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[BRIT]ISH WOOLLEN MANUFAC[TU]RERS AND THE CANADIAN TARIFF.

[The com]plaints of British manufacturers against [the C]anadian tariff, which were rather loud at [first, have] subsided a good deal of late, since it [appears th]at our import trade with the Mother [Country i]s thriving very well under the infliction. These prophets of evil, who felt certain [that Cana]da would soon cease to be a customer for [their go]ods, and might, therefore, just as well be [separated] from the Empire, have not found their [an]ticipations confirmed by the event. Strange [as it mus]t appear to them, Canada is actually a better [customer] to Britain now than she was two years ago. [This does] not express the full importance of the change [either; m]erely that the amount of our purchases, stated [in poun]ds sterling, has increased. Not only is there [more tra]de, but there is a better and healthier trade, [with a] less proportion of losses from compositions [and bad] debts. These are facts well attested by the [commer]cial press in Canada; and we may be sure that [they are] well known to British merchants and manu[facturer]s having Canadian connections. One particu[lar int]erest, however, that of the Yorkshire woollen [manufa]cturers in certain lines, is still up in arms [against] the Canadian tariff, as appears by the follow[ing, w]hich we copy from the *St. James' Gazette* of [Februa]ry 4th:—

[CANA]DA AND BRITISH GOODS—A deputation from the [Co]mmittee of the Yorkshire Chambers of Commerce, [headed b]y Mr. Sergeant Simon, M.P., Mr. Behrens, Mr [Sm]ith, Mr. Staples, Leeds; Mr. T. B. Fox, Mr. [Kaye-Sh]uttleworth, Mr. Ormerod and Mr W. H. Lee, Mayor of [Bradfor]d, had an interview last night with Lord Kimber[ley at th]e Colonial Office, upon the subject of the specific [duties lev]ied by Canada on the heavy woollen goods of [Yorkshir]e. They complained that the low woollen fabrics [which are th]e staple products of Yorkshire, composed of wool, [shoddy a]nd cotton, were subjected by the Canadian Gov[ernment n]ot only to a 20 per cent. *ad valorem* duty, but to [a] specific rate of 7½c. per pound, the compound duty [amountin]g to 35 and 40½ per cent., and in some instances [to 50] and 70 per cent upon the values. Moreover, the [tariff] imposed a differential tax, to the prejudice of [the trad]e of the Mother Country, and was both unjust [and impoli]tic. Having asked the Canadian Government [to consid]er the matter, with the view of altering their [tariff, a] reply had been received from Sir Leonard Tilley [that it wa]s not deemed advisable at the time to make any [alteration]s in the duties imposed on woollens. They [hoped, th]erefore, that Lord Kimberley would make it known [to the Ca]nadian Government that the deputation considered [the] duties so levied by the Dominion Government [to be diff]erential in favor of French and Belgian manufac[tures, an]d prejudicial to the Mother Country. That [being so], the Canadians should know what they paid for [[illegible]] the Mother Country. They declared [that whil]e the exports of Yorkshire goods to America had [great]ly increased during the past year, the exports to [Canada] had largely fallen off. Lord Kimberley, in reply, [pointed o]ut that he was powerless to actually do anything, [but he w]ould bring their representations to the knowledge [of the] Canadian Government. He supposed there was no [differenc]e of opinion in this country as to our lamenting the [course C]anada had taken with regard to its tariff, and [[illegible]] could only be made to place before them fac[ts] bearing upon the effect of their tariffs which might influence them and lead to its reform. The point of the differential duties favoring other countries was a very strong one, and one that would be likely to have some influence with the Canadian Government, and he recommended them to place their views on the subject forcibly in a memorandum, which he would cause to be forwarded to the proper quarter."

It is not true that Canada imposes "differential" duties against British woollens, the same rates being levied on all such goods, without any distinction as to countries whence imported. True enough, it is, however, that the duty of 7½c per pound presses harder upon the coarse, heavy stuffs so extensively made in Yorkshire, than it does on the merinos and fine cloths which are specialties with France and Belgium. Here we might answer English Free Traders with their own arguments, and advise them that all they need to do to be even with the French, as far as trade with Canada is concerned, is to put in the same machinery, work up with it pure, fine wool, and produce the same kind of goods that they do in France. It is the orthodox Free Trade doctrine that, if any particular manufacture cannot compete in open market, on even terms, those engaged in it should drop it and betake themselves to something else. But we know for certain that the Yorkshire manufacturers, with all their devotion to Free Trade, are of too practical a turn thus lightly to change their hand out of devotion to a theory. Those among them who feel their Canadian sales affected by the new tariff might perhaps turn their energies to the making of fine goods instead of heavy shoddy, but they will not do anything of the kind, they will stick to the particular trade to which they were brought up. Where the trouble lies is easily explained, but the explanation will not help the case for the complainants. Certain fine woollen fabrics, in the production of which France and Belgium excel, are not made in Canada at all, and therefore our importation of them is not greatly affected by the tariff; besides which, the goods being of fine, light texture, the specific duty per lb. is not much on the value. But in Canada many woollen factories, large and small together, are producing cheap goods for the every day wear of the people, which come in direct competition with cheap Yorkshire goods; while upon the latter, besides, the specific duty per pound is a heavy percentage on the value. In Canada the poor man certainly gets better value for a dollar through the compulsion put upon him to buy a good bargain of home manufacture rather than a poor one of imported stuff. But we make shoddy in Canada, too, it will be said; shoddy is still sold to buyers of moderate means, after all. So it is, indeed, but the home made shoddy is a decidedly better article than the imported, and this advantage attends, besides, that in case of goods not being up to the mark, the home manufacturer is at hand and can be held responsible for defects in quality, in goods not coming up to specifications. The manufacturer over the sea is, however, beyond our reach, and how important this difference is in practice those in the trade well know. If the exports of certain goods composed, as is above stated, of "wool, shoddy and cotton" to Canada have decreased, this is not true of woollen goods generally, as the following figures will show. In the London *Economist* of February 12, the exports of woollens to British North America are given as under for the years ending 31st December, 1879 and 1880 respectively (in pounds sterling):—

	1879	1880.
Cloths, etc	£212,940	£[illegible],748
Worsted stuffs	3[illegible]	447,847
Carpets......	91,0[illegible]	1[illegible]
	£775,9[illegible]6	£1,[illegible]6,[illegible]0

In the items of blankets, flannels and small wares the exports to British North America are not given separately in the *Economist's* tables, and therefore we cannot at present include them. But the fact that in the classes of goods the amounts of which are given, and which make up the great bulk of the whole, the export to these provinces has increased one-third, puts an extinguisher on the contention that the new tariff is decreasing our purchases of woollens from Britain. If in some particular lines there is a decrease, the increase in others more than makes up for it. That we should under protection and progress in manufactures import less of such articles as we make at home is natural enough. English axes and chisels can scarcely be sold at all in Canada now, but we get our razors and penknives from Sheffield, as before; and in their respective lines British woollen manufacturers may read the same lesson as to the peculiar aptitudes of Canadian manufacturing enterprise. After all, however, we still remain valuable customers to the Mother Country. From the latest available return of the sort, which was published early last year, we take the following figures of British goods imported annually per head of the population in the countries named—

	£	s.	d.
Australia	8	12	8
North American Colonies	2	2	9
Germany	0	4	[illegible]
France	0	7	5
United States	0	7	0

The consumption of British goods in Australia is remarkable, more per head than in Britain itself, in fact. Those "Britishers" who think that the Empire would have a good riddance were Canada annexed to the States should ponder the fact that, according to the proportion above shown, four million people in the Dominion buy and pay for as much British goods as twenty-four millions in the Republic. We hold it is fairly shown that the complainants have really no case to come into court with.

PROTECTION AND THE IRON TRADE.

The theory that protection does not protect does not stand well in accord with facts. Some very limited and partial experiences there have been which give it an air of plausibility, but the large, and thorough and long continued test it will not stand. In the latter part of 1879 American railway companies appeared to have realized, all in one day, that necessary renewals and repairs neglected or postponed during the five years of hard times preceding had grown to such gigantic accumulation that further delay was out of the question, in view of the large increase of traffic then coming on. A panic of demand for iron ensued, and the excitement of buyers almost matched the dead apathy of the time, then very recent indeed, when there was next to no demand at all. A craze to buy at any price, however high, succeeded to the panic to sell at any price, however low. But four or five years dullness and nothing doing had caused a great slackening in the iron making business in the States, stocks had been allowed to run down, and furnaces and rolling mills had been allowed to drop into a state of suspended animation, comparatively, except, perhaps, in the Bessemer steel manufacture, which kept constantly expanding. All the iron works in America could not fill the orders that were offered in the time named, and then what followed? Why, this simply, that the English iron masters, having piled up and in store the accumulations of years back, instantly seized upon the advantage given them, sent iron over in immense quantities, and had the market supplied, and over supplied, ere the American iron companies had time to realize what the situation was. American production, lulled to sleep by several years of no demand, was not able on the instant to meet the sudden rush of orders, and there was no accumulation of old stocks to fall back upon. But in England a tremendous accumulation of stocks had been going on during all the dull years; there iron in immense quantities lay ready for shipment at a moment's notice to any quarter of the globe, from China to Peru, or from Canada to Australia. The rush of importation of English iron into a country having high protective duties on that article gave renewed vigor to the cry that protection does not protect, and it was confidently affirmed that in the iron trade American Protection had proved a failure. But by-and-bye it began to appear that the American tariff was really protective after all, and that much of the English exportation business to the States had been done at a loss—to somebody. When the excitement had cooled off, it was discovered that the enormous importation from England had been the accident of a day, merely, something that could not possibly be continued, if the American tariff were not lowered. As the truth became better known, American iron makers gained courage, and acted upon it. The result is now seen in statistics published in the Philadelphia *Bulletin*, showing a wonderful increase in American iron protection for 1880. The *Bulletin* gives full details in tabular form, but from its condensed statement we take what will most readily convey an idea of the expansion of iron production in the States under thorough-going Protection:—

"We have received from the manufacturers full returns of the production of pig iron in the United States in 1880, and lose no time in giving the details to our readers.

"The production of pig iron in the United States in 1880 was 4,[illegible] net tons, or [illegible] gross tons. The production in 1879 was [illegible] net tons or [illegible] gross tons. The increase in 1880 over 1879 was, therefore, 1,[illegible] net tons, or [illegible] gross tons, or [illegible] per cent. The production of 1879 was larger [illegible] than any preceding year, but the production of 1880 was not only [illegible] per cent. larger than that of 1879, but it was [illegible] per cent. larger than that of the two preceding most active years, 1872 and 1873, and it was double that of the Centennial year, 1876, when the production of pig iron during the panic years [illegible]. The following [illegible] will make these extraordinary facts plain to the eye. Production:

1872	2,[illegible]
1873	2,[illegible]
1874	2,[illegible]
1875	2,[illegible]
1876	2,[illegible]
1877	2,[illegible]
1878	2,[illegible]
1879	3,[illegible]
1880	4,[illegible]5,414

"Of the total production of pig iron in 1880, 1,807,651 net tons were made with anthracite coal, 1,950,205 tons with bituminous coal and coke; and 537,558 tons with charcoal. The increased production of the year over the product of 1879 was very evenly divided among the different fuels. It is, however, worthy of notice that the production of charcoal pig iron has increased pari passu with that of anthracite and bituminous pig iron. In the four years preceding 1880 it had declined relatively as compared with its two rivals. The charcoal iron product of 1880 has only twice been exceeded in our history—in 1873 and 1874, when the production was respectively 577,620 and 576,557 net tons. As has heretofore been the case, some of the anthracite furnaces used more or less coke in 1880 as a mixture, and a smaller number of bituminous furnaces used anthracite as a mixture. The exact quantity of pig iron produced in 1880 with this mixed fuel was 714,[illegible] net tons."

The American production of 1880 was 4,295,414 net tons, equal to 3,835,191 gross tons. The import, as nearly as can be ascertained, was about 700,000 gross tons, or say, 16 per cent of the whole year's new supply in the market. With 84 per cent produced at home, the petty plausibility that Protection does not protect will have to be abandoned. But if Protection has so decisively fulfilled its mission in the United States in the iron trade, will it do so in Canada? Without the least hesitation we answer that it will, if we only have the courage to try it. In this particular industry half measures may fail, but a thorough-going policy will command success. Two things are wanted—a sufficient measure of protection, and the certainty that it will be continued and maintained. With boldness of action on our own part, sufficient to give assurance in both ways, the bugbear that seems to frighten some of us will disappear. The "lion in the path" is no reality, but a phantom of our own imagination only. The nettle, that stings in response to a feeble touch, shrinks crushed and harmless when grasped with vigor. The particular scarecrow now paraded before us is that of iron manufactures paralyzed in Canada, through dearness of the raw material, caused by protection. Iron-making has from 50 to 75 per cent. protection in the United States, and yet, so cheap are nearly all manufactures of iron in that country, that Free Traders here grieve over the calamity of Canadians being stopped by the N.P. from supplying themselves with cheap American manufactures of iron. Are we setting forth theory or supposition merely, or is the actual experience of a great nation, our nearest neighbor, of any value as a guide. The conspicuous success of American Protection in developing iron production over the border, and in giving cheap iron manufactures to the consumers, ought to press home upon us more forcibly a sense of what Canada is losing by every year's delay in extending to this great industry the encouragement which we have already given, and with such marked success, to many others.

THE N. P. IN MONTREAL.

The statement was recently made by somebody in Montreal, and was published in the *Witness*, that accounts which had been given of large business and lively times at the foundries in that city were exaggerations, and that the foundry business was actually slack and unremunerative. To many people it must have appeared strange if the statement as to slackness of work in the Montreal foundries could be true, and now we have the contradiction, as given by the *Witness* itself:—

"A manufacturer who is constantly engaged in purchasing castings stated to our reporter that the remark by a founder in the columns of this journal to the effect that founders, as a whole, were slack of work, and took a gloomy view of the situation, was incorrect as far as his experience goes. He states emphatically that he is in the habit of having castings made weekly, and at present finds it exceedingly difficult to have his work done. For instance, a small furnace, which he is requiring daily, has been in the founder's hands for over three weeks, and is only now promised for next Thursday. The delay is occasioned by press of work only, and he had made application at several foundries to have this work done, all of whom stated that they were far too busy to do it immediately. If any foundries are idle the cause must be attributed to any other reason than to want of work. He also states that being in need of a pattern and his own pattern maker being sick, he applied to almost every pattern shop in Montreal, including the pattern makers engaged by the different founders, and could not get his pattern made in less than two weeks from the date of order. This, he says, is sufficient proof that if patterns are being made castings must follow, as manufacturers are not in the habit of paying high prices for patterns they do not intend to use. To his knowledge founders in this city are advertising for moulders in the American papers, and though offering liberal wages,

[illegible] to the best workmen in the States, are not receiving any response

The Witness is an out-and-out Free Trade organ, and in its editorials it says what it can on that side of the question and against Protection. But, as we have several times before had occasion to remark, our contemporary is honest enough to give in its news columns very full and fair accounts of the progress of manufacturing enterprise, and of business generally, under the system which it opposes. In making up not long ago a column of items respecting new enterprises for 1880, we found a good many such in the Witness, which we copied just as we found them. If other Free Trade journals, professing to pay special attention to the current business and commercial news of the day, were to do as fairly as the Witness does in the matter of publishing facts simply—facts of which in their respective localities they cannot fail to be aware—the N P boom would be less the subject of debate than it is. Even extremists on the Free Trade side might be less profuse in their reproaches against the N P, if the many new enterprises, and the large aggregate of extension of old ones, which Protection is causing were given reasonable mention in the papers which their supporters mostly read. However, facts will tell after all, and not even the able efforts of some free trade journals not to see what is going on before their eyes will long suffice to keep the truth from their own readers

THE QUESTION OF RAILWAY POWERS IN ENGLAND.

The question as to the rights and powers, and duties of railway companies and the public respectively is becoming a prominent one in the United States. So much is this the case, indeed, that by some it has been named as the great question of all which will tax the ability of President Garfield's Administration to grapple with it. Other questions there are which will come up, and keep coming up, but this one seems likely, so some very competent observers say, to wax and grow to the dimensions of a great national issue Where the two rival political parties respectively will place themselves on it remains to be seen, but at present the Republican leaders appear to be tending towards the railway side, with this inevitable consequence, that the Democratic leaders will be driven to take the side of the public as against the railways, and fight it out on that line. In Canada we have had just enough of railway monopoly experience to impress upon us pretty forcibly the conviction that the thing has gone far enough, and that the present time would be a good time to stop it. Our sins past we cannot help, still, we may repent and firmly resolve that we will not do it any more And, while we are struggling on towards clearer light on the subject of railway rights and duties, it may help us somewhat to look at what they are doing in the Old Country in such matters. The report of the British Railway Commissioners for 1880 has recently been laid before the Imperial Parliament, and what the *Times* says of results arrived at and progress made indicates a very decided advance in public opinion on the main question. It used to be the orthodox doctrine in high class philosophical British circles that railways should be regarded merely as private commercial enterprises, power of interference with them on the part of the State being next to nothing. But something which we may call the growth of circumstances is rapidly upsetting all this, and is showing that against the perpetration of new wrongs old rights must be asserted. Strange to remark, while popular rights in this respect are asserted, and that very effectively too in the Old Land, they are but feebly asserted in Canada, while in the States the railways seem to rule the nation. That the Old Country is ahead of us in this respect may be seen from the following, which is taken from the London *Times'* summary of the Commissioners report, and remarks thereupon:—

"The report of the Railway Commissioners of their proceedings under the Regulation of Railways Acts, 1873, during the past year has been laid before Parliament. A perusal of it suggests that the description of it as a report of their proceedings is a misleading one, for it deals almost more with the proceedings of the High Court of Justice in relation to applications for prohibitions against the Railway Commissioners than with the doings of the Commissioners in their own court It seems that in almost every case in which the Commissioners have been asked to exercise their jurisdiction under the Act of 1873—the act under which the tribunal was established—the railway company complained of has gone to the High Court of Justice and sought to deprive the Commissioners of the powers they proposed to exercise. Every turn of the Commissioners has been obstructed by applications for prohibition, and the record of these applications and their results occupies a considerable space in this their seventh report. The Commissioners seem to feel a little natural pride in the fact that in most cases factious applications have been decided in their favor and against the company trying to clip their judicial wings They refer with satisfation to the judgments of the Queen's Bench Division and the Court of Appeal in the case of the 'Denaby Main Colliery Company vs. the Manchester, Sheffield, and Lincolnshire Railway Company,' and of the same Courts in the case of the 'Swansea Improvement and Tramways Company vs. the Swansea and Mumbles Railway Company,' and they print the judgments of the various judges in one of the appendices to their report. They refer, too, with pardonable satisfaction to the difference of opinion in the Queen's Bench Division as to the Hastings case. Their report is dated the 13th of January; but had it been written a few days later the Commissioners would have had to record the judgment of the Court of Appeal in the same case which reversed the decision of the Queen's Bench Division, and to some extent, at least, assured to the Commissioners the jurisdiction they claimed to make railway companies provide adequate stations where they had inadequate ones. Another source of anal[illegible] satisfaction must have been afforded by the decision of the Master of the Rolls in the case of the 'Great Western Railway Company vs. the Waterford and Limerick Railway Company and the Railway Commissioners,' which we reported on Saturday last, and by which the Commissioners' power to entertain an application to decide a difference which two railway companies had agreed to refer to arbitration in accordance with the provisions of the Railway Companies Arbitration Act, 1859, although one of the companies, party to the agreement, elected to have the difference adjudicated upon by that tribunal, was confirmed. But even this considerable catalogue does not exhaust the attempts which have been and are being made to regulate the railway commissioners in their duty of regulating railways, for we see by their report that [illegible] are pending in a case where complaint is made that the Great Western Railway Company are charging passengers more than they are authorized to charge, and in the case of the 'Corporation of Huddersfield v. the Great Northern and Manchester, Sheffield, and Lincolnshire Railway Companies,' in which case the Commissioners seem to have put a very [illegible] construction upon the words of an agreement, and besides these we gather from our law report that the Master of the Rolls decision of Friday last is to be appealed against."

What the *Times* says on the subject seems conclusive as to this main fact, that in the Old Country public opinion and judicial authority together are asserting very vigorously the rights of the people as against railway corporations. Have we progressed as far on this side of the Atlantic, and, if not, why not? Dare we venture to hope that as just, and as righteous, and as popular a law of the road will obtain in Canada and the States as does to-day in England? The question is a live and interesting one.

GOVERNMENT TELEGRAPHY.

In the the year 1869 the British Government became possessors, by purchase, of the telegraphs of the country During the ten years ending December, 1879, the number of offices had increased from 2,488 in the former year to 5,331 in 1880 In 1869 the number of messages was about 6,500,000, and in 1880 the number was 26,547,137 The number of miles of line in 1869 was 5,601, in 1880, 23,156 The great progress made since the Government became owners and controllers of the lines has produced such a favorable impression in the United States the question of the Government of that country taking similar action has been favorably received In a recent report to Congress, the Postmaster General said:—

"During my visit to the British post office I examined with much interest the system of telegraphy for several years past connected with the postal service. This method of correspondence is thought to have made a great advance since it was changed from the management of private corporations, responsible to nobody, hardly to public opinion, and placed under the control of the Government. The business has increased many fold, the cost of sending messages has been largely reduced, and the service is performed in localities it would never have reached under the pecuniary stimulus of private enterprise. At the same time it yields a margin of profit to the royal treasury. Is it not time for us to renew the inquiry whether it is wise to leave this important instrument of correspondence in charge of corporations, whose primary object is gain to the managers and stockholders, and the convenience of the public secondary only?"

EMIGRATION MATTERS

In the Liverpool *Echo* of the 22nd of February, we find the following under the heading, "The Church and Emigration":—

"At a meeting of the standing committee of the Society for the Propogation of the Gospel, the Bishop of Carlisle in the chair, this subject was discussed. The Rev. W Panckridge, vicar of St. Matthew's, City Road, London, and the Rev. J. Bridger, of St. Nicholas's, Liverpool, addressed the meeting, and it was resolved that a sub-committee should be formed to place before His Grace the Archbishop of Canterbury, who has evinced great interest in the matter, some particulars of this movement. The sub-committee comprises Sir Walter James, Hugh Birley, Esq, M.P, of Manchester, and other well known laymen. The clerical members are well known London clergymen. It is surely time that in such a practically philanthropic movement as this the church should lead the way"

The Rev. Mr. Bridger brought a party of immigrants to Canada last spring, settling them in the Province of Manitoba. We understand Mr. Bridger will sail from Liverpool on the 23rd of the present month with another party destined to Winnipeg. In the same paper we read the following statement taken from the letter of a London correspondent:—

"In the matter of emigration from Ireland I have reason to believe that Queensland is likely to enter into friendly competition with Canada. The Queenslanders contemplate laying down a thousand miles of railway through a country which, for the most part, is not yet in any way opened up to civilization, although it is exceedingly fertile and well watered I also hear that the Queensland Government will be prepared to convey emigrants to this territory for the same amount which it would cost to take them to the Province of Manitoba. I may add that the Premier of Queensland has just arrived in London Before long the subject of emigration will assume an importance which has not yet attached to it for many years."

In the Belfast (Ireland) *News-Letter* of a recent date we read:—

"It is very well known that we are not advocates of emigration; but, if our people must leave this country, our advice is that they should go to some of the British Colonies, the nearest and, perhaps, the best of which, all things considered, is the Dominion of Canada. The resources of that great country are well set forth in a pamphlet just issued, containing the second series of the reports of farmers from England, Ireland and Scotland, who were there in the summer and autumn of last year. Some of these gentlemen were sent out as delegates by the farmers in their districts, while others, from their positions in the agricultural world, are well qualified to write and speak on this important subject. Their observations were made without prejudice, and apply to every part of the colony They tell us all that is necessary about the climate, which has its advantages and disadvantages; about the soil, which is generally rich and productive; about the prospects of profit, the colony being so convenient to the British markets; and about the shortness and pleasantness of the voyage in the well appointed ships of Messrs. Allan Brothers. There is not the least doubt that tenant farmers, who have sufficient capital to enable them to settle on farms, may go with the certain hope of being better off than they could ever be on a few acres in Ireland; and laborers may expect profitable employment, either on farms, or on the public works, such as the Canadian Pacific Railway, to which our correspondent has been calling attention in his recent communications. The classes who should not emigrate are females above the [illegible] servants, clerks, shopmen and persons having no particular trade or calling, and unaccustomed to manual labor With respect to farmers, they can obtain, in Manitoba and the North-West Territories, 160 acres free, and purchase another 160 acres at a nominal price, or on easy conditions. Ten years ago, Manitoba and the North-West territories were absolutely unknown lands; now there is one city in the territory, Winnipeg, containing [illegible] inhabitants, besides many smaller towns. No doubt the cold is intense, and there are long winters in Manitoba, but the lowest temperature is a crisp, dry cold, which is not unpleasant, and there is time enough during the season to grow crops in great abundance. To those who cannot endure the rough life of the West, there are many farms [illegible] at from 20 to 100 dollars an acre. These farms are, as a rule, near to a railway, are well fenced, and on them decent farm houses and suitable buildings have been erected In the same localities there are farms to let at three dollars to five dollars an acre, or they can be hired by the tenant paying the rent in kind by a fixed portion of the produce. The reports speak for themselves, and intending emigrants would do well to read them, that they may judge whether it would be to their advantage to go to the Dominion or remain at home We should certainly prefer the latter, if our friends can get along even fairly well, but if they cannot, if their rents are excessive and their farms small, so that change is necessary, then let the change be to Canada or some other British Colony, where the emigrants will still be our fellow subjects, citizens of the great and free British Empire."

Competition in the matter of securing immigrants is likely to be brisker than it has been in the past, and therefore it is necessary that the interests of Canada should be energetically promoted. In the hands of the present Minister of Agriculture, who has already done so much in the direction of calling attention to the advantages of our vast possessions in the North-West, the matter is in safe keeping The action of the Government will be substantially enhanced by the action to be taken by the Syndicate recently formed for the completion of the Canadian Pacific Railway.

EDITORIAL COMMENTS.

It is probable the present session of the Parliament of Canada will conclude by the end of next week—at the latest the week following.

It is announced that the Telegraph Department of the British Post Office is paying a fair rate of interest on the capital—£10,539,557—sunk in the business. The balance of profit earned last year was equal to a dividend of 3.36 per cent. on the total amount expended.

The Civil Service Commission appointed after the last session of the Dominion Parliament has reported The doing away with political appointments and the introduction of the English open competitive system are recommended Dr. Tache, one of the Commissioners, will make a minority report

In another column will be found a letter, addressed to the Montreal *Gazette*, by Mr Alexander McGibbon, in reply to the remarks of Mr. Gunn, M.P., in the House of Commons, on the sugar question. There are people in the country who know something about sugar as well as the member for Kingston

Sir Charles Tupper, Minister of Railways, who has been confined to his home through a severe illness for several weeks past, left for England via Halifax on Wednesday During his absence the business of the Department of Railways and Canals will be conducted by the Hon. J. H. Pope, Minister of Agriculture.

The *Insurance World*, published at Pittsburg, Pa., says —American life insurance companies are away ahead of their English brethren. The largest new business done there was less than nine millions of new insurance This was exceeded by a number of American companies, and one company wrote over thirty-five millions of new insurances.

A few days ago Mr. Brodsky introduced in the New York State Assembly, a bill to regulate the price of gas. It provides that in towns of 100,000 inhabitants the price shall $2 per 1,000 feet. In towns of less than 100,000 and more than 75,000, $2 25 per 1,000 feet can be charged, less than 75,000 and more than 50,000 inhabitants, $2.50, and in towns of less than 50,000 and more than 25,000, $2 75

Under the heading stocks and shares, in the St. James' *Gazette* of February 26th the following quotations are given:—

British Columbia 6 p c July, 1907	116	118
Do Do. April, 1891	112	114
Canadian Gov. 6 per cent. 1879-81	—	—
Do. Do. 1882-84	102	105
Do per cent. Inscribed Stock	104	106
Do., Dominion of, 1903	113	115
Do. Do. 4 p.c 1904-5-6-8	103	101
Do. 1904-5-6-8, Inscribed Stock	103½	104½

The *American Protectionist* says for the year ending March 1, 1881, the production of cotton was 5,761,252 bales against 5,073,531 in 1880; of wool, 264,000,000 pounds against 232,500,000 in 1880; of wheat, 480,849,725 bushels against 448,756,630 in 1880, of corn, 1,537,535,000 against 1,547,901,790 in 1880; of pig iron, 3,300,000 tons against 2,741,853 in 1880, 2,301,215 tons in 1879, and 2,066,594 in 1878, of coal, 69,200,934 tons against 65,808,398 in 1880, and 52,130,584 in 1879.

The New York *Tribune* says:—"The Canadian Finance Minister has been able to meet Parliament this year with a satisfactory account of his stewardship. Instead of crippling trade and industry the protective policy assures a surplus of [illegible] year, while an adverse balance of trade [illegible] was changed into a favorable [illegible] of $16,628,479. In other words, Canada [illegible] more and importing less merchandise [illegible] resulting largely from the growth of [illegible]

The Halifax *Herald* of the 2nd inst. [illegible] five column description of the sugar [illegible] established at that city. Its construction [illegible] nine months, and cost $[illegible], giving [illegible] to [illegible] people. The value of the [illegible] $2[illegible], over $50,000 of which was [illegible] Dartmouth. The capacity of the [illegible] barrels per day, there being [illegible] From 1[illegible] to 150 men will be regular[illegible] This, the *Herald* points out, represents [illegible] of between [illegible] and 700 people. What [illegible] working that the horrible National Policy [illegible]

Referring to a portion of the letter in [illegible] on the industries of Dundas, a correspondent [illegible]: "In your issue of the 3rd inst. describing [illegible] Dundas factories, you draw attention to the [illegible] Pride and Peerless Axe as being made [illegible] this is a mistake. The first axe named [illegible] Borell, of Belleville. The brands made [illegible] Forrest and Queen, Fern Cutter, Peerless [illegible] Jewel, and two special brands made [illegible] Wood & Leggat, of Hamilton, Red Cross [illegible] Every axe passes inspection and is branded [illegible] head D. E. T Co. The seconds are [illegible] nor labelled."

An American contemporary points [illegible] census report concerning the manufacture [illegible] that country shows that there are 38[illegible] establishments in which $18,899,500 capital is invested, the $22,371,300 worth of raw material worked up annually, producing $34,410,463 worth of finished [illegible] These factories give employment to [illegible] people, to whom $9,107,8[illegible]5 are paid [illegible] wages New Jersey is the most largely int[illegible] this branch of manufactures, having 10[illegible] factories during $12,851,045 worth of goods, and [illegible] 13,932 hands Fifteen Northern States [illegible] greater or less extent, engaged in the silk [illegible] turing industry, but no Southern State. The [illegible] is making rapid strides in Canada

Mr. Blake, M P for the County of Waterford, Ireland, published a letter recently in the [illegible] *Gazette* deprecating emigration to Manitoba and the North West Territories, as the result of his [illegible] observation. Mr Blake's views do not coincide with those of the tenant farmers' delegates who [illegible] visited the country. The *Irish Farmer* [illegible] length to Mr. Blake's strictures, and concludes by saying:—

"There are some thousands, nay, hundreds of [illegible] of men who emigrated to Canada doing well there [illegible] is no reason why Irishmen should not do as well [illegible] better than those of any other nationality. Doubtless [illegible] true that emigrants going to Manitoba will have [illegible] but they will have to do this wherever they go, and [illegible] case of Manitoba and Canada generally, it should be remembered that they have a grand chance of becoming [illegible] dent and making a comfortable home for themselves and their families. A farm can be had free, taxes [illegible] education is good, and if Irish farmers contemplate [illegible] ing we say by all means give Manitoba and the North West Territory a trial. In giving this advice we have [illegible] to serve but the good of our fellow countrymen, and [illegible] confident that on further consideration Mr. Blake will [illegible] that we are right."

LAKE SUPERIOR MINERAL RESOURCES.

The *Thunder Bay Sentinel* thinks the newspapers of the country do not give enough attention to the [illegible] mineral resources of that section. It points out that the press can do much to benefit that part of Canada, and in doing so, it remarks, journals will in no way detract from their own locality. Our contemporary concludes: "There are many points in connection with mining in this district that are superior to almost any other, but the most desirable one is the 'clear title' to properties already in the hands of the people, and the chances of procuring much valuable land direct from the Government. These points [illegible] should commend it to capitalists, and we look [illegible] brethren of the press in Canada to make them prominent. We appeal to our Canadian brethren more particularly, because we would like to see Canadians taking a more active part in opening up the [illegible] of the district. Not that we have any dislike to the activity of our American friends in purchasing [illegible] property, *per contra* we are thankful to them for all that is at present being done here But it is certainly not very desirable for Canada to [illegible] pockets of her neighbors with the wealth that [illegible] self has the power to extract, but which is going [illegible] her for want of foresight, or perhaps through her indifference to the situation."

—The new Allan line steamer *Parisian*, [illegible] burthen, will be dispatched from Boston on March 31st, leaving Halifax on the 2nd of April for Liverpool carrying the Canadian mails and calling at Moville. The *Parisian*, with its saloon amidship, has all the latest improvements that engineering skill can devise and practical experience suggest. The cabin class tickets, and every information, can be had by applying to E. King, Allan Line, Ottawa.

—Under the heading "Hopeful," we read in the St. Catharines *Daily News*, a staunch Reform—free trade—journal. "One of the hopeful outlooks for our city just now lies in the fact that some of our citizens, who eighteen months ago could not have been induced for a moment to entertain a proposition looking toward an investment in any manufacturing enterprise, are now stirring up some little agitation in that direction. Whether any of the specialties talked of will ever be adopted, we cannot say; but at all events, that they are talked of, is a hopeful sign. Nothing is so ruinous to the well-being of a city as the apathy of its inhabitants, and we hope that there is now an enduring tendency on the part of our people in an opposite direction, whatever the cause of the dullness may have been." If the N P. were not in existence such paragraphs could not be read in Canadians journals.

CANADA'S MANUFACTURES

... the publication of extracts collected ... illustrative of the progress of the ... of the country —

... Messrs. Hickland & Co., of Paris, Ont ... making extensive additions to their ... knitting factory. They propose ... three stories high ... are already on the ground."

... Manufacturing Company of Berlin, ... work in the new building. ... new machinery will not be in operation ... yet. Thirty-six looms will be in ... about 100 hands altogether will ... engine is a beautiful piece of ... as a horse power, ... pounds, and its working is as ... as that of a watch."

... cans for preserved lobsters is a ... at Bathurst, N.B. Seven persons ... engaged in it, employing some thirty or ... cans with their contents are intended mostly to Great Britain. There will ... operations, by Messrs. ... cans; by S. Bishop, 200,000 cans, ... by G. Sutherland, 100,000 ... cans, by W. Mann, 150,000 ... cans. The total is thus over ...

... N.B., *Capital* says —"Thomas Barry ... Davis, Horace M. Ruggles, Giles E. ... Ludgate, Frederick W. Holt, Alfred ... Joseph M. Greene apply for a charter of ... for the St. George Cotton Mill Company, ... $500,000 in 10,000 shares of $50 each, ... office at St. George, Charlotte County."

... Leather Company," says the Fredericton ... contemplate, as soon as arrangements can be ... erect a new *tannery* in addition to their ... and commodious manufactory. The new ... will be 125 ft long by 45 ft. wide, in which ... placed forty-five of the largest size double vats, ... of some six leaches which will be added to ... house. *This will give a sufficient capacity to* ... finish some two hundred and fifty whole hides ... week. The orders from abroad which are continually ... received by the company makes the enlargement ... premises a necessity. Their new patent and ... *leather building is rapidly* approaching completion. The boiler for heating the buildings and ovens ... from Flemming & Sons, St. John, and will be ready ... shipment in about ten days. The building will ... ready for occupation early in April."

"A *new butter tub factory is* to be built at Richmond, ... upon the site of the one recently destroyed by ...

"It is stated that about 3,000 cases of boots and ... were exported from Quebec on Saturday."

"The Craven Cotton Mills, of Brantford, it is expected, will begin operations the first week in March, employing 150 hands at the outset."

"A vast quantity *of builders' hardware* has been imported this season by Toronto merchants, and building operations in the Queen City next summer are expected ... be lively."

"The mills of the Hamilton Powder Company, near ...*dale, which have been idle for a long time, are being* fitted, and will be running with a full force of hands ... a few days."

"A mill for the manufacture of cardboard and wrapping papers is to be built at Chambly, Quebec, by Mr ...ale, who owns a very large proportion of the excellent ... privileges upon the Richelieu River at this ...

"The new glove and mitten *factory at Montreal is to* be conducted by a joint stock company with a ... of $25,000. Several enterprising French Canadians have the scheme in hand, and expect to commence ... by the first of May."

"The Montreal *Witness* announces that Messrs. ... and Colonel d'Orsonnens, who have an extensive ... land in the Beauce district, are making, it is ..., arrangements with foreign capitalists to ... their gold and silver mines, which are said to be ...*portant. A joint stock company is in process* ... formation to work the entire tract."

... Robt. Gardner & Son, of Montreal, have just ... an extensive order *for machinery* and complete ... for a large biscuit factory in Belfast, Ireland. ... machinery is shipped *via* Boston for Glasgow, ... weighs over 10,000 lbs. This firm is now filling ... for Nova Scotia, Manitoba and British Columbia.

The Kingston *Daily News* says —An engine belonging ... the St. L. & O. Railway, which was being ... at the Canadian Engine Works, left on Saturday ... Another, the property of the same company, ... *Saturday for general repairs. The employees* ... Canadian Engine Works are happy in lots of ...

... St. Catharines *Daily News says* —"For the ... our principal manufactories are doing well. ... Welland Vale Works are not running quite up to its ... capacity, but the Knife Works are booming, and also ... Works. There ... in fact, a good healthy outlook ... most of them."

... New Brunswick Cotton Mills of Messrs W. ... & Son, at St. John, has provided itself with additional steam power to overtake its growing business. ... Thomson & Williams Company, of Stratford, has ... that *mill a Brown* variable cut off engine of 125 ... power, which has been put in position."

... has been decided to make the additions and improvements to the Stormont Cotton *Manufacturing* Company's mill at Cornwall, which we spoke of in a ... issue, as contemplated. The property *adjoining* the mill has been acquired at a cost of $10,000, and ... building operations will be begun in the spring. ... *intended to almost double the present capacity.*"

Says the Annapolis *Journal* —The wide awake firm of ..., Pickels & Co, at Round Hill, *who so successfully* met and supplied the long felt want of good home made pails, are now manufacturing hand rakes, samples of which we have carefully examined, and compared with those made by our Yankee cousins, and in all points of excellence we can produce the home article to fully equal any article of the kind we have ever seen.

The Moncton ... "The Peters Brothers, who recently took the ... factory of ... on Wesley street, are ... *a grist* mill in the ... adjoining their ... The mill will be fitted with all the latest improvements for grinding wheat and other grains, and, as it will be operated by steam, will be a great public convenience. It will be in operation for the fall work."

