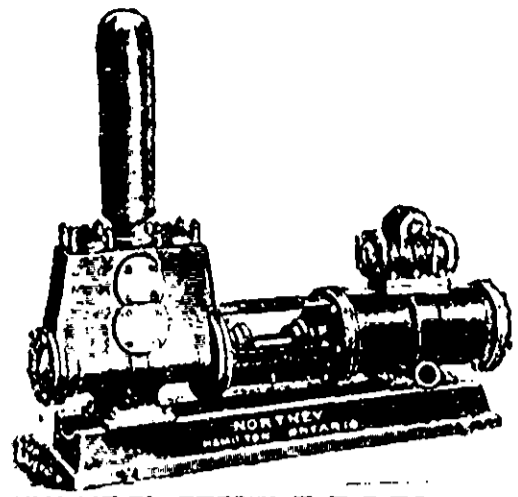
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