"The number of hands now employed in the ... Knitting Company is seventy. The knitted shirts and drawers manufactured during 1884 were 15,000 dozen, of the value of ... It is a ... mill, making shirts and drawers only. Another set of machinery has been ordered, and will probably be in place in the month of June next. It will increase the production of the mill to the extent of about ... *dozen*."

The Montreal *Herald* of the ... says —"The entire amount of the capital required by the company for the erection of cotton mills ($...) has been subscribed, and the provisional directors have most excellent sites in view. The municipalities of St. Cunegonde and St *Henri* will, we understand, determine in the course of a day or two the extent of the bonuses to be offered for the locating of the mills in these municipalities."

"An *Important* industry in the County of Essex is the manufacture of charcoal, which is *largely shipped* across Detroit River, to be used in making charcoal iron at the Wyandotte, Mich., furnaces and elsewhere. The whole export of charcoal thence for the quarter ending the 31st of December, 188) was, we are told, 400,000 bushels. *One-half of this may be credited to Messrs.* Curry, & Co., Colchester, who have recently increased the number of their kilns. They ship to the Eureka Iron Works, at Wyandotte."

"*Mr. Wade, of Clinton,*" *says the New Era*, "has bought the right for the Dominion of *drying fruit, etc.,* by means of evaporation in this place, to erect five evaporators, and intends as soon as he can procure a building adapted for the purpose. By this process of *drying*, any kind of *fruit, roots, vegetables, etc.*, can be dried so as to retain all their natural flavor, and are also proof against vermin. It is Mr. Wade's intention to work the evaporators to their fullest capacity. He has already contracted for 2,000 bushels of potatoes next fall, at 30c. a bushel, and intends raising 12 acres of corn and 15 *of potatoes on his own property*, the product of which will only be a small proportion of what will be *required to keep the dryers working.*"

The Windsor *Mail* says:—"We hear that a stock company of about $200,000 capital is talked of in Windsor, for the purpose of manufacturing agricultural implements. As the sale of these goods is large, and always on the increase, we have no doubt of the success of the undertaking. We have heard it stated that at least $150,000 worth of agricultural implements have been sold in Nova Scotia in one year, and there is no reason why such a large amount of money should not remain in the Province. We *look anxiously for* further developments."

"The Canada Screw Company, Hamilton, have completed their preparations so that they can commence work the first of next week. About 300 tons of iron *rods, to be drawn into wire for screws, for which they* have been anxiously looking, have arrived *in Hamilton*, and the Hamilton and Dundas street railway is taxed to *its* almost capacity in transporting it to their works in Dundas. In addition to making screws of all kinds, *they are getting in machinery for the manufacture of* bolts of various kinds, which will add *largely to their* output."

St. John *Telegraph*:—"We are glad to see signs of returning activity in the mechanical interests of Annapolis town. The shipyard is in full blast, and a foundry *closed up* some time ago is to be converted into some new purpose of manufacture. Of all winter seasons within the memory of persons living, this has been the most advantageous to the valley regions. The roads have been almost perfect for traffic and sleighing. Cordwood, lumber, of different kinds, have been coming in by rail, and teams in great quantities. Vessels are *constantly loading* at the wharves, yet the wharves are mostly piled up with different articles awaiting spring shipment."

The Berlin *News* says —"Most of the Guelph factories are very busy these days. The Bell organ factory is so busy that its impossible to keep up with the many orders which come from nearly all countries in the world. There is hardly a complete instrument in the whole establishment, the rush being so great that they are sent off as fast as they can be got ready. The success of *Messrs Bell & Co. in the comparatively* short time they have been in business is something marvellous, and never has their business grown as it has within the last two years—that is since we have had a truly National Fiscal Policy in this country."

The Belleville *Ontario* learns "that several enterprising business men in Napanee have been considering the propriety of trying to establish a glucose manufactory in that place. Glucose is a sugar manufactured from corn, and in the early stages of the work the process is said not to be dissimilar to the manufacture of starch from corn. *There is no such manufactory yet* in Canada, but as sugar is an article of standing necessity the business opening seems like a good one, in case the article can be made cheaply enough to compete against the cane sugar we now import exclusively from foreign countries."

The Montreal *Herald* says:—"A meeting of the municipality of St. Cunegonde was held on Monday evening for the purpose of considering the proposed grant of a bonus of $5,000 to the Merchants' Company, who propose to establish works in the vicinity of the municipality at St. Henri. It was agreed that the bonus should be granted upon the understanding that the company, which expects to employ some 600 or 700 hands, should employ a *certain number of their people from the* municipality. It is understood that the municipality of St. Henri will also give a bonus and an exemption from taxation to the company."

The Berlin *News* gives some *interesting information in regard to some of the manufacturers in that town.* "The Ziegler Novelty Works have over 1,200 perambulators in process of construction at present. C. J. Nordhausen & Co.'s button factory employs fifty hands and turns out 150 gross *of buttons a day*. The Forcke Knitting Factory, P. Bechtel, proprietor, employs between twenty-five and thirty hands, and turns out 500 pair of hose a day. Brown & Fib, mattress makers, manufacture between fifty and sixty thousand dollars' worth *of goods* per annum. Jacob Y. Shantz & Sons' Dominion Button Factory employ 22 hands, and manufacture 200 gross per diem. Vogelsang & Co.'s button factory employ between sixty and seventy hands, and *turns out over 200 gross daily.*"

A Moncton, N.B., despatch says: "The adjourned annual meeting of the Peters Combination Lock Company took place at the office of the company here to-day. About 35 stockholders, representing most of the stock, were present. The reports of directors, treasurer, etc., were very satisfactory. The profits on goods sold at the Waterbury and Moncton branches amounted to several thousand dollars, and the assets very largely exceed the liabilities, the latter including the stock paid in. The prospects of the company are considered much brighter than ever. About 30 hands are now employed in the casting, finishing, plating and other departments, and the goods turned out are pronounced equal to any imported. The orders are in excess of the ability of the company to produce."

Mr. Senecal said recently to a Witness reporter "that the jolting on the cars of the Q. M. O. & O. Railway was now a thing of the past, as the springs formerly used have been substituted by the 'Patent Concave Spring,' which is manufactured solely by the File and Spring Company of Montreal, whose works are at Cote St. Paul." A *Witness* representative took advantage of this information to visit the factory and examine the springs in course of manufacture. About 65 hands are employed *in the extensive works*, which are working a half-day over time, making nine days per week, to fill several large contracts they have at present on hand, but which they expect will not be completed until June next. *Trial sets have been placed on every road in the country*, and in *every* instance orders have been duplicated and the highest satisfaction has been given.

Montreal *Witness* — "A manufacturer who is constantly engaged in purchasing castings stated to our *reporter* that the *remark by a founder in the columns of* this journal, to the effect that founders, as a whole, were slack of work, and took a gloomy view of the situation, was incorrect, as far as his experience went. He states emphatically that he is in the habit of having castings made weekly and at present finds it exceedingly difficult to have his work done. For instance, a small furnace, which he is requiring daily, has been in the founders' hands over three weeks, and is only now promised for next Thursday. The delay is occasioned by press of work only, and he had made application at several foundries to have this work done, all of whom stated that they were far too busy to do it immediately. *If any foundries are idle the cause might be attributed to any other* reason than to want of work. He also states that he being in need of a pattern and his own pattern maker being sick, he applied to almost every pattern shop in Montreal, including the pattern makers engaged by the different founders, and could not get his pattern made in less than two weeks from the date of order. This, he says, is sufficient proof that if patterns are *being made* castings must follow, as manufacturers are not in the habit *of* paying high prices for patterns they do not intend to use. To his knowledge founders in this city are advertising for moulders in the American papers, and though offering liberal wages, equal to those paid to the best workmen in the *States*, are not *receiving any response*."

The Hamilton *Times says*.—"The *cotton batting* works, started by Mr. O. B. Snow in the building formerly occupied by the Beckett engine and boiler shops, have commenced operations. A *Times* reporter was shown over the establishment by Mr. Blackburn, the foreman. The works have been incorporated with the new company for cotton manufacture, and will form part of their works. The motive power is supplied by a 40 horse power engine and a *60-horse power boiler*, manufactured by *J. H. Killey & Co.* About ten hands are employed at present, but the number both of operatives and mechanics will shortly be largely increased. The factory is running mostly waste at *present, pending* the *arrival* of cotton *from the South.* The cotton is taken *just as it comes* from the hands of the pickers, except that it has been 'ginned,' that is passed through a 'gin' or machine which removes the seeds. One bale of cotton makes about 450 pounds of *wadding*, and the present staff and machinery can turn out about 1,000 pounds a day. The first machine used in the manufacture of the raw cotton into wadding is the opener, which makes it soft and opens the *tightly packed bundles in which the cotton comes from the bales, preparing* it for the picker. The picker rolls it up into a cylinder. It is then sent up stairs to the *cards*, six large machines which pass it on to an endless apron, each card contributing a layer. *At the end of the row of cards the* endless apron passes the six layers into the *cylinders of a* double header, where the layers are pressed into one. The last work of the machinery is to roll the batting about a large wooden drum, by which it is formed into large balls. These are each about seven feet long and three feet wide, and are put up by girls into the ordinary roll of batting of commerce wrapped in tissue paper. The batting is then ready for the market. Other machinery is coming *for the works* and a *first-class wadding factory*, supplying as fine a class of goods as any sold in Canada, is now in operation."

A public meeting has been held at Lindsay, at which, after some discussion, the following resolution was passed:—"Moved by Col. Deacon, seconded by Mr. J. R. *Dundas*, that this meeting is of opinion that encouragement should be held out to induce manufacturers to establish a branch or branches of manufacturing industries in the town of Lindsay, and it is hereby resolved that the meeting approves the principle of the necessity of offering inducements by way of bonuses, exemption from taxation, or both, to such companies or persons as may erect and maintain for a term of years factories in which such employment will be given as to encourage an influx of manufacturing population and afford steady employment to the people of the town generally."

The Campbellford *Herald* of the ... instant says — "The plans and specifications of the new woollen mills to be erected in this village arrived last week, and were placed in the office of Mr. Ferris for inspection. The building proposed to be ... by ... feet, five stories high. There will be two additional buildings—a dye house and a store house, each of which will be 50 by ... feet, two stories high. The whole water power front is to be built up, and every foot of the lot will be utilized. A high fence will surround the property. The building represented in the plans exhibit an excellent style of architecture. Tenders for the different branches of work required will be opened and contracts given to-morrow, Friday. If the weather continues open the work will commence immediately. The brick will be furnished by Mr. Foster, of Belleville."

"The agricultural implement manufactory of Messrs. Frost & Wood, Smith's Falls, now employs one hundred and sixty-five workmen, being the highest number yet attained since the factory was opened. Every year since it has started the number of hands employed has steadily increased, and we see no reason why this growth should not continue still in the same ratio. Next summer the enterprising proprietors intend to erect a three *story* addition to their premises, and renovate and enlarge the old machine shop at the east end, which will give greater uniformity and capacity to their establishment. They now turn a *great share* of their attention to the plough trade, and will turn out some three thousand this year. They will make all the other im*provements in proportion*."—*Perth Expositor*

"At a recent meeting of the Directors of the West Farnham Beet Root Sugar *Company*, it is *decided* to change the capacity from 100 tons to 200 tons of beet roots per day. The machinery for the enlarged capacity, *we understand*, has been purchased in *Halle, Germany*, by Mr Wm. Donahue, at a cost of about $60,000, and will be received *here* early in the spring. The company has contracts with farmers in the counties of Rouville and Missisquoi for 1,500 acres of beets, and, since the enlarged capacity has been decided upon, *800 acres more* will be required, which the management is confident of being able to obtain without any difficulty. The factory is situated at West Farnham, which is intersected by three lines of railway from different directions, and will be ready to commence *operations early next* fall. The company holds a copy of an Order in Council of the Quebec Government, passed last spring, to draw the Provincial *subsidy of $70,000, payable in ten yearly* instalments."

The Montreal *Gazette* says — "We understand that the proposed reduction of duty on satins from 30 to 25 per cent will not be made, as it would seriously interfere *with the silk and satin manufacturing industry* now growing up in Canada. In this connection the following statement of *Mr. Corriveau*, of the Corriveau Silk Factory is interesting —'We are now doubling our machinery for the webbing of broad goods, silk and satin, and also plushes, we started ribbon *making a few weeks* ago, both silk and satin, and we are going into it on a *large scale*, and in a month intend to have silk handkerchiefs turned out. We were the pioneers in weaving broad goods and also ribbons. Our dyes are said to surpass those of *Lyons* and *England*, and of course outstrip the Yankees. Moreover, our goods are acknowledged superior in many respects to imported goods. *At present we can only supply* one-quarter the demands made upon us from all parts of Canada. We enlarged our mill *last* week and added new machinery, and expect another car load in two weeks. We employ 100 hands now, and if the tariff is not changed would send the number up to 200 men.'"

Kingston *News* "The building material for the *enlargement of Messrs.* Chown & Cunningham's foundry is being laid down in that locality, and operations will commence as soon as possible. It is understood the extension will include a spacious *show room*."

"An engineer, writing from St. Catharines to Kingston, states that times are to be particularly good this *season in his line. The engineers' pay there and at* Port Dalhousie will be $65 per month, board included, and fitting out supplied. *Kingston engineers* are to receive $50 per month, a difference of $15.

"The *New Era* is jubilant over the prospects of Halifax. It is happy to be able to assure the people *of that* city that there is a very strong probability, amounting *almost to a* certainty, that the long desired graving or dry dock will soon be commenced and pushed to completion. Some Londoners with a capital of a million and a half of dollars are seeking *the privilege of building* it. The *New Era* also finds a pleasure in the fact that new lines of freight steamers are to be established between *Halifax* and *Liverpool* and *Halifax* and *Brazil*, in the early opening of two sugar refineries, and in the advance in the *value of real estate*."—*St. John Sun*

North Sydney *Herald* —"The enterprising people of Prince Edward Island are awakening to the advantages to be derived from the establishment of manufactures afforded by the National Policy. The mechanics and capitalists of Charlottetown recently held a meeting at which the subject was thoroughly discussed, and ways and means towards the desired end considered. In this connection the Charlottetown *Examiner says* — 'Coal and iron can be laid down here as cheaply, the raw materials can be had here as cheaply, wages are as *low here as elsewhere*; and *provisions*, etc., may be had in abundance at first hand. We should at least manufacture the clothes, including the boots and shoes *for our own use*, and we might with advantage export many manufactured articles to Cape Breton and Newfoundland. We have the money. All we want is the enterprise, and the practical, technical *knowledge* of the branches of manufacture we can with profit engage in.'"

SPIRIT OF THE COMMERCIAL AND INDUSTRIAL PRESS.

CANADIAN COMMERCE.

[illegible]

[illegible] at present to say when the improvements on the St Lawrence [illegible] will be completed, but that is not a matter of the highest importance. Hitherto the New York route has had an immense advantage over the St Lawrence route in the shipment of grain arising in large part out of the great advantage enjoyed in getting the grain to Buffalo. A statement in the report, just issued, of the Minister of Public Works, puts the actual cost of carrying a cargo of 60,000 bushels of wheat from Chicago to Buffalo at $1,709, or 2·85 cents per bushel. In consequence of the smaller capacity of our canals, the maximum load which can be carried to Montreal is put at 16,000 bushels, and the cost of its carriage through to that port from Chicago is fixed at $1,656 50, or 10·35 cents. A canal boat load of 210 tons can be moved from Buffalo to New York for $297, or 5·7 cents per bushel, making the total cost of carrying a bushel of wheat from Chicago to New York 8·55 cents, against 10·35 cents, as stated above, to Montreal. This statement must, however, be qualified to some extent, since a vessel carrying 60,000 bushels cannot reach the elevators at Chicago, except the two at the mouth of the river. When the new Welland canal is opened, the largest class of lake vessels will be able to carry grain to Kingston at a rate only a fraction higher than that to Buffalo, and from there it can even now be barged to Montreal at a very reasonable rate so that the conditions for reaching tide water will be exactly reversed: the Canadian port will enjoy a decided advantage over its American rivals and Canadian vessels will again be in a position to earn substantial rewards instead of realizing only working expenses, as they have been doing for some time. But it will be quite useless to spend millions of money in making a cheap highway for getting grain to Montreal unless the people of that city make an effort to compete with their rivals and enable seagoing vessels to take the produce cheaply from Montreal to its European destination. This effort they have not made. Port charges, pilot charges, towing charges, and all the various imposts upon ocean shipping, are higher at the Canadian city than at Boston, New York, Philadelphia, or Baltimore. Some of these charges are necessarily higher, owing to the greater distance of Montreal from the sea, but some of the most onerous are quite within the reach of remedy. For example, the wharfage charge on steamships at Montreal is 1½ cent per ton per day, and various charges are imposed upon merchandise. Grain (except oats) pays 25 cents per 100 bushels. On sailing vessels the wharfage charge is ¾ of a cent per ton per day. At Boston there is no wharfage charge on vessels, and the charge on goods is low. On grain loaded at the elevators there is no charge. At New York the wharfage on vessels is 8 10 of a cent per ton for a vessel of 1,000 tons; when loading or unloading grain, free. There is no wharfage charge on goods. At Philadelphia steamships pay 1 cent per ton per day, and sailing vessels from ½ to ¾ of a cent. There is no charge on goods. At Baltimore there is no charge on vessels at the railway wharves, but at other wharves ½ a cent per ton per day is charged for steamships and ¼ of a cent for sailing vessels. Grain pays 25 cents per 100 bushels. It will be seen that at Montreal the harbor expenses are much higher than at any of the American cities. Mr. Patterson, the secretary of the Montreal Board of Trade, suggests that the wharfage charges should be "promptly repealed." He believes that then "the Harbor Trust could give attention to other reductions and economies, which would soon make Montreal the cheapest port in the world for the sea-going craft of all nations." In pilotage charges there is not an equal discrepancy between Montreal and American cities, except in the case of Boston. These charges are for a vessel of 600 tons: Boston, $117 90; New York, $172.80, Philadelphia, $162, Baltimore, $180; Montreal, $193.50. When distance from the sea is taken into account, the Montreal charge is far lighter than any of the others, still the fact must not be forgotten that as an actual charge on shipping it is the heaviest. Tonnage is a more serious matter. For a 600 ton vessel the charge at Boston, for towing inward and outward, is $70, at New York it is the same, at Philadelphia it is $128 75, at Baltimore, $284, and at Montreal it seems to be between $500 and $600.

THE CANADIAN PACIFIC RAILWAY

(London Globe, February 2.)

It may have been noticed that the cable has just brought the news of the ratification by the Canadian Parliament of the contract entered into between the Dominion Government and a syndicate of English, French and American capitalists for the construction of the Canadian Pacific Railway. The significance of this news is, perhaps, hardly sufficiently realised in this country. A railway nearly 3,000 miles long, reaching from the Atlantic to the Pacific, and traversing vast sections of as yet undeveloped territory, has ceased to be a novelty, and, therefore, the announcement of such a project falls, to some extent, to secure attention from the public at large. But, in the present instance, there are several reasons why more prominence should be given, and greater heed paid to the undertaking to which the Government of the Dominion and the syndicate have mutually committed themselves. For when the Union Pacific Railway was being built the population of the United States averaged 37,000,000, its revenue 70,000,000, and its total trade 13,000,000 sterling. Canada, on the other hand, now has a population of 4,000,000, its revenue during the past financial year was, in round numbers, £4,900,000, and its total imports and exports, £35,500,000. We are accustomed to acknowledge the go ahead qualities of the citizens of the great Republic; but surely the contrast presented by these figures, without considering the relative development of the two countries, is striking enough to lead us to respect also the enterprise of our Canadian fellow subjects. But is not the responsibility about to be undertaken more than the country is justified in assuming? The answer to this is that its Ministers and the majority of its people think not, and are convinced of the advisability of building the line at once. The best justification of their policy is, however, to be found in the advantages which will undoubtedly result from the construction of the road. These may be briefly indicated. When completed, the railway will be 2,000 miles in [illegible] reached in less time than it has ever been yet." And he points out that the Australian colonies, and every British station in the North and South Pacific Oceans, are deeply interested in the project. The benefits which may be expected to accrue to Canada herself—and thus, indirectly, to the Empire at large—are even still more conspicuous. The impetus the construction of the line will give to the immigration of agriculturists, to the development of all the resources of the North-West, and consequently to every branch of trade throughout the Dominion, cannot be other than immense. We have lately heard a good deal of Manitoba, and this in itself is matter for congratulation. But there is some risk that it may be thought that Manitoba, with its present limited boundaries, monopolizes all the fertile territory in the interior of the Dominion. Nothing could be further from the truth. That interior is equal in extent to fully half, if not two-thirds, of Europe, and Manitoba is a small but rapidly developing corner of it. The prairie region of this vast territory is estimated to measure about three hundred million acres, and of this Professor Macoun, by whom it was specially explored, calculates that one-half is fit for farming and grazing purposes, and some 80,000,000 acres suitable for cultivation. Then there is the mountain region, with its great mineral wealth, coal of capital quality, and iron existing in profusion, and the "color" of gold being found in almost every river in British Columbia, and lastly, the woodland region, less valuable whether from an agricultural or mineral point of view, but still of vast extent. The new railway, when built, can, of course, directly affect but a small portion of these territories. But with the tide of emigration setting in, as it now appears to be doing, among our tenant farmers, the influence it must necessarily have in developing the country will inevitably be great and far reaching. Take, for example, what has occurred in Manitoba during the last two or three years, since communication with it has been improved. In spite of much misrepresentation as to climate, the province has grown enormously. Its population is now over 75,000; villages are springing up even in the most remote districts, and settlers are locating themselves in all directions. Winnipeg, its capital, described by Lord Dufferin as the half-way house of the continent, and the future "umbilicus" of the Dominion, has, in the course of the last decade, increased the number of its inhabitants from a few hundreds to upwards of 6,000. And with a soil in many districts admitted to be among the most fertile in the world, with a climate unquestionably healthy, though severe; with mineral wealth, the extent of which has not yet been gauged; and with a system of waterways in the form of lakes and rivers which cannot be equalled in any part of the globe, it is manifest that all Canada wants in this respect is the development of her resources, and as the necessary first step towards this end the construction of a Canadian Pacific Railway is called for by the needs of the country, and justified by the most immeasurable advantages it will confer. The work of development, like the building of the line itself, must necessarily be a matter of time. The two will, in fact, go side by side. And just as land which is now nominally worth a dollar an acre, or which can be had almost for the asking will by the next generation have assumed a real and high market value, so we may justly assume that the Canadian Pacific Railroad will be the means of contributing greatly to the progress of the Dominion, and thus adding alike to the prestige and wealth of the Empire.

THE LABORER'S STAKE IN PROTECTION

(Chicago Industrial World.)

Free Traders are accustomed to charge that our present tariff policy is a device to tax the rest of the community for the benefit of the manufacturer, but it is a great mistake to suppose that the protective system is designed for any particular class of our citizens to the exclusion of the other classes. Its advantages extend to all callings and employments; still no one derives greater benefits from it than the day laborer. By encouraging, fostering and shielding manufactures and the mechanic arts, a new demand is created for the services of labor, by which the price of those services is enhanced. Wages, like anything else, depend upon the law of demand and supply. When manufacturing establishments multiply and flourish, there will be an increased demand for labor, and it is then that the poor man receives the greatest reward for his toil, it is then that his income is the largest, and that his purchasing power secures the most abundant return. Many, very many, of our hardy laborers possess no property that amounts to anything except their ability to work—no capital but their physical frame and its guiding mind. Now, by protecting our home industry, we enable the poor man to earn a larger sum, and in doing this we, to all practical purposes, increase the amount of his capital, or, which is the same thing, make his present capital more productive. If the laborer, by the encouragement given to home industry, is enabled to earn $30 a year more than he could have earned without this stimulus, we actually, for the time being, confer as great a favor upon him as though we had deposited $500 at 6 per cent interest for his benefit, and secured that interest for his sole ownership and use. Thus does the laborer, who depends for a livelihood on hiring his services, have, more than any other class of the community, an important stake in protection. The rich capitalist has much less of a stake in this policy. His tens of thousands would perhaps yield him a greater return if labor was depressed, and the staples of agriculture were rendered cheaper, but the industrious laborer, who depends on the fruit of his own toil for the support of himself and family has a direct personal stake in maintaining the price of labor at comfort wages. When production and trade are languid, embarrassed, or stagnated, he is the first to suffer; and when it revives, he receives the largest share of the benefits. The European manufacturer, in estimating the cost at which he can produce a fabric, inquires what is the lowest sum which will feed, house and clothe the laborers—what is the least pay for which their services can be secured—and that pittance the manufacturer has usually been able to compel the laborers to accept. But the American [illegible] to the low level of the European standard.' This is the direct and the inevitable tendency of their doctrines: hence it is of vital interest to our workingmen, who, being a vast majority of the voters, have at all times the destinies of the nation in their hands, to inquire whether those can be their friends who would reduce their wages, and thus deprive them of the ability to earn a comfortable support for themselves and their families. Although government is bound to sustain all its citizens, and should, so far as possible, throw its protecting shield around every interest, yet its first care should be extended to the weak and defenceless—the poor man, more than any other, needs the fostering regard of national authority. The rich man can, in a great degree, protect himself; but the man who earns his bread, from day to day, by the sweat of his face, he it is who most requires encouragement and help through protection against unequal foreign competition. An unrestrained importation of manufactured commodities into the United States would be disastrous to the rights, interests and position of labor, especially to its rate of wages. In this land of liberty, it is essential that the laborer's social condition should correspond with his political franchises. The importance to every country of good pay to labor has been stated in very clear terms, and in a very forcible way, by the English writer, J R McCulloch, in his work on "The Principles of Political Economy," as follows —"The best interests of society require that the rate of wages should be elevated as high as possible; that a taste for the comforts, luxuries, and enjoyments of human life should be widely diffused, and, if possible, interwoven with the national habits and prejudices. A low rate of wages, by rendering it impossible for increased exertions to obtain any considerable increase of comforts and enjoyment, effectually hinders any such exertions from ever being made, and is, of all others, the most powerful cause of that idleness and apathy that contents itself with what can barely continue animal existence. The experience of all ages and nations proves that high wages are at once the keenest spur, the most powerful stimulus to unremitting and assiduous exertion, and the best means of attaching the people to the institutions under which they live." These are maxims which lie at the foundation of national prosperity in its highest state. All wealth proceeding from production, and all production proceeding from labor, the welfare of labor cannot be neglected, in passing or in not passing laws, without bringing retribution in the shape of declining prosperity. Man's spirit and condition sink with his wages. If his pay is too small to afford any largeness of life, his first sacrifices and privations will be such as pertain to his moral and mental natures. Moral comforts will be dispensed with before any of the material needs of the body are given up. Intellectual food will be surrendered in preference to stinting the demands of the stomach or of the back. When there is a struggle for bare subsistence—a continual effort to get from one meal to another, and out of one day into the next, without unsatisfied hunger—the laborer loses the best qualities of a true manhood, because he loses self-respect and incentives to self improvement. He is compelled by his necessitous circumstances to subject himself to a round of degrading tendencies, and to limit his aspirations mainly to the gratification of his of his animal wants, there being of a kind which are imperious, threatening disease, suffering, or death when they are inadequately supplied. It is impossible to have a high degree of [illegible] excellence if the rate of wages is graded no higher than the fact that there are mouths to be filled and limbs to be clothed, heads to be sheltered and bodies to be warmed. The statesman who does not look much further than that in legislating for the benefit of labor—who does not especially regard the bearing of his measures on the mind of the nation—is unfit to touch a single one of men's greatest interests. Unhappily, those who are called statesmen have seldom comprehended the sacredness of human nature and human society, or learned that the most valuable of all laws are the ones which help men to unfold and exalt the spirit which inhabits his physical frame. The elevation of the individual, through full opportunity to quicken, to strengthen, and to improve his moral and mental powers, is the proper end of social institutions, and should be their constant and supreme object, but this sort of progress not only stops, but retrogrades, whenever the rate of wages is reduced so low as to permit the satisfaction of scarcely more than the animal wants of a simple living. It is the crowning glory of the protective tariff system that it uniformly advances the rate of wages, elevates the laborer's condition, kindles higher aspirations in his soul, offers him the opportunity of rising in the world, and imparts a nobler excellence to the societary formation. For these reasons every laborer is deeply concerned in maintaining the protective policy.

BRITISH AGRICULTURAL NOTES

From the repeated floods grass lands are suffering deterioration as the finer grasses die out and give place to the coarser and less nutritive herbage. Liver complaint is increasing on these wet pastures, and "flukes" in sheep have become disastrously prevalent. Another great loss resulting from the wetness and coldness of the meadows is the diminution in the yield of milk by cows fed thereon—20 to 30 per cent—as proved by recent returns from Leicestershire and Derbyshire. The contract price for milk this season is 7d per gallon, at which rate the farmer requires a maximum yield to pay him. Last week three bright days allowed drained lands to be well worked, and the skylarks sang merrily over the ploughmen in Hampshire. The grain market remains quiet, and currencies are unaltered. The American wheat shipments for the week are 143,500 qrs. to this country, and 60,000 qrs. to the Continent; of maize 89 800 qrs., and 30 000 qrs. There were also exported 75,000 bags of flour for the United Kingdom. The imports of the week [illegible] wheat [illegible] to deliveries from [illegible] so that small [illegible] wheat makes about an average [illegible] samples, but the average of the [illegible] low. Cargoes can be got [illegible] to Antwerp [illegible] where at an average [illegible] pounds. Foreign wheat [illegible] the [illegible] for good samples being [illegible] superfine quality, [illegible] American and [illegible]. The [illegible] exists at [illegible] are Scotch and New Zealand [illegible] per bushel. Barley, maize [illegible] and old prices. Foreign [illegible] 40s to [illegible] per quarter. The question [illegible] as affecting farmers is now under discussion [illegible] published by an agricultural contemporary [illegible] thirty instances on one line where the [illegible] are stated to vary from [illegible] to 400 per cent [illegible] however, doubtful whether the companies [illegible] a sufficient answer, certainly there are many where the transit charges are much below the maximum legal rates.—*St James Gazette*.

THE SUGAR QUESTION.

To the Editor of the Gazette.

SIR—Among the many benefits conferred on the country by the adoption of the National Policy, the sugar refining interest is one of the most satisfactory. The tariff as regards this industry seems to have been so well considered and thought out that it has accomplished all that was asked or expected by those who advocated the change. It has worked so well that the wonder is there should be any one opposed to it. But there are some people who are so narrow in their views that they allow their own little private interests to warp their judgments on questions affecting the general interests of the country. I have come across a [illegible] ered by the member for Kingston, Mr. Gunn, and he declares himself as dissatisfied. Kingston has always had the reputation of being a rather slow place, and if one has to judge of the character of a city from the members they send to speak for them in Parliament, I rather incline to believe that the reputation of that city will soon be well deserved. Mr. Gunn quotes a letter from Messrs. Tiffin Brothers, of that city, in support of his views. The burden of the complaint is that they have lost their trade in importing sugar. Mr. Gunn did not inform his hearers how many direct cargoes of raw sugar were imported into Canada during the time Redpath's refinery was closed. I only knew of [illegible] all that time, and the sugar lay here eating itself up in interest and storage until it was sold to a Boston [illegible] at a great loss to the owners. This was a pretty good proof that raw sugar was not wanted here unless we had refiners of our own to prepare the sugar so as to make it saleable for ordinary use. The trade during [illegible] was confined to jobbing houses who got their supplies from Boston, New York and Glasgow, but as to direct trade there was none. That the trade has been transferred from the jobbing houses and from New York, Boston and Glasgow, into the hands of the refiners, who get their supplies of raw sugar direct from places of production, thereby restoring our direct trade which we had foolishly lost, nobody will deny. This was one of the advantages sought, and we have got it. If the refiners are making money I think we should all rejoice over the fact. It is much better that the profits in the manufacture should remain in the country than go into the pockets of outsiders. The next and most important point is the one of cost or benefit to the consumer. I have had an experience of thirty years in the trade, and I can safely say that at no time has the retailer been better served than he is now, and at no time has the consumer got better value for his money. To begin with all, the sugar we get now is better and purer than when we got supplied from the American and Scotch refiners. Dr. Edwards' late reports prove this. Mr. Gunn's argument about loss to the revenue is sheer nonsense. If the duty is not collected on the refined sugar it is on the raw, so where is the loss to the revenue? The [illegible] of monopoly will not stand argument for a moment. In addition to Redpath's refinery, which can turn out more than the requirements of the whole Dominion, we have the St. Lawrence refinery in Montreal, then we have another at Moncton, N B, and a fourth just commencing manufacture at Halifax, besides some beet root sugar factories in the course of organization, so that competition will prevent any monopoly in prices, and [illegible] each will vie with the other in producing a good article. Seeing, therefore, that the change so wisely made has restored our direct trade from places of production and from the cheapest markets for our supplies, that the cost of manufacture is spent in our own country and that the consumer gets supplied on the very best terms, and a quality infinitely superior to the time when he had to depend on New York, Boston and Glasgow, would it be wise to agree to Mr. Gunn's suggestions and take a backward step? Does Mr. Gunn want to be a pedler for the American and Scotch refiners? It is surely more becoming to be competitors to these people than to be their consumers. Messrs. Tiffin and Gunn ought to be more patriotic and not set up their own little selfish [illegible] as against the whole country, which, I contend, are now being fully met by the present policy.

I wish I could say as much about the tariff as regards the wine business, but I cannot. The tariff as regards wine, is one that cannot be sustained on any ground whatever. The revenue is not benefitted, neither is the importer, the dealer, nor the consumer; but of this I shall have something to say on a future occasion.

I am,
Your obedient servant
ALEX. [illegible]

Montreal, March 3rd, 1881.

CANADIAN AND BRAZILIAN TRADE

The prospectus of the company trading under the name of "The Canadian and Brazilian Direct Mail Steamship Company," is now before the public, [illegible] merits and proposed traffic arrangements. The [illegible] of the company are severally connected with [illegible] commerce, as regards railways in the Dominion and [illegible] cial operations.

The company has chartered steamships to commence the traffic at an early date, and is sanguine [illegible] results stipulated in their prospectus. Mr. [illegible] Macdougall, of Montreal, has been appointed [illegible] introduce a portion of the company's stock on [illegible] dian exchange.

Mr Mackay, of the Public Works Department, will, [illegible] understood, occupy the position of General Traffic [illegible]. He has had extensive and practical acquaintance with railway matters, both in England, in India and the colonies, and is well adapted for the organization and carrying out of passenger and freight matters.

The various rates regarding passengers and freight will be published in the course of a few days.

—The shipments of sardines from Eastport, Me., during 1880 amounted to 65,000 cases, valued at $650,000. In 1879 the shipments were [illegible] cases. Last year there were seven new factories started, making thirteen now in operation.

TORONTO PRICES CURRENT.

GROCERIES

[illegible]	[illegible]
[illegible]	16 @ 17
[illegible]	48 @ [illegible]
[illegible]	23 @ 27
[illegible]	[illegible] @ 1 05
[illegible]	11 @ 12½
[illegible] white	15 @ 17

SUGARS

Porto Rico, per lb	6¾ @ 08
Canadian Refined, low to extra bright	08 @ 09
Dry Granulated	6¾ @ 08
Scotch Cut Loaf	09 @ 10½

TEAS.

Japan common to good	25 @ 45
fine to choicest	42 @ 47
Congou common to fine	4? @ 45
Souchong	40 @ 55
Oolong good to fine	35 @ 65
Gunpowder common to good	42 @ 60
medium to choice	45 @ 50
extra choice	55 @ 62
Young Hyson common to medium	40 @ 47
medium to fine	42 @ 00
fine to finest	60 @ 65
Hyson	35 @ 65
Imperial	33 @ 40

TOBACCO, MANUFACTURED.

Dark	23 @ 38
Western Leaf, good to fine	35 @ 42
Bright sorts, good to fine	45 @ 55
choice	72 @ 82
Solace	38 @ 48

HARDWARE.

TIN.

Block, per lb (four months)	25 @ 27
Grain	27 @ 30

COPPER.

[illegible]	19 @ 20
[illegible]	24 @ 29
Zinc Sheet	05½ @ 06½

CUT NAILS.

10 to 60 dy per keg of 100 lbs., hot cut American pattern	2 75 @ 2 85
8 dy and 9 dy	3 00 @ 3 10
6 dy and 7 dy	3 25 @ 3 35
4 dy and 5 dy	3 60 @ 3 60
3 dy	4 25 @ 4 35
4 to 6 dy cold cut Canada pointed	3 25 @ 3 35
3 dy "	3 75 @ 3 85

HORSE NAILS. (Discount, 40 to 45 per cent.)

Patent Hammered	00 @ 22

GALVANIZED IRON.

Best No 22	5½ @ 6
Best No 24	5½ @ 6
Best No 26	6½ @ 7
Best No 28	7 @ 7½

IRON

Pig—Carnbroe	20 00 @ 21 00
Summerlee	00 @ 00
Eglinton No. 1	00 @ 00
Nova Scotia	23 00 @ 23 00
Nova Scotia bar	2 40 @ 00
Bar, per 100 lbs	2 00 @ 2 10
Hoops—Coopers'	2 50 @ 2 75
Band	2 50 @ 2 75
Boiler Plates	2 75 @ 4 00
Canada Plate—Hatton	3 50 @ 3 75
Berne	3 60 @ 3 75
Thistle	3 00 @ 3 75
Pen	3 60 @ 3 73
Swansea	3 75 @ 4 10
Blaina	3 75 @ 4 00
Clinton	3 80 @ 4 80
Saguenay	3 80 @ 4 00

LEAD.

Bar, per 100 lbs. (at four months)	5 @ 5½
Pig	4½ @ 5
Sheet	5 @ 5½
Shot	6½ @ 6¾

BABBITT METAL

No 1	16
No 2	12
No 3	8

AXES.

Lumberman's Pride	8 25 @ 10 25
Peerless	8 25 @ 9 50
Keen Cutter	8 25 @ 10 40

CORDAGE.

Manilla ½ and larger	0 00 @ 0 10½
¼ inch	0 00 @ 0 10

IRON WIRE

No. [illegible] per bundle (four months)	1 80 @ 1 90
No. [illegible] "	2 10 @ 2 20
No. 12 "	2 40 @ 2 60

POWDER.

Blasting Can	3 50 @ 3 75
FF Sporting	4 80 @ 5 10
Blasting English	3 50 @ 3 75
FF sporting, loose	4 60 @ 5 10

WINDOW GLASS.

25 and under	1 80 @ 1 90
[illegible]	1 65 @ 2 06
[illegible]	2 20 @ 2 30
[illegible]	2 40 @ 2 50

STEEL

Cast steel	0 13 @ 13½
[illegible] Steel	0 5 @ 6¼

TIN PLATE.

IC Coke (four months)	5 00 @ 5 25
IC Charcoal	6 00 @ 6 25
IX "	8 00 @ 8 50
IXX "	10 00 @ 10 75
DC "	5 50 @ 5 75

DRUGS

Aloes Cape	17 @ 20
Alum	2 @ 3
Borax	17 @ 18
Camphor	38 @ 43
Castor Oil	11 @ 12
Caustic Soda	3 00 @ 4 00
Cream Tartar	35 @ 37
Epsom Salts	1½ @ 2
Extract Logwood, bulk	11 @ 12½
boxes	13½ @ 15
Indigo, Madras	75 @ 85
Madder	13 @ 14
Opium	8 50 @ 9 00
Oxalic Acid	13 @ 20
Potass Iodide	3 25 @ 3 50
Quinine	3 90 @ 4 00
Soda Ash	02 @ 03
Soda Bicarb, per keg	4 00 @ 4 10
Tartaric Acid	00 @ 55
Morphine	3 75 @ 4 00
Brimstone	02½ @ 03

OILS

Cod Oil Imperial gallon	00 @ 65
Straits Oil	50 @ 55
Lard, extra	82½ @ 85
" No 1	73 @ 76
Linseed raw	78 @ 82
boiled	82 @ 85
Olive	1 30 @ 1 33
[illegible]	1 70 @ 1 90
" quart, per case	3 00 @ 3 25
Seal	75 @ 80
Whale, refined	90 @ 95
Spirits Turpentine	78 @ 82½

PAINTS, ETC

White Lead, genuine, in Oil, per 25 lbs	[illegible]
" No. 1	[illegible]
" No. 2	[illegible]
" No. 3	[illegible]
" Dry	[illegible]
Red Lead	[illegible]
Venetian Red, English	[illegible]
Yellow Ochre, French	[illegible]
Whiting	[illegible]

PETROLEUM

Refined—Delivered in Car Lots	
No. 1 [illegible] per Imperial gallon	[illegible]
" 5 to 10 barrels	[illegible]
" single barrel	[illegible]

WOOL

Fleece, per lb	[illegible]
Super	[illegible]
Extra	[illegible]

HIDES AND SKINS

Steers 60 to 90 lbs, per lb	[illegible] @ 10
Cows	[illegible]
Cured and inspected	[illegible] @ 10
Calfskins, green	11 @ 13
" cured	13 @ 17
Sheepskins, Lambs'	1 [illegible] @ 1 [illegible]
" shearlings	[illegible]
Tallow, rendered	[illegible]
" rough	[illegible]

LEATHER.

Spanish Sole, 1st quality, all weights, per lb, (four months)	25 @ 31
Spanish Sole, No. 2	24 @ 26
Slaughter, heavy	28 @ 31
" light	35 @ 38
Buffalo	23 @ 25
Harness	32 @ 35
Upper, No. 1, heavy	36 @ 40
light and medium	40 @ 45
Kip Skins, French	95 @ 1 10
" English	70 @ 90
" Domestic	50 @ 60
" Veals	70 @ 75
Hemlock Calf (25 to 30 lbs.) to doz., per lb	60 @ 65
30 to 40 lbs	75 @ 85
French Calf	1 15 @ 1 45
Splits, large, per lb	20 @ 30
" small	23 @ 28
Enamelled Cow, per foot	16 @ 18
Patent	17 @ 20
Pebble Grain	16 @ 18
Buff	16 @ 18
Russetts, light	40 @ 50
Gambier	5 @ 6
Sumach	5 @ 6
Degras	6 @ 7

PRODUCE.

FLOUR.

Superior Extra, per barrel, f.o.c.	4 90 @ 5 00
Extra	4 75 @ 4 85
Fancy	0 00 @ 0 00
Strong Bakers	5 15 @ 5 25
Spring wheat, extra	4 80 @ 5 00
Superfine	00 @ 00
Oatmeal	3 85 @ 3 95
Cornmeal, small lots	3 30 @ 3 40

GRAIN.

Fall Wheat, No. 1, f.o.c	1 11 @ 1 12
" No. 2	1 09 @ 1 10
" No. 3	1 05 @ 1 08
Spring Wheat, No. 1	1 18 @ 1 20
" No. 2	1 16 @ 1 17
" No. 3	1 11 @ 1 12
Oats	36 @ 37
Barley, No. 1	97 @ 98
" No. 2	88 @ 90
" No. 3 Extra	82 @ 84
" No. 3	70 @ 73
Peas	60 @ 70
Rye new	86 @ 87
Corn	55 @ 58

PROVISIONS

Butter, choice, dairy	20 @ 21
Butter, shipping, per lb	13 @ 15
Butter, crocks, city trade	19 @ 20
" pound rolls	20 @ 22
Cheese	12½ @ 14
Dried Apples	03½ @ 04
Pork, mess	17 @ 18
Bacon, long clear	09 @ 10
" Cumberland cut	8½ @ 09
" Breakfast Smoked	11½ @ 12
Hams	10 @ 11
Lard	12 @ 12½
Eggs	20 @ 22
Hops, new	15 @ 20

SALT, ETC

Liverpool, coarse, per bag	78 @ 90
Canadian, per barrel	00 @ 1 05
Stoved	1 40 @ 1 60

BOOTS AND SHOES.

Men's Calf Boots	3 50 @ 4 00
" Kip Boots	2 25 @ 3 50
" Split Stogas	1 75 @ 3 00
" No. 1 "	2 50 @ 3 00
Men's Congress and Balmorals	2 00 @ 3 10
Boys' Kip Boots	1 65 @ 1 95
" No. 1 Stogas	1 85 @ 2 00
" Split	1 55 @ 1 70
" Gaiters and Balmorals	1 40 @ 1 75
Womens' Balmorals and Gaiters, pegged	1 10 @ 1 60
" " " M. S	1 30 @ 1 65
" Batts	90 @ 1 30
" Goat Balmorals	1 70 @ 2 75
Misses' Balmorals	75 @ 1 00
" Batts	75 @ 1 10
Childs' Balmorals	75 @ 1 00
" Batts	55 @ 75
" Turned Cack, per doz	3 60 @ 6 00

LIQUORS.

Prices to Country or City Dealers.

[The following prices are per wine gallon; add one-fifth for Imperial measure.]

Rye	0 00 @ 1 08
Malt	0 00 @ 1 08
Brandy	3 25 @ 4 25
Wine, Port	1 25 @ 3 75
" Sherry	1 25 @ 4 25
" Native	1 25 @ 1 75
Rum	2 50 @ 2 60
Old Tom, green cases	1 25 @ 4 75
Bitters	1 50 @ 1 75
Ginger Wine, No. 1	1 00
Raspberry Wine	1 00
Gin, red	8 60
" green	4 50
Irish Whiskey, in wood	3 00
Scotch " "	2 50
Booth's Old Tom, qts	6 50
" " pts	7 25
Brandy, imported, qts	8 50 @ 11 50
" 2 doz. pts	11 50 @ 12 50
" 4 doz. ½ pts	11 00 @ 13 00
" 8 doz. ¼ pts	13 00 @ 15 00
" com. qts	6 00 @ 8 00
Scotch Whiskey, qts	5 00 @ 7 00
" " pts	6 50 @ 7 50
Irish " qts	6 25 @ 6 75
" " pts	5 50 @ 7 50
Claret	3 50 @ 11 00
English Ales, qts., per doz	2 00 @ 2 75
" pts.	1 75
Guiness Porter, qts., "	2 25 @ 2 70
" pts., "	1 75
Champagne, qts	14 00 @ 20 50
" pts	15 00 @ 28 50
Holland Gin	1 75 @ 2 00

WEEKLY REVIEW.

Toronto, March 9th, 1881

STOCKS.—The stock market was fairly active for ex[illegible] and the transactions were as follows:—Bank of Montreal 5 at 185; Ontario Bank 5 at 100; Bank of Commerce 20 at 142½, 0 at 142¼, and 0 at 144¼; Dominion Bank 0 at 1[illegible]; Western Assurance Company 4 at 21[illegible]; Consumers Gas Company 64 at 14[illegible]; Building and Loan Association 10 at 10[illegible]; Manitoba Loan [illegible] at 12[illegible].

PRODUCE.—The flour market has ruled decidedly firmer during the past week, and several large sales have taken place, more particularly of superior extra at quotations. Spring wheat has also been in better demand at full rates. Fall wheat is inquired for, and some shipments have been made for export. Peas, oats and barley are steady at quotations.

HARDWARE.—There are no changes to report in this market for the past week, but the trade is suffering severely from the keen competition and consequent cutting of prices in heavy goods by the houses here and in Hamilton, in competition with Montreal. Orders have been booked in several cases at prices which were quoted regardless of profit and in some instances below cost. It is hoped that the recent heavy failure in Montreal will have a beneficial effect on the markets here, but up to the present no change is apparent.

WOOL.—Inactivity prevails in this market and prices are in the hands of the manufacturers, who, however, are holding off in expectation of a further decline. Combing wools are quoted at from 27 to 29, superior pulled 29 to 30, and pulled at 35 to 36.

DRUGS.—There is a good general demand, and some staples are in short supply. Prices are generally firm, with advances in Vanilla, Jalab, American saffron, leptandra root, quinine, chillies, cardamons and fenugreek seeds. The following are easier: serpentaria, pink root and potassium iodide.

FREIGHTS.—Are unchanged, and the rates are as follows: to Belleville, 24c per barrel; Shannonville to Kingston, inclusive, 28c; Gananoque to Prescott, 30c; Edwardsburg to Cornwall, 35c; Summertown to Montreal, 35c; St Lambert's to St John's, Q., 47c; Durham to Lennexville, 53c; Waterville to Coaticooke, 55c; Danville to Chaudiere, 60; Doucett's Landing, 45c; Point Levis, 55c; Quebec, 55c; Island Pond to Falmouth, 65c; St. Henri to L'Islet, inclusive, 60c; St Jean Port Joli to Riviere du Loup, inclusive, 65; Cacouna to Moncton, inclusive, 70c; Point du Chene (for gulf ports and Prince Edward Islands, traffic only), 70c; Humphries to Amherst and Point du Chene, Boundary Creek to Colbrook, inclusive (except Salisbury Junction), 75c; Nappan to Richmond, and Fisher's Grant to Valley, inclusive (Truro excepted), 75c; Pictou, Truro, Halifax, New Glasgow Junction (for Halifax and C B railway traffic), 65c; Windsor Junction (for Windsor and Annapolis railway traffic only), 60c; St John, N B, 60c; McAdam Junction and Fredericton Junction, 60c; Carleton, N B, 60c; St. Stephen, N B., St Andrews, N B., 60c each. To England, via steamers from Portland:—Flour, 99c; oatmeal, 99c per barrel; beef in barrels, 56c per 100 lbs; pork in barrels, boxed meats, 54c; tallow and lard, 54c per 100 lbs; butter and cheese, 68c per 100 lbs., in lots not under 15,000 lbs; do in lots from 5,000 to 15,000 lbs., 78c per cental; oil cake, 45c per 100 lbs; flour and meal in sacks, 45c per 100 lbs; apples per barrel, prepaid, $1 13 for lots of 130 barrels or over; clover, 68c per cental.

Ocean freights quiet and firm. From Philadelphia to Continent, 6,000 qrs. grain at 4s 3d; to east coast of Ireland, 5,500 qrs at 4s. From New York to Liverpool, steam, 10,000 bush. grain at 5¼d. To Glasgow, *steam, 40,000 bush. grain at 5¼d with risk. To Cork,* for orders, sailing ships with grain quoted at 5s per qr; firm.

CANADIAN CATTLE IN ENGLAND

Halifax, March 8.—The statement made by Sir Alex. Campbell in the Senate yesterday regarding the cargo of cattle shipped from this port in the SS *City of London*, by Messrs. McLellan & Fader, has created considerable excitement among our cattle shippers. The ship sailed on 10th February, with 317 head of Nova Scotia cattle and a number of sheep. On the previous voyage she carried a cargo of American cattle from New York, which had foot and mouth disease, but she had complied with the necessary regulations, the 30 days had elapsed, the ship had been well *cleaned and whitewashed, and the cattle were embarked*, Mr. McLellan going across with them. They must have experienced rough weather, for 30 cattle and 150 sheep were lost overboard. Mr McLellan cabled safe arrival, but said nothing about disease. Nova Scotia cattle never had foot and mouth disease. Mr. Fader does not believe they contracted that disease during the voyage, but thinks that they may have contracted some disease, and Sir that A. T. Galt has been misinformed on the subject. If they had foot and mouth disease McLellan would certainly have said so. Another cargo of Nova Scotia and New Brunswick cattle will be shipped on the American cattle SS *Thanemore*, on Thursday.

ACTIVITY IN THE COKE TRADE.

Western Pennsylvania contains two regions utterly unlike in character, and at the same time absolutely unique in their way, and which cannot find duplication on the face of the globe. In the north-western portion of the Commonwealth the oil regions form one of those peculiar areas, while the south-western industry is the coke regions, just now the scene of intense activity, the plum for which railways are eagerly reaching, and a place full of interest even to the traveller who rushes through the region by rail and is forcibly minded, by the everlasting flames and sulphurous fumes, of that place which Bob Ingersoll declares is not. The recently begun activity in the iron trade, the "blowing in" of furnaces long cold, the building of new foundries, and the growth of the smelting trade in the far West and elsewhere have all contributed to the present state of energy displayed by the coke making trade of the Connellsville regions of Pennsylvania. *Though the price just now is barely* one-half that obtained during the spasmodic advance of a year or so ago, yet it seems sufficient to not only keep every oven of the regions in active operations, but to start work which will result in the completion of nearly 2,000 ovens more. To obtain some facts regarding the trade was the purpose of the writer in visiting several gentlemen posted in the business. Among these was Captain John F Dravo, the oldest of operators in coke. From him and from others the following facts were obtained. The use of coke in blast furnaces dates back only to 1850, when the firm of Graff, Bennett & Co., of this city, first used the article with success. Previous to that time the "block" coal of Ohio, and charcoal, was used in the reduction of ore in blast furnaces. Coke had been made in the Connellsville regions some few years before the time mentioned, but as there was no communication with this city except by river, coke was sent past our furnaces and used at Cincinnati and elsewhere along the river in foundry furnaces only. Gradually, however, as the merits of the new fuel became known and railroad transportation became possible, the coke industry began the growth which has today attained most important proportions. The peculiarity of the business lies in the fact that the vein of soft coal from which the Connellsville coke is made is a restricted, well-defined area, and is only found in the Pennsylvania regions in a workable vein to feet thick. The same properties, it is true, are claimed for the Colorado coal, but as yet the deposit is not known as a rival to the Pennsylvania vein. This deposit of coal crops out at its northern edge at Blairsville, Indiana county, and is traced as far as its southern outcrop at Morgantown, W. Va. The eastern and western limits are from two to four miles apart, and the coal fit for coking comprises eight feet of the ten feet alluded to. In its nature the coal is so much softer and workable than the Pittsburg vein or thinner and harder coal that a miner can double his daily output in working the softer fuel. The number of ovens now in operation in the region is placed at 6,000, and between 1,500 and 2,000 are in process of construction at various points. These are all of the beehive pattern, twelve feet in diameter, eight feet high, with a two foot circular opening in the apex and an arched doorway let into the wall at the base. They are built of fire brick, and are charged with 100 to 125 bushels of coal at each filling. This coal weighs 76 pounds per bushel, but 100 bushels of coal yields 125 bushels of coke, at 40 pounds to the bushel. The process of coking is a most simple one. The oven is filled to the depth of 18 inches, the air supply cut off almost entirely and the heat of the surrounding fire brick, left from its previous charge, converts the coal into coke in 36 hours. Extra hard, or 72 hours coke, is the product of a charge which has remained in the ovens over Saturday, Sunday and Monday. *The capacity of each oven* in the region is given at 100 to 120 bushels every alternate day, or 350 bushels per week, the total number of ovens being in round numbers 6,000. Their combined production is readily found to be 2,100,000 bushels per week. This output is, however, restricted by the want of cars, many firms shipping only a few days each week. But making all allowances for this and other causes the total product of the coke in the regions for the present year will be something enormous. Pittsburgh coak finds ready sale on the shores of Lake Champlain, in Canada, in New York, Philadelphia, Baltimore, Chicago, all parts of Ohio, St Louis, Omaha and other widely distant points. Its chief merits are the following: Proportion of fixed carbon, great strength, openness of texture and freedom from sulphur. An analysis shows the following component parts:

Bitumen and moisture	.52
Ash	6 44
Fixed carbon	89 80
Sulphur	.21
	100 00

To operate the 6,000 ovens of the region it requires the services of an army of 4,000 men and boys, and each oven represents in capital invested in lands, ovens, machinery, etc., the sum of $500. This gives $3,000,000 as at present so invested. Coke lands are worth, when the vein is favorably located, from $300 to $500. As showing what the railroads share of the coke must be it is only necessary to state that for the fifty miles of transportation between the regions and this city the freight is $1 10 per ton, to Chicago, $3 50 per ton, to New York, $4 00 per ton. Twelve tons makes a car load and no one can limit a car loading coke on it, *and it does not require a car of special build to hold* it, and at these rates cars are now so scarce as to seriously disturb the filling of contracts by many shippers, shipments being only possible three days in a week. A queer feature of the coke making trade lies in the fact that every twenty-four hours 100,000,000 cubic feet of gas is wasted from the ovens. It is this product of combustion which a Pittsburgh corporation proposes to bring to the city in a 24 inch main, and thus heat our residences and operate our puddling and heating furnaces.—*Pittsburgh Telegraph.*

THE BRITISH GRAIN TRADE.

London, March 7th.—The Mark Lane *Express*, in a review of the British grain trade for the past week, says: In consequence of the changeable, damp weather, the agricultural prospects at the beginning of March were serious. Little progress in sowing has been made since Christmas. The young wheat crop is in a favorable condition. Good home grown samples, from mere scarcity, advanced 1s 6d to 2s on Friday, both in London and the Provinces. Bad wheats were unchanged and neglected. Foreign wheat, until the middle of the week, was improved. American red winter and Australian to the extent of 1s advance, which, however, was solely due to the paucity of supplies, and buyers are now waiting for prospective supplies.

Newmarket, Ont., 9th.—The Lundy flour mill was burned to the ground this morning. The stock was insured for $1,000 in the Western.

Toronto, 7th.—Fat cattle, having been fed all winter, will soon be on the market. Lively times may be expected at *spring fairs.* The demand will be greater than the supply, and prices may be expected to advance rapidly. There is a great demand for horses.

—Messrs. Munderloh & Co., who have acted for years as representatives in Montreal of the well known White Cross Line, have received a cable despatch from the owners, Messrs Steinmann & Ludwig, Antwerp, announcing a regular monthly line of steamers between Antwerp and Montreal.

—In a circular recently issued by the Austrian Minister of Commerce, the attention of Austrian millers is called to the present immense importation of flour from Germany to Austria. In 1879 the total amount was 45,441,095 kilagrams. The Minister thinks that this can only be explained on the ground of the inferiority of the system of production adopted by the Austrian millers. He invites the railway companies to reduce their freight charges, so that the cost of production and exportation may be lessened. In conclusion, he invites suggestions as to the causes of the evils.

—In addition to the amount of breadstuffs raised in Great Britain last year, there were imported into the kingdom 1[illegible]9,925,313 bushels of wheat, or its equivalent in flour. Of this amount the United States supplied 84,433,652 bushels. The Canadas contributed about 10,000,000 bushels, and South Russia nearly as much, and other countries smaller amounts. The United States furnished about 60 per cent. of the gross amount of wheat purchased by the people of Great Britain, and with these figures before them it is no wonder that the farmers of that country turn their thoughts to America when disastrous seasons come upon them.

SCIENTIFIC AND PRACTICAL.

[illegible]

It is the [illegible] that [illegible] a comparatively slight spreading of charcoal over dead animal matter as a preventive of the escape of the odors arising from decomposition. A dead dog having been placed in a box in the warm laboratory of an eminent chemist, and covered with charcoal to the depth of between two and three inches could not be discovered to have emitted any smell during several months after which time an examination showed that nothing of the animal remained but the bones and a small portion of the skin. To the large excess of oxygen over the nitrogen in the atmosphere, which according to the above table was absorbed by the charcoal, and which thus rendered harmless the noxious vapors given off by the carcass as they were being absorbed, is doubtless owing to the fact above stated and the further fact of the charcoal never becoming saturated. A reader of the *Scientific American*, who has been trying certain experiments on the value of charcoal as a convenient means of storing oxygen, reports favorably as to the results. In a box or case containing one cubic foot of charcoal, may be stored, without mechanical compression, a little over nine cubic feet of oxygen, representing a mechanical pressure of 126 pounds on the square inch. From the store thus preserved the oxygen can be drawn by a small hand pump. From the fact of the charcoal absorbing oxygen in so much greater proportion than nitrogen, we have here a means of utilizing its discriminative powers of selection in obtaining unlimited supplies of oxygen from the atmosphere, which contains *nitrogen five times in* excess of its oxygen, or twenty per cent., whereas, by the separating or selective powers of the charcoal, the mixed gases capable of being extracted from it contain over sixty per cent. of oxygen. It only suffices to withdraw this now highly oxygenized air into another vessel of charcoal, by the further exposure to which the proportion of oxygen will be increased to a still greater extent. This indicates a most feasible means by which atmospheric air can be decomposed in such a way as to provide a cheap supply of oxygen. One cannot readily recognize the fact, which is nevertheless true, that the condensing power of charcoal, as applied to ammonia, is equal to what would be obtained by subjecting this gas to a pressure of nearly 1,260 pounds on the square inch.—*Scientific American.*

LIGHTS AND LIGHTING.

The importance of good light, to enable work to be done after dark, is very great, and during the long evenings when the hours of night encroach upon those of the working day, shops where orders are pressing feel the importance of some method of practical illumination. The first result of poor light is that the work is imperfectly done. The workman is not able to judge of the quality of what he is doing, *and so the character of the product falls off, even* though he may do his best. The quantity of work produced is also diminished, owing in part to the difficulty of seeing, and in part to the discomforts which are always entailed by an attempt to do anything by an imperfect light. There is always a wear of eyesight, too, which, though it may not be noticed at the moment, contributes to the weariness of the labor. A good light is a necessity in almost every manufacturing operation that can be named, whether carried on upon a large or small scale. In many lines, indeed, so important is this that the length of the working day in winter is always determined by the hours of daylight, and always ends before artificial light is needed. In the great cities and most of our manufacturing towns there are at least three methods of artificial illumination which are available for work on a large scale. First in order of intensity is the electric light; second, gas; and last, oil; the latter, with the burners now available, having least power. The electric light, when it can be applied under even ordinary conditions, is very cheap, its cost being practically nominal. When the establishment has power available at night, the amount needed to drive the electric machine is so small that no ordinary establishment would ever miss the quantity needed for the largest light. With the present price for coal, a horse-power can hardly be estimated to cost in a large engine more than a cent per hour, and all the other expenses will not more than double that figure. The consumption of carbons is not large, and with an outside estimate for power the total cost of a light of 1,600 candle power for six hours would not be more than 48 to 50 cents. To this, if we calculate interest on the plant, we should perhaps add 15 or 16 cents, making a total of about 65 cents for six hours. The electric light appears to be applicable in all places where power is used and where an abundant and intense light is needed. There are drawbacks, however, to its use, and these are somewhat serious. The light given is not a pure white, it has a strong tinge of red and blue, and is notably wanting in the yellow. This makes the blues and reds, as well as all shades of green, unnaturally brilliant, while the yellows are exceedingly light. This causes the peculiarly ghastly appearance which is so characteristic of the electric light. Another fault is that the source of light is practically a single point; hence the shadows are as sharp as though their boundaries were marked with a knife. This prevents the possibility of soft shades, and makes every shadow of the deepest black. The tendency of this is to cause all objects to appear flat, even when they are round. Until these objections are removed the utility of the electric light will have

[illegible] These are much better than a cluster of small burners consuming the same quantity, and so far as we know are the best that can be had in the country. By them any shop may be well lighted and work carried on with almost the same ease as with gas. The main object is to get light enough. In all cases a concentration of the sources of light rather than a dispersion of them is needed, except in the case of the electric light when for the sake of dispersing the dark shadows it is sometimes necessary to divide the light and use two instead of one. A great loss of light, however, always takes place when this is done, either with the electric, gas or oil lights. With oil and gas the burners should be kept as few in number and as close together as possible. One large burner is always better than two small ones, both on account of getting more from the same amount of oil or gas, and because one flame of double power or two flames close together are more effective than two similar flames separated by a considerable distance. The reason for this we cannot here discuss, but it is easily demonstrated. Whatever light is used, let it be remembered that an abundance pays, not only in the amount of work and its quality but in a thousand other ways. In the large cities, for example, an abundant light is made to pay for itself in ordinary shops, simply as an advertisement, and for this purpose alone it is also quite valuable in the country. How much more attractive is the store or shop that is well lighted than the one that is dark and dingy. The subject is well worth the careful attention of our readers from a business point of view alone, independent of the care of the eyesight. Oils are everywhere so cheap at the present time, and gas in most places is so reasonable in cost, that liberality in this matter of lighting cannot be regarded as extravagance by anyone. On the contrary, *it is true* economy.—*Iron Age.*

HEATERS ON NON-CONDENSING ENGINES.

On this subject a correspondent of the *American Machinist* writes as follows: "Why is it that heaters are not in more general use on condensing engines? We certainly can get feed water at a temperature of 100° from the hot well without a heater, but although we cannot hope to heat the feed water to as high a temperature as is obtained from the use of some heaters attached to non-condensing engines, still I think the general efficiency of a condensing engine is increased by the use of even the ordinary feed water heater. I think I can safely say that the pointer of the vacuum gauge on our lake steamers rarely gets below 24. There are a few exceptions. The reason generally given for this poor vacuum is that to show 27 or 29 on the gauge, an increased amount of injection water is required, which lowers the temperature of the hot well, and consequently the feed water, so that we are prevented from getting the economical benefit of a better vacuum on account of having to use colder feed water. Now, by forcing the feed water through a heater, on its way to the boiler, we *can get our 27 or 29, if possible, and still keep up, if* not increase, the temperature of said feed. Practically, a terminal pressure of five pounds above zero is a desideratum not often gained, as even in our best condensing engines seven or ten pounds is considered good. In that case our exhaust will be at a temperature of from 175° to 190°, so that there ought to be no difficulty, by the use of even a moderately long heater, in heating the feed water to 120°; and as the terminal pressure rises so will the benefit be more marked. Before giving the result of some trials with our heater, I must explain that on account of the engine being rather small for the work to be done we cut off at one-third of the stroke, which gives us a terminal pressure of about 23 lbs. above zero, 55 lbs. being the boiler pressure. The heater is built of boiler plate; such an one would be considered the worthy emanation of a country blacksmith shop, containing 110 one-inch lap-welded iron tubes 3 feet long for the passage of the exhaust steam. This is far too short for best results; but we were cramped for room and could not get the heater any longer. During the following different tests the steam was kept at a uniform boiler pressure of 55 lbs.; revolutions, 66 per minute; cut off, one-third of the stroke; terminal pressure, 23 lbs. Indicated h. p., 291. When feeding from the hot well, at a temperature of 102°, and partially closing the suction cock, so that the pump got just water enough to feed the boiler, all the water passing through the heater going into the boiler, the temperature of the feed entering the boiler was 152°; the temperature of the injection water was 40°; vacuum, 24. When feeding from a lake at a temperature of 40°, all the water passing through the heater entering the boiler as before, the temperature of feed was 146°; vacuum, 25. When feeding from the lake, and the pump pumping its full capacity into the heater, what was not wanted for the boiler being allowed to pass overboard, after passing the heater, the temperature of the feed entering the boiler was 138°; vacuum, 25½. Regarding the vacuum, I might explain that our condenser is one of those very unhappy mixtures of boiler plate and cast iron that require a separate ventilator to supply the air for the leaks, so as not to rob the furnaces of their share, and of which the best word that can be said is that they are about dying of old age. But before we added the heater 22 was considered a booming vacuum. You will see by this that to an engine with limited condenser capacity the addition of a heater is beneficial in other ways than keeping up the temperature of the feed. Another advantage gained by the addition of a heater to a condensing engine is in case of the breaking down of the air pump valves connected therewith, or anything by reason of which the engine is worked

[illegible] treated as it is advisable [illegible] is diluted [illegible] About [illegible] pint of [illegible] oil to three [illegible] of tallow will form a mixture which will prevent many of the evils resulting from a continued use of neat's tallow. I do not consider brass tubes any better than good iron [illegible] necessary. In fact, owing to the unequal expansion between the boiler plate shell of the heater and the brass tubes, there might be objectionable.

—Of the use of cast iron for boilers, Mr. Shock says, that the uncertain strength caused by defective moulding, its brittleness and low tensile strength renders it unfit for extensive use for parts of boilers proper. Its unyielding nature unfits it especially for parts subjected to unequal expansion from differences of temperature. Several kinds of modern sectional boilers consist, however, almost entirely of small cast iron spheres or tubes.

—An invention has recently been patented to prevent the explosion of steam boilers by placing a partition across the boiler slightly above the water line, providing an opening through this partition, which is adjustable, and through which the flow of steam can be regulated to be equal to the average intermittent flow required for the engine. It is claimed that this prevents dangerous variations of pressure on the surface of the water, hence preventing explosions.

—An improvement on the furnaces of steam boilers has been patented at Birmingham, England, by which the bridging wall has openings upon the fire side with a hollow connection with the steam pipe or air pipe, which is led under the grate. A jet of steam is driven through the pipe under the grate which draws in air with it, and the whole is forced through the openings in the front side of the bridge wall. The idea being to ignite the unconsumed gases, making a very effective flame.

—A test of a high-speed stationary engine was recently made at West Sullivan, Me. The engine tested is a 14x21, which was designed to make 150 revolutions per minute. This engine was run up to the remarkable speed of 412 revolutions per minute, with no noise save the hum of the fly-wheel, and without occasioning any heat on account of friction. The piston at this great speed was travelling 1,442 feet per minute, and the rim of the fly-wheel, which was 7 feet in diameter, was travelling 9,055.76 feet per minute, or 102 miles per hour. The highest speed for which any locomotive has yet been built being 1,700 feet per minute, makes this feat of a stationary engine quite remarkable.

—For ordinary slide valve engines the coal burned per indicated horse-power will vary from nine to twelve pounds; for the sake of illustration we will say ten pounds, and that the engine is of such size as would require for a year's run $3,000 worth of coal. Now an ordinary adjustable cut-off engine with throttling governor ought to save at least half of that amount of coal, or say $1,500 per year; if the best automatic engine were employed using 2½ pounds of coal per horse-power, a *further saving of $750* per year could be effected, or between the two extremes $2,500 per year in saving of coal without interfering in any way with the power, with the exception perhaps that the automatic engine will furnish a better power than the former engine.

—Speaking of the causes of loss in the power of steam engines, the editor of the *Mechanical Engineer* says: A loss of heat, from whatever cause or source, is a loss of power, and though it may be an infinitesimal loss, it appears in the coal bills with unerring certainty. Thus it is that some steam engines of precisely the same dimensions, as regards piston *displacement*, and with the same boilers, *fail to agree* in economical results; there is a loss of heat from some cause not discovered. The situation of the engine has something to do with it. The steam pipe of one engine may be exposed to currents of air which the other escapes; larger radiating surfaces are unclothed; in short, a multiplicity of causes, involving the loss of heat, affect the economy of the steam engine in a large degree.

—Foaming is either the fault of the water used or the shape of the boiler. The surest remedy is to use better water, or an improved boiler. Some kinds of soft water contain organic greasy ingredients, which will cause enormous amounts of foam to be developed. Quicklime will help this in some waters, but then you may get scale in the boilers; hard water is not so apt to foam. When the boiler is of such a shape as to allow water to be easily thrown into the steam-pipe this may be a cause of foam, and the two causes may co-operate. If the water is used which has a tendency to foam, have a high steam dome put on the boiler, and the inlet pipe for the steam so high that the foam cannot reach it. This is better than doctoring the water, which only helps temporarily, if it helps at all.

—The Boston *Journal of Commerce*, referring to a recent boiler explosion, sensibly remarks: "If any *reliance is to be placed upon the report* which has since come from it, a part or nearly all of the men employed about it had been in a state of semi-intoxication the night before, and were not thoroughly sober at the time of the explosion. If this is the case, it is only another of those explosions which, if the facts had not been known would have been dwelt upon at greater length by experts, with some mysterious detonating theory or some other fol-de-rol. If people who are drunk, or half drunk, are bound to manipulate a steam boiler and take their lives into their hands, they should certainly not be permitted to do damage to others, as in this case. Five or six persons were killed and one or two injured."

—[illegible] says [illegible] in the way of [illegible] discovering that [illegible] cylinders which [illegible] with slow pistons [illegible] engines by 10 to 15 per cent [illegible] efficient [illegible]

—When a sheet in a steam boiler [illegible] it is necessary to keep the patch in place [illegible] the edges of the hole [illegible] When the corrosion covers a large surface the best and safest way [illegible] entirely out and substitute a new one [illegible] to avoid delay and expense patches [illegible] without cutting out any of the corroded [illegible] such patches are called "soft patches" [illegible] of a piece of sheet iron laid over the leaky parts and held in place by [illegible] bolts and then the joint is made tight [illegible] made of white lead, red lead and [illegible] borings. If the bolts are only held [illegible] roded iron, these patches are extremely [illegible] and only allowable when held in place [illegible] rounding iron.

—The almost incredible feat of [illegible] boilers of wood was accomplished [illegible] Philadelphia, where they were used to [illegible] to the pumps for pumping up the river [illegible] use of the city water-works. They, however [illegible] only two years, when it became so dam[illegible] them steam-tight that they were abandon[illegible] boilers. How was it possible to heat wat[illegible] boilers? It was accomplished by having [illegible] box 12 feet long, 6 feet wide, and [illegible] inside a rectangular wooden chest, [illegible] 9 feet square, made of plank nearly [illegible] securely bolted together by iron rods pass[illegible] the planks. The iron fire box had eight [illegible] of one foot in diameter, through which the [illegible] lated, and around which the fire acted, [illegible] upward through an open flue, first above the [illegible] carried from the back of the boiler to [illegible] and back again, when it passed out into the [illegible] It was expected that these boilers would [illegible] economical, on account of the non-conducting property of wood, and so they were to a certain extent as the boilers did not need any protecting covering but, as already stated, they did not last, and [illegible] *boilers were substituted, and used until* [illegible] water power was substituted for steam power [illegible] Fairmount water-works.

—Twenty years ago we began to understand that we had yet to perfect the philosophy of the steam engine and that it was still apparently far from perfect efficiency. We then discovered that while our best engines were consuming from 25 to 30 pounds of dry steam per hour, the mechanical equivalent of the heat supplied to the steam in the boiler was sufficient to give about a horse-power per each two pounds of high pressure steam per hour, and hence that we were utilising but one-tenth or one fifteenth *of the heat we were paying for when* we settled our coal bills. Next we found that, owing to the fact that we cannot practically expand down to a pressure power than that due approximately to the temperature of surrounding bodies, that we must therefore discharge heat unutilized; that the larger part of the waste is unavoidable, and that an engine, perfect mechanically, and working within the maximum usually of practical limits, must waste three-fourths and can return useful effect from but one-fourth of the heat supplied, thus placing the practical limit under known conditions at about eight or ten pounds of steam per hour and per horse-power. And here we stand to-day with the steam engine, mechanically *almost perfect, yet with a theoretical economy of* about eight or ten pounds of steam per horse-power per hour, while consuming actually, in the test examples, about fifteen, *i.e.*, with an efficiency of [illegible] 70 per cent.

ENGLISH FARMERS IN DESPAIR

It may be from fear of America, it may be from the long continuance of unprofitable harvests, it may be from the rise in the expenditure, especially upon labor, or it may even be from increased intelligence, but *there is a hopelessness about farmers' complaints* which experienced men, familiar with their ways, never remember before. They hardly look for any improvement. They do not speak of the bad times as exceptional. They do not, among each other, talk of prices as sure to improve. Above all, they throw up their farms on apparently light provocation. Experienced land agents notice a total difference of tone, an indisposition to haggle, a sort of determination to make none but low offers, and to stick to them. The tenants, as they say, seem not to want the farms, and make offers, too low to be entertained, in a kind of spiteful sport. Very often no offers at all can be obtained and the land is either thrown upon the landlord's hands or goes out of cultivation. The latter occurrence was formerly most unusual in Great Britain, and seems almost impossible, but there is no reason to doubt the statements made that in every county in the south and east large numbers of farms yielding good rents are lying idle, the landlords being unwilling to let at low rents to men who ask for long leases, and unwilling to cultivate for themselves or able to bear temporary loss. We know in our own experience a district in which eleven farms, poorish [illegible] soil, are deserted and untilled, and have [illegible] ments of a quite extraordinary character [illegible] temptation to tenants. Of farms in the [illegible] hands, and of farms broken into two or three [illegible] no end, while land in modest patches has [illegible] value in a degree which suggests a kind [illegible] among tenants as well as land buyers. [illegible] feeling of hopelessness, in fact, abroad among [illegible] of the better class, and of reluctance to remain [illegible] business which of itself may produce important [illegible] willingness to farm having been an important [illegible] in the trade. It differed from all others in its attraction for a class—those who preferred country life [illegible] were content not only with modest profits, but [illegible] almost an entire absence of those chances which [illegible] many walks of life are so attractive. Now that [illegible] lingness has disappeared.—*London Economist.*

MINING NEWS.

LAKE SUPERIOR IRON

[illegible] Now without wishing to detract from [illegible] of our blue-nose friend, we submit for [illegible] capitalists and all who are in any [illegible] developing the mineral industries of [illegible] Lake Superior, that in view of the [illegible] are immense ore beds in this district [illegible] at least, contains over 60 per cent of [illegible] suitable for the manufacture of [illegible] and in view of the enormous require[illegible] the Canada Pacific Railway, our representa[illegible] would lose no time in sending one of their [illegible] to interview the members of the Syndicate [illegible] lay the matter fairly and [illegible] them, but also invite them to send [illegible] of their number up here to visit and in[illegible] such locations as are known to be rich in iron, [illegible] that the Thunder Bay district may reap as [illegible] as possible from the construction of the [illegible] by having a large share of the rails, car wheels, [illegible] manufactured in the immediate vicinity of the [illegible] works. By adopting such a course as we [illegible] suggested it is not improbable that before the [illegible] of the year we may see the shores of Thunder Bay illuminated by night with the reflections from several blast furnaces in full operation, and instead of the Syndicate's money going to pay for [illegible] it will be retained at home to be expended in [illegible] to miners, moulders, etc."

OUR GOLD MINES

Gold has been discovered in many parts of Kings County but heretofore its working has not been profitable. The sands of the Gaspereaux river contain gold in such quantities that an experienced miner can wash out about a dollar's worth a day. The quartz of the South Mountain range is known to contain gold but capitalists have never yet ventured to erect mills or sink shafts to any considerable depth. It seems, however, that a lead has at length been discovered that promises to be really remunerative; it is called the Town Lead, and is about four miles from Berwick. It was discovered last spring, and was about one foot wide at the top. The company have since worked down some 18 feet and increased the width of the seam to six or seven feet. A fair sample of the ore has been sent to Boston, and assayed by an experienced metallurgist. The certified result is 1 oz 10 dwt [illegible] or about $30 per ton. One of this richness will well repay working, and it is said that an American company has already made an offer for the mine. It seems a pity that some of our own capitalists could not take hold of this, if it is a good thing. There are said to be other leads in the vicinity, but the present owners need capital to develop them. Our moneyed men should look into this matter.—*Wolfville (N S) Star*

GOLD MINING IN QUEBEC

This winter the work of washing the gravel is being carried on uninterruptedly by the Canada Gold Company, even in the severest weather. A short tramway leads through a covered passage from the hoisting shaft to a thoroughly warmed washing house. A tram car loaded with pay gravel, runs down the tramway by force of gravitation, and hauls an empty car on the opposite way back to the north of the hoisting shaft. As soon as the gravel reaches the washing house it is dumped upon a high platform, and shovelled into a huge buddle or puddler. This is simply a large, water tight circular vat, with an upright shaft in the centre. From this upright shaft a projecting arm reaches about two feet beyond the outside of the vat. A horse is hitched to this arm, and walks around a sort of tow-path outside the vat. Shorter arms project over the vat at intervals, and to these are attached small steel or iron harrows, which are hauled around by the revolving of the shaft. The vat is supplied with plenty of water, and these little harrows keep its contents continually in motion, thereby precipitating the gold and other heavy substances to the bottom of the vat, while the coarse gravel and fragments of bed rock gradually work to the surface. This washed gravel is raked off from time to time and thrown into the waste, while the rich sediment concentrated in the bottom of the vat is taken out, and washed through the sluices, which are supplied with riffles, false bottoms, and other appliances for further concentrating the wash. The material left in the sluices is usually only the gold, and what is termed "black sand," or finally comminuted particles of magnetic iron. Out of this residue the gold is then carefully panned, and when the result of the panning has become thoroughly dried, the particles of magnetic iron still remaining are removed by means of a magnet.

The Canada Gold Company is at present employing about eighty men, and handle some twenty-five tons of pay gravel per day during the winter months, and forty tons per day during the warm weather. The staff consists of Mr. J. N Gordon, F R G S ; M J M E , F R S S A., chairman of the company; Mr. W. Moody, resident manager, and Capt. Predeaux, mining captain.

Next on the lead travelling eastward, or up the valley of the river, comes the claim of Mr. S. J Ainsworth, of New York. This is lot 13, concession [illegible]. This is regarded as one of the most promising claims in the whole Chaudiere district. It is on the same ancient river bed or lead as that of the Canada Gold Company's location. Though as yet a considerable portion of this property is yet unprospected, there can be no reasonable doubt that this location contains a space of at least 2,000 feet along the lead. So far Mr. Ainsworth has only worked a [illegible] of 120 feet lengthwise of the vein, with cross-[illegible] in a few places showing a width of 180 feet. In [illegible] so far as this 120 feet working is concerned, little more has been done than the mere blocking out of the ground, though what little work there was done last fall gave the most flattering results. As yet, however, Mr. Ainsworth only claims to have made a commencement, though he has everything now in excellent shape to begin work on a large scale as soon as spring opens. In fact the appliances on this property for pumping, hoisting, sluicing, etc., are of the most complete and satisfactory character. At present Mr Ainsworth is only working about 20 men, his object being to keep the water down, and [illegible] employment to his best miners, rather than to attempt to make anything over expenses. His washing is at present done under ground, and with rockers, but in summer he uses some 400 feet of sluicing. Among other sets of this claim [illegible] that water which [illegible] miles in length [illegible] found in [illegible] and [illegible] of the [illegible] up of [illegible] which the result of which [illegible] Mr. Ainsworth [illegible] the Canada Gold Company [illegible] only about eighteen inches or two [illegible] from the [illegible] shaft, while Mr. Ainsworth [illegible] not less than three [illegible] bed rock. The [illegible] yield in the whole district is set down at about one [illegible] gold to the cubic yard of pay gravel and bed rock.

Mr. Smart is to [illegible] the [illegible] on the lead and is located on lot 14, concession d'Lery. He, too, has somewhere about [illegible] on the [illegible], which at this point is about [illegible] feet in width. He has partially worked [illegible] for a distance of 150 feet on the lead with the most satisfactory results. At present he has shut down for the cold weather, but he expects to resume work in a few weeks, when he will employ a large force of miners. Mr. Smart has also just completed the purchase of a promising claim on lot 1[illegible] on the same concession.

The North Star Company of which Capt Richards is a prominent member, have an excellent prospect on a portion of lot 1[illegible], concession d'Lery. Dupuis, of Montreal, and Spalding and Company, of Maine, have good prospects on lots 16 and 17 in the same concession, as have also Auhault and Company of Montreal, on lots 18 and 19.

Captain Richards and Company have excellent prospects on the Cumberland, a branch of the Famine river, the Famine, in turn, being tributary of the Chaudiere. This location is about 3½ miles south-east of the mining camp on Gilbert river. The company have a length of two miles on each side of the river, the title being undisputed, and quite outside of the d'Lery patent. So far they have sunk one shaft 75 feet through clay and gravel, and have drifted 65 feet one way, and 208 feet the other. In the last 20 feet of the 208 they consider that they have got into the lead or deep river bed, as they found that the bed rock was dipping suddenly down, and getting into boulders and wash. They washed about fifteen feet of the gravel, and took out of it two ounces of gold, though it was impossible to obtain whey, considered the richest portion of the wash, by cleaning off the bed-rock, as they were driven back by the water. This was all within the last four months, and for the present they are only keeping force enough on the place to keep down the water. The old river bed at this point is no less than 62 feet below the level of the bottom of the Cumberland, which latter stream is supposed to have taken its place.

THE FAMINE RIVER.

A good deal of gold was found on this river some fourteen or fifteen years ago, but at present nothing is doing here, as the property is all tied up in the hands of companies, who appear to have no intention of profiting by its development.

LA PLANTE RIVER.

Mr Mackenzie, of Montreal, made preparations for surface working on this stream last autumn. He worked with a hydraulic machine for a day or two with good results, when the severe weather came on suddenly, and caused a suspension of his operations.

ON THE DITTON RIVER,

about forty miles east of Sherbrooke, there were shallow alluvial diggings that are said to have paid well every summer for the last fourteen years.

LARGE NUGGETS

The statements I have heard from mining men here regarding the weight of the largest nuggets that have been found in the wash vary very considerably. All appear to agree on the fact that several have been found weighing over forty ounces each, but while some insist that the largest found have gone as high as seventy ounces, a gentleman who appears to be well up in the history of the district, and who has had a long personal acquaintance with mining, informs me that the largest nugget ever found here weighed only forty-eight ounces, and that it was found on the Gilbert river. The largest nugget that I saw taken out of the rocker in Mr Ashworth's shaft during my brief stay here weighed between twelve and thirteen pennyweights.—*Correspondence of Toronto Globe.*

NEW IRON MINES.

The new iron mine on the Borron location, in the vicinity of Desert Lake, has been purchased by the Cleveland Rolling Mill Company, of Cleveland, Ohio, and by them placed under the supervision of Colonel Rankin, by whom it has again been committed to the charge of Mr. Abraham Mitchell, an old and experienced foreman of Bruce Mines, and Mr. John Driver, of this place, who claims to have had considerable experience in iron ores at Marquette, Michigan. Messrs. Marks & Bro., of Bruce mines, have been appointed financial agents, and work will be begun at the mine as soon as supplies of steel, provisions, etc., can be put down on the premises. There being no steel at Bruce Mines it necessitated the delay of a visit to this place before the indispensable article could be obtained. Mr Mitchell will have the superintendence of the mining operations, and Mr. Driver, we are informed, has been appointed surface boss, with Mr. C J Pim as bookkeeper, etc. The mine is to be worked during winter with a force of twenty miners. From information furnished us from what we consider an excellent source, the vein of iron ore is over five feet wide upon the surface, of excellent quality, and is easily traceable for over a mile and a quarter, that is, through the width of the location, and on the adjoining ones east and west of it. That to the north-west is already working under Mr. James Stobis, to whose energy the discovery and sale of the next location is largely due, he having operated last winter on the vein at different places and developed its size and quality of the ore. The product of the mine will be brought down to Portlock Harbor by tramways at present. Should the development of the mine, however, warrant the expenditure, the company are prepared to build a railway and put on a locomotive which would accommodate the working of all three locations on which the vein is traceable. Trial shafts have been sunk to a depth of 12 or 15 feet, and the vein is strongly marked, dipping north, with a free footwall, and increased in width as it descends. As previously noticed some time ago, a boarding house and other necessary buildings have been erected, and everything looks prosperous and favorable for a thorough development of the mine. It is in the hands of an experienced and enterprising company who have secured the services of thoroughly practical miners, and if it is as good as present prospects lead one to suppose, its future will mark a new era in that section of the district, as we are given to understand that the working of other lodes, or a continuation of the same lode, is made dependent on the success of the experiment.—*Algoma Pioneer.*

CANADIAN COAL FIELD

Popular Illusions Respecting Cape Breton Coals Dispelled—An English Company Formed with Bright Prospects of Success.

[illegible] impressions have [illegible] in regard to the Cape Breton coal fields, but [illegible] Cape Breton coal will very probably [illegible] a most important factor in contributing to the prosperity of Canada and Great Britain. In the case of our own country the trade [illegible] has always stood [illegible] when the [illegible] withhold their increase and the [illegible] has been unsuccessful, and as to Britain nothing has so contributed to the stability of the [illegible] as its coal sources which have given its inhabitants the advantages of cheap fuel and enabled its manufacturers to hold their own against the whole world. Our forests, however, are bound to disappear, the mines of Great Britain to be exhausted, and although this may not happen for many years to come, still great interests are already bound up in our coal mines. Our steamships, our railways, and our great factories are large consumers of coal, and wood is also being superseded by coal in the household more and more every year.

ENGLISH CAPITALISTS,

fully alive to the situation, are already extensive owners of Canadian coal fields. The "Sydney and Louisburg Coal and Railway Company, limited, with D. J. Kennedy as managing director controlling the "Reserve," "Lorway," "Haven," "Lake Balmoral" and "Schooner Pond" mines, with lines of railway leading from the pits mouths to the port of Sydney and Louisburg. The principal mine now being worked is the "Reserve" mine, the output of which is 300,000 tons per annum, while the output of the whole mines at present is 800,000 yearly. At these collieries the only smiths' coals in the Dominion are turned out, and they are pronounced quite equal to the famous South Melton Smithey coals. The "Reserve" mine has 2,200 feet slope, and the coal is of a very superior order. A London gas company, which carbonized over 1,000,000 tons of coal in 1879, reports that the analysis of one ton of Newcastle coals gave 10,300 cubic feet per ton of 2,240 lbs, with illuminating power of 15½ candles and 48 bushels of coke. Cape Breton coal compared favorably with this, giving 9,866 cubic feet of gas per ton, 16 24 candle illuminating power and 49 bushels of coke.

The Cape Breton mining properties were, we believe, released from chancery only a few months ago, and in December last the new company was formed in London. It is reported that already 130,000 tons have been contracted for to be delivered in Montreal this year, and large orders are expected to be taken in Quebec. Before many years it is not improbable that Cape Breton coal will be invading the markets of Europe, and the British manufacturer of the future will doubtless be greatly dependent on Cape Breton for his supplies. Sydney, C B, has risen into prominence of late years as an important coaling station for steamers, and the new company is increasing its facilities in this direction.

—On Saturday last the Gladstone Gold Mining Company's property, better known as the Dale Mine, was sold by public auction in the Master's office here, under a decree in the Court of Chancery to B Truaish, for the sum of $5,670. The property embraces 22¼ acres, and is supposed to be one of the richest gold mines in the northern part of the county. The mine will be operated and managed by Mr. David Stewart, in the interest of Mr Truaish. There was a lively competition at the sale, some Americans being among the bidders.—*Belleville Intelligencer*

—The revolution in shipbuilding and the ocean carrying trade is exhibited in the facts that there are at present on the stocks in the Scotch yards one steamship of 8,500 tons, one of 7,000 tons, one of 6,250 tons, one of 5,500 tons, and two of 5,000 tons each. Twenty years ago there were not half as many steamships in the world as are now built every year on the banks of the Clyde. The size of steamers employed has doubled and trebled within the last 15 years. Iron is taking the place of wood in the construction of nearly all kinds of craft, even to our own Sound and river steamers. England's coal and iron and organized industry have made her mistress of the seas in peace as well as in war.

—The *City Press* states that from carefully prepared statistics it may safely be computed that at the present day there are 130,000,000 sterling of gold coins doing duty in the British Isles; of crowns, 2,320,047, of half-crowns, 41,516,343; of florins, 16,456,220, of shillings, 125,540,160; of sixpences, 82,125,578, of fourpences (possibly), 12,000,000, and of threepences 17,572,857; or a grand total in round numbers of three hundred millions of silver coins of all denominations. Of bronze coins, it is stated that since the institution of the Royal Mint more than six thousand of tons have been struck and issued. By far the largest portion of these are in the form of pence and half-pence, although many hundreds of tons of farthings, too, are in existence. Taking an average of the proportionate number of each variety of the subsidiary coins, it may be safely assumed that there are collectively not less than eight hundred millions of pieces in the pockets and the tills of Her Majesty's lieges at the time of the present computation. From the foregoing statistics it may be gathered—and the gathering may be depended upon—that the aggregate number of current coins of every legitimate kind now in use throughout the United Kingdom is not less than twelve hundred and thirty millions.

—Some very interesting returns as to the status of the laborer in Japan have been compiled from the American Consular reports. The farm laborer receives about four shillings a week, without board; women employed in domestic service or in farm work receive from two shillings to half a crown a week, without [illegible] from [illegible] to [illegible] a year if they are [illegible]. The hours of labor vary from eight to nine, the work is light, and the laborers, except on rare occasions, are almost exclusively vegetarians. Their clothing costs them about twenty shillings per annum, a house with three rooms can be built for ten pounds and furnished for a similar sum. A great improvement has been wrought in the condition of the common laborer. Wages have risen, their children are being educated, and they are settling on the land. There are about 300,000 or 400,000 jinrickishas, or men waggons in Japan. The jinrickisha is a kind of Japanese hansom, drawn by a man instead of a horse, who will trot at the rate of six miles an hour, cover thirty to forty miles a day, and count himself well paid if he gets half a crown for his day's work. If our surplus population should ever emigrate to Japan, it may safely be predicted that they will not seek employment as jinrickisha men, for not only is the toil excessive, but the rate of mortality, owing to exposure to chills when heated, is exceedingly high.

RAILWAY MATTERS.

A MAMMOTH ENGLISH RAILROAD

[illegible] London and North-Western Railway, will no [illegible] At any rate [illegible] in the way of news [illegible] stating that [illegible] lines laid down over a large portion [illegible] and the vast number of sidings the London and North-Western Company maintain the astonishing amount of no less than 10,000 (?) miles of railway. The capital embarked in this vast aggregate amounts to no less a sum than £100,000,000, while its average weekly receipts fall a little short of £200,000. The company annually carry nearly [illegible] passengers and between [illegible] and [illegible] tons of merchandise and minerals, in the conveyance of which their trains run 25,000,000 miles, while there are employed upwards of 2,000 engines, [illegible] carriages, and nearly 50,000 goods waggons and other vehicles of various descriptions, to say nothing of a magnificent fleet of steamers, a stud of between 2000 and 3000 horses and last, though not least, an army of [illegible] men.

RAILWAYS AND RAINFALL

American scientists are again discussing the connection alleged to exist between the operations of railways and the amount of rainfall. It is regarded as a remarkable fact that before railways were extended to the Pacific, the country lying between the Sierra Nevada and Rocky Mountains was subject to an almost continuous drought. Since then, however, the region has been visited with frequent falls of rain. What has produced the change? is the question. Some suggest that it is due to a change in the electrical state of the atmosphere, produced by the conduction of the subtle fluid into the region by the iron rails. Others assert that it is caused by the atmospheric disturbance arising from the frequent passing and repassing of trains. It is shown that up to 1854 the United States had been periodically visited by great and general droughts, but since that year there has been no such visitation, or, in other words, that the building of such a vast network of railways as has been constructed in the past quarter of a century has had the effect of promoting the fall of rain. Since the general introduction of railways in Europe, also, there has been no drought such as previously at short intervals caused widespread distress. In the case of England it is remarked that although the climate has been always humid there has been a growing excess of rainfall during the period of railway building, until now she gets far more than is beneficial to the crops. This has been noticeable to an alarming degree in the past few years. We give these conclusions for what they may be worth, and merely as showing the drift of current discussion on this point.

—The *Railway Age* makes the correct figures of the railway construction of the year 1880, 93,801.71 miles.

—The Northern Pacific Railroad reports earnings for the second week of February, 1881, of $19,655, against $19,315 for the corresponding week in February, 1880; an increase of $340.

—The loss in earnings of the Wabash during the second week in February, as compared with last year, was about $62,000, and of the Hannibal and St Joseph $14,637 for the same week, caused through the interruption to travel in consequence of the storms.

—The gap between the junction of the Atchison, Topeka & Santa Fe and the Southern Pacific is now less than 25 miles, and this, it is expected, will be overcome within the next thirty days, when a new railway route from the Atlantic to the Pacific will be open.

—The estimated earnings of the Houston & Texas Central for second week of February were $94,491.22, same week of previous year, $68,862 12, increase, $25,629 10, earnings January 1st to February 15th, 1881, were $538,855.15, do 1880, $452,506 62, increase, $86,348.53.

—The earnings of the Chicago & North-Western show a decrease for the second week of February, 1881, as compared with the corresponding week of last year, of $74,886, they being respectively $205,701 and $280,587. The loss is ascribed to the interruption caused by the severe weather and floods.

—The Railroad Commissioner of Ohio announces the gross earnings of the roads of that State during 1880 to have been $81,833,423; an increase of $24,645 over 1879. Of this sum $59,111,741 was from freight, $18,100,922 from passengers, and the remainder from mail, express and other miscellaneous sources.

—Great Western Railway of Canada traffic for week ending February 25th, 1881, was as follows:—

Passengers	$25,200
Freight and live stock	66,235
Mails and sundries	2,878
Total	$94,313
Corresponding week last year	90,057
Increase	$4,256

—The agents of the Toronto Cattle Exportation Company are going through the country in great numbers, buying up sheep and lambs for the English market. The animals will be left at their farm-yards till June, when they will be gathered up and shipped direct.

—Messrs. Bastedo & Co., wholesale hatters and furrier doing business at Toronto, have got into complication with the Customs authorities. It is alleged that the firm secured a lot of billheads from a house in Boston, and when the goods were sent to Toronto Messrs. Bastedo & Co. made out the process on the Bills to suit themselves, getting the goods passed at a low value, and thus defrauding the Government. A portion of the property has been attached by the Crown.

—On Wednesday of last week a man named Ellis, a painter in the Massey Manufacturing Works, better known as a "barber, went into the Wellington Hotel, corner of Strachan Avenue and Wellington street, Toronto, kept by a man named Nixon. Ellis was very much intoxicated. He went through the bar into the dining room and sat down at the table. In the room at the opposite side of the table sat a man named Samuel Moore who also is employed in the Massey Works and with whom the man Ellis is on bad terms. According to the other's story he missed the chair on which he attempted to sit on and fell on the floor. Moore immediately ran around the table and kicked the prostrate man savagely about the head, body and face. He would have killed the now unconscious victim of his fury, had not some bystander sturdily interfered. Ellis presented a shocking sight when he was dragged out from under the table. His face was apparently a mass of raw flesh. He was taken to a friend's house, and on Thursday was removed to the hospital. The danger is that erysipelas may set in. Moore will be arrested.

MONTREAL PRICES CURRENT.

GROCERIES

[illegible]			

[illegible]			
Jamaica	18	@	?
Laguayra	21	@	?
Plantation Ceylon	?4	@	?
Rio	?	@	1?
Maracaibo	?	@	?
Mocha	2?	@	?
SUGARS.			
Barbadoes	?	@	6
Cuba	6?	@	6?
Cut Loaf	10?	@	10?
Granulated	10	@	10?
Do. Diamond A	9?	@	9?
Grocers' A	?	@	?
Montreal yellow	?	@	?
Porto Rico	?	@	6
SYRUP.			
Amber	60	@	00
Diamond Drips	54	@	56
Imperial	57½	@	62½
Lord Lorne (nominal)	70	@	72½
Pale Amber	52½	@	55
Royal Imperial	62½	@	65
Star Amber	60	@	0?
Standard	0?	@	60
MOLASSES.			
Barbadoes (Wine gallon)	42½	@	44
Cardenas	00	@	30
Centrifugal	00	@	00
Filtered, brls	00	@	00
Filtered, pun	00	@	00
Muscovado	00	@	00
Porto Rico	00	@	00
Sugar House, brls	00	@	00
Sugar House, pun	00	@	00
Trinidad	36	@	37
FRUIT.			
Almonds, hard shell	8	@	9
" soft "	13	@	14
" Jordon shelled	00	@	50
" sweet "	35	@	30
Brazil nuts	00	@	00
Currants, new	06½	@	07½
Dates, golden	00	@	09
" black	6	@	7
" finest	6½	@	7
Figs, Eleme layers	18	@	20
" Malaga mats	06½	@	06½
" " boxes	07	@	07½
Filberts	08½	@	09½
French Prunes, boxes	00	@	00
" " kegs	5½	@	6
Raisins, black crown	4 50	@	4 75
" London layers	2 85	@	2 90
" Loose Muscatel	2 35	@	2 45
" Old Loose Muscatels	1 40	@	1 50
" Layers	2 25	@	2 35
" seedless mats	9½	@	10
" old	0	@	0
" black basket	0	@	0
" blue	0	@	0
Sardines, quarters	11½	@	13
" halves	17	@	19
Sultanas	10½	@	11
Valencias	8½	@	9¼
Walnuts	07½	@	08
Walnuts, Grenoble, genuine	00	@	00
SPICES.			
African Ginger	10	@	12
Allspice	15	@	16
Cassia	12	@	16
Cloves	4?	@	4
Jamaica Ginger, bleached	23	@	28
" " unbleached	17	@	22
Mace	75	@	90
Mustard Seed, yellow			
" ground, 4lb jars	18	@	19
" " 1lb "	24	@	25
Nutmegs	70	@	95
Pepper	13	@	15
Do white	20	@	22
RICE.			
Rice	4 00	@	4 20
Sago	06	@	06½
Tapioca	7½	@	8½
SALT.			
Coarse (10 to the ton)	??	@	60
Eureka, bags	2 00	@	00
" halves	1 00	@	00
" quarters	50	@	00
Factory Filled	90	@	1 00
FISH.			
Canned Fish—			
Lobster, 1lb cans	1 25	@	1 30
Mackeral, "	1 20	@	1 ?
Salmon, "	1 ?5	@	2 ?0
Dry Cod (Gaspe)	4 00	@	4 25
Green Cod in barrels—			
No. 1	4 00	@	4 20
No. 2	3 00	@	3 25
Large do., draft, No. 1	5 50	@	00
" " " 2	00	@	00
Herring, Labrador	5 50	@	5 75
" Canso, No. 1 split	4 75	@	5 00
Lake Superior White Fish, half barrels	4 50	@	4 75
" Salmon Trout " "	4 25	@	4 50
Columbia River Salmon, barrels	14 75	@	15 25
" No. 1	15 00	@	00
" " 2	17 00	@	00
" " 3	16 00	@	00
Sealed Herring	20	@	00
Split Mackerel, No. 1	6 5?	@	00
" " " 2	5 00	@	00
" " " 3	4 00	@	00

LIQUORS.

Brandy, Hennessy's, per gal	4 40	@	4 50
" " cases	10 75	@	11 00
" Martell, per gal	4 30	@	4 40
" " cases	10 50	@	10 75
" Otard, Dupuy & Co., ⅌ gal	3 85	@	4 05
" Pinet's, ⅌ gal	3 30	@	3 40
" Vine Growers' Co., ⅌ gal	3 30	@	3 40
" Dulary & Co., ⅌ gal	3 30	@	3 40
" Jules Robin's, ⅌ gal	3 30	@	3 40
" Riviere Gardral & Co., ⅌ gal	3 10	@	3 15
" Renault's, ⅌ gal	3 30	@	3 40
" J. Denis, H. Mounie & Co., ⅌ gal	3 30	@	3 40
" Arbouin, Marett & Co., ⅌ gal	3 30	@	3 35
" De Laage, Fils & Co., ⅌ gal	3 05	@	3 15
Rum, Jamaica, 16 o. p., per gal	2 75	@	3 00
Demerara	2 25	@	2 45
Cuba	2 15	@	2 35
Gin, De Kuyper's, red cases	7 10	@	8 10
" " green "	4 20	@	4 30
" " in wood	2 05	@	2 15
" Blandenheym & Nolet	1 95	@	2 05
" other brands	1 95	@	2 00
" green, other brands, per case	3 75	@	3 87
" red, other brands, per case	7 00	@	7 20
Booth's Old Tom, cases	6 40	@	6 50
Barnett's Old Tom, cases	5 62	@	5 87
" " wood	2 40	@	00
Highwines, U. C. p. Imperial gal., in bond	70	@	00
Rye Whiskey, Imperial gal., in bond	42	@	00
" " in small lots, duty paid	1 20	@	00
Bass' Ale, quarts	2 40	@	2 45
" pints	1 60	@	1 65
Guinness' Stout, quarts	2 35	@	2 45
" " pints	1 55	@	1 60

[illegible]			

DRUGS AND CHEMICALS

Aloes Cape	14	@	1?
Alum per 100 lbs	1 80	@	1 90
Arrowroot, per lb	11	@	15
Bicarb Soda per 100 lbs	3 ?5	@	3 ?0
Bichromate of Potash	15	@	16
Baking Powder per ?	1 ?	@	1 ?
Blue Vitriol	?	@	7
Borax, refined	15	@	16
Camphor, American Refined	?	@	40
" English Refined	4?	@	4?
Castor Oil	10	@	11
Caustic Soda, per 100 lbs	2 50	@	2 75
Citric Acid	80	@	8?
Copperas per 100 lbs	90	@	1 00
Cream Tartar, Crystals	2?	@	30
" " Ground	31½	@	33
Epsom Salts, per 100 lbs	1 50	@	1 50
Gum Arabic	30	@	35
" Tragacanth	45	@	75
Indigo, Madras	85	@	1 00
Iodide Potass	3 25	@	?
Logwood, Extract	9	@	10
Madder	12½	@	?
Opium	8 25	@	8 75
Oxalic Acid	12½	@	1?
Pipe Clay, per 100 lbs	60	@	75
Quinine	3 50	@	3 60
Sal Soda, per 100 lbs	1 05	@	1 15
Saltpetre, per keg	9 50	@	10 00
Soda Ash, per 100 lbs	1 60	@	1 90
Sugar of Lead	12½	@	14
Sulphur, per 100 lbs	2 75	@	2 87½
Sulphur, Roll, per 100 lbs	2 25	@	2 50
Sweet Oil, Olive	1 25	@	1 30
Tartaric Acid	57½	@	60
Whiting, per 100 lbs	55	@	65

WINDOW GLASS.

Window Glass, per 50 ft. ordinary 4th quality:			
To 25 added inches	1 80	@	1 90
" 40 " "	1 90	@	2 00
" 50 " "	2 25	@	2 35
CORKS.			
1sts to 3rds, per gross	0 60	@	2 00
LEADS & PAINTS			
Red Lead and Litharge	4 50	@	5 00
White Leads	6 00	@	7 50
BLUE.			
Ball	0 11	@	0 12
Button	0 06	@	0 07
OILS			
Cod, Gaspe, ⅌ Imperial gal	0 60	@	0 6?
" Newfoundland, do	0 62½	@	0 65
Lard, Extra	0 72	@	0 75
" No. 1	0 66	@	0 70
Linseed, boiled, ⅌ gal	0 75	@	0 80
" raw	0 73	@	0 76
Olive	1 25	@	1 32
Palm, ⅌ lb	0 06	@	0 06
Paraffine—Canadian ⅌ gal	0 21	@	0 00
" American	0 40	@	0 45
Petroleum, refined, carloads	0 25½	@	0 27
" " in small lots	0 27	@	0 28
Seal, Pale, ordinary	0 60	@	0 65
Seal, Straw	0 54	@	0 56
Steam refined Seal	0 70	@	0 72½
NAVAL STORES			
Coal Tar	2 75	@	3 00
Oakum—Navy	0 06½	@	0 08
Pine Pitch	? 00	@	3 50
Pine Tar	4 50	@	5 00
Resin—Strained	3 00	@	3 25
" No. 2	3 50	@	4 00
No. 1 & Pale	4 50	@	6 00
Spirits Turpentine, Imp. gall	0 78	@	0 80
CORDAGE.			
Manilla rope	0 09½	@	0 00
Sisal	0 09	@	0 00
Tarred rope	0 11	@	0 00
Jute "	0 08	@	0 00
Cotton "	0 28	@	0 30
Sail, canvass duck	0 25	@	0 35
" cotton "	0 30	@	0 35
CANDLES.			
Belmont Sperm	0 19	@	0 20½
Mould, Montreal	0 10	@	0 10½
Paraffine, 12s & 6s	0 19	@	0 21

IRON AND HARDWARE.

PIG IRON.			
American	00	@	00
Canadian Siemens	25 00	@	26 00
Carnbroe	19 50	@	20 50
Coltness	21 50	@	22 00
Eglinton	19 50	@	20 50
Gartsherrie	21 50	@	22 00
Glengarnock, per ton	20 50	@	21 50
Hematite	27 00	@	28 00
Summerlee	20 50	@	21 50
BAR.			
Canadian Siemens	2 10	@	2 25
Lowmoor and Bowling (under 280 lb)	6 50	@	7 00
Scotch and Staffordshire, per 100 lbs	1 85	@	1 95
Best do do	2 25	@	2 50
Swedes and Norway	4 50	@	5 00
CANADA PLATES.			
Arrow and equal	3 40	@	3 50
Clifton	3 25	@	3 30
Hatton	3 10	@	3 15
Swansea and Penn., per box	0 00	@	3 25
TIN PLATES.			
Charcoal, I C, per box	5 75	@	6 00
Charcoal, I X	7 75	@	8 00
Charcoal, D C	5 25	@	5 50
Coke, I C	4 75	@	5 00
14 x 20, 25c extra.			
TINNED SHEETS.			
Charcoal (best) No. 26	10 50	@	11 00
Coke " "	8 50	@	9 00
GALVANIZED SHEETS.			
Morewood's Lion, No. 28	7½	@	7½
Other brands, No. 28	6½	@	6½
Hoops and Bands, per 100 lbs	2 60	@	2 75
Sheets, best brands	2 00	@	2 75
STEEL.			
Cast, per lb	10½	@	13
Sleigh Shoe	2 50	@	2 75
Spring, per 100 lbs	3 50	@	4 00
Best do, warranted	5 00	@	6 00
Tire do	3 50	@	3 75
BOILER PLATES.			
Best best brands, ⅌ 100 lb	3 50	@	3 75
Lowmoor and Bowling, under 280 lb	6 50	@	7 00
Ordinary brands, best, ⅌ 100 lb	2 75	@	3 00
MISCELLANEOUS.			
Anchors	6 00	@	6 50
Anvils, "Peter Wright's"	10 50	@	11 00
Axes, Chopping, 20 to 25 p. c. discount:			
List S. S.	11 00	@	0 00
List D. S.	13 00	@	0 00
Clinch Nails	6 50	@	8 50
Cut Nails, per 100 lbs:			
10d to 6d (3 in. and larger)	2 60	@	0 00
8d and 9d (2½ and 2¾ in.)	2 85	@	0 00
6d and 7d (2 and 2¼ in.)	3 10	@	0 00
4d and 5d (1½, 1¾ and 1¾ in.) A. P.	3 35	@	0 00

[illegible]			

LEATHER

[illegible]			
Pebbled	0 12	@	0 16
Rough Leather	0 25	@	0 30
Sheepskin Linings	0 40	@	0 70
Splits large	0 24	@	0 ?
" small	0 24	@	0 27
Waxed Upper light and medium	0 30	@	0 42
" heavy	0 3?	@	0 40

BOOTS AND SHOES

Boys' Split Brogans	0 85	@	1 00
Buff and Pebble Congress	1 20	@	1 75
Men's Kip Boots	2 75	@	3 25
" French Calf	00	@	3 75
" Buff Congress	2 10	@	2 ?0
" Split Brogans	1 00	@	1 10
Misses Buff and Pebbled Balmorals	1 00	@	1 20
" Prunella Balmorals	0 70	@	1 25
Women's Buff and Pebbled Balmorals	1 30	@	1 40
" Prunella Boots	0 90	@	1 50

RAW FURS

Bear cub	2 00	@	4 00
Bear, large prime	6 00	@	8 00
Bear, small	4 00	@	5 00
Beaver, spring, do	0 00	@	00
Beaver, Winter, clean pelt, per lb	2 00	@	2 50
Cross Fox	2 50	@	5 00
Fisher	5 00	@	8 00
Lynx	1 50	@	2 00
Martin	1 00	@	1 25
Mink, Dark Prime	0 75	@	1 50
Otter	7 00	@	10 00
Racoon	0 25	@	0 00
Rats, Fall, large	10	@	12
" kitten	2	@	5
Red Fox	1 25	@	1 50
Silver Fox	25 00	@	30 00
Skunk, black	0 50	@	0 00

WEEKLY REVIEW.

MONTREAL, March 9th, 1881.

In financial matters the most prominent feature is the advance in Montreal Bank and miscellaneous securities during the past few days, Montreal having sold up to 185¼, Ontario to 101, Consolidated to 19, Merchants to 120, Commerce to 143¾, Molsons to 112, Toronto to 149, Exchange to 66, Montreal Telegraph to 128¾, Richelieu and Ontario Navigation Company 60 to 62, City Passenger Railway Co. to 118, and City Gas to 155¾. Money has been quiet and easy at 3 to 4 per cent. on call, and 5 per cent. on time. Good to gilt-edge commercial paper has been discounted at 6 to 7 per cent., and drafts on New York have commanded ¼ per cent. premium. Sterling exchange has ruled at between 9⅛ to 9¾ premium for round amounts of 60 day bills between banks, and between 8¾ to 9 over the counter.

In wholesale mercantile pursuit, the record of the past week has been a quiet one, which is nothing unusual for this season of the year, when the trade of the country is frequently interrupted by climatic changes; the break up of the country roads, and partial suspension of business in the interior. There are evidences, however, on all sides of the trade and commerce of the country being in a sound condition, and the confidence with which our merchants anticipate the business of the coming season is a cheering factor in the situation. In some lines remittances are reported to be falling off a little, but in other years they generally fall off a great deal at this period. There are other departments, however, where no complaints are heard on the score of payments, and upon the whole I may safely say that, considering the season, the finances of the country are satisfactory.

DRY GOODS.—The recent mild spell, causing a break up of the roads in many districts, has had an unfavorable influence upon this line of the wholesale trade, and business must be called quiet. Still quite a number of Western buyers have visited our houses during the week, and left behind them a fair amount of orders. A good demand for cottons is reported at steady prices. Canadian tweeds are growing in favor, as the neat patterns of the new samples offered are said to be taking well. Remittances are scarcely as well as expected, owing, no doubt, to the bad condition of many of the country roads, and the inability of farmers to market their produce. On the whole, however, the situation is far ahead of that of the corresponding period of 1880.

IRON AND HARDWARE.—In pig iron there is no change, further than the improved feeling consequent upon the relief to the trade which has been caused by the removal of W. & F. P. Currie & Co. from business, as their slaughtering of goods was a great drawback to others in the trade. For spring shipment sales of Summerlee have taken place during the week at $20, and of Gartsherrie at $20.50. Regarding pig iron, a New York dispatch says: "There is a general belief in this trade that consumption this year will be fully as heavy as in 1880, and that we shall have a lively trade for the spring months. An encouraging feature is the absence of the unhealthful speculation that prevailed during the early portion of last season. The pig iron makers have, for the most part, sufficient orders to take up the early product, and as a consequence they offer very sparingly on the open market. It is generally calculated that, unless prices should decline materially abroad, the present figures can be maintained, desp[ite] the probable unprecedented production." In bar iron there has been a little more doing, but prices are no better. In general hardware a fair amount of business is reported, especially in heavy goods, and a good trade is confidently expected during the coming seas[on]. Prices are still unsatisfactory, however.

GROCERIES.—A number of buyers from the West have visited the city during the week, causing an increased inquiry, which has brightened up matters, and brokers are again hurrying round for samples. In teas I have no new features to report, and last week's figures are repeated. The only sales reported are a few invoices of Nagasaki Japans at 22c @ 25c, to arrive, and lines of about 350 packages of common Japans at 22c @ 22½c. Fine grades are scarce. Sugars have met with quite an increased demand, under which the price of yellow refined has advanced ½ per lb and some large sales have t[aken place] at the advance. There has been not[hing] [illegible] raw on spot but sales to arrive are reported [illegible] terms. The Cuban market has advanced [illegible] Refined syrups are more called for [illegible] grades are 2½c per imperial gallon high[er] [illegible] in [illegible] demand, Barbad[oes] selling at [illegible] sale of a lot being reported to-day at [illegible] The fruit market is dull. [illegible] scarce and nothing can be had under [illegible] are steady, and the market is cleared [illegible] below [illegible] Barcelona filberts are in [illegible] at [illegible] and [illegible] and Tarragona almonds [illegible] In spices, tobaccos and [illegible] is very dull, and [illegible] favor buyers.

LIQUORS.—A fair jobbing trade transpires [illegible] and [illegible] at within range of quotations [illegible] reported as having changed hands.

DRUGS AND CHEMICALS.—The English [illegible] weakening tendency, which has stopped [illegible] operating as they hope to buy in supplies [illegible] rates than those now ruling. We have [illegible] report in prices. The colliery strikes have [illegible]tially settled in Lancashire, with [illegible] feeling.

FISH.—The demand for Labrador herrings [illegible] brisk. All real No. 1 have been disposed of [illegible] hands and the trade is now obliged to fall [illegible] No. 1 small, which have changed hands at [illegible] and No. 2 at $3 50. A fair inquiry exists [illegible] cod at $4 @ 4 25. Dry cod is scarce at $[illegible] inferior to good. The market is almost [illegible] salmon, the only stock available being No. [illegible] is held steadily at $16 50. The stock of lake t[rout] [illegible] small, and prices range from $4 25 @ $4 5[illegible] per barrel.

OIL.—A few transactions continue to be reported [illegible] cod oil at 60c per imperial gallon, and to-day a[n im]proved demand set in from consumers. Stocks [are] light, and the feeling among holders is one of [firm]ness. Linseed oil has taken a turn for the better, [and] a stronger feeling prevails, although prices are [not] quotably dearer. In steam refined seal there [is a] small inquiry, but the market remains about as [for]merly quoted as to values. Olive oil is scarce [and] there is none in first hands.

PETROLEUM.—Since my last report the pri[ce of] refined oil declined 1c per gallon, but at the reduced rates a slightly better demand has been experienced. Car lots are quoted at 23½ @ 24c, broken parcels at 25c, and single barrels 25½ @ 26c per imperial gallon. The price of refined oil in London is 20c f. o. b.

NAVAL STORES.—Following upon the recent advance in the price of spirits of turpentine in New York an easier feeling has set in, and slightly lower values have been accepted. Here the situation is unchanged. During the week a very brisk demand has transpired for oakum at quotations; stocks are entirely cleared out of first hands and the market is firm.

LEATHER.—The market is dull and stocks are beginning to show larger dimensions than dealers care to have on hand; especially is this the case with black leathers, with the exception of buff. There is a large quantity of splits upon the market, which will have to be shipped abroad before a clearance is effected. One dealer is about shipping ten tons to Great Britain and another is expected to forward fifteen tons in a few days. Quebec is full of splits, most of the dealers there having their cellars pretty well choked with them. There is a good consumptive demand for buff, and sales have been reported at 14 @ 16c. Sole is steady in price on account of the advance in dry hides. Brond sole is quoted at 24 @ 26c for No. [1] and at 22 @ 24c for No. 2. The sale of 600 hides of buffalo sole has taken place at 19c for No. 2 and [illegible] for No. 1.

BOOTS AND SHOES.—Manufacturers are getting through with their spring orders, and a quiet time is anticipated for the next few weeks. Remittances so[me]fully as good as can be expected, and the outlook of the trade is in every way healthy.

HIDES AND SKINS.—The receipts of green butchers' hides are about as usual for the time of year, although we hear loud complaints of the large number of grubby hides, nearly one half of the receipts [com]ing under that defect. Prices are unchanged at $[illegible] and $7 for Nos. 1, 2 and 3 respectively. Sheep skins are quoted at $1.20 @ 1.40 each, the sale of a lot being made to-day at $1 30. Calf skins commence to arrive more liberally, and are readily disposed of at 10c per lb. A few lamb skins have come to hand, and have been sold at 25c each.

TALLOW.—There have been sales during the week of refined at 7½ @ 7¾c per lb, and of raw at 4½ @ 5½c, as to quality.

WOOL.—The past week has been a very dull one in the wool trade. Although stocks are generally light the inquiry from manufacturers has been lighter and we have to report one of the most inactive markets experienced for some time past. There is no material alteration in prices, however, which we quote as follows:—Greasy Cape, 18 @ 19c, as to quantity; Buenos Ayrean pulled 50 @ 52c; New Zealand, 55 @ 60c; Canada pulled A super 34 @ 35c, B super, 32 @ 33c, unassorted pulled, 30c.

RAW FURS.—The only local business is in muskrat and fox, the former selling at 12½c for good late winter skins, and the latter finds slow sale at former rates. These are about the only skins arriving. No business of any importance is expected here until after the result of the London auction sales which begin on the 16th inst. is known. The following is the order in which they will take place:—Wednesday, March 16th, beaver, otter and squirrel; Thursday, March 17th, sea otter; Friday, March 18th, red, blue silver and cross fox; Monday, March 21st, racoon; Tuesday, March 22nd, muskrat and oppossum; Wednesday, March 23rd, sable, martin, lynx, wolf, white fox, wolverine and ermine; Thursday, March 24th, bear, fisher and grey fox; Friday, March 25th, mink; Monday, March 28th, skunk and sundries.

COAL.—There have been a few sales during the week of lower port steam for spring shipment, but prices did not transpire. Considering the recent mild spell, the demand for hard coal has been fair, sales having taken place of stoves at $8 50 @ 9 per ton of 2,000 lbs delivered, of egg and chestnut at $8 @ [illegible] It is reported that a lot of anthracite has been received by rail. Stocks generally are very light.

Horse Market.

MONTREAL, March 9th, 1881.

Another very brisk week's business has transpired in horses. Over thirty American buyers are still in the market, and trading keeps active. The shipments from Montreal for the week ending March 5 amounted to 239 horses, costing $28,478.50, against 248 horses, costing $22,480 for the week previous. According to Grand Trunk returns, there were shipped from Point St. Charles, during the month of February, 828 horses, valued at $78,000. On Monday there were shipped from Point St. Charles up till noon 121 horses, valued at $10,700. Mr. Frank Shields, of Toronto, had 53

some Upper Canada horses for sale, and Mr C Quin[illegible] [illegible], and several transactions occurred this morning A [illegible] bay mare, 6 years old, weighing [illegible] brought $11[illegible], a large bay gelding was [illegible], and a stylish chestnut mare 6 years old, [illegible] hands, was sold for $130 Two strong [illegible] went for $185 Purchases made by American [illegible] last week averaged $95 20, and ranged from [illegible] Mr Maguire's stables at the [illegible] street market are full, and quite a number were [illegible] from the American House The following [illegible] the shipments of horses from this city to the United States for week ending March 5th —February [illegible] $1,1[illegible] 18 do, $1,507 50 16 do, $1,402, [illegible] $837 50 17 do $1,842 50 3 do, [illegible] March 1st—[illegible] horses, [illegible] $1,000 March 3rd—1 horse, [illegible] 1 do $42 50 1 do $147.50, [illegible] March 5th—21 horses, $2,50[illegible] 1 do, [illegible] 17 do, $1,443 60, 15 do, $1,731.50, [illegible] do, $1,[illegible], 12 do, $1,102 [illegible]

Live Stock Market.

MONTREAL, March 7th, 1881

The following were the receipts of live stock at the Grand Trunk yards, Point St. Charles —

	Cattle.	Sheep.	Hogs.	Horses
For week ending March 5, 1881	541	221	12	70
For week previous	625	...	.	15

Only about seven carloads of cattle were received at St Gabriel the greater portion of which was taken to the lower market. Mr Hugh Kelly had a carload of very fine cattle, part of which was sold to Mr N Kennedy at 5½c per lb live weight. R. Jones sold 15 cattle at $40. R. J Hopper had a carload of very nice cattle, nearly all of which he sold at 4½c@5c per lb R Cochrane sold a carload at about 5c per lb., and James Eakins 1 carload of fair cattle at 4½c per lb The market was firm under light supplies and prices ruled in favor of sellers There are now waiting in the Grand Trunk yards, Point St. Charles, 1 car of cattle and 2 cars of sheep for shipment to Great Britain via Portland, the property of Mr. Kennedy There is a good export demand for choice Leicester and Cotswold sheep. The above carloads cost 5½c per lb At Viger market the offerings of cattle were about 150 head. Sheep were in small supply and of inferior quality, sales being reported at $4 to $6 each A few spring lambs were brought into the city and sold at the butchers' stores at $3 50 to $5 each. A small lot of live hogs were sold at $6.75 per 100 lbs The sale of a carload of dressed hogs was reported, averaging over 200 lbs, at $ 50. Small jobbing lots from $8 75@9 A few calves were sold at from $4 to $7 each

—Twenty years ago the Cunard steamship *Persia*, then the finest vessel afloat, used to consume 6 7-10 pounds of coal per hour per horse power. So great was the space required for the coal that, though the vessel was 2,000 tons burden, she could only find room for 250 tons of paying cargo Contrast this with the performances of a new steamer of the present day The *Arizona* is about double the size of the *Persia*, but she consumes only 1¾ pounds of coal per hour per horse power The consequence is that she can carry 3,400 tons of paying freight and can steam 16½ knots against the *Persia's* 13, thus burning but one-fifth of a ton of coal for each ton of goods carried across the Atlantic, instead of 6½ tons burned by the *Persia*. The present expenditure of coal in carrying a ton of goods across is, therefore, less than 1-30 of what it was twenty years ago, and improvement is still going on

THE LUMBER TRADE.

ENGLISH MARKETS

The *Timber Trades Journal* (London) says of recent sales The greatest sacrifice was apparently made on the cargo of 1st quality Quebec spruce ex *Elgar* These goods were in the summer thought to be getting scarce and valuable in this country, and in Quebec they were sought for and bought up at over £10 per standard, and it was at one time stated that as much as £8 was cheerfully paid to secure them for shipment to Europe. Remembering this and the reputed short stock of spruce abroad, especially of 1st quality Quebec, it is but an indifferent sign of the times to see good mercantile parcels of it, allotted to landing, selling at the hammer in London by the handy lot of about ten standards at £8 10s, only one lot fetched £8 15s, and some went at £7 1 s The freight and charges on these goods by the time they left the hands of the selling broker could not be much under £4, as that figure would cover them. There were about 100 standards of them sold Battens, which were to be scarce and dear this winter, do not average quite the free on board prices of last spring and they continue plentiful, as there is still a good supply of them in the Surrey Commercial Docks which is not likely to need replenishing for some time to come. This kind of stock was represented, up to a very recent date, as so scarce and dear in Norway that mill owners could not afford to pay the price for cutting into flooring. The flooring mills on this side must, therefore, have rather the best of it just now, for battens can be bought in London, on an average, at the public auctions quite as cheap as they are offered for shipment abroad Freight to London is certainly no formidable item like that from Quebec, and that is the reason why we are deluged with Norway goods here when other markets are slack Sometimes a good parcel of battens of approved mark will go to £9, but this is now an exceptional price at the public sales Among the eccentricities of the day may be mentioned the sale of a small lot of less than a load of timber, or 38 ft. of wainscot logs, that is, one log and two half logs, from Pillau, that brought £6 per log of 18 ft cube, which would be £12 13s 4d for the lot, three-fourths of a load. We may expect a good supply of wainscot logs from that port in future, as this was sold at the rate of about £17 per load The price is the more remarkable as, just before, a quantity of New Orleans wainscot logs, ex *Italy*, were put up at 70s per 18 ft., and the officiator, Mr T. Simpson, even reduced the reserve to 67s 6d without eliciting a single bid. The Pillau lot was one of the exceptions to the rule we referred to in our last report, that small lots did not commonly fetch best prices at the Baltic sale rooms But this was better exemplified still in another small lot, about a standard, of tamarac 3x7, 8 and 9 inches, of fair lengths, which went at £5 15s per standard, about half their value to anyone having occasion for them. The hickory timber was held back at £5 7s 6d per load, and birch timber, fine sizes, 82s 6d. Smaller wanted an advance on 75s, but not a soul opened his mouth for either. Quebec oak over 95 c ft. average was put up at £7, smaller sizes £6 10s, but a dead silence pervaded the room Ash from the same port, ex *Lennie Burrel*, in plank, could obtain no bid on 1s 11d per ft. cube. A good deal of Petersburg lathwood was offered, but only one lot found a buyer at £6 15s.

The Liverpool report says:—There is little doubt that at the present time the stocks of deals in the shipping ports of New Brunswick and Nova Scotia are moderate, but the fact should have very little weight with shippers when they fully appreciate the fact that the stocks are heavy here, and must be worked down considerably before they can hope to get paying prices again. Freights will in all probability rule low for the opening of the navigation, both for the deal producing ports and Quebec. For the latter we hear that about 24s is the prevailing idea as the rate offering to Liverpool; this will leave little, if any, margin of profit to the shipowner. The common qualities of yellow pine timber, say from good fair average and downwards, are becoming year by year much less valuable than they were formerly, owing to the competition they meet with in pitch pine, as the latter can be obtained, not only of longer lengths and better sizes, even in sawn timber, but, what is nowadays of greater importance, at a much lower rate than is asked for the Canadian production. A large proportion of the stock on hand consists of this description, and it appears most difficult to sell We cannot help thinking that the Canadians are putting far too high a value upon their productions, especially for the medium and lower qualities of pine timber and deals, and, in fact, of nearly all their timber, when not of really first-class quality.

The *Irish Times* of Monday last says that there is a better tone in the timber market this week, though but little actual improvement in business can be recorded. The transactions in timber are confined to the supply of urgent wants for immediate consumption, save in a few exceptional cases where merchants in the country, knowing that with any increased demand prices will be higher, have taken advantage of the present low rates to buy some stock for future requirements. The disposition of holders, however, is not to look far ahead at current prices. St. John and Miramichi deals £14 10s to £15, 1st Quebec deals, £18 to £22; 2nd, £14 10s to £15 10s, 3rd. £13 10s to £14, 4th, £13, white Norway flooring, 7x1, 11s 6d, oak, £7 10s, ash, 90s, elm, 90s, birch, 85s to 90s, red pine, 75s to 80s; yellow pine, 95s to 100s; board pine, 100s, pitch pine, 65s; Memel (fur sized), 60s to 80s; do. (under sized), 50s to 60s.

THE LUMBER CUT.

We print below some estimates obtained from well informed sources as to the probable cut of timber in the Muskoka and Georgian Bay districts, from which it will be seen that the result of this season's operations in those localities does not differ materially from that of last season. The table is compiled to show the points on water or rail at which the cut "comes out", and the quantities agree in many cases very closely with the estimates given for similar points last year. The total for the Muskoka district is now placed at 124,000,000 feet of sawn lumber, where last year's estimate was 108,000,000 feet. The Georgian Bay district cut, which was last year placed at 149,000,000 is now put down at 157,500,000 feet. The aggregate of these is thus 281,500,000 superficial feet, against 257,500,000 in the previous winter. From the Midland district we are as yet without full information. Messrs H. B Rathbun & Son write us that they are getting out 33,000,000 of pine this season. Last year at this time the account from their territory, (the Moira, Salmon and Napanee rivers), was 23,000,000 feet. It is reasonable to suppose that the abundance of snow which has fallen this winter, and the favorable weather for lumbering operations, will tend to increase the cut upon the whole, but, judging from the figures thus far furnished us, this increase will be less marked than is popularly supposed There is much activity in lumbering in some of the western counties Essex for instance, is turning out more of her light woods such as ash, balm-of-Gilead, elm, as well as stave and shingle bolts than in any previous season We have not been furnished with any trustworthy estimate of the cut of the Ottawa River and tributaries

THE LOGGERS

Logging on the Tittabawassee river is progressing favorably, and nearly 75 per cent of the stock intended to be cut is now on the banking grounds Alpena mills are figuring upon cutting 175,000,000 feet of lumber this year Cheboygan river operations are pretty well along, with over 100,000,000 feet banked The sleighing is reported good and the total amount intended for the mills at Grand Haven Spring Lake and vicinity will no doubt be secured There is a general cry of too much snow and heavy hauling from the western part of Michigan, but the season has been a long one, dating back to the middle of November, with sleighing and cold weather throughout, and there can be little room for fear that the Pere Marquette, White, Muskegon and Manistee rivers will not furnish a good supply of logs—enough to meet in full the demands of the mill. On the eastern side of the state, it cannot be denied, operations have been going forward somewhat more leisurely than during seasons when the prospect was not so favorable. Loggers seem to have settled down to a conviction that there would be time enough for all the work they have on hand, and they have not pushed things as has been their wont. There has not been much to interrupt the work, but the heavy snow has doubtless impeded it somewhat The thaw noticed in our previous issue drove some of the workers out of the woods for a few days, but they have returned and hauling is progressing as before It is not probable that the Saginaw stock will be much larger than last year; the Tittabawassee and tributaries, with the Cass, Bad, Kawkawlin, Rifle, AuGres and AuSable, and other sources of supply usually credited to the Saginaw district, will probably not yield above 1,000,000,000 feet. If they should, however, there will be no more mills to do the cutting than were in operation last year "Out west" there is the same complaint about the snow as in Michigan. Lumbermen are difficult to please, and it is not surprising that now and then one turns up as the defendant in a divorce suit. The cry on the St. Croix, Minn., is too much snow, but it is admitted that the cut will reach 2,000,000,000 feet and may go above that amount. On the upper Mississippi the snow is deep, three to four feet in the pineries. It has been kept so dry by the cold that the hauling has not been good. Three feet of snow in the woods is not calculated to make logging easy, and when the reports say operations are backward on the streams in Minnesota it is easy to believe them true. If the stock is as large as last year it will be all that can reasonably be expected Wisconsin reports are of a mixed character The "beautiful" has been almost too plentiful, but there has been a long spell of weather, and the loggers have been a good while at work On Black river somewhere near 1,300,000,000 feet have been hauled to the banking ground, and half as much more is certain to follow, making 2,000,000,000 feet.—*North-West Lumberman.*

CHOOSING OAK TIMBER

In the selection of oak, a great deal depends on a knowledge of the soil on which it has been grown, for we generally find that when the product of a peculiarly rich soil it is deficient in strength, being full of sap, which necessarily impairs the solidity of the wood. Again, we have to consider the effects which the atmosphere produces upon it in the situation in which it is grown, as it has been found that even the product of a few acres may vary in quality according to the position of the trees, thus, those having a northerly aspect have been uniformly better in quality than those exposed to the rays of the noonday sun The best means of discovering the comparative quality of different kinds of oak consists in immersing several specimens in water, and attentively watching the respective weights of each after having been soaked for a certain time; the specimen that has imbibed the least quantity of fluid should always be chosen for use, as that may be depended upon as being closest in grain, and, consequently, least liable to decay. Those trees which have been cut down in winter should always, when possible, be selected, for in such the sap has become partially dry, and, consequently, they require less seasoning. Great attention should always be paid to the state of the timber about to be selected, examining well the central parts, as there it is that decay generally first shows itself. It is to a want of proper attention to this point that many disastrous accidents may be ascribed, with regard to the beams employed for supporting roofs, etc, breaking beneath their loads

ADVANTAGES OF SAWDUST AS A FILTERING MATERIAL.

On the 27th ult. Mr. Henry Chapman read a paper before the Institution of Mechanical Engineers on the Farquhar Filtering Apparatus, in the course of which he remarked that, in addition to water and sewage, this automatic self cleansing process may be expected to effect a revolution in all kinds of filtration, and will prove of great benefit to sugar makers, distillers, brewers, vinegar makers, and others who require pure, rapid, continuous and economic filtration It entirely supersedes and dispenses with the use of cloths or bags, which entail a considerable annual outlay, and which do not produce an average pure filtration. For brewers and distillers it would be specially useful in filtering the refuse, which at present contains a very large amount of good liquid that is practically wasted, owing to the inability of any existing system to filter it continuously Taking bulk for bulk it has been found that the following great advantages are in favor of sawdust as against sand, etc —1. It is a cheaper commodity. 2 Its cost of conveyance is not a serious item as it is with sand 3. Much less manual labour is required in washing sawdust, chiefly on account of its lightness and portability 4. It produces far purer filtration, because the grains of sawdust, when saturated, pack closely together, and the greater the pressure employed the tighter the grains become knit together, which cannot take place with sand. 5. More than three times the volume of liquid is filtered in a given time through sawdust than the same bulk of fine sand by this process The reason is that the solid impurities are arrested immediately on the top surface of the sawdust, and are, therefore, instantly removed by the cutter, so that rapid and continuous filtration ensues, whereas with sand the impurities always penetrate some distance below the top surface, owing to the impossibility of making grains of sand pack close enough together, even under great pressure In fact, the grains of sawdust tightly overlap each other under pressure, being thus equivalent to a number of pressed layers of fine cloths or blotting-paper, and the sawdust bed is thus impervious to anything but pure liquid The question naturally arises whether sawdust imparts any flavor to the filtered liquid, which with sugar, etc, might be a disadvantage The answer is that, after the liquid with which the sawdust has been saturated previous to filtration has been expelled, no flavor from the sawdust can be detected in the filtered liquid The reason is that the liquid with which the sawdust was saturated is thoroughly absorbed into the loose grains of the sawdust like a sponge, and that the whole of this liquid is, under pressure squeezed out of the grains, carrying with it the greater part of the flavor in the sawdust The sawdust being then in a compressed state, the filtered liquid is prevented from entering into the interior of the grains and in its rapid passage between the grains it does not carry with it any flavor therefrom In all cases the sawdust must be saturated with some clear liquid prior to making the filter-bed, in order to create capillary attraction equally in all directions, so that the filtered liquid shall flow equally through the whole of the bed Repeated tests have been made to ascertain if the liquid to be filtered drives before it the whole of the liquid used in the saturation of the bed prior to filtration. This has always been proved to be the case, by the following test The amount of water used in saturating the bed has been carefully measured. So soon as this quantity had been extracted, and not till then, did the filtered sewage or sugar juice, etc, pass out of the machine

SUBSTITUTES FOR LUMBER

We are in receipt, from Mr. S. W Hamilton, of Lawrence, Kansas, of a sample of lumber made from straw, manufactured after a process patented by himself, the particulars of which he does not explain. He informs us, however, that he can manufacture lumber like the sample sent, in any desired length, from 1? feet upward, and to 32 inches in width, at a cost competing with the better or finishing grades of pine, although he does not inform us whether this competition will apply equally to sections where lumber is comparatively cheap, as at Chicago, and at Western grain producing points, as at Kansas We imagine, however, that the expense will vary but little at any point where straw is obtainable in large quantities The manufacture is, of course, confined to a grade which will compete with the better class of lumber, as there would be no object in filling the new product with knots, and shakes would scarcely be obtainable even if desired, while sap and decayed wood must be impossibilities. The sample sent to us will hold a nail as well as wood, is equally susceptible to a high painting finish, and can be polished to as high a degree as is at all desirable. Being made waterproof, we can discover no possible reason why it should not be as durable, or even more so, than pine or even oak, while its adaptability is evidently as great for roofing purposes as for the fine work of a dwelling.

—There are now sixteen broom factories managed by Chinese in San Francisco.

—A. Burtis, agent of the Flatt Bros., of Hamilton, Ont., purchased and shipped from the river Thames, during the year ending the 31st December, 1880, $45,000 worth of hewn and sawn oak; this, in addition to the great quantity of ship timber and plank manufactured by D. R VanAllen & Co', and the trade of other dealers in this wood, indicates that the oak timber of Kent county, Ont., is not all gone as yet.

—The importation last year into the United Kingdom, without taking into account staves or mahogany, consisted of 6,206,778 loads of hewn and sawn wood, which are equivalent to 310,338,900 cubic ft., or nearly 3,725,000,000 super. ft. To form an idea of this stupendous quantity, it may be mentioned that there would be a sufficient number of blocks 1 ft. cube, if placed end to end, to stretch a girdle twice round the earth, and to leave almost a sufficient number over to extend through the centre of it.

—Mr. P. Fitzpatrick, Mayor of Allumette Island, who has the contract of drawing a raft of timber, manufactured on the Coulonge by Bryson & Murtagh, for J. R. Booth, has caught up to the timber makers, and has now between one thousand four hundred and one thousand five hundred pieces conveyed from the bush and deposited on the ice. According to Mr. William Clarke, forest ranger, of Pontiac, the timber will average between sixty-five and seventy feet, and he says it is the best he has seen this winter. The distance which the timber has to be drawn varied from six to eight miles It is now lying on the Coulonge river, some seven or eight miles above its junction with the Ottawa, and consequently about the same distance from Coulonge village. If the season permits, about seven hundred pieces will be manufactured and added to the timber already drawn.

—A circular from the Census Bureau has been sent out to obtain information as to the evil effects of forest fires in the wooded sections of the country during the past year. Specific answers are requested from correspondents in regard to the extent of the area burned over, the quality and value of timber destroyed, the causes of the fires, and other particulars, while suggestions as to avoidance or prevention of continued destruction are invited The recklessly rapid rate at which our forests are being cut down for use in the arts, manufactures, house and ship construction, etc., has seriously alarmed political economists. But even this immense consumption, it is contended, is not equal in magnitude to the enormous waste by forest fires thoughtlessly or wantonly kindled. We trust that the efforts of the Census Bureau to obtain particulars of such importance will be fully responded to by those who are in possession of the facts.

—The State of Nevada has a remarkable timber known as mountain mahogany. The trees are not large, averaging less than a foot in diameter The seasoned timber is said to be as hard as boxwood, of a very fine grain, of a rich red color, very heavy, and a fine material for the wood carver It is sometimes used for making boxes for shafting, and wears well under the journal. In the mining districts it has been used for shoeing and dies in quartz batteries. As a fuel, it creates an intense heat, burning with a blaze, as long as ordinary wood, and, with scarce a change in form, becomes charcoal, lasting twice as long as ordinary wood. It is extensively used as fuel, bearing a price per cord equal to the price of coal It is, however, open to the objection of such intensity of heat as to burn out the iron of the stove more rapidly than any kind of coal. As to the extent of the supply we have no information, but if all claimed for it be true, it should be conserved for the use of engravers.

THE METAL TRADE.

THE ENGLISH MARKETS.

[illegible] from W[illegible] years. [illegible] the year [illegible] indeed is [illegible] United States we were [illegible] furnaces a twelve- [illegible] N vertheless [illegible] have been the [illegible] United States [illegible] and in the [illegible] this month have had [illegible] from Spain [illegible] with the end [illegible] shipped across [illegible] into rolled st [illegible] after [illegible] with the aid of United States steel through the [illegible] Siemens-Martin [illegible] makers here hope that the demand will [illegible] increasing side [illegible] steel blooms. In that shape [illegible] has been going to the United States in augmented quantities for some months past, and the demand now being expressed in Cleveland by consumers on your side is indicative of further expansion. This week's inquiries represent a larger total than those of a week ago in the same district. Only in steel and in telegraph wire, in addition to hardwares and cutlery, is the iron business [illegible] are doing superior to that of a year back. Unwrought Steel of the value of £39,000 was shipped hence in January this year, against £[illegible],411 in the same month last year. In quantity the difference is an increase of 1,908 tons. This increase of over 19 per cent in the value of unwrought steel is the measure of the increase also in the value of steel manufactures shipped in the same month. The total quantity of iron and steel exported last month was 197,112 tons, as compared with 275,979 tons in January of last year, a decrease on the past month's figures of 28.3 per cent. The value of these exports was £1,645,280, as against £2,094,724 in the previous January, a decline of 21 per cent. The pig iron exports during the month amounted only to 98,971 tons, as against 102,565 tons, while the decrease in value was equal to 43 per cent. The bulk of this falling off was with the United States, while with Belgium also our trade has considerably declined, with Holland, France, and countries not specified, an improved business was done. Of bar and angle iron the quantity exported was 19,581 tons, as compared with 28,357 tons, and the decline in value was 36.7 per cent. There was a falling off of 11,64[illegible] tons in the month's exports of railroad iron, and the value was less by 5.3 per cent. In cast or wrought iron the difference was inappreciable. Hoops and sheets show a decline of 3,440 tons in quantity, and 18 per cent. in value. In old iron, sent out for remanufacture, there was an enormous decline, amounting to 21,036 tons in quantity and 70.3 per cent. in value. The figures are as follows —

Iron	Month of January, 1880.	1881.
Pig and puddled	£349,300	£149,901
Bar, angle, etc	212,677	134,446
Railroad	285,187	295,915
Wire	57,761	79,064
Telegraphic do.	31,318	57,227
Cast and wrought	271,933	278,343
Hoops and sheets, etc.	241,100	230,890
Old iron..	118,180	35,897

Our export trade as a whole shows a slight increase upon January last year of 2½ per cent. Our imports, on the other hand, are a serious decline—serious, inasmuch as the falling off is mainly in raw materials of manufacture. The general satisfaction came out as here: The imports show a decline of £6,629,945, as compared with the corresponding month last year, but the small increase of £375,916 over January, 1879. The totals of the past month were £26,742,962, as against £32,732,907 in January, 1880, and £26,367,046 in January, 1879. The total exports during the month amounted to £17,318,911, as compared with £16,912,858 in January last year, and £14,196,518 in January, 1879. The serious increase in our stocks of raw iron is producing the inevitable effect of bringing out large quantities of metal which had got into weak hands, with the disastrous result as to the prices taken by such tenders indicated further on. That prices should have declined to the large extent shown is easy enough to understand when I point out that since this year opened the augmentation of pigs in stock in Glasgow and Middlesborough represents no less than 100,000 tons. Stocks of steel pig iron do not show any considerable growth. Indeed in the Barrow district, where the native hematite ore (of Lancashire) is almost exclusively smelted, the furnaces are heavily taxed to meet deliveries, and arrangements are in progress for the lighting of furnaces now out of blast. In that centre 98s. is now asked for Nos. 1, 2 and 3 Bessemer, and 67s for No. 3 forge hematite pigs. Of the making of steel from common pig iron in England not much is just now being said, but statements continue to be published here, taken from German newspapers, which indicate much progress in the subletting of the Thomas-Gilchrist patent upon the Continent. The proprietors of the Hoder Works, says a Berlin paper, have paid £15,000 to the joint owners of the patent rights (the Horde Works Co., and the Rhenish Steel Works Co.), and agreed, in addition, to pay 3s. 6d. for every ton of steel produced. Moreover, a minimum payment per annum is guaranteed during the continuance of the patent whether the patent is used or not. Similar privileges are being acquired, on equivalent terms, by other establishments. The profits acquired in this way the Horde Company will, it is reported, enable the directors to reduce the call upon the shareholders, on account of new works which are to be built, from £200,000 to £150,000. The production of steel by the new method is said to cost 7s. 6d. per ton more than by the old, but, on the other hand, the pig iron used costs only 43s. instead of 75s. per ton. While we continue to await your orders, which at present are provokingly delayed in other respects than those I have indicated as to crude steel, iron and steel blooms together, I may add, with a trifle more buying upon the week in iron hoops—we watch narrowly all we can learn of what is going between buyers on your side and producers of iron or steel elsewhere. The losses sustained by the German trading company, of Frankfort, on consignments of iron through their New York branch, are not, therefore, without their interest for the British ironmasters who have been and are hoping again to trade with the United States. According to a statement in a Berlin paper, considerable quantities of rails made on behalf of the company for the United States are now lying in works in the Saar district, and other works are engaged in completing the remainder of the orders given. As these rails are made specially for American railroads, it will be necessary to send to the United States, as they would have no value on this side of the Atlantic except as old iron. The circumstance deserves attention in connection with the [illegible] American [illegible] for rails [illegible] United States [illegible] the Atlantic [illegible] the same [illegible] this country. [illegible] orders [illegible] as well as [illegible] against [illegible] district [illegible] Now we have the liquidation of the Mersey Steel and Iron Company, Limited, of Liverpool [illegible] with the capital in shares [illegible] winding up [illegible] through the books to profit and loss account 31st January, 8[illegible] The total [illegible] were set down at £[illegible], while £[illegible] is put down as allowances for non-fulfilment of contracts. Further serious losses will be entailed from other contracts yet running; but as some contracts entered in the foregoing statement have been cancelled in the past few days, the directors have hope that the total further loss will not be so heavy as they had at first feared. The finished iron makers have been asking a rise of 5s per ton upon their former minimum prices. But except in the case of galvanizing and merchant sheets, buyers refuse to respond. Sheets (singles) which last week were £7 15s are this week quoted £8, and minimum quality boiler plates which were £8 per ton are now quoted £8 5s. For common merchant bars £6 7s. 6d. to £6 5s is asked, and for good branded hoops, £6 12s 6d to £6 15s. All the large works are resuming that degree of activity upon steel and iron rails and upon merchant iron of which the late severe weather caused a suspension. The new contracts are not, however, of such a character as to call for much jubilation in any of the departments. Steel rails are the branch that is best off. The iron steel shipped from Cardiff last week amounted to 3,000 tons—a very important improvement over all the weekly totals since Christmas. From Newport 2,300 tons were exported. The tin plate trade is very languid, and enormous stocks are held—a fact that does not augur well for any improvement in prices. It is stated that in Liverpool there are no fewer than 500,000 boxes stored at the railway stations. The London and North-Western Railway Company have 320,000 boxes at one station alone, and they are giving notice that they cannot well take any more there.

THE LONDON MARKET.

The following were the closing prices in the London metal market February 11, 1881.

IRON.	£	s.	d.		£	s.	d.
Bars, Welsh (in London)	6	17	6	@	0	0	0
Bars, Swedish (in London)	10	0	0	@	10	10	0
Bars, Staffordshire (in London)	6	15	0	@	7	0	0
Nail rods (in London).	6	5	0	@	6	15	0
Pig, G.M.B., f o b Clyde	2	10	3	@	0	0	0
Rails, Welsh (at works)	5	10	0	@	5	15	0
Rails, North of England (at works)	5	10	0	@	5	12	6
STEEL							
Bessemer rails (at works)	6	0	0	@	7	0	0
English spring	13	0	0	@	19	0	0
Swedish (in kegs)	15	0	0	@	0	0	0
Swedish (in faggots)	15	10	0	@	0	0	0
COPPER							
Sheathing and sheets	71	0	0	@	71	3	0
Flat bottoms	74	0	0	@	74	0	0
Tough cake	66	0	0	@	67	0	0
Best selected	68	0	0	@	68	10	0
Burra or P.C.C	68	10	0	@	0	0	0
LEAD (per ton)							
English pig, W.B	15	10	0	@	15	15	0
English sheet	15	15	0	@	0	0	0
English red	17	0	0	@	0	0	0
English white....	21	10	0	@	23	10	0
English patent shot	18	0	0	@	0	0	0
Spanish pig	14	15	0	@	0	0	0
TIN (per ton)							
English ingot	92	10	0	@	93	0	0
English bars (in barrels)	93	10	0	@	94	0	0
English refined	94	10	0	@	96	0	0
Banca	nom. 0	0	0	@	0	0	0
Straits	89	0	0	@	0	0	0
TIN PLATES (per box).							
Charcoal, I.C., 1st quality	1	9	0	@	1	4	0
I.C. Coke	0	18	0	@	0	19	0
SPELTER (per ton).							
English (Swansea)	17	10	0	@	0	0	0

UNITED STATES MARKETS.

(American Manufacturer.)

Pittsburgh.

Pig Iron.—The week just closed has been an uneventful one in the pig iron market. Trade has been fair, and prices have undergone no change since the previous week. Sales are still made in from 100 to 500 ton lots, with one exception, which exception relates to a local furnace. It has transpired that some days ago, the owners of a city furnace, as stated, have contracted with the Pittsburg Bessemer Steel Company, owners of the new Bessemer steel works at Hempstead, to make and deliver 15,000 tons of Bessemer iron during the last half of the present year, deliveries to be made monthly from June to December. We understand the price varies very little, if any, from $28. It is certain, at all events, that the price was a little lower than the commission merchants here would accept. Sales of forge irons have been made during the week at $22.50 for coke iron made from native ore, and at $24 for iron made from Lake Superior ore and mill cinder. Commission merchants express surprise at the fact that pig iron does not advance under the stimulus of scarcity and large demand, and know of no reason why it does not except the comparatively low price of manufactured iron, which continues to drag, notwithstanding the good demand. We repeat quotations of last week: Cold-short, $21.50@22; neutral, $22.50@23; extra neutral, $23.50@25, cinder-mixed red-short, $25, all-ore red-short, $27@27.50, Bessemer, $28.50, No. 1 foundry, $23.50@25, Missouri and Lake Superior warm-blast charcoal, $35, Hanging Rock cold blast charcoal, $42@45. Hanging Rock charcoal foundry, $29@32; as to quality—all four months time.

Manufactured Iron—The mills continue fairly busy, and prices remain about the same as for some time past. We quote same as last week: Bar, 2.25; sheet No 24, 3.9 to 4c, tank, 3.1 to 3c—usual terms.

Nails—The new card adopted last week appears to be adhered to strictly. Stocks are said to be very small and there will doubtless be a large demand this spring. We quote as before: 10d. to 60d, $3 per keg, 60 days, or 2 per cent less for cash, with an abatement of 10 cents per keg on lots of 250 kegs.

Wrought Pipe—Demand continues good and prices unchanged. Discount on gas and steam pipe, 65 to 67½ per cent; on boiler tubes, 40 per cent; oil-well tubing, 22 cents net; oil-well casing, 72 cents net.

Rails—It is pretty difficult to quote steel rails accurately. We heard of contracts being placed at $64 at works for early delivery. Light iron rails are worth from $43 to $50.

Railway [illegible] Prices have been stationary [illegible] We quote as heretofore. Spikes [illegible] bars [illegible] track bolts [illegible]—all [illegible]

S[illegible] all the orders [illegible] remains [illegible] steel 11 to 12 cents [illegible] quantity purchased [illegible] cents, and Bessemer and [illegible] cents [illegible] 4½ to 4¾ cents.

[illegible]

Philadelphia.

Pig Iron—There has been a very favorable movement [illegible] during the past few days in pig iron. Buyers of both large and small quantities have appeared and made purchases extending in some cases over requirements for one to three months. The business done covers a wider area than heretofore, and the total volume, as shown by inquiries is sufficient to impart continuous activity and very firm prices for months to come. It is, however, well to keep in mind the possibilities which have been so frequently adverted to in this column, viz., that of renewed importations, if the adverse influences at work in home and foreign markets should continue to act. An assurance of greater uniformity in prices is given in the increase of reserve stocks as compared to this time last year. No 1 foundry commands $25 readily, with the usual exceptional transactions at higher figures. No. 2 is very firm at $22, and is leaning to a higher price. The improvement in price is confined chiefly to lower grades, which for months past have been the most to suffer from foreign competition. Special brands are higher. Gray forge is meeting with a quite active demand at $20.50@21, delivered. It is questionable whether really good gray forge can be got at $19 at furnace at present. The partial revival in demand is due to the fact that several large transactions in miscellaneous iron have been closed, and manufacturers are "covering." English iron is still to be got at $18 to $20. Gartsherrie sells at $23.50. A very large pipe contract was given out late last week at Springfield, Ohio, and the bids were as low as $30.24, which fact goes to show pig iron can be bought somewhere at remarkably low figures. The above price includes $3.50 freight. Charcoal has not felt the improvement yet and is sold between $32 to 37. Some Bessemer iron sold at $26.

Blooms—Charcoal blooms are firm at $63, and anthracite at $55. There are none on the market.

Muck Iron—All good lots are snapped up at $39@38.50, and inquiries are numerous, with holders not anxious to sell.

Nails—$3.10, retail, $3 wholesale; large sales larger inquiries and excellent outlook. The Atlantic Association met at noon Tuesday and fixed card.

Iron Rails—So far as can be learned, several pending transactions in iron rails have as yet not been closed, but are in hand. The companies purchasing need rails before they can get steel rails. The weakening tendency in old material may influence the delay. It is believed among those who know that a large business will be done in iron rails as soon as preliminaries are settled. Several transactions in light rails are reported at from $48 to $52.

Steel rails—New buyers, if accommodated in point of time of delivery, pay high prices. Several lots have been placed recently, but our inquiries have not found transactions of this week's origin. No mills, so far as can be learned, are taking orders at $60, and need not because of the firmer tendency abroad. Just what the actual terms are, are matters of conjecture, as the companies prefer to not state prices which depend upon so many conditions.

Old Rails—The holders of old rails have capitulated and are waiting to be paroled. Sales of tees have been made at $27.50, and less will buy now. Doubles are quoted at $29. Fewer sales have been heard of. Reports from abroad seem to indicate a growing and permanent scarcity there, from the fact that the old material is pretty well cleaned out. If so a reaction here would not be surprising. Stove plate is $17 at yard.

Steel—There is an encouraging increase of inquiries from buyers, but tire steel is in most active demand just now. The general demand is good but improving.

New York.

Pig Iron—American: Some commission firms express a little surprise at the moderate amount of orders coming to hand, considering the near approach of the opening of navigation, and, if the reports emanating from this source are a fair index (and there is good reason to believe they are) the market is unquestionably dull. If, however, the makers are so far sold ahead as represented, there is a large amount of material passing into consumption, and the general situation in point of fact more favorable than indicated by the transactions reported from day to day. The quantity of good brands offering continues moderate, and $25 for No. 1 X foundry, $22 for No. 2 X foundry, and $21 fo. gray forge, are the lowest prices named. As a rule the holders ask 50c to $1 above those figures, and report small sales at that. There are some inferior makes offering at $24.50 for No. 1 X foundry, and $20 for gray forge, without finding buyers except for small lots. At the close of business to-day there was some uneasiness caused by the recent decline on foreign iron and on old rails, but so far as could be learned prices of good American iron were not materially affected. For that matter the probability of a decline even seems to be entertained only among buyers.

Scotch: The demand continues very moderate, and, while comparatively little of the current importation goes upon the market, there is a sufficient amount of stock offering to keep the tone easy, and prices are a shade off when it comes to the matter of good sized lots. Store prices are about $22 for Eglinton, $23 for Glengarnock, $23.50 for Gartsherrie, and $24.50 for Coltness.

English: There have been sales of about 1,500 tons No. 3 Middlesboro at $18@18.50, and 800 tons Bessemer at $26@26.50. The market closes rather easy at those prices.

Old Rails—During the week about 2,600 tons T's at $27@27.50, and 3,600 tons D. H. at $28.50@29 have been sold. Some parcels are still slightly urged for sale, and the market is unsettled in consequence.

Scrap Iron—Choice wrought scrap is the strongest article on the market, and commands $30@32 as to selection. A lot of 400 tons brought $30 ex-store. Cast borings are quoted at $13, cast machinery scrap at $20, and old car wheels at $33@35, as to condition.

Rails—Small lots of steel are said to have brought equal to $63 at tide water during the past week. Very few transactions in large quantities come to notice, but there are numerous orders, and $60@62 is quoted, as to delivery. A lot of [illegible] tons [illegible] 000 tons sold at $61 at mill. [illegible] late call and may be termed steady [illegible] for heavy section.

Tin—About 100 tons Straits [illegible] but the market is now [illegible] these prices, under better demand [illegible] for common English [illegible] Billiton and refined English. Tin plates [illegible] dull with prices about as follows: [illegible] coke tin I.C. cross assortment $5.7[illegible] grade, and $6.12@6.25 for Melyn [illegible] $4.87[illegible] for B. V. grade, and [illegible] grade charcoal terne at $5.1[illegible]@5.25 [illegible] and $11 [illegible] 20x28 [illegible] $4.87[illegible] for 14x20 Ulans grade, [illegible] —all round lots.

Copper—Ingot has continued quiet [illegible] shade easier at 19½@19¾ cash [illegible] Manufactured quoted as follows: Braziers over 16 oz, per square ft 28c., do. 12 oz to [illegible] do 10 oz to 12 oz, 32c. do. lighter than [illegible] circles segment and pattern sheets less [illegible] diameter, 31c., do. do, over 84 in. [illegible] fire box sheets, 31c; sheeting copper [illegible] sq. ft, 26c. do. bolt, 28c., copper bottoms, [illegible]

Lead—Domestic pig continues weak, and [illegible] the best price for common, even in small lots [illegible] factured lead quoted as follows: Bar, [illegible] sheet, 7c—less 10 per cent discount to the [illegible] and tin lined pipe 15c. Shot 7¾c for drop [illegible] buck, and 8¾c for patent chilled—less 1 per [illegible] count to the trade for small lots, and for large [illegible] per cent.

INSURANCE MATTERS.

STANDARD FIRE INSURANCE COMPANY.

The fourth annual report of the above company and the President's remarks thereon, will be seen in another column. A material increase to the capital stock is noted, and the security offered to policy holders is claimed to be as great as that of any other company. During the nine months covered by the report 3,344 policies have been issued, from which a gross premium income of $67,271.30 was derived which, with receipts from other sources, made the gross income $76,101.24. The net loss paid during the same period was $28,532.17, this amount, however, including losses of the previous year unadjusted at the last report. Local boards have been established at Toronto and Port Hope, and the directors anticipate for the current year an equally prosperous one. The usual dividend of 10 per cent. is recommended.—*Hamilton Spectator*.

INSURANCE BUSINESS FOR 1880.

The returns made by insurance companies to the New York Insurance Department furnish a fair estimate of the business of the whole country. The whole number of fire companies reporting to that department was 156, of which 79 were New York State companies, 55 were other State companies, and 22 were foreign. The aggregate assets of these 156 companies amount to $150,168,150, and their liabilities, including $41,835,120 capital, are $110,09[illegible], leaving a net surplus of $40,071,163, a sum very nearly equal to their capital, which shows that the companies are disposed to afford all the protection possible to their customers. The total income of the companies was $67,041,043, and the total expenditures, including $6,027,147 paid in dividends, were $61,545,256. The receipts from fire premiums were $54,799,060, and the amount paid for fire losses was $30,135,107, showing that less than sixty per cent of the premium receipts were required to pay the losses. The expenses were $20,956,923, a bare shade below forty per cent. of the premiums, and herein lies the bane of the business. The expenses of conducting the business of insurance is outside of all reason necessity or propriety. If the expenses of conducting a business of $55,000,000 had been reduced to twenty per cent., which is ample for the purpose, a saving of $10,000,000 could have been secured to the policy holders, or that sum could have been added to the dividends of the stockholders, or to the surplus of the companies, and thus afforded increased security. It is gratifying to note that these reports show an improved condition of the companies generally. The showing is that, while there are not so many companies reporting for 1880 as for the previous year by the number of 17, the increase in net assets is about $3,000,000. This may not be attributed so much to the profits of the insurance business proper, as to the enhanced value of assets. In several instances there were companies that made a loss in the business of insurance, and yet were enabled to pay dividends and add to their surplus from the income and enhancement of their securities. Some companies have made losses for their stockholders, but the losses to policyholders by the failure of companies to perform their contracts have been so small as to be hardly worth the mention. The insuring public has been well and faithfully served, and although rates have been somewhat higher than they should have been, there are no special grounds of complaint.

PRACTICAL VIEWS OF BUSINESS IN ITS RELATION TO FIRE UNDERWRITING.

The remark is not unfrequently heard that "the less profits fire companies make the better it is for the insured." The very reverse of this idea is the fact. A good profit to the insurer is not more important to him than it is to the insured. Indeed, it may be more important to the insured. To insure is to make certain, nothing is more certain to make the insurance certain to the insured than to have the insurer derive a good profit. The greater uncertainty of profit to the insurer, so much nearer is the insurance to the insured uncertain. Again, it does not by any means, follow, because one company in which property insured makes good profit and declares large dividends annually, besides adding something to a reserve fund, that the insured pays a larger premium than he would in another company that does not show so favorable results, nor divide among its stock owners so high per cent. of dividend. The utility of fire insurance, the absolute necessity for it, places the practice of it among the most important classes of business transacted. Hence it should be expected to pay a good profit over and above the legal or established rate of interest upon the capital invested. In fact fire insurance companies are, in in one sense, silent or private partners in every kind of business or property which they insure, since the security represented thereby underlies the system of commercial business credit and is essential to it. The risk of destruction by fire is one element of the cost of any article, and in part makes up the price for

... is to be sold. It makes no difference whether ... came by the merchant or tradesman or by ... company the cost of the ... must ... at cost ... at the trade ... not wish to carry his own ... has not ... to invest in the desired amount of ... and thus the ... the capital ... goods with ... insurance. Thus, for ... that part which ... the ... the contract ... losses thereof must be provided ... profit, and enters into the ... all who ... the true ... particularly that of ... they would be much more ... the ... attendant upon ... the ...

DOMINION FIRE AND MARINE

... report of this company shows that ... December 31st the premiums received ... to $[illegible], of which $[illegible] was paid for ... The losses were heavy, amounting in ... The losses paid footed up to ... of which part must be charged to the pre... Some of the losses belonging to this year were not adjusted at the date of the report. The ... of business now carried on is large, the ... being $5,058,716, of which the greater part is ... where fire extinguishing appliances ... found. The management of this company ... and the directors express the hope that ... selection of risks the company will pro... rank among Canadian institutions of ... character.—*Hamilton Times*

A NEW INSURANCE QUESTION

The position recently assumed by some of the ... insurance companies, touching the insurance of commissions, is creating much comment among commission merchants, who, it is estimated, carry in this city over $30,000,000 of insurance. A large portion of this amount expired at the close of last year and applications for renewals were duly made. On examining a new policy issued by a large foreign company it was found that the words "nor for any commissions on merchandise in the hands of consignees" had been added to the clause specifying the "exceptions absolute on account of which this company shall not be liable." The discovery was immediately communicated to several commission merchants, who within the past few days have requested their brokers to have policies containing the words quoted cancelled at once. They regard the claim that the commission on merchandise held on consignment is not insurable as a great outrage, and believe that the companies should pay, in case of loss, the market value of the goods or the cost of replacing them after a fire. They contend that the selling price of manufacturers' agents is the market value, and that if the companies go into the market to buy or to replace the damaged merchandise they will be met with a price which includes commissions. They further claim that the whole business of commission merchants, their rent, outlays for insurance, travelling agents, cartage, and all other items of expense are made out of the profit of the commissions of the sellers, and that if property be destroyed by fire they are thereby prevented from making sales and obtaining commissions. This, they say, is the gist of the trade, and if the insurance companies decline to pay for commissions, they deprive the agents of the only real interest they have in the property insured. Their claim goes even further than this, and is based on the assumption that their commissions are insurable as part of the market value in addition to the selling price, and that the companies have repeatedly paid such claims, thereby admitting their justice. One commission merchant with whom a *Times* reporter conversed said: "It would revolutionise our business if the companies generally determined not to allow anything for commissions in settlement of losses, and we will fight the issue to the bitter end if, after years of acknowledgement of the justice of such claims, the companies now set up a different rule. Nothing, in the opinion of this gentleman would alienate the commission merchants from the insurance companies quicker than an arbitrary course of this kind. Another merchant characterized the exception clause in question as "preposterous," and said that if the companies were to adopt it generally commission merchants would get their insurance in Boston, where the Massachusetts standard policy form, which contains no such condition, is in operation. At the National Convention of Insurance Managers, in this city, the insurance of commissions was freely discussed. A resolution condemning the practice was introduced, and, after a long debate, was finally referred to a special committee to report at the next convention. The gentleman who introduced the resolution, the resident manager of the North British and Mercantile, said he was in favor of allowing commission merchants such proportion of the commissions as would have to be sacrificed by the manufacturer in case he wished to withdraw his goods. Mr Peter Notman, President of the Niagara, speaking of the question of commissions, said: "Supposing the goods were sold, they would be sold at the market price. Supposing they were burned, they were paid for at the market price. Now, is there any change in the position of the commission merchant? Does the manufacturer, when he has sold them, if sold at nothing more than the manufacturing price, allow the commission merchant anything? If he does, then it comes out of the value of the goods, and we, paying the value of the goods, include that. The commission merchant gets his commission if he sells the goods, they are paid for (in case they are burned) at the market price. He is entitled to some pay from the manufacturer, and he gets the value of them. There is, therefore, no reason why we should pay more when they have burned than the commission merchant could get for them if they were sold." Mr. Heald, vice-president of the Home, contends that the commission merchant stands precisely in the relation before the courts that the retailer does after goods have passed out of the jobber's hands into the hands of the retailer. He believes that the question is one of considerable importance, and that the companies ought not to take a false position upon it, or one contrary to the decision of the courts. The courts have held in so many words, says Mr. Heald, that whenever you insure the commission merchant he is entitled to recover the full value of the goods. Now, what is the value of a thousand yards of prints that are produced in two mills running side by side, and sold in adjoining stores in New York? Each store is selling these goods at 9 cents a yard, with a commission of 5 per cent. That is a commission from the owners of the goods. Is not the market value of the goods 9 cents per yard? The court says that the commission merchant shall be entitled to recover the full value of the goods. Where the commission ... undertakes to cover that as a commission ... and in advance that is ... present policy," continued Mr. Heald, "to treat the commission merchant as owner, and ... that he is entitled to the full value of the goods, without any reference to the ... the ... not known ... of the ... in favor of continuing the course ... adopted by them in relation to insurance of commissions, and are opposed to any departure from ..."

REFORMATION OF INSURANCE POLICIES

A policy of insurance being an agreement between parties should in its terms conform to the agreement. A mistake in the dates or conditions or in the description of the subject matter may be corrected by a reformation of the policy so that its terms may correspond to the actual agreement of the parties. The old rule that contracts might be reformed only in courts of equity has been so far relaxed that the same court will grant the needed relief of reformation and also enter up judgment on the policy as reformed. In order to justify the reformation there must have been an agreement between the parties as to what the policy should contain and there must be a mistake in the expression of the terms. If the minds of the parties did not originally agree there can be no correction, because the correction is to be made to conform to the real agreement of the parties. Circumstances of fraud may arise which will prevent the company from insisting that their agreement was different from that of the insured. If the company's agent understood the proposition and expectation of the applicant, and did not inform him that such expectation could not be carried out in the proposed contract, the circumstances would justify a correction of the policy to conform to the proposition and expectation of the applicant. This rule operates in favor of the company as well as in favor of the assured. In the case of the North American Insurance Company vs. Whipple, 2 Biss 418, the application was for a policy to terminate December 22, 1864. By mistake the policy clerk filled up the date of termination as December 22, 1865. A loss occurred in December, 1865, and the holder of the policy sued to recover for the loss, but the court permitted a reformation of the policy so as to read December 22, 1864, and the action fell to the ground. The fact that the insured retains the policy without complaint does not operate against his right to a correction. It generally happens that the first careful reading of a policy is after the loss occurs. The insured generally has confidence that the company will present to him a policy which will effectuate the intentions of the parties, and if this confidence is abused, the mere fact that the insured receives the policy without examination and relies upon its correctness will not prevent a reformation. Brioso vs. Mutual Ins. Co. 4 Daly, 246. In Bidwell vs. Astor Mut. Ins. Co. 16 N Y. 263, the policy was laid away for nearly a year before the loss occurred and the mistake discovered. A recent case in Wisconsin, being that of Knox vs. Lycoming Fire Ins. Co., is a good example of a proper case for equitable relief. The agent solicited the insurance on the 12th of May. The plaintiff paid the premium, the agent gave a receipt therefor, and it was agreed that the risk commenced at that time. The agent returned and on the 14th made out a policy and mailed it to plaintiff. The policy was drawn pursuant to the contract, except that by its terms it was to commence at noon, May 14th, the day it was written. The property insured was destroyed on the morning of the 14th. The court reformed the policy so that the risk should commence on the 12th.—*American Exchange.*

—The insurance companies lose somewhat heavily by the large fire last week at Montreal. The following is the insurance on Nordheimer's building:—British America, $5,000; North British, $5,000; Royal, $5,000; London, Liverpool and Globe, $5,000; Phœnix, $5,000; Commercial Union, $4,000; total, $29,000. On chairs and benches in the hall, North British, $1,000; on stock of pianos, Phœnix, $4,000; North British, $2,000; Commercial Union, $2,000; Liverpool, London & Globe, $2,000; total, $10,000. Dawes & Co., on stock of ales, etc., Imperial, $3,000; North British, $2,000; total, $5,000. Mrs. Davis, on stock of dry goods, British American, $2,000; Lancashire, $2,000; total, $4,000. H. Swain, tobacconist, Northern, $2,200.

—The value of a man's leg has been differently estimated by juries at $20,000 and $45,000, the price increasing each time very heavily. The case was this: Some two or three years ago a Chicago commercial traveller, named C. H. Worthen, was injured at the Grand Trunk Junction. He was coming to Detroit on a Grand Trunk train, and when approaching the junction stepped out upon the platform. A slight collision occurred, and he was thrown between the cars, and so injured as to lose one of his legs. He brought suit against the company in Boston and got a verdict of $20,000. Upon the second trial the jury gave him $36,000. The railway company took the case up into New Hampshire for a third trial, and the jury gave the plaintiff a verdict of $45,000, and this verdict has been sustained by the court.

—London had 2,194 fire alarms during 1880; 206 were false and 117 chimneys. Compared with 1879, this shows an increase of 153. 33 lives were lost and 127 injured. 21,072,730 gallons of water were used, one-half of which was taken from the river, canals and docks, and the remainder from the street pipes. The brigade includes 52 land fire engines, 5 movable land stations, 117 fire escape stations, 4 floating stations, 3 large hand steam fire engines, 35 small do., 73 6-inch manual fire engines, 37 under 6-inch do., 135 fire escapes and long scaling ladders, 3 steam floating fire engines, 1 steam tug, 3 barges, 17 hose carts, 15 vans, 2 trollies, 58 telegraph lines, 170 miles of telegraph, 6 fire alarm circuits with 40 call points, 485 firemen, including chief, superintendents and all ranks, 97 firemen are employed during the day and 212 by night, making 309 in all. The remainder are for general work at fires.

—Seven persons were drowned or killed by a collision of two British vessels on the Yangtse River, China, some time ago.

—The brigantine *Isabel*, of the Brazilian line, has been wrecked on the coast of Newfoundland, and her crew are said to have been lost.

—The Williamsport, Pa., Industrial Association, composed of the principal business men of that city, are making an organized effort to secure the establishment of new industries at that place

POSTAL TIME-TABLES.

Post Office, Ottawa.

ARRIVAL AND DEPARTURE OF MAILS.

Mails				Delivered
[illegible]				
Hull				6 00 / 7 30
Aylmer, [illegible]				
North Shore & Montreal				4 00
Gatineau Route				6 00
New Edinburgh				7 30
Billings Bridge				2 10
British, via N. Y. (M.)		8 00		
British, via Halifax (Thursday)		12 00	noon	
British supplementary		1 30		

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

G. P. BAKER, Postmaster.

Post Office, Montreal.

MONTREAL, July 5, 1880.

DELIVERY A.M.	DELIVERY P.M.	MAILS.	CLOSING A.M.	CLOSING P.M.
		ONTARIO & WESTERN PROVINCES.		
8 & 8 40		*Ottawa by railway	8 15	8 00
8 & 8 40		*Provinces of Ontario, Manitoba & British Columbia	8 15	8 00
	6 15	Ottawa River Route up to Carillon	6 00	
		QUEBEC & EASTERN PROVINCES.		
	8 05	Quebec, Three Rivers, Berthier and Sorel, by Q.M.O. & O. Ry		1 50
8 00		Quebec by Steamer		6 00
8 00		†Quebec by G.T.R		8 00
8 00		†Eastern Townships, Three Rivers, Arthabaska and Rivière du Loup Ry		8 00
	12 50	Occidental Ry. Main Line to Ottawa	7 00	..
9 20		Do. St. Jerome and St. Lin Branches		4 45
11 30		St. Remi & Hemmingford Ry		2 00
8 00	12 45	St. Hyacinthe, Sherbrooke, etc	6 00	2 30 & 8
8 00		Acton & Sorel Ry		8 00
10 00		St. Johns, Stanbridge and St. Armand Station	6 00	
10 00		St. Johns, Vermont Junction & Shefford Rys		2 15
10 00		South Eastern Ry		5 15
8 00		†New Brunswick, Nova Scotia and P.E.I		8 00
		Newfoundland forwarded daily on Halifax, whence despatch is by Packet leaving 6th and 20th July		
		LOCAL MAILS.		
11 30		Beauharnois Route	6 00	
11 30	...	Boucherville, Contrecoeur, Varennes and Vercheres		1 45
10 00		Cote St. Paul	6 00	
11 30	6 30	Tanneries West	6 00	2 00
.....	6 30	Cote St. Antoine and Notre Dame de Grace		12 45
11 30		St. Cunegonde	6 00	
11 30		Huntingdon	6 00	2 00
10 00	5 30	Lachine	6 00	2 00
10 30		Longueuil	6 00	1 45
10 00	..	St. Lambert		2 30
10 00		Laprairie	6 00	2 30
10 00		Pont Viau, Sault-au-Recollet		3 30
8 00		Terrebonne and St. Vincent		1 45
8 30	2 30 & 6	Point St. Charles	8 00	1 15 & 5
...	1 30	St. Laurent, St. Martin and St. Eustache	7 00	
10 00		North Shore Land Route to Bout de l'Isle		3 30
9 00	5 30	Hochelaga	8 00	2 50 & 5
		UNITED STATES.		
8 & 9 40		Boston and New England States, except Maine.	6 00	5 40
8, 8 40 & 10 30		New York and Southern States	6 00	2 15 & 5 40
8 00	12 30	Island Pond, Portland and Maine		2 30 & 8
8 & 8 40		*Western and Pacific States	8 15	8 00
		GREAT BRITAIN, ETC.		
		By Canadian Line (Friday)		7 30
		By Canadian Line (Supplementary—Saturday)	6 00	
		By Canadian Line, Germany (Friday)		7 30
		By Cunard (Monday)		5 25
		Supplementary, see P O. weekly notice		2 15
		By Packet from New York for England (Wednesday)		2 15
		By Hamburg American Packet to Germany (Wednesday)		2 15
		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.		2 15

*Postal Car Bags open till 8 45 a.m and 9.15 p.m.
† " " 9 00 p.m.
The Street Boxes are visited at 9 15 a.m., 12.30, 5.30 and 7.30 p.m.
Registered Letters should be posted 15 minutes before the hour of closing ordinary Mails, and 30 minutes before closing of English Mails.

RAILWAY TIME TABLES.

Canada Central Railway

CHANGE OF TI[illegible]

[illegible] MONDAY, [illegible]

[illegible]

Brockville, [illegible] June, 1880.

ST. LAWRENCE AND OTTAWA RAILWAY.

On and after THURSDAY, 10th JUNE, 1880 trains will run as follows:—

LEAVE OTTAWA.

For the East, West, South and South East	11 15 a m
For the East	2 00 p.m
For both East and West	10 30 p.m.

ARRIVING IN OTTAWA.

From both East and West	6 00 a m
From the East, South and South East	4 00 p m
From the West	[illegible] p m.

Going West take the 11 a.m. train. Ample time for dinner at Prescott Junction.

Sure Connections with Grand Trunk Trains to and from both East and West, and with those of the Rome, Watertown & Ogdensburg and Lake Champlain and Utica & Black River Railways at Ogdensburg, to and from New York, Boston, and all points South and East.

A Steamboat Express Train will leave Ottawa on Tuesdays, Thursdays, Saturdays and Sundays, at 8 a.m., connecting with the different lines of steamers on the St. Lawrence, for both East and West.

A Sofa Car will be run on the Night Trains between Ottawa and Prescott Junction.

Trains are run on Ottawa time.

WALTER SHANLY,
General Manager, Ottawa.

OTTAWA, July 26, 1880.

Q. M. O. & O. RAILWAY.

CHANGE OF TIME.

COMMENCING on Wednesday, June 23rd, 1880, trains will run as follows:—

	Mixed.	Mail.	Express.
Leave Hochelaga for Hull	1.00 a.m.	8.30 a.m.	5.15 p.m.
Arrive at Hull	10.30 a.m.	12.40 p.m.	9.25 p.m.
Leave Hull for Hochelaga	1.00 a.m.	8.20 a.m.	5.05 p.m.
Arrive at Hochelaga	10.30 a.m.	12.30 p.m.	9.15 p.m.
		Night Passenger	
Leave Hochelaga for Quebec	6.00 p.m.	10.00 p.m.	3.00 p.m.
Arrive at Quebec	8.00 p.m.	6.30 a.m.	9.20 p.m.
Leave Quebec for Hochelaga	5.30 p.m.	9.30 p.m.	10.10 a.m.
Arrive at Hochelaga	8.00 a.m.	6.30 a.m.	4.40 p.m.
Leave Hochelaga for St. Jerome	5.30 p.m.		.....
Arrive at St Jerome	7.15 p.m.	Mixed.	.....
Leave St. Jerome for Hochelaga	....	6.45 a.m.	.....
Arrive at Hochelaga	....	9.00 a.m.	.....

[Local trains between Hull and Aylmer.]
Trains leave Mile End Station seven minutes later.
☞ Magnificent Palace cars on all passenger trains and elegant sleeping cars on night trains.
Trains to and from Ottawa connect with trains to and from Quebec.
Sunday trains leave Montreal and Quebec at 4 p.m.
All trains run by Montreal time.

GENERAL OFFICE, 13 Place d'Armes Square.
TICKET OFFICES, 13 Place d'Armes and 202 *St. James St.*, Montreal, and opposite the St. Louis Hotel, Quebec.
L. A. SENECAL, General Superintendent.

INTERCOLONIAL RAILWAY.

SUMMER ARRANGEMENTS, commencing 14th June, 1880:—

Through Express Passenger Trains run daily (except Sunday) as follows:—

Leave	Point Levis	7.30 a.m.
"	River du Loup	1.00 p.m.
Arrive	Trois Pistoles	2.05 p.m.
"	Rimouski	3.41 p.m.
"	Campbellton	7.56 p.m.
"	Dalhousie	8.31 p.m.
"	Bathurst	10.15 p.m.
"	Newcastle	11 40 p.m.
"	Moncton	2.10 a.m.
"	St. John	6.05 a.m.
"	Halifax	10 45 p.m.

This train connects at Chaudière Curve with Grand Trunk train leaving Montreal at 10 p.m.

The trains to Halifax and St. John run through to their destination on Sunday.

☞ The Pullman car leaving Montreal on Monday, Wednesday and Friday, runs through to Halifax, and that leaving on Tuesday, Thursday and Saturday, to St. John.

☞ The trains leaving Halifax at 6 p.m. and St. John at 10.25 p.m., and which reach Montreal at 6.30 a.m. by connecting at Chaudière Curve with the Grand Trunk train at 8.50 p.m., remain at Campbellton over Sunday.

For information in regard to passenger fares, tickets, rates of freight, train arrangements, etc., apply to
CAPT. MacCUAIG, Sparks St., Ottawa.
D. POTTINGER, Chief Superintendent.

PETROLEUM.

THE BRITISH MARKET.

[illegible] PETROLEUM REPORT.

[illegible], February 21st, 1881.

[illegible]—Values kept firm till the [illegible] of the week, when a general collapse took place, [illegible] falling about [illegible] per gall. in two days [illegible]. At present low figures spot is in good demand, but there is little doing in futures. Prime [illegible] Standard White Pennsylvanian sold at [illegible] to [illegible]. March at [illegible] to [illegible]. March [illegible] to [illegible]. April [illegible] changed [illegible]. September-December [illegible] sellers.

[illegible] market [illegible] 7½d. [illegible].

Naphtha.—Quiet and unchanged.

Coal Oil.—No business.

[illegible].—Declined on spot from [illegible] to [illegible], but [illegible] March-April business done from [illegible] to [illegible]. May [illegible] to [illegible]. June [illegible] sellers and August-December offers at [illegible].

The stock at wharves to-day is [illegible] barrels, and deliveries for the past week are [illegible] barrels, excluding [illegible] barrels delivered overside.

PETROLEUM OIL.

Prices of [illegible] Petroleum	1881 Refined	1881 Crude	1880 Refined	1880 Crude
Stock this day	[illegible] bbl, [illegible] cs		14,264 bbl, 612 cs	
Landed last week	[illegible] bbl		21,727 bbl, 0 cs	
Delivered last week	*11,717 bbl, [illegible] cs		7,301 bbl	

* Including 415 barrels transferred from one wharf to another.

COAL OIL.

	1881 Refined	1881 Crude	1880 Refined	1880 Crude
Stock this day	275 bbl		1,204 bbl	
Landed last week	— bbl		— bbl	
Delivered last week	97 bbl		110 bbl	

Above represents stocks and movements at London and Thames Haven Public Wharves only.

PETROLIA OIL REPORT.

We have the pleasure of reporting a revival in the demand for crude during the past week, and a slight appreciation in value. Transactions during the week have been quite numerous, and sales are registered on the bulletin board at the office of the Tanking Co., at $1.55 in tank. Refined is fairly active, with prices as before, 20 to 21 cents. The attention of the trade generally is turned towards Ottawa, in expectation of shortly learning the course determined upon by the Government as to the proposed changes in the law regulating the manufacture of petroleum. Hon. Mr. Blake has signified his desire for the removal of the specific gravity, but when he learns the evil results to both producers and consumers which would follow such action we believe he will be content with a relaxation of the present stringency. Drilling operations in the producing territory are being prosecuted *vigorously.*

In their lumber yard J. & J. Kerr are down 275 feet. They are moving a rig in the grove.

Near the King territory W. Stevenson is building a rig.

D. M. Kennedy is in the top soap on lot 9, 15th concession.

Christner & Co. are finishing with a small show in Marthaville.

F. Ward is building a rig on lot 8, 13th concession.

H. Sykes has finished with a small show on lot 8, 12th concession.

Peat & Co. have struck a three barrel well on lot 6, 11th concession.

J. L. Englehart is drilling in the lower line on lot 8, 12th concession.

Crosier & McLean are moving a rig to lot 2, 11th concession.

John Ha[illegible] is moving a rig to lot [illegible], 12th concession.

Jas. Rainsberry has finished with a good show on his own farm.

On lot 1, 12th concession, J. Leckie is getting a rig ready.

McKenzie & Co. are down 200 feet on lot 1, 11th concession.

Corey & Moore are down 400 feet in Sarnia Township.

A little south of Gleeson's refinery, J. McCarty is down 360 feet.

On the flats Hoskins & Smiley have struck a two barrel well.—*Petrolia Topic.*

THE SUEZ CANAL.

The following is a return of the ships and tonnage which passed through the Canal in 1880 and the preceding year:—

	1880 Ships.	1880 Gross Tonnage.	1879 Ships.	1879 Gross Tonnage.
English	1,862	3,[illegible]	1,144	2,095,[illegible]
French	102	271,[illegible]	93	202,017
Dutch	70	174,455	61	139,024
Italian	62	106,597	62	94,142
Austrian	60	103,070	46	71,460
Spanish	33	84,617	25	64,408
German	33	32,361	16	21,545
Russian	22	42,899	7	8,799
Egyptian	16	13,936	12	9,266
Danish	10	13,679	6	7,729
Norwegian	7	11,078	6	9,154
Ottoman	10	9,858	5	4,764
Portuguese	6	5,252	6	7,166
Belgian	1	1,751	1	3,445
Liberian	2	1,257		
American	1	1,225	1	1,646
Zanzibar	1	1,124		
Japanese	1	986	1	2,121
Brazilian	1	940		
Swedish	1	361		
Servian	..		2	1,920
Siamese	..			....
Totals — including fractions of tons	2,026	4,344,519	1,477	3,236,942

—It is now over thirty years since the first grant of land was made to railroads in the States. The railways were then few and struggling for an existence, and capitalists were not very favorably impressed with the idea of investing their funds in railroads. The government was forced to come to the aid of those commercial highways. Few persons have any very clear idea of the amount of land that the United States Government have given to railroads. In Illinois there has been granted for the above purpose 2,595,053 acres, in Iowa 6,795,529 acres, in Mississippi, 2,062,240 acres, Alabama, 3,579,120 acres, in Florida, 2,300,114 acres, in Louisiana, 1,575,720 acres, in Missouri, 2,085,160 acres, in Arkansas, 4,878,149 acres, in Michigan, 4,112,480 acres, in Wisconsin 4,806,436 acres, in Minnesota 9,902,041 acres, in Kansas, 9,370,000 acres. In addition to the above extremely liberal grants, the United States has given to the Pacific Railroad corporations to the amount of 159,486,766, making a grand total of 215,393,807 acres. At a moderate estimate, the value of the above lands amounts to fully $539,009,529.

THE MONEY MARKET.

TORONTO STOCK REPORT.

BANKS.	Shares	Capital subscribed	Capital paid-up	Rest	Dividend last 6 months	Closing Prices, March 9, Sellers	Closing Prices, March 9, Buyers
[illegible rows — Banks]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
LOAN AND SAVINGS COMPANIES							
[illegible rows — Loan companies]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Huron and Erie Savings and Loan Society	50	1,000,000	[illegible]	[illegible]	6	153	150
Imperial Savings and Investment Co.	50	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	119
London and Canadian Loan and Agency Co.	50	4,000,000	[illegible]	[illegible]	5	[illegible]	[illegible]
London Loan Company	50	434,700	221,700	[illegible]	4½	111½	110
Manitoba & N. W. Loan & Investment Co.					[illegible]	[illegible]	[illegible]
National Investment Co.	100	1,450,000	[illegible]	[illegible]	[illegible]	141	110½
Ontario Loan and Debenture Company	50	1,000,000	981,700	108,000	5		171
Ontario Savings and Investment Society							
People's					3½		110
Real Estate Loan and Debenture Co.							101
Union Loan and Savings Company	50	500,000	485,212	105,000	5	152	145
Western Canada Loan and Savings Company	50	1,000,000	1,000,000	340,000	5		1[illegible]
INSURANCE, &c.							
British America	50	500,000	500,000	645,393	5	152	149
Western Assurance	40	800,000	400,000	835,000	7½	220	218½
Canada Life	400	1,000,000	125,000	96,004	7½		216
Confederation Life Association	100	500,000	50,000		5		300
Consumers' Gas	50	600,000	600,000		5	120	119
Dominion Telegraph	50	711,7[illegible]	711,709		2½	94	
Montreal Telegraph	40	2,000,000	2,000,000				129
Globe Printing Co.					4		

DEBENTURES, &c.	INTEREST PAYABLE.	WHERE PAYABLE.		
Dominion Government stock, 5 per cent	30th April and 31st Oct	Ottawa, Montreal, and Toronto		1[illegible]
County (Ontario), 6 "				110
Township " 6 "				1[illegible]
City of Toronto 6 "				110
Toronto, Grey and Bruce bonds, 6 "	January and July	London (Eng), & Toronto		
Toronto and Nipissing bonds	January and July	Toronto	.....	

MONTREAL STOCK REPORT.

NAME.	Par value	Capital subscribed	Capital paid-up	Rest.	Dividend last 6 Months	Closing Prices March 9. Sellers.	Closing Prices March 9. Buyers.
BANKS. British North America	250	$ 4,866,666	$ 4,866,666	$ 1,170,000	2½		
Canadian Bank of Commerce	$ 50	6,000,000	6,000,000	1,400,000	4	130½	129
Dominion Bank	50	970,250	970,250	355,000	4	155	151½
Du Peuple	50	1,600,000	1,600,000	240,000	2	91½	91
Eastern Townships, x d	50	1,469,000	1,382,037	300,000	3½	110	114
Exchange Bank	100	1,000,000	1,000,000	50,000		61	62½
Federal Bank	100	1,000,000	1,000,000	220,000	3½	141	137
Hamilton	100	1,000,000	745,100	50,000	4		100
Hochelaga						80	72
Imperial Bank	100	1,000,000	998,000	100,000	3½		115
Jacques Cartier	25	500,000	500,000		2½	98	97
Maritime	100	800,500	539,400				
Merchants' Bank of Canada	100	5,798,300	5,506,010	475,000	3	119	118½
Molson's Bank	50	2,000,000	1,998,500	100,000	3½	110	109
Montreal	200	12,000,000	11,999,200	5,000,000	4	163½	157½
Nationale	100	2,000,100	2,000,000	300,000	2½	91	92
Ontario Bank x d	40	3,000,000	2,997,000	100,000	3	88½	86
Quebec Bank	100	2,500,000	2,500,000	475,000	3		109½
Standard						107	105
Toronto x d	100	2,000,000	2,000,000	500,000	3½	148	146½
Union Bank	100	2,000,000	1,992,990		2	91½	90½
Ville Marie	100	1,000,000	919,370			91	91½
Canada Cotton Company	100					131	122½
Dominion Telegraph Company	50	711,709	711,700		2½	94½	93
Montreal Telegraph Company	40	2,000,000	2,000,000		4	127½	126½
Montreal City Gas Company	40	2,000,000	1,800,000		5	134	133½
Montreal City Passenger Railway Company	50	600,000	600,000		5	117½	115
Montreal Loan & Mortgage Society	100	1,000,000	650,000	75,000	3½	110	108
Richelieu & Ontario Navigation Company	100	1,500,000	1,500,000		2½	70	69½
Intercolonial Coal Company	100					29	28
Quebec Fire Association Co.	100				5	67	66½
Silver Plume Company	100					56½	57½
Royal Canadian Insurance Co.	50				5	87	86
Graphic Printing Company's Bonds						81	80
Dominion 5 p.c. Stock						110	107½
Montreal Harbor 6 p.c. Bonds							
Montreal 5 p.c. Stock						108	105½
Do. 7 p.c. do.							
Do. Corporation Bonds						108	106½
Do. Waterworks do.							
Montreal Building Association	50					70	65
Canada Shipping Company						111	109½
Dundas Cotton Company						126½	125½
Montreal Cotton Company						130	108
Canada Paper Company						125	116
Canada Central Bonds						98	97
Bell Telephone Company						99½	98½
Champlain & St. Lawrence Railway Bonds						87	86½
Graphic Stock						30	40

—The Montreal *Star* obtains the following particulars of a new and important enterprise to be carried out by Messrs. Shickluna, the extensive shipbuilder of St. Catharines, as the result of the deepening of the Welland Canal, and the important bearing it will have on the extension of the inland carrying trade of Canada. In order to meet the anticipated wants of shipowners, the Messrs. Shickluna are about to build, during the coming summer, a large dry dock, consisting of a basin and a lifting lock combined, an inner dock for repairing, and another one to lengthen vessels or build new ones in. The estimated cost of these works is over $50,000. By their erection they will be enabled to dock the largest vessel on the lakes. They contemplate building several large craft during the summer, and at present have a model of a vessel 200 feet long, 16 feet in the shallowest part in depth of hold, or an average depth of 18 feet; beam, 37 feet. In a depth of 12 feet of water they calculate that this vessel will carry 50,000 to 60,000 bushels of wheat. It has been questioned by some people whether vessels of such large capacity could successfully navigate on canals after the improvements are completed, and we think the action of such men as Messrs. Shickluna, whose experience is unequalled in matters of this kind, should be sufficient to convince the most skeptical on this subject. With vessels of fifty or sixty thousand tons and free navigation, which it is hoped will be obtained, the Canadian route has nothing to fear from the competition of the Erie Canal.—*Belleville Intelligencer.*

—The *Timber Trades Journal*, of Feb. 12th, says: From America we are told the coming season will witness one of the largest outputs of logs that has been known for several years; but such is the ever increasing demand for building timber in that region, where cities rise up with mushroom-like rapidity, that we do not anticipate any great glut of pine in the London market. We have witnessed an anomaly of the trade in the fact that, with a shortage of pine stocks, prices have gone somewhat back, and, supposing the shipments of this particular description to be the reverse of those of last year, it would only be another peculiarity if the values increase with the supplies. Considering impartially the present aspect of the trade, coupled with the large supply of timber on hand, we doubt, even with a moderate production on the north of Europe side, that sellers will be able to keep values at anything like the quotations a month ago. There is a desire among shippers' representatives here to press sales at some sacrifice, and they would not do this if they were confident the production for 1881 would be a small one. It is a somewhat thankless task to decry prices, but after the experiences of the past season we must not let our columns be made the medium for statements that bear a one-sided character, without keeping our readers fully alive to the state of the stocks on this side. It is open to shippers, and within their right, to state to a deal, if they can, what their productions will be, but when they go into the field of estimates, and profess to give us a general review of not only their own productions, but that of the whole body of mill owners, while they admit a difficulty in getting a correct estimate, and can at the best furnish only an approximate one, we are obliged to look back and compare the statements previously made by the Swedish statisticians with the result of the season's shipments, and if these were not borne out, there is nothing that has occurred since why the deductions they now make should be more trustworthy. At any rate London is perfectly independent of the Low. shipments, and could carry on very well if the northern ports of Europe were blocked till midsummer, unless something extraordinary in the way of demand should crop up.

DOMINION TRADE REGISTER AND INDUSTRIAL DIRECTORY.

AGRICULTURAL IMPLEMENTS

A. S. WHITING MANUFACTURING CO., [illegible]—Manufacturers of [illegible].

ANILINE DYES

EMIL THOURET & CO., Montreal—Agents [illegible].

COTTON BROKERS

M. WRIGHT, Dundas, Ont.—Sole agent [illegible] Orders & McIntyre, cotton factors, [illegible].

COTTON MILLS

DUNDAS COTTON MILLS CO., Dundas, [illegible] denims, tickings, yarns, etc.

HAMILTON COTTON MILLS CO., Hamilton [illegible] tickings and yarns.

JOHN MACKAY, Dundas, Ont.—Manufacturer [illegible] description [illegible] cotton warps and yarns.

EDGE TOOLS

R. J. WILSON, Dundas, Ont.—Manufacturer [illegible] mattocks, grub hoes and railway contractors' [illegible].

ENGINES AND BOILERS

O. C. MORRISON, Hamilton—Engines, [illegible] hammers, etc.

FILES

THOS. GRAHAM, Toronto—Manufacturer of files and rasps.

FURNITURE

OSHAWA CABINET CO., Oshawa, Ont.—Furniture manufacturers. Toronto branch, 97 Yonge St. [illegible] branch, 417 and 419 Notre Dame St.

AMERICAN BRACKET CO., Hamilton, Ont.—Manufacturers of all kinds of fancy furniture, brackets.

GLASSWARE.

HAMILTON GLASS CO., Hamilton.—Manufacturers of flint and green glassware.

GLOVE MANUFACTURERS

W. H. STOREY & SON, Acton, Ont.—Manufacturers of gloves and mitts in every variety and style.

HUBS, SPOKES AND BENT GOODS

F. W. HORE & SON, Hamilton, Ont.—Manufacturers of spokes, rims, shafts, poles, sleigh and cutter stuff.

INKS.

F. F. DALLEY & CO., Hamilton, Ont.—Manufacturers of inks, blackings, harness oils, perfumery, etc.

IRON WORKS.

CANADA SCREW CO., Dundas.—Manufacturers of iron and brass screws, bolts and rivets.

COWAN & CO., Galt.—Manufacturers of every description of wood working machinery.

DOMINION BOLT CO., 87 St. Peter St., Montreal.—Manufacturers of every description of bolts, hot pressed nuts, railway spikes, bridge, boiler and iron rivets. Works, Toronto.

HAMILTON BRIDGE & TOOL CO., Hamilton.—Iron railway and highway bridges and iron working machinery.

McKECHNIE & BERTRAM, Dundas.—Machine tools and wood working machinery.

OSHAWA MALLEABLE IRON CO., Oshawa, Ont.—Manufacturers of malleable iron; also Coe and Taft [illegible] screw wrenches.

KNITTING MILLS.

S. LENNARD & SONS, Dundas.—Manufacturers of plain and fancy hosiery.

LEATHER BELTING.

DOMINION BELT AND HOSE CO., Toronto.—Oak tanned belting, lace leather, etc.

ORGAN BUILDERS.

BOLTON & SMITH, 167 Mountain St., Montreal.—[illegible] and repairing attended to.

DANIEL BELL & CO., Toronto.—Manufacturers of the "Excelsior" organs.

S. R. WARREN & SON, Toronto.—Manufacturers of church organs.

PAPER MANUFACTURERS.

CANADA PAPER CO. (Limited), 374, 376 & 378 St. Paul St., Montreal.—Manufacturers and importers of all kinds of papers. Mills at Windsor, Sherbrooke and Portneuf.

DOMINION PAPER CO., 87 St. Peter St., Montreal.—Manufacturers of manilla, book and news print [illegible] board middles and colored papers.

JOHN FISHER & SONS, Dundas.—Manufacturers of printing and wrapping papers.

WM. BARBER & BROS., Georgetown.—Manufacturers of book and fine papers.

SAW MANUFACTURERS.

R. H. SMITH & CO., St. Catharines.—Manufacturers of all kinds of saws, plastering trowels, Shaw knives, etc. Sole manufacturers for the Dominion of Canada of the celebrated "Simond's Saw."

SHURLY & DIETRICH, Galt, Ont.—Manufacturers of circular and cross-cut saws, plastering trowels, etc.

SCALES.

CANADA SCALE WORKS, Jas. O. White & Co., Toronto.—Manufacturers of all kinds of standard scales. Factory, 102 Adelaide St. East.

SPICES, ETC.

R. D. VAN DE CARR & SON, Toronto.—Manufacturers and importers of coffees, spices, cream tartar, mustard, etc.

STEREOTYPERS, ENGRAVERS, ETC.

F. DIVER & CO., Toronto.—Electrotypers and stereotypers. Designers and engravers on wood.

TELEPHONES.

HOLT TELEPHONE CO., Toronto.—Telephones sold outright $5 to $20 per pair; wire 3c. to 5c. per rod [illegible] two miles.

WIRE WORKS

B. GREENING & CO., Hamilton, Ont.—Manufacturers of wire ropes, cloth and general wire workers.

TIMOTHY GREENING & SONS, Dundas, Ont.—Manufacturers of the strongest description of steel wire [illegible] malt kiln floors, and general wire weavers.

WOODEN GOODS

C. T. BRANDON & CO., Toronto.—Have special tools and machinery for the manufacture of all small wooden articles. Correspondence solicited.

WOOLLEN MANUFACTURERS.

J. ROUTH & CO., Cobourg.—Woollen Manufacturers.

JOHN WARDLAW, Galt, Ont.—Manufacturer of Scotch fingering, wheeling and knitting yarns.

WOOLS AND COTTON WARPS

WINANS & CO., Toronto.—Dealers in wools and cotton warps.

—Large quantities of a peculiar kind of ore were discovered at the Hull Iron Mines, now in operation, and at first thrown aside as useless. On further examination the ore proves to be chromic iron, valuable for the acids it contains, used in the manufacture of paints. The ore is quoted at $50 per ton in the English market.

THE DRY GOODS TRADE.

UNITED STATES MARKETS.

[illegible] States Economist says: [illegible] which the retail merchant [illegible] the [illegible] much in need of the supply [illegible] is [illegible] just now somewhat under the [illegible] [illegible] especially true of the [illegible] cottons. In other [illegible] the supply with which [illegible] for their needs for the time being [illegible] West and North-West the [illegible] of [illegible] orders has been of more moderate [illegible] many parts of [illegible] snow and ice found holding the general [illegible] spring supplies in more or less [illegible] dress goods, prints, etc., the [illegible] of good proportions, and [illegible] have in many instances been [illegible]. In low and medium spring woollens [illegible] cloakings, Shetland shawls, etc., and [illegible] and summer underwear the demand has been steadily enlarging, and in many lines of the [illegible] satisfactory sales have resulted. A leading [illegible] remarked, "Business this week has been [illegible], and we have disposed of large quantities [illegible] to the South and South-West, as well as to the interior. With a week or so of good weather, our [illegible] will be unable to hold the country dealers who will visit this market for spring supplies." All with whom we came in contact in jobbing circles spoke hopefully and encouragingly of the prospects of an enlarged and very healthful spring trade—but seemed to deprecate the action of Congress in relation to the Funding Bill, which, as before remarked, has been vetoed by the President in accordance with the wishes of business men generally. Package trade in cottons and woollens during the past week has, as a general thing, ruled moderate, though in some lines of the same showing a fair increase in the takings on the part of jobbers and clothiers. In brown shirtings and sheetings the new demand has been fair as to the total transactions consummated, but generally modest in detail. Supplies of the leading corporation brands are limited, and the receipts coming forward from the mills are almost entirely absorbed in filling back orders. Prices are firm and are being steadily maintained. In outside makes or less desirable brands the position is not quite so strong and selling values have a slightly easier tone, without any quotable changes of moment to note. In bleached goods the request for medium and fine shirtings showed a fair improvement in volume at firm steady figures. Stocks of desirable makes of these are also rather measured. For colored cottons the leading brands are without much especial change, but in excellent shape, firm in price and in fair movement on back account and for current orders. The export request for staple cottons exhibits marked improvement, and some styles are well under control for this direction alone. For ginghams, cotton dress goods, prints, etc., there has been a fair to improving package request, with the most relative activity in the former. In men's wear woollens the position of the general market is without especial change, and selling values on the principal makes are being steadily and firmly held. In spring weights the new duplicating request has been of moderate proportions, although having secured a little better attention from buyers. Freer deliveries, however, have seemingly been effected on back account. In new fall woollens additional new openings have been made in a quiet or partial way, on which, considering the condition of trade generally, a moderately fair complement of orders has been placed, but as a rule the season for them is as yet much too early to make any extended remarks as to the future of trade in this direction. However with improvement of the weather, the indications are that towards the middle of the month trade will open satisfactorily. In the present condition of affairs, for obvious reasons, we defer any extended notice of such openings as have been made, or any very special references to styles, qualities and prices, leaving that to the time when the exhibitions become more general and the season a little more fully developed. In other classes of woollens the market is without especial change, and the new movement from agents' hands has generally been moderate.

Silk.

The manufacture of American silk goods, such as sewings, twist and floss silk, broad goods, handkerchiefs, ribbons and laces, trimmings and small goods, and the silk value in mixtures, amounted in round figures in 1879 to the value of $30,000,000. This was subdivided as follows:—

Sewings, twist and floss silk	$6,830 485
Broad goods	7,060,825
Handkerchiefs, ribbons and laces	9,621,630
Trimmings and small goods	6,438,249
Silk value in mixtures	1,8,750
	$29,383,849

The product of 1880, so far as we can learn at present, will show a very material increase over the previous year. In fourteen States of the Union we have over 375 silk manufacturers. The States having the largest representation of these are New Jersey, Connecticut, New York, Pennsylvania, Massachusetts and California. Of the silk manufacturing establishments, New Jersey alone contains over one hundred, of which Paterson represents about eighty. The market for the spring season opens with a very fair demand for goods. Agents and makers have sold off all surplus jobs in stock carried over from last year, and are now offering new goods, which are meeting with ready sale. Prices on the average are about five per cent lower than those of last year. On some styles of goods the rates are unchanged. On others there is ten per cent reduction, which makes [illegible] per cent about the mean. Trade early last fall was very good, but later on in the season it was not so satisfactory, from the fact that the market was over-stocked with goods. The result was that large quantities of goods were carried over, and these within the past six weeks have been sold at reduced prices, and now have probably gone into consumption. From all indications the outlook for spring trade is very promising. No advance in prices is looked for. The cost of the raw material is unprecedently low, although of late there has been a slight tendency towards stiffer values.

Furs, Skins, Etc.

The fur and skin trade during the present season has been an unusually active one, with firm, strong upward prices prevailing for the same. For seal skins the demand has been brisk, and selling values are very firm. The present season's sales will end with the close of March. The supply of seals comes principally from Alaska, which furnishes about 100,000 yearly. From other sections, including Cape Horn and the Northern Pacific, the average annual yield is about 60,000 additional. From the Shetland Island there is little, no product of consequence now received [illegible] almost [illegible] extinct. A good [illegible] [illegible] in length from 2 to [illegible] [illegible] choice [illegible]. [illegible] as it takes [illegible] skins and [illegible] usually [illegible]. The [illegible] for [illegible] cent, and the [illegible]. [illegible] very [illegible] the [illegible] [illegible] They are [illegible] [illegible] and [illegible] in [illegible] [illegible] principally from the Hudson's Bay [illegible] sold according to the old [illegible] custom and are worth [illegible] from $[illegible] to $4 25 per pound [illegible] little or none of [illegible] manufacturing [illegible] some out of [illegible] [illegible] property and all kinds sell readily, the pale shades bringing about $8 [illegible] piece and the dark colors on an average about $12. For mink there has been a fair demand, but mostly from the Western States. This is still largely used for silk circulars, etc., the pale shades being the most fashionable. Coney and Russian black, however, have also been in good request at firm values, for trimming purposes. Skunks have also been in good request at a material advance over opening prices, especially for black, which started at 80 cents and are now worth $1 25 and $1 40 per piece. Muskrat has also met with good attention at fair prices, while racoon has been very active, with moderate stock on hand. Cross foxes, being a fancy article, often bring extreme prices, and this season have been in very good request. Red foxes have met with especial favor on the part of the Russians, and considerable quantities of these furs have been exported to that country during the season. Domestic squirrels appear to be of no value, while the Siberian have been selling well. In nearly all kinds and classes of furs and pelts the season has been an exceeding active and prosperous one. The only drawback has been the extreme cold weather, which, while it deferred trapping for some little time, increased the value and beauty of the fur by giving it longer time for growth. The fur season may be said to continue the entire year through. The largest share of the peltries of the North-West are mostly shipped by the Missouri River, the receipts will necessarily be light until the ice and snow melt, making navigation of the same feasible. In skins such as deer, elk and antelope, for glovers' stock, trade has been also very active. Buffaloes have been in good sale. The supply has not been as large as usual, the receipts this season being estimated at about 30,000 robes. This is probably owing to the fact that the Indians have driven large herds over the British borders, and then killed the beasts and tanned the skins, which have to pass through the Canadian customs ports, paying a duty of 15 per cent. This duty makes their importation through Canada almost prohibitory. Prices for buffalo hides range ordinarily from $4 to $10 per piece, according to size and quality, the mean average, however, for good skins is about $8 to $10.

Woollen Goods.

On such makes of new fall woollens as are open more attention has been accorded by the clothing trade, and in some instances very fair orders for future delivery have been placed. Buyers have been coming in in good numbers, although taking hold of new goods to some extent, yet their selections, as a rule, have not been up to expectations. The weather continuing so changeable and unfavorable in character has naturally militated much against new business in this department, and until it becomes more settled and pleasant much improvement cannot reasonably be looked for. Buyers in the meantime, as is to be expected, will not largely anticipate their wants, but be very conservative in their purchases, confining them largely to their current needs. In spring weights, while the duplicating demand for the most desirable styles shows some increase, it may nevertheless be characterized as having been moderate. Of inferior or less popular patterns, including odds and ends, a number of lots have been moved at prices satisfactory to the buyer. However, in good patterns of fancy cassimeres and suitings selling values are being steadily maintained, and are firm on the basis of current quotations. Worsted coatings in new fall weights have been receiving comparatively fair attention for this stage of the season, and some good orders have been placed. In spring styles, new business, aside from clearing up the residue of stocks, has not been very active. However, the leading makes have their product under the control of orders, and liberal deliveries are being daily executed. In overcoatings, save a moderately fair request for low and medium chinchillas and fancy back styles, there has not been much movement of importance to note. Some makes are well sold to arrive. For some styles of cloakings there has been a comparatively fair inquiry for small lots, but the general request has exhibited but little animation. Satinets of the most popular suiting and overcoating patterns are sold close up and ahead, at firm, steady prices. Repellents are quiet and unchanged. Flannels continue in moderate re-assorting request at the current quotations. Blankets are limited in stock, firm in price, but more or less light in movement. In Kentucky jeans and doeskins there is very little change to note in first hands, the demand having ruled moderate. With the jobbers, however, there has been a moderately fair to increasing trade in these, as with other classes of woollens.

—The proprietors of the city woollen mills have disposed of their corn meal machinery, and its space will be filled with additional woollen machinery. They have also secured Mr. Grant, of Elora, as manager, whose ability for the position is so well and favorably known in Western Ontario. Mr. Grant will enter upon his duties early next week, when Mr. Hewton starts to New York, Massachusetts, and some other manufacturing centres, to purchase additional machinery. The proprietors intend to double their present capacity.

The shipping of Hamburg shows a constant increase. Last year it was higher than any previous year, the arrivals amounting to 2,760 806 in registered tonnage. The number of vessels rose from 5,263 in 1873 to 6,024 last year. As to flag, Germany counts 2,620, England, 2,432, Holland, 302, Norway, 268, Sweden 108, Denmark, 90, and France, 89. Last year, 6,887 emigrants and passengers were conveyed from Hamburg to trans-Atlantic ports (some 44,000 more than last year). In the year ending July 1, 1880, the number of immigrants into the United States was 457 257. Of these, 71 603 were Irish, 52,451 English and 16,640 Scotch (148,697 in toto from Great Britain), 84,638 were from Germany, 33 186 from Sweden, 19,895 from Norway, 12,904 from Austria, 12,327 from Italy, 4,363 from Hungary, 6,575 from Denmark, 6,156 from Switzerland, 4,854 from Russia, 4,313 from France, 5,802 from China.

SAN FRANCISCO TRADE REPORT

We are now receiving supplies of Carbon Hill W[illegible]. This is a first class steam coal [illegible] recently introduced [illegible]. The [illegible] of February [illegible] the following [illegible] at test thereof: "The United States revenue steamer Wolcott took [illegible] Carbon Hill coal at the wharf at New Tacoma, January 15th, [illegible] for the purpose of testing the same as a steam coal. The report of Lieutenant [illegible] Mr. [illegible] to Captain [illegible] has been submitted [illegible] [illegible] with the [illegible], appended: That Carbon Hill coal is an easy kindler, free burning, non-coking coal, all consuming except [illegible] ash and clinker, which does not adhere to the grate bars or boiler plates, the best results being obtained by well [illegible] fires, of five or six inches depth of coal and very narrow spaced grate bars. Forty tons were taken on board this vessel January 15th, but have shown no signs of heating up to the date (February 2nd), although received in a wet condition. On the basis of an average speed of eight knots per hour, it propels this vessel 34.7 knots per ton of coal. On the same basis the Wilkeson coal drives this steamer 2?.292 knots per ton. With Seattle coal the distance attained per ton was 20.9 knots. Nanaimo coal from Chase river vein gave 27.6 knots per ton. The refuse from the several coals figured was as follows:—Carbon Hill, 9.02, Wilkeson, 26.07, Seattle, 21, Nanaimo leaves more clinker than any of the other coals. Runs are selected for comparison in which the conditions having a bearing on the experiments are as nearly alike as possible. It would, therefore, appear from the above results of the elaborate and exhaustive tests made by Mr. Marsilliot that the Carbon Hill coal, for steam making purposes, has a value 40 per cent. greater than that of either Wilkeson or Nanaimo, and 80 per cent greater than that of Seattle coal, while the refuse from the Carbon Hill coal is but a trifle compared to that of any other coal mined on the Pacific coast and compares favorably with any of the best domestic or foreign bituminous coals. There is a slight decline to be noted in Coos Bay and other coast coals resulting in a break of the combination ring, so far at least that some one or more of the dealers both here and in Oakland have kicked out of the traces, and broken the jobbing price that has been existing two months past. The arrivals of coal for the week past include the following—Empire from British Columbia with 740 tons Wellington; Gatherer, 2 200 tons do.; Fremont, 550 tons Carbon Hill from New Tacoma; Arcata, with 550 tons Coos Bay; Dunmore, from Glasgow, 1,940 tons Scotch; Joseph S. Spinney, from New York, has 200 tons Lehigh. Prices for cargoes to arrive have declined, as well as for shipments. Sales are reported at $6 75 for Liverpool steam and $7@7 50 for Australian; at the same time dealers are disinclined to make any reasonable offers for Scotch or West Hartley to arrive months hence. We omit spot quotations, as at best they are retail prices, no large transactions being made. The Antioch has 972 tons Seattle.—*Commercial Herald*.

RUSSIAN BANKING.

The statistics of Russian banking though only published for 1877, are interesting. There are two State banks with sixty-four branches, 280 local banks, and thirty-six joint stock, with thirty-eight branches. The State banks are:—

	Capital. £	Reserve. £
Russia: fifty-four branches	2,500,000	293,000
Poland, ten branches	800 000	60 000
280 local banks	2,0 6 000	656,000
39 Joint stock: 38 branches	9,700,000	520 0,0
There are also 91 Mutual Credit Societies, with a capital of	2,300,000	79,000

The total of banks and branches is 414, with a capital of above 17½ millions. The net profits during 1877 were £2,670,000, upon a discount business of £110,000,000, and a loan business of £148,000,000. The net profits were realised as follows:—

Bank of Russia	32 per cent.
Bank of Poland	10 "
Joint stock	13 "
Mutual Credit	10 "
Local banks	17 "

According to English ideas, these banks do not afford great commercial and banking facilities for a population of 83,000,000.

CANOE NAVIGATION

The number of canoes now belonging to the American Canoe Association is rather larger than the number of sea-going American vessels. The sails of the latter perceptibly whiten at occasional intervals a few square feet in three or four distinct seas, but the paddles of American canoes flash in the sunlight on dozens of American streams. There is the Housatonic River, the upper part of which, between Pittsfield and Canaan, requires a great deal of improvement. Its channel has a depth in some places of a scant quarter of an inch, and is frequently obstructed with cast-off shoes, pieces of glass, and other natural obstacles to canoe navigation. There ought to be a uniform depth of four inches everywhere in the channel of the Housatonic, and the shoes and pieces of glass ought to be removed. Moreover, the river is obstructed with about 30 dams to the mile. Around these dams the canoe must be carried, and for this purpose a supply of boys should be kept constantly on hand. To dredge out the channel of the river, to remove obstructions, and to supply boys for carrying purposes would cost, as estimated by experts, $489,312 37. This sum should at once be appropriated by Congress, and after it has been used up in the work of preliminary surveying a new appropriation can be demanded. The navigation of Smith's Brook, which drains the northern watershed of Owl's Head Mountain and discharges into Lake Memphremagog, is thoroughly disgraceful. At present canoes can neither ascend nor descend it. It has a fall of 33 feet in every 100 in the summer months it has no depth of water whatever, it is in many places not over three inches wide, and it is frequently obstructed in July and August by girls from the city who visit it from the neighboring hotels and sit down on the boulders in its dry bed. About $4,000,000 is needed to make this stream navigable for canoes throughout its entire length, which is fully a mile and a half. There will have to be constructed about 500—say 502—locks between the source of the brook and its mouth. By means of these locks a sufficient depth of water can be maintained at all seasons of the year provided the stream is fed with a hose leading from Jacob Bradford's force pump. The importance of rendering Smith's Brook navigable for canoes is very evident, and if the appropriation of $4,000,000 is placed in charge of the American Canoe Association the country may rest assured that steps looking toward the beginning of this grand work of internal improvement will be seriously considered.—*New York Times.*

THE ELECTRIC EXHIBITION IN PARIS

A Paris despatch to the Times says: The Government of France has given its adherence to the plan [illegible] the International Exhibition of Electricity in Paris this year, which is to open in August. The Exhibition is not a private enterprise. The French Government not only patronizes it, but subsidizes it to an extent which [illegible] every likelihood of [illegible] to all [illegible]. The Government [illegible] at [illegible] the [illegible] the public and of the many [illegible] who are interested in the practical application of electricity. [illegible] of the disinterested subscription of [illegible] capital large enough in case of need to [illegible] all the [illegible] necessary both for the Exhibition of Electricity and for the Congress of Electricians. The result, in a few days, exceeded all expectation [illegible] even imposed on the administration the [illegible] of [illegible] a large number of offers. The Government will nominate the French members, including the president, but half the number of vice presidents will consist of foreigners. The objects admitted will comprise all kinds of apparatus for the production and transmission of electricity and every description of work to which this potent force is applied. There will also be what is called a retrospective collection of apparatus concerning the first experiences and oldest applications of electricity, and of a library of works on the science as applied to industry. Objects sent for exhibition will be received at the Palais de l'Industrie, which is lent by the Government on and after July 1, next. The Exhibition is to last from August 1 to November 15, and the International Congress is to be opened on September 15, presided over by the French Postmaster General, who is also Minister of Telegraphs. The Congress is to be held at the Trocadero Palace, and the Exhibition at the Palais de l'Industrie is to be open by night as well as by day. All communications are to be addressed to M. Berger, numero quatre, Palais des Champs Elysees.

—The Chicago *Railway Review* reports that the use of cotton seed hulls as a substitute for cotton waste in packing the journal boxes of cars and locomotives has been adopted on several roads, and others are preparing to adopt it.

—The revenue books show that during the year 1880, $3 561,300 were received from revenue stamps from the match manufacturers of the United States. This would make the number of matches consumed 35,613,000,000 or about 700 matches per year to every man, woman and child in the Union.

—A remarkable discovery has been made by Mr Alex Adams, one of the technical officers of the Post Office Telegraph Department. It is the existence of electric tides in telegraph circuits. By long continued and careful observations he has determined distinct variations of strength in those earth currents, which are invariably present on all telegraphic wires, following the different diurnal positions of the moon with respect to the earth. He read a paper on the subject at the meeting of the Society of Telegraph Engineers.

—Commercial spirit of wine is often colored yellow on addition of alkalies. According to Herr Lux, this is due to the presence of a coloring matter which he names flavescine, and which can be got in a concentrated state by passing moist air over small oak chips heated to 200 deg. to 260 deg. C., filtering the distillate so obtained, and shaking with ether. The etheric solution is evaporated, and the residue treated with water. Flavescine forms with alkalies strongly yellow colored combinations, while the solution of the pure coloring matter in alcohol, ether, or water, is nearly colorless.

—The rainfall out in Shasta, California, is in proportion this year to the size of the "big trees" and other big things produced in that state, but its seven feet of rain is less than the average rainfall in Bergen, Sweden, only one-half that of Vera Cruz, and only one-third that of the lower slopes of the Himalayas on the eastern side. At Cherra Poojar, India, more rain falls in each of three months in the year, but that record is hard to beat. Although it does not rain at all during November and December, and less than five inches in three other months, the fall during the year amounts to 606 inches, or over fifty feet.

—A return, moved for by Lord Cloncurry in the House of Lords, has been issued, showing the total area of grass lands lands, including meadows and pastures, and the total area of tillage lands, including all kinds of crops and fallows, in Ireland, for the years 1850, 1855, 1860, 1865, 1870, 1875, and 1880. The returns for 1850 are incomplete, but in 1855 there were 10,872,908 statute acres under grass and 4,426,035 of tillage lands, in 1860 the numbers were—grass, 11,078,152, tillage, 4,411,454, in 1865, grass, 11 501 905, tillage, 3,968,968, in 1870, grass, 11,740,706, tillage, 3,885,945, in 1875, grass, 12 354,003, tillage, 3,599,001, and in 1880, grass, 12,168,933, tillage, 3,186,665.

—A Paris firm, MM. Serpollet, have lately patented a peculiar method of generating steam for a steam-engine. At each stroke of the piston a certain quantity of water is projected against two strongly-heated metal plates. The steam so produced goes direct into the cylinder, so that in this arrangement not only a special generator, but also the valve system for the entering steam, is superfluous. In the example given in *Dingler's Journal*, the vaporizing surface consists of two metallic cones, one within the other, with an interval of about 1mm between. The hollow space is divided into two chambers, each of which is connected with one side of the cylinder. The gases play first on the inner surface of the double cone, then on the outer.

—The firm of Rossler, in Chemnitz, have been for some time past trying to produce coffins which should be quite air-tight and water tight, and should not lose this property after remaining many years in the ground. A coffin they made with stone composition answered this purpose but was too heavy, and would require a change in the method of burial. They have lately, however, surmounted this difficulty also, by combining a thin coffin of wood with a thin one of stone composition. The composition is formed of 3 parts Portland cement and 1 part finely-washed quartz sand. For the sake of adhesion, the inner surface of the wooden coffin (which encases the other) is left rough as the wood comes from the saw. The top of the stone coffin is arched, in order to give it greater resistance to outer pressure, and the wood is shaped to correspond. The thickness of the wood is only 2 to 3ctms, that of the composition 1 2 to 1-5ctm. The weight of such a compound coffin is not greater than that of the common oak coffins. The closure is perfectly tight, so that the bodies of persons who have died of infectious disease may be safely kept in them in the house till burial. When the wood has decayed away in the ground, the stone coffin remains, uncompressed. The price of these coffins is said to be comparatively low.

CANADIAN PARLIAMENTARY NOTES

Among the returns brought down on Tuesday afternoon was one by Mr Langevin, for an order of the House for a copy of all memoranda to Council, and the Order in Council as to the withdrawal of Mr Sandford Fleming from the position of Chief Engineer of the Canadian Pacific Railway; also copies of correspondence between Ministers and between Mr. Fleming and any member of the Government upon the same subject. The first document is a memorandum from the Minister of Railways, dated May 11th, 1880, in which he reports that in 1863 Mr Fleming was appointed Chief Engineer to conduct the preliminary surveys of the Intercolonial Railway. On the union of the Provinces, in 1867, he was chosen to carry on the location surveys of that undertaking. In 1869 he was appointed Chief Engineer at a salary of $4,800. In April, 1871, he was charged with the additional duty of Engineer in Chief of the Canadian Pacific Railway. He discharged the duties of both offices until the opening of the Intercolonial on the 1st July, 1876. He then considered his connection with the Intercolonial at an end. The expenditure of the Intercolonial was first made under the management of four commissioners, but for some time before its final completion it was carried on under the Minister of Public Works, by Mr. C. J. Brydges, as General Manager, and Mr. Collingwood Schreiber, as Superintending Engineer. When Sir Charles Tupper assumed the administration of the affairs of his Department he found that a large number of suits had been brought against the Government by the Intercolonial Railway contractors, several of which had been disposed of by the courts, and a considerable number had been left undecided. From October, 1878, to the date of the memorandum, many complaints had been received from the contractors that they had been denied any opportunity of establishing their claims, by a clause in their contract which made the certificate of the Chief Engineer essential to the validity of any claim they might have against the Government, that they had been, and were then unable to obtain an examination of their claims by reason of there being no officer to issue the required certificate, and they submitted that serious injustice was done them by the Government in consequence. Under the circumstances the Minister says he recognized the necessity of extending full justice to the contractors, and adopting all proper means of finally adjusting and settling the claims which had arisen in connection with contractors of the Intercolonial Railway. Having given the question careful consideration the Minister states that it would be a difficult matter for anyone, except the engineer who was connected with the work from its inception, to satisfactorily perform the service; but as the importance of the Pacific Railway work required the undivided attention of Mr. Fleming, would not admit of his giving the time necessary to a due consideration of the Intercolonial claims, he (the Minister) recommended that Mr. Fleming be relieved from the duties and *responsibilities of the office of Engineer in Chief* of the Pacific Railway and be appointed Chief Engineer of the Intercolonial Railway, to investigate the unsettled claims which had arisen in connection with that undertaking upon which no judicial decision had been given, and report in each case to the Department of Railways and Canals. The Minister, considering it important that he should continue to have the benefit of Mr. Fleming's professional services and judgment in important matters connected with the construction of the Pacific Railway, recommended that Mr. Fleming be retained as Consulting Engineer for that work, for the purpose of affording advice and assistance in that capacity to him and the officers of the Department. The next paper is a copy of the report of the Privy Council, dated 11th May, 1880, adopting the Minister of Railway's recommendations, including the payment to Mr. Fleming of a salary of $6,000 per annum while performing the duties of Consulting Engineer of the Canadian Pacific Railway and Chief Engineer of the Intercolonial Railway. On the 3rd of June the Secretary of the Department of Railways and Canals wrote to Mr. Fleming, informing him of his appointment to the positions named. On the 6th of June Mr. Fleming wrote to the Minister of *Railways and Canals. He* acknowledged the Secretary's letter, and continued as follows:—"In the nine years I have acted as Chief Engineer of the Canadian Pacific Railway, I have given my best efforts to carry out the instructions and wishes of the Government, my labours have frequently been harassing, but I have exerted myself to the utmost of my power to advance the work, and I have done all I could to promote the general interests of the Dominion in connection therewith. At this stage in the progress of the undertaking, I may recount what has been accomplished. The question of practicability, with the difficult problem of route, has been successfully solved. The most exacting labor imposed upon the Chief Engineer has been performed. Generally speaking, the whole design of the railway and its multitudinous works have been considered, difficulties overcome, details arranged, plans prepared, specifications made, contracts framed, modes of procedure established, operations for carrying on the work systematized, and instructions to the various executive officers issued and put in force. So much having been designed and organized the duty remaining consists chiefly in general supervision and carrying out what has been arranged and determined. I can, therefore, relinquish the position *I have so long held with a feeling of confidence for* the future, and although difficulties, which no foresight can guard against, may present themselves, I am justified in saying that every contingency that may be anticipated has been considered and, as far as practicable, provided for. Having from its inception been so actively engaged in connection with the undertaking and in forming and maturing the organization for carrying it to completion, I shall never cease to take a deep interest in the great work, and I will always be willing and ready to give any advice and render all the service in my power towards the establishment of the railway system of the Pacific. But my nomination to investigate the unsettled claims which have arisen in the construction of the Intercolonial Railway places me in a position as embarrassing as it is unwelcome. The service is not strictly of an engineering character, and it could scarcely be possible to select a duty more distasteful for me to perform, or one for which, with my antecedents in the matter of these claims, I appear less fitted to act." Mr. Fleming proceeds to point out that inasmuch as the difficulties to be investigated and settled being due mainly to the adoption of a policy entirely at variance with the views he held, and the recommendations made by him when Chief Engineer of the Intercolonial, and that they arose through the disregard of his earnest and repeated warnings, he was not the person to make the investigation. He states, further, that whatever decision he might make the party to whom it would be adverse would be in a position to challenge it as the result of prejudice or feeling, and insist that it was adopted to fit in with opinions previously expressed; that the service proposed was so full of complications that he could foresee that it would be utterly impossible for him to perform it with any hope of giving satisfaction in any quarter, that however just his decision he would be exposed to the charge in Parliament and in the press that it had been his aim and object to sustain his previously expressed theories and opinions, and that the Government could not fail to recognize that in a matter of such importance, involving the settlement of claims amounting to several millions of dollars, all ground for hostile criticism should be avoided. He concludes as follows:—"My sense of duty has always led me to serve the Government as best I could in every position in which I have been placed. In this instance, I feel it a duty to point out that no good result can be attained from deputing me to attempt the settlement of the Intercolonial Railway claims, and that it does not appear to me expedient that I should enter upon the investigation. In declining the duty I am aware that I will be terminating my connection with the great railway works of the Dominion, to which I have given the best seventeen years of my life in the responsible position of Chief Engineer. It will especially be painful for me to separate myself from the Pacific Railway in its present condition, but the terms of the Order in Council appear to leave me no alternative. Accordingly, for the reasons set forth, I have respectfully to ask the Government to allow me to decline the new position assigned me."

The report of the Minister of Agriculture for the calendar year of 1880 was laid on the table of the House of Commons yesterday. During the year 24,210 letters were received, and 30,998 were sent by the Department. Illustrative of how the business of the Department has increased during the last sixteen years, it may be mentioned that during the former year 5,422 letters were received, 5,152 were sent. The number of cases of patents, copyrights, trade marks, etc., was 181. The number of immigrants was 40,649. In 1880 the number of letters received and sent was as above set forth, cases of copyrights, etc., 4474 and the number of immigrants, 85,850. The cattle trade with Great Britain during the year assumed larger proportions than in any previous year. The total number of cattle exported from Canada during the past year was 50 905, being an increase of 25,896 over last year, as will be seen from the following table:—

	1879.	1880.
Cattle	25,009	50,905
Sheep	80,332	81,843
Swine	5,385	700

Reference is made to the importance of the phosphate resources of the country, and to the Paris exhibition.

The total expenditure on census account during the year was $9,089 95. The total number of registrations of copyrights, trade marks, industrial designs and timber marks, was 385 during the year 1880. Out of this number there were 185 registrations of copyrights, besides 93 certificates, 14 of interim copyrights, besides 7 certificates; 2 of temporary copyrights with certificates, *113 registrations of trade* marks, 40 of industrial designs, and 19 of timber marks. The total number of assignments of these different rights recorded was 28. The correspondence of this branch of the department amounted to 1,145 letters received, and 1,292 sent. The fees during the year amounted to $3,808.15. A large portion of the report is devoted to the important subject of immigration. A table is furnished showing the number of arrivals of immigrant passengers and immigrant settlers from 1872 to 1880, inclusive:—89,186 in 1872; 90,138 in 1873; 65,992 in 1874; 35,319 in 1875; 25,415 in 1876; 23,532 in 1877; 28,597 in 1878; 51,277 in 1879; and 75,602 in 1880. As far as ascertained, the value in money and property brought in by emigrants in 1880 was over $1,250,000. The following table shows the number of immigrant passengers who passed through Canada to the United States, and the number of settlers in Canada from 1866 to 1880, inclusive.—

Year.	Immigrant Passengers.	Immigrant Settlers.
1866	41,704	10,091
1867	47,212	14,666
1868	58,683	12,765
1869	57,202	18,630
1870	44,313	24,706
1871	37,949	27,773
1872	52,608	16,578
1873	49,059	41,079
1874	40,649	25,263
1875	9,214	19,248
1876	10,916	14,499
1877	5,640	15,323
1878	11,221	18,372
1879	20,560	30,717
1880	47,112	27,611

The nationality of the immigrants who reported at Quebec during the year was —

English	11,050
Irish	3,183
Scotch	2,873
German	377
Scandinavians	7,402
French and Belgians	27
Other origins—Swiss, etc	3
Icelanders	71
Mennonites	
Russians	70
Total	24,997

The occupation of the steerage adults who arrived at Quebec was:—

Farmers	783
Laborers	10,150
Mechanics	903
Clerks and traders	51
Professional men	
Total	11,730

Reference is made to the visit of the British agricultural delegates to Canada at the expense of the Government, and to the reports of the agents at home and abroad. The total cost connected with immigration from 1873 to 1880 inclusive were as follows:—1873, $304,000.93; 1874, $251,020 75; 1875, $296,692 91; 1876, $284,065.92; 1877, $183,672,76; 1878, $185,866.23; 1879, $176,343 16; 1880, $481,532.67. On the exodus question the Minister says:—"When I was in England in the autumn I found that a publication to the effect that there was an emigration from Canada at Port Huron of 75,039 for the fiscal year ended June 30th last, had produced a very detrimental effect as respects confidence in immigration from the United Kingdom to Canada. It was naturally said by many that if Canada is a place from which such large numbers leave in one year at a single port, it must at least be a very doubtful country to go to for settlement. From my general knowledge of the movement of emigrants I felt positive that this statement could not be correct, and I caused a denial of its truth to be published. I have since caused an investigation to be made, the result of which will be found in an annex herewith, in the form of a report from Mr. Lowe, the Secretary of the Department. It is therein shown that the claim of the Collector of the Port Huron Custom House is a very gross fabrication, and that the emigration at that point was not more than 6,705, arising apparently from an ordinary movement which has been going on for some years between the east and the west on the whole continent of North America, and which will probably, in the future, be turned in a very much larger stream to the Prairie Province of Manitoba and the North West Territory of the Dominion."

A statement has been brought down showing the amount of tolls, wharfage and storage, fines and damages and other receipts on account of canal revenue collected at Beauharnois during the fiscal year 1872 to 1880 inclusive:—1872, $1,757 90; 1873, $602 57; 1874, $2,291; 1875, $2,187 10; 1876, $1,128 48; 1877, $2,501 61; 1878, $2,787 65; 1879, $2,848 16; 1880, $4,221 87. Total $19,500 74.

A return has been brought down showing the quantity of coal imported into the Dominion since 30th June to the 31st December last, and the duty collected thereon distinguishing between anthracite and bituminous:—

	Quantity Tons	Value	Duty
Anthracite	349,784	1,475,037	$155,974 85
Bituminous	330,141	838,551	171,167 76
Other coal	159	508	79 48
Totals	680,084	$2,314,096	$327,222 09

Of the above imports there were entered for home consumption—Anthracite, 311,946 tons, $1,212,255 value; bituminous, 285,275 tons, $795,974 value, other coal, 153 tons, $408 value.

The following statement taken from a return laid on the table of the House recently, showing the amount of duties collected on rice and powder in the Province of British Columbia during the fiscal year ending 30th June 1880:—Rice, $18,195 57; gun, rifle, sporting powder, etc, $72.05; common and musket powder, $55; canister powder, $984 35; blasting and mining powder, $4,332 25; giant powder, dualin, dynamite, etc, $800 41; gun and pistol cartridges, $406 17.

Sir John Macdonald brought down a return showing the amount paid to the Hudson's Bay Company, by the various Departments since the transfer of the territory. Department of Indian Affairs, $140,429; Militia, $228,719; Interior, 9,468; Justice, $2,246; Agriculture, $5,903; Marine and Fisheries, $1,061; Public Works, $343 394; Railways and Canals, $237,644; total, $1,009,122.

The bill introduced in the Senate recently, providing for the enlargement of the boundaries of Manitoba, may be briefly summarized as follows: The boundary begins on the international boundary, 197 miles west of Winnipeg; thence north to Fort Ellice, about 280 miles, thence across the north ends of Lake Winnipegosis and Lake Winnipeg to the boundary of Keewatin; and this line of Keewatin and the western boundary of Manitoba from the eastern lines of the enlarged Province.

CIVIL SERVICE COMMISSION

After the last session of the Dominion Parliament, the following gentlemen were appointed by the Governor General Commissioners to inquire into the working of the Civil Service, their investigations to include both the inside and outside services: Mr Donald McInnes, Hamilton, Chairman; Dr. Tache, Deputy Minister of Agriculture; Mr. E. J Barbeau, Montreal. Mr. W. R. Mingaye, Collector of Customs at Kingston; Lieut.-Colonel White, Secretary of the Post Office Department; Mr. Brunel, Commissioner of Inland Revenue Department; Captain Tilton, Marine and Fisheries Department, and Mr Martin J Griffin, Secretary. The report, which is a voluminous one, refers to the Order in Council under which the Commission was appointed; to the means taken to collect evidence; and to the lines of examination in regard to appointments and promotions. The Commissioners condemn the system of political patronage, and recommend the adoption of the English system of open

COMPETITIVE EXAMINATIONS,

a period of probation to precede permanent appointment. On this point the Commissioners say:—

"We claim that it is the most effectual, indeed the only means for completely cutting away all opportunities for the exercise of political influence in making appointments and promotions in the public service, which we believe to be so injurious to the public interests. We believe too that the educational status of the service would be raised and its efficiency greatly increased, and that at times when an unusual strain is put on it for skillful work, this will be of almost incalculable advantage. These views are strongly supported by the valuable evidence submitted herewith. The public service would, under such a system, be open to the public, instead of being, to a large extent, a close corporation in the hands of political parties. An opportunity would be given to all intelligent and educated young men to obtain by their merits alone a start in a service in which promotion by a continuance of intelligent self-improvement and well directed official labor would be certain. The civil servants would be saved from the imputation of partizanship which is periodically brought against them in times of political excitement. Men who had obtained their places by merit alone, and as the result of impartial examination, could not possibly be open to any imputation of political partizanship in office; nor would they be in any degree influenced in the discharge of their duties by political considerations. Ministers and members of Parliament would, by the abolition of unnecessary patronage, be relieved from an enormous degree of labor, difficulty and annoyance, and left more free for the discharge of the more important duties of their position, and an end would also be put to the pernicious practice of thrusting new and inexperienced men into office over the heads of those whose *service has been long continued and meritorious. Finally,* we believe that, under the system which we recommend, the service would win the respect of the public and of the Government; and that it would obtain and preserve a dignity in the eyes of the whole country which it does not now possess.

For the proper carrying out of the above recommendation, the Commissioners suggest the constitution of a

BOARD OF CIVIL SERVICE COMMISSIONERS,

"as free from political influence as the Judiciary happily is." It is proposed that the Board shall be composed of men holding an independent position, and capable of commanding general confidence; it should consist of three members, one of whom should be a French Canadian, or a representative of the Province of Quebec, and they should be appointed in the same manner and hold office on the same tenure as the Judges. The Commissioners believe that the judgments and decisions of an impartial tribunal thus constituted would command the respect and confidence of the public and of the Service. The estimated cost of the Board is $12,500, less than one-tenth of one per cent. on the cost of the Service—$2,800 000. The general principles which it is proposed shall govern the Commissioners in the performance of their duties are laid down as follows:—

POWERS OF THE BOARD.

"The Board should have power to obtain the assistance of persons who have had experience in the education of the youth of the Dominion, and with such assistance periodical examinations should be held in the most important cities and towns, especially at Halifax, St. John, Charlottetown, Quebec, Montreal, Toronto, London, Ottawa, Winnipeg, and Victoria. To these examinations no person should be admitted until he has satisfied the Commissioners:—

"1st. That he is within the limits of age prescribed for the situation or employment to which he [illegible] admitted, and which for first admission [illegible] less than eighteen nor more than twenty-[illegible] years.

"2nd. That he is free from any physical defect or disease which would be likely to interfere with the proper discharge of his duties.

"3rd. That his character is such as to qualify him for such situation or employment.

With the exception herein mentioned all [illegible] made to the Civil Service of Canada after [illegible] of January, 1882, should be by means of [illegible] examinations, according to regulations to be [illegible] *to time framed by the Board of Civil Service* [illegible] sioners, and approved by the Privy Council, [illegible] gulations having reference to the qualification [illegible] or officers for any department, should be [illegible] the Commissioners in conjunction with [illegible] authorities of the department. The competitive examination should be open to all persons of the [illegible] health, character, and other qualifications pr[illegible] the regulations who may desire to attend the [illegible] on payment of such fees as may from time to time be decided on by the Board and approved by the [illegible] in Council. Before any such examinations a [illegible] computation of the number of permanent [illegible] likely to fall vacant within the next six months [illegible] made by the Board; to the number so computed [illegible] be added such further number as may [illegible] necessary to provide for any contingencies [illegible] absences or failure of health, and the [illegible] so arrived at, when approved by the Governor in Council, should be the number of persons [illegible] lected at the next ensuing examination and [illegible] the lists herein referred to. This number should [illegible] the number published as part of the advertisement [illegible] any such examination. Immediately after every examination a list of the competitors should be [illegible] in the order of merit up to the published number [illegible] many are found by the examination to be qualified for appointment, which list should show as far as [illegible] what branch of the service each of the candidates [illegible] to be best qualified for. The lists so made [illegible] published in the *Canada Gazette*. Examinations [illegible] above proposed should be for first appointment [illegible] To third-class clerks in the inside service [illegible] office of messenger, tide waiters, landing waiters [illegible] ers, or as third-class clerks in the outside [illegible] service; (c) To the office of messengers, [illegible] assistant inspectors of weights and measures, [illegible] class clerks in the outside service of the Inland Revenue Department (d) To the office of messengers [illegible] carriers, or fourth-class clerks in the outside service of the Post office, and (e). To the office of messengers and third-class clerkships in all other branches of the service. In addition to the examinations above mentioned others should be held when necessary for appointments for special qualifications not possessed by any available members of the service, and also for promotion in the service. When the deputy head of a department to which a situation belongs and the head of the department certifies that the qualifications in respect of knowledge and ability deemed requisite for such situation are wholly or in part professional or otherwise peculiar, and not ordinarily to be acquired in the Civil Service, and that it would be for the public interest that examinations should be wholly or partially dispensed with, the Board of Civil Service Commissioners may do so, and grant their certificate of qualification upon evidence satisfactory to them that the said person possesses the requisite knowledge and ability, and is duly qualified in respect of age, health and character. Competitive examinations for first entrance to the service should be preceded by a preliminary examination to ascertain whether the candidate possesses such a knowledge of orthography and elementary arithmetic, and whether his handwriting is such as will justify his admission to the competition. The competitive examinations should test the comparative proficiency of candidates on the following subjects: Handwriting, orthography, arithmetic, including vulgar and decimal fractions, copying manuscript to test accuracy, digesting returns into summaries, English composition, writing from dictation, geography, history—English, Canadian and United States,—book-keeping, precis writing, French.

PROMOTIONS

For promotions in the service the examination should be on such subjects as may be decided upon by the Board of Commissioners after consultation with the chief officers of the department to which the promotion belongs, and such examinations should be competitive, and open to all employees in the service holding positions ranking below those to which the promotions are to be made.

OTHER RECOMMENDATIONS.

A uniform system of accounts throughout the service and the constitution of a revenue board, composed of the deputy heads of the Departments of Customs, Finance and Inland Revenue to try all revenue cases of fines, penalties and seizures, are recommended. For deputy heads of departments a scale of three salaries, $4,[illegible] $3,000 and $1,500 is suggested. On this point the Commissioners say:—"We are strengthened in this view by the consideration that the practice already exists of granting extra pay for work which is assumed to be outside the normal work of the departments thus establishing, by indirect means, a scale of salaries analogous to what we suggest. The amount of the salary should be the measure of the value of the whole of the service of the incumbent in any office, and should be placed in one sum in the estimates under its proper head." It is recommended that the position of commissioner be abolished, and that the next officer to the deputy head be called Chief Clerk.

On the question of classification the Commissioners say:—"It is, we think, abundantly evident that the existing classification is much too complicated, and that while it has a tendency to create discontent it affords too many facilities for the unjustifiable advancement of employees, to which we have referred. Keeping this principle in view, we propose that there shall only be four grades below the Deputy Heads, that is Chief clerks, who shall also be known as officers, first-class clerks, second class clerks, third class clerks.

SALARIES.

It is recommended that the maximum salary of a Chief Clerk be $2,800, and the minimum $2,200. First Class Clerks to commence with $1,600, advancing by biennial increments of $100 up to $2,000, with duty pay for the performance of special duties not exceeding $300, such duty pay being only granted under the same restrictions as are proposed with reference to Chief Clerks. Second Class Clerks, $1,000, rising by biennial increments of $100 to $1,400, with specific duty pay not exceeding $200. Third Class, $500, advancing in a similar manner to $900. For the outside service the following salaries are recommended —

CUSTOMS.

Chief Inspector	salary		$4,000
Inspectors	salary from	$2,500 to	3,000
Collectors	do	1,000 to	4,000
Surveyors	do	1,200 to	2,500
Chief Clerks	do	1,200 to	2,500
Clerks, probably three classes	do	600 to	1,000
Head landing waiters	do	900 to	1,500
Landing waiters	do	600 to	800
Gaugers	do	600 to	900
Chief lookers	do	800 to	1,000
Lookers	do	500 to	700
Tide Surveyors	do	920 to	1,000
Tide waiters	do	500 to	600
Preventative officers	do	200 to	500
Messengers	do	200 to	500
Appraisers	do	900 to	2,000
Assistant Appraisers	do	600 to	1,000

INLAND REVENUE.

... Commissioners consider the classification in the ... service of this Department satisfactory —

Chief Inspector		$3,000
Inspector of distilleries		2,500
District Inspectors	$2,000 to	2,500
Collectors	500 to	2,000
Deputy Collectors	400 to	1,500
Clerks (accountants)	900 to	1,400
Special Class Excisemen		800
First, second and third class do	500	800
Preliminary Excisemen		500
Messengers	200 to	400

POST OFFICE

... Commissioners are of the opinion that the whole ... the service should be regarded as one, and the ... appointments in both inside and outside service ... by promotions or transfers from ... They propose the following classification:

CITY POSTMASTERS.

Class 1, where postage collections exceed $80,000	$2,600
Class 2, where postage collections exceed $50,000 to $80,000	2,400
Class 3, where postage collections exceed $40,000 to $50,000	2,200
Class 4, where postage collections exceed $20,000 to $40,000	2,000
Class 5, where postage collections are less than $20,000	1,400

... as the Postmaster-General may determine. These salaries should not be supplemented by any allowances or perquisites whatever.

For Assistant Postmasters, we suggest for class 1 $..., class 2 $1,800; class 3, $1,600, class 4, $1,400, class ... $1,000 to $1,400

CLERKS IN CITY POST OFFICES.

First Class, $1,000 by annual increment of $40 to $...

Second Class, $300 by annual increment of $10 to $...

Third Class specific duties in each case with fixed salaries to be determined by the Postmaster-General, but not to be less than $1,200 or more than $1,500.

... CLERKS, MESSENGERS, BOX COLLECTORS AND PORTERS.

... to $600 by annual increments of $30.

POST OFFICE INSPECTORS

Chief Inspector	$2,800
First class, on appointment	2,200
After 10 years' service	2,400
After 20 years' service	2,600
Second class, on appointment	2,000
After 10 years' service	2,200
After 20 years' service	2,400

ASSISTANT INSPECTORS

On appointment	$1,000
After 10 years' service	1,200
After 20 years' service	1,500

Clerks in the Post Office Inspector's offices the same as for clerks in the city post offices. Suggestions respecting the salaries of railway mail and ocean mail service clerks are also made.

DISCIPLINE.

Discipline in the Departments is referred to at length. It is pointed out that, *contrary to regulation*, the rule regarding luncheon is generally disregarded, most of the clerks taking an hour, more or less, for refreshments. It is proposed that the office hours be from 9 a.m. till 4 30 p m, one hour to be allowed for luncheon.

TEMPORARY CLERKS.

Suggestions are made *regarding the employment of* temporary clerks when necessary, *to be drawn from* the Civil Service Commissioners' list of unemployed successful candidates

SUPERANNUATION.

The Commissioners say they propose to deal with the question of superannuation in another report. Meantime, they say, they have sufficient before them to say that notwithstanding all the alleged abuses that are said to have prevailed in the administration of the law, the result has been a very large measure of saving to the public exchequer, for they find that during the decade the saving has been,—

In the Department of Finance	$48,548 73
Department of Agriculture	12,845 11
Department of Inland Revenue	42,570 78
Department of Public Works	21,014 98
Department of Marine and Fisheries	30,263 86
Department of the Secretary of State	5,482 40
Department of the Interior	6,893 78
	$167,619 64

As against which we may place the loss in:—

The Department of Railways and Canals	$21,146 45	
The Department of Militia and Defence	3,725 10	$24,871 55
		$142,748 09

The Commissioners seem to have done their work thoroughly. Of course it is impossible this session for the Government to adopt any, or all, of the recommendations made.

Galt, Ont., 9th.—The monthly cattle fair held here to-day was well attended by buyers but poorly represented by sellers. The cattle brought out were of *very* good quality but few in number and were sold for from three and a half to four and a half cents, live weight.

Halifax, N.S., 9th.—*The Local Legislature* has done very little business so far of any importance. It is thought the session will be short, as only a few measures are to be introduced. To-day the annual report of the Commissioner of Crown Lands was presented, which exhibits a larger revenue from that branch of public service than for years past, owing largely to the improvement in the lumber trade last year. The revenue of the department was $20,784, about double that of the previous year. The number of grants issued in the year were forty-one.

—"A representative of the *Witness* called recently at Mr William Clendinneng's foundry, and was conducted by the proprietor around the premises. The visit was made for the purpose of ascertaining the amount of activity in regard to this branch of business, which is a disputed question. Mr. Clendinneng states that in 1880 he did fifty per cent. more business at his foundry than he did in 1879, and yet, though having half a dozen railway customers, the railway castings did not amount to one-half his trade. He adds that his two retail stores have done, in January and February, 1881, more than double the trade they did in the corresponding months of 1880, which fact convinced him that people generally were buying more than they did a year ago. He has orders on hand from the Hudson Bay Company, Winnipeg, Messrs Cooper, Fairman & Co., Canada Central, South Eastern, Quebec, Montreal and Occidental, Halifax and Cape Breton, and other large railways and private firms, there are being cast daily *from fifteen to seventeen tons*, and last year there were over 4,000 tons of metal cast. In the extensive works, covering over 30,000 feet, there are 225 persons employed, of whom over a hundred are making from $12 to $15 per week. In fact he is employing double the number of people at three times the amount of wages that he was doing twelve months ago. The following eight trades are represented:—Moulders, pattern makers, blacksmiths, finishers, nickel platers, tinsmiths and furnace builders. Nearly all the orders are small, showing activity in the general business."

EXTRACTS AND ESSENCES

How the discovery happened to be made, or how many experiments it cost, I do not know, but it *certainly* was at last found out that several compound ethers possess both the odor and the flavor of certain fruits These fictitious essences can be made much cheaper than the genuine And hence it comes to pass that nine-tenths of all fruit essences which are used for flavoring, in cooking and confectionery, instead of being innocent and healthful, are spurious and hurtful By treating certain animal fats with potash and sulphuric acid these laboratory experts produce certain other acids Out of these fatty acids are distilled *certain ethers, which ethers being intermingled* and compounded in certain proportions, and then colored with coal-tar dyes, various aniline dyes, are made to resemble in color, flavor and odor certain berries of the field and fruits of the garden The basis of these fictitious fruit essences are *these ethereal* compounds of organic acids, with the oxides of ethyl and amyl Ether, in its common and ordinary form, is known to *the eye by nearly every intelligent person* This, in more scientific phrase, is oxide of ethyl Amylic ether is the *oxide of amyl* Each of these ethers possesses its basic properties, and has its alcohol Common, or ethylic ether, corresponds to common or ethylic alcohol, Amylic ether corresponds to what is known as fusil oil More than forty years ago these fusil oils were *publicly advertised as* one of the main ingredients for making grape-juice wine out of rye and corn-juice whiskey The prices of these recipes were stated in the advertisements It would seem that, beginning with the juice of the grape, these laboratory manipulators transferred their magic to the sophistication of other fruit juices as well It is laid down in the books that butyrate ether *is prepared* by mixing 100 parts of butyric acid with 100 parts of alcohol and 50 parts of concentrated sulphuric acid, and *agitating* the mixture for a short time This butyric ether is very valuable in alcohol, and is said to be much used to communicate *a fine apple flavor to* rum Butyric ether dissolved in eight or ten parts of alcohol begins the essence of pineapple From twenty to twenty-five drops of this essence added to a pound of sugar containing a little citric acid imparts to the mixture *a strong* taste of pineapple Acetate or amylic ether is made by distilling a mixture of one part of amylic alcohol, (this last being what *is known as fusil oil*), two of acetate of potassa and one of concentrated sulphuric acid An alcoholic solution of *this last named ether forms* the jargonelle pear essence Fifteen parts of acetate of amylic ether, with half a part of the ether dissolved in ten parts of alcohol, form what is called bergamot pear essence When this is employed to flavor sugar, acidulated with a *little citric acid, it imparts* to all drinks and pasteries the flavor of a genuine bergamot pear Acetate of amylic ether, *mixed with butyric ether, forms*, in alcohol solution, the banana essence Valerianate of amylic ether is made by mixing four parts of fusil oil with four of sulphuric acid, washed with water and a weak solution of carbonate of soda An alcoholic solution of this ether, *in the proportion of one part of* six or eight of alcohol, forms the flavoring liquid known as apple essence. It will thus be seen that much of *what is* bought and sold as pure fruit essences are chemical compounds entirely, that they are *only mixtures of certain ethereal compounds of* organic acids with the oxides of ethyl and amyl series of ethers, and that they do not contain the ghost of the fruits they are named after. Genuine and perfectly honest fruits, extracts and essences are both made and sold, and that *in quantities*, but it still remains true, that by far the larger proportion of all "extracts," "essences" and "fruit flavoring, as they are now sold *in the markets*, possess no more of the genuine fruits in them than there is of Havana tobacco in a *cabbage leaf cigar*, or than there is of French wine in Ohio corn whisky Such for the most part are the fruit flavors which now obtain in *commerce*, and which are sold and consumed in quantities beyond all computation They bear no greater resemblance to the genuine *original* than horse chestnuts do to chestnut horses, or than the honest pork sausages of *New Jersey do to sausages which are made of cats* dogs and jackasses —*Confectioner's Journal*.

BULLION AND COINAGE.

The New York *Bullion* contains some interesting and *carefully prepared figures relating to the stock of* gold and silver now existing in the various countries of the globe, the amount in circulation as coin and the quantity of the bullion product in the year 1880. The world's stock of gold in the year 1492 is estimated at 26,500,000 *ounces*, and *of silver* at 326,000,000 ounces From 1492 to 1848, the year of the discovery of gold in California, the production of gold was about 160,000,000 ounces, and of silver 4,800,000,000 ounces. The production each year since 1848 is given in *Bullion's tables*, and the aggregate is 171,443,750 ounces of gold and 2,393,290,000 ounces of silver. If there had been no gold and *silver lost or destroyed* the total stock in the world at this time would amount to 357,443,750 ounces of gold and 7,519,290,000 ounces *of silver*. Estimating the annual loss from abrasion and total destruction at one-tenth of one per cent. per annum, the actual supply at the present time would be as follows:—

	Gold, Ounces.	Silver, Ounces.
Production	357,443,750	7,519,290,000
Destroyed	39,000,000	852,000,000
Present stock	318,443,750	6,667,290,000

The following is an estimate of the amount of gold and silver in circulation and held as reserve in national treasuries and in the banks of the world:—

	Gold, Ounces.	Silver, Ounces.
Circulation	141,000,000	1,990,000,000
Treasury reserve	7,700,000	96,500,000
Bank reserves	21,200,000	200,500,000
Total	169,900,000	2,346,000,000

Deducting *these amounts from the present supply of* gold and silver, as shown by the preceding table, the amount existing in the world at the present time, in the shape of hoardings, or employed in the arts and capable of being converted into money, is 148,543,750 ounces of gold and 4,321,290,000 ounces of silver Up to 1848 the United States contributed about 1,000,090 ounces of gold to the world's production, or less than one per cent. of the world's supply at that date, From 1848 to date the bullion *product of the United States has aggregated* 73,127,587 ounces of gold, or forty-four per cent. of the world's production during the period, and 340,310,745 ounces of silver, or fourteen per cent. of the world's production. The stock of gold and silver in the United States at the close of 1880 was $650,543,082, of which $486 683,049 were gold and $163,860,632 were silver. The production of the United States for 1880, including about $3,000,000 from Mexico and British Columbia, was $80,167,939, according to *Bullion's figures*, a gain of $4,818,435 over 1879 The production of gold in 1880 was $33,522,182, as compared with $32,539,920 in 1879, and of silver, $40,005,364, as compared with $38,625,812 in 1879 *There are nine countries—Great Britain, Canada*, Australia, Greece, Sweden, Norway, Denmark, Portugal and Columbia—*which use gold* exclusively or give to silver a limited legal tender power only, there are sixteen—the United States, Germany, France, Belgium Switzerland, Italy, Austria, the Netherlands, Spain Mexico Peru Central America, the Argentine Republic, Cuba, Japan and Algeria—which use silver as full legal tender as well as gold and one country only, India, uses silver exclusively The population of the silver-using countries is eight times as large as that of the countries where silver is not full legal tender and the entire amount of silver in circulation is $2,432,250,0..., as compared with $2,5..., ... in gold The total coinage of the United States in 1880 was $90,... ,8170, of which $62,281,270 was in gold The silver coinage during the past six years amounted to $131,205,951, or nearly one-half the entire amount turned out since the mints were established.

POLLED ABERDEENS FOR CANADA

[Live Stock Journal, Feb 25]

Polled Aberdeen cattle appear to be rapidly coming into favor in Canada. Mr George Wilkin of Waterside, of Forbes, Aberdeenshire, who was one of the tenant farmers' delegates to the *Dominion of Canada in 1879*, has selected and shipped by the Allan steamer *Nestorian from Glasgow, on the* 23rd of February, a valuable consignment of polled Aberdeen cattle to the Hon. John Henry Pope, Minister of Agriculture for the Dominion of Canada. The order was to ship the best to be obtained in Scotland, and the *following* have been sent forward:—1 four-year-old cow, Western Queen, 1 four-year-old cow, Caroline 2nd, and another four-year-old cow, three-year-old heifer, Gagmar 5th, ditto, Zulu, ditto, Pauline, ditto, Fair Lady, and one two-year-old, May *Queen*.

The Hon Mr Pope, who farms extensively at Cookshire, in the Eastern Townships, Province of Quebec, has already a good herd of these valuable cattle, which was augmented last year by the importation of a bull and three very fine heifers When the present shipment *reaches its destination*, the honorable gentleman will be in possession of one of the finest, if not the finest, herds of polled Aberdeen cattle outside the British Isles. The bull exhibited by the late Mr M'Combie, of Tillyfour, and which secured the first *prize at the Paris Exhibition*, is also in the *Eastern Townships*

We understand that Mr Hunter, a short-horn breeder from Ontario, is at present in this country with a view of purchasing polled Aberdeen and other cattle for the Ontario Government Model Farm at Guelph, Ontario

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—It is said there are 1,350 watches manufactured each day in the United States

—*Montreal is to have electric light*. A company has given notice, applying for incorporation

—There is a manufactory of paper bricks in Wisconsin The bricks are said to be very durable.

—The report of the Workshop Inspectors show that there are 107,554 males, and 17,... females employed in the manufactories of Chicago

—The copper mine at Coxe Heath Cape Breton, owned by R A McKill of St. John's, and John A McKenzie, of Sydney, has been sold to a Boston company.

—Up to the close of the year the Lake Superior copper mines have produced since their commencement 300,000 tons of ingot copper, valued at $140,000,000

—*Worth, the French man-milliner, predicts* that American silks will, ere long, supersede those of French *manufacture* They already excel in some respects.

—The New York and Acadian coal mine in Cumberland County has been sold for $49,000 to Mr. McInnis, of Hamilton A company will open extensive operations in the spring.

—It is thought that over 100,000,000 feet of pitch pine timber and lumber will be *shipped from* the port of Darien, Ga., *this year* A *little over 85,000,000 feet* was shipped last year

—The Oneida community, having *given* up plural *marriages, is devoting itself to money making. Last* year it netted in profits $97,000. During January last is paid out $7,000 for labor

—When *the twelve million acres of the Florida* Everglades are drained and put into sugar plantations, *it is to be hoped*, says the Philadelphia *Record*, that glucose will take a back seat

—A member of the Albany Assembly has a resolution before the House which provides for transferring the State canals to the General Government, provided that the Government enlarge them to the size of the Welland Canal The resolution was referred to the Committee of the Whole.

—The *Lumberman's Exchange*, Williamsport, Pa., offers a reward of $50 to any person furnishing evidence leading to the conviction *of any one* sawing off the ends *of logs*. *All parties purchasing stray* logs from any person not authorized by the stray log committee will be prosecuted.

—There were received in Boston, Mass, *during* the year 1880, 351,744,000 feet of lumber in all Of this quantity about 209,100,000 feet was received by rail, 41,000,000 by sailing vessels from the south, 1,500,000 by southern steamers, and about 100,000,000 by water from Maine and the British provinces.

—According to *Bradstreet's*, the amount of lumber manufactured in the leading Michigan districts during the year 1880 was 3,938,187,227, an increase of 651,510,514 feet over the production of 1879 More than one-third of the demand, or about 6,000,000,000 feet, was supplied by Michigan, Wisconsin and Minnesota.

—It may give some idea of the capacity of the mills in Florida by mentioning the fact that the 17 mills along the lines of the Atlantic, Gulf & West India Transit and Peninsular, railways can make an aggregate yearly cut of *84,108,000 feet, an average of nearly* 5,000,000 each. The largest one can turn out 9,000,000 feet, and the smallest, 2,500,000 feet.

—Messrs P Freyseng & Co, of Toronto, recently put in their premises an assortment of cork cutting and shaping machinery, driven by a Doty engine of 8 horse-power, and has found it work so satisfactorily that they have ordered some additional machines from the States. This firm used formerly to import, but now manufacture their own corks, and also life preservers, etc

—The amounts put in for the following parties on the Kawkawlin river, Maine, represent the product of that stream Parks & Keeley, 2,500,000 Bradley & Ring, 4,000,000, Gustin & Merrill, 1,500,000, Carrier & Co., 2,000,000; C. M. Hill, 4,000,000; Schmidt Bros., 1,000,000, Worren, Yorkey & Bradley, 8,000,000; Westover, 500,000, total, 23,500,000. The product of the Kawkawlin last year was about 15,000,000.

—In Germany there are at this time twenty converters in constant daily use *under the Thomas* Gilchrist license, which number is to be increased to thirty early in April The dephosphorized metal is daily becoming in greater demand for a variety of special purposes, such as telegraph wire of high conductive property boiler plates etc. Large shipments of this metal are being made to the United States

—The Victoria Tobacco Works of Toronto are running to their full capacity, working over time They find it difficult to procure hands educated in certain branches of the trade, and the want of such skilled workmen is just now keeping them back from hiring double the number of unskilled labourers for another department We noticed two packages ready for shipment, one each for British Columbia and Jamaica, West Indies

—Owing to the competition between the different trans-Atlantic lines of steamers running to the port of New York *emigrants* can now obtain passage tickets to this country for $12 each A passenger tariff was ... ing between the lines, but efforts are being made to adjust the existing differences, and before the usual tide of *emigration that sets in in the spring begins* it is probable that at least $20 will be the prevailing price for tickets

—A public *meeting was held recently at Prince* Arthur's Landing, for the purpose of taking into consideration the question of the future of that part of the country in case of "dismemberment from the Province of Ontario The *North Shore Miner* says —"This separation is generally looked upon as a certainty, and *therefore* it is quite probable that before long we shall be either attached to the *Province of Manitoba, or set* apart as a territory"

—Very rapid development of the country on the line *of the Chicago, Saginaw and Canada railroad, between* Edmore and St Louis, is reported On that part of it running in Montcalm county there is an average of at least one saw mill at *every half mile*, and the woods are literally alive with lumbermen and lumbering operations A great many buildings for all sorts of purposes are *going up*, and soon the stump lands will pass into the *hands* of actual settlers.

—On the occasion of his departure from London to *take command* in the Transvaal, General Sir Frederick *Roberts* was the recipient of an *enthusiastic demonstration*, ladies participating. It is an unfortunate state of affairs which necessitate General Roberts' *departure*, but it is felt that even *after recent adverses* the prestige of British arms must be upheld It is to be hoped that a satisfactory solution of the difficulties with the *Boers will soon* be reached.

—The Napanee *Standard* says.—"It is gratifying to note that the brush factory is rapidly becoming one of the *most* flourishing manufacturing establishments in *Napanee* *Beginning in September, 1879, with a staff of* seventeen hands, these have so increased that on Saturday evening last fifty five hands were paid, nearly all of whom have been *putting* in daily a quarter of a day overtime New machinery has been added, and the hum of business fills the premises, already too small for the demand of the trade"

—*During the past year Miss Rye sent to Ontario 64* children, Miss Macpherson 114, Miss Bilbrough 124, Mr Middlemore 41, Rev Mr Stephenson 22, Boy's Home, London, 11, and Cardinal Manning 22—making 407 in all The number of farm laborers, including their families, brought out by the department in 1879 and 1880 was 472, and female domestic servants 158. *The total expenditure* on account of *immigration*, during the years 1878, 1879 and 1880, respectively, was $31,000, $39,000 and $53,000

—The revenue of the *Direct* United States Cable Company for the half year amounted to £59,815, against £120,445 for the same period in 1879, or a decrease of £60,630. The *expenses, including interest* on debentures, were £26,233, leaving a net balance of £33,581, which, with £21,760 brought forward, makes a total of £55,342. Out of this interim dividends of 1¼ per cent each for the quarters ending 30th September and 31st December, 1880, amounting to £30 355, have been paid, £21,870 has been added to reserve, increasing that fund to £200,000.

—The circular of Cornes & Co, represented in Montreal by Mr. James Reid, dated Yokohama, Feb 10, says "Our preceding circular was dated on the 7th ult. since when we are in receipt of letter advices dated New York, 28th December, and San Francisco, 6th January. *After the departure of the last mail, on* the 23rd ult., our market was again easier, but a good demand springing up rapidly caused prices to advance, and *the market closer steady* at our quotations. Prices for all grades above fine are more or less nominal, owing to small supplies. Settlements since the 7th ult. amount to 6,000 piculs. Fresh supplies have been *very light*, and our stock *is* reduced to some 3,500 piculs, largely composed of the low grades Choice to choicest, nominal; fine to finest, $23@27 per picul, medium to good medium. $16@19 do., *common* to good common, $10@14.—*Herald*

—Of the Pike & Richardson Cooperage Company the Chatham *Planet* says:—"*A meeting of the shareholders* of this company, which has absorbed the business of Messrs. Pike & Richardson, was held at Garner House *on Thursday evening*, for the election of directors and the organisation of the company. *The chairman* reported that all the stock had been subscribed. The by-laws were passed and the following directors elected for a period of two years, viz.: John B. Pike, Wm J. Richardson, Duncan C. Plumb, of Niagara, and Valancey E Fuller, of Hamilton. The capital stock of the company is $100,000, and their letters of incorporation give them very extended powers. The company have purchased a large timber tract, and are now operating six mills. We understand that the contracts entered into by the company will aggregate over $200,000 for the year 1881, and that *sufficient stock has already been secured* to fill these contracts. With the addition already made to their Pikeville mills and those contemplated, the company will be in a position to supply almost the entire barrel trade of Western Ontario."

—The Chicago *Field* says that the salmon h... ...ery built by the United States Fish Commission i... ...lifornia, which was recently destroyed by a storm, cost about $25,000, and that Congress has already voted money to rebuild it. The annual expense for maintenance *was $6,000*. The *Federal Government* employs a steamer, the *Fishhawk*, expressly fitted up for hatching deep-sea fish. The cost of construction and outfit was $92,000. Another new *steamer* for coast service in the fisheries is being built at a cost of $103,000. In Canada we have ten fish hatcheries, the whole expense of which last year does not exceed $30,000, which sum includes the price of two new hatching houses, built for about $4,000 each. We regret to see by the last report of the Department that the *fisheries* have been merged in *the marine* service, and a very meagre and unsatisfactory account of them is published. This is a strange commentary upon the value attached to the Canadian fisheries by the Halifax commission. There is no account whatever given of their produce and condition last year.

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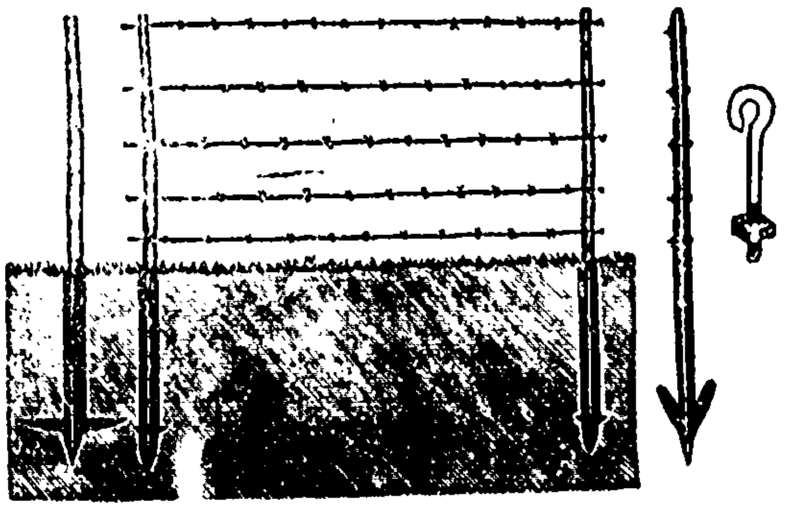

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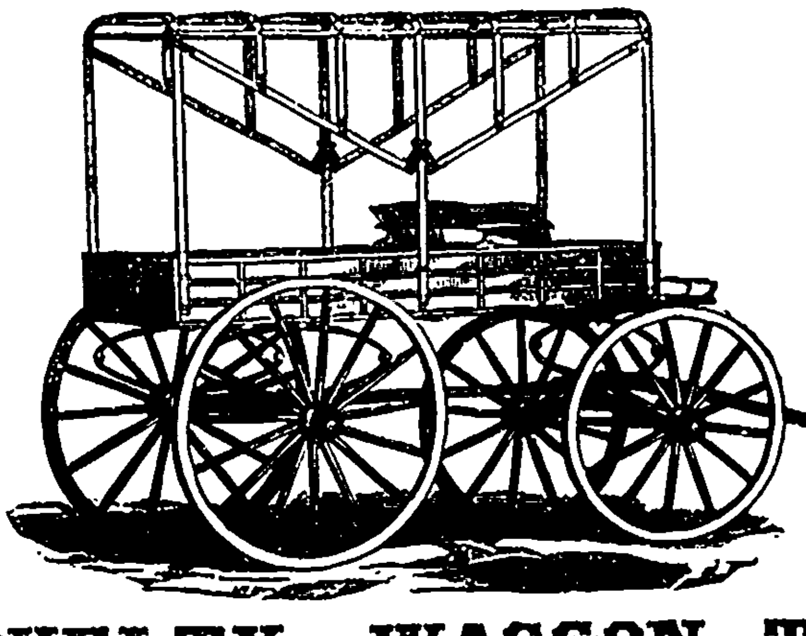

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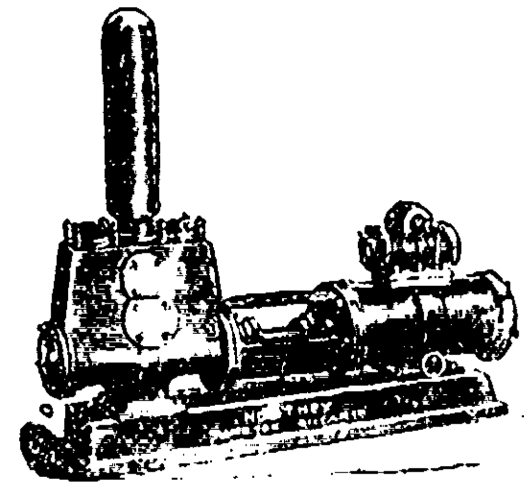

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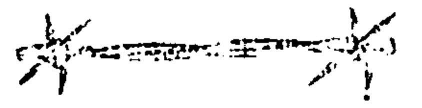

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