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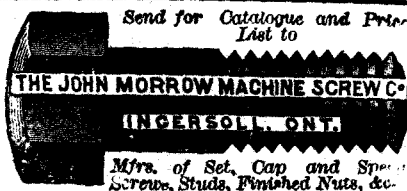
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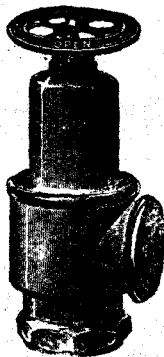
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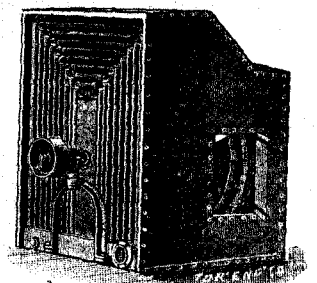
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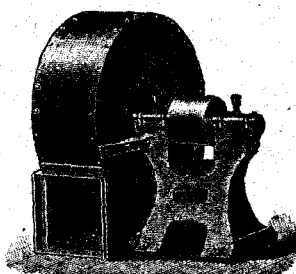
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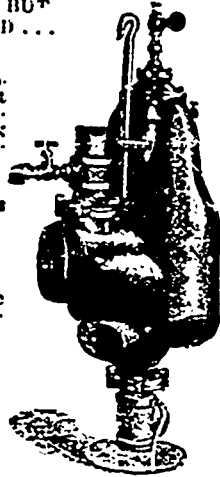
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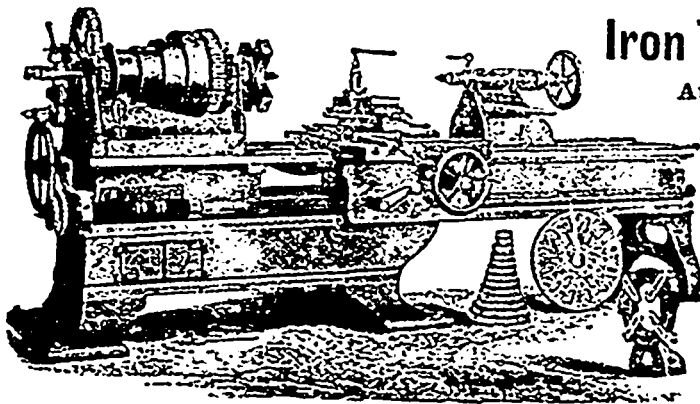
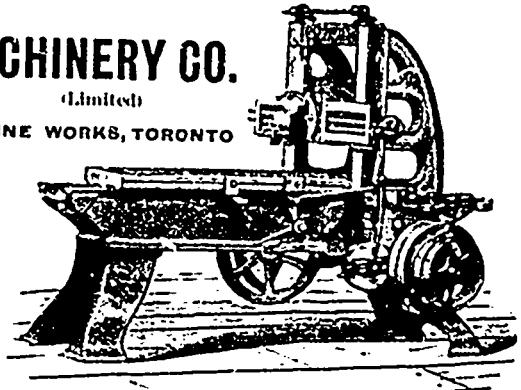
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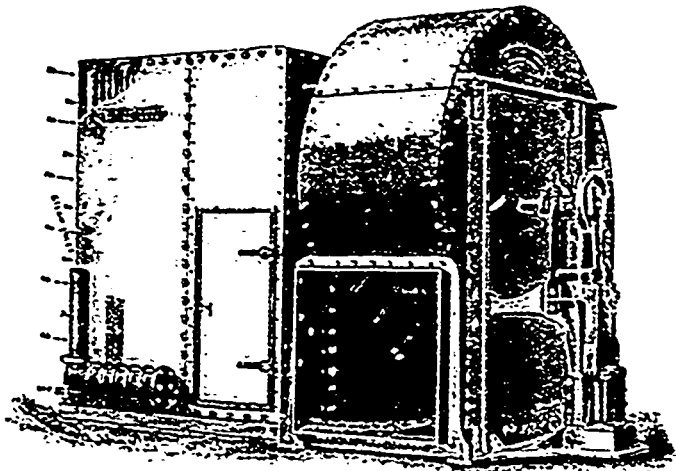
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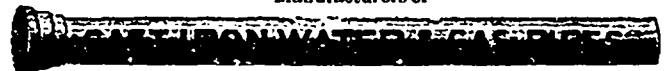
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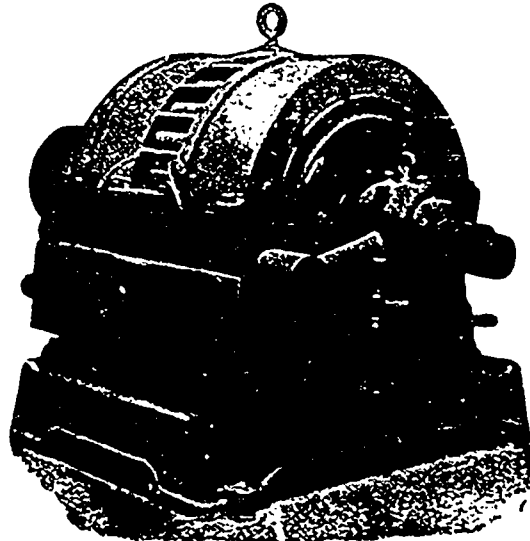
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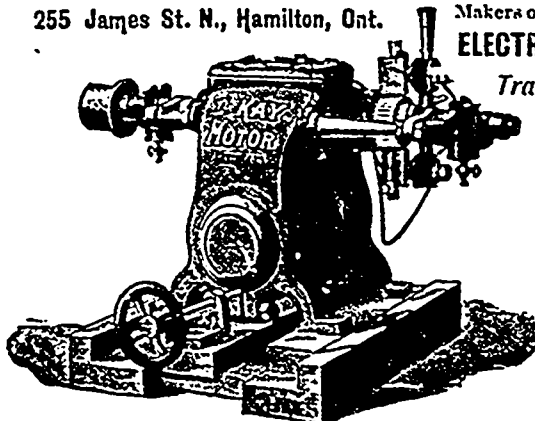
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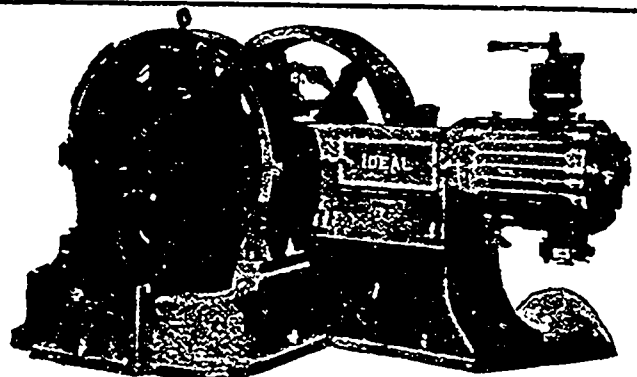
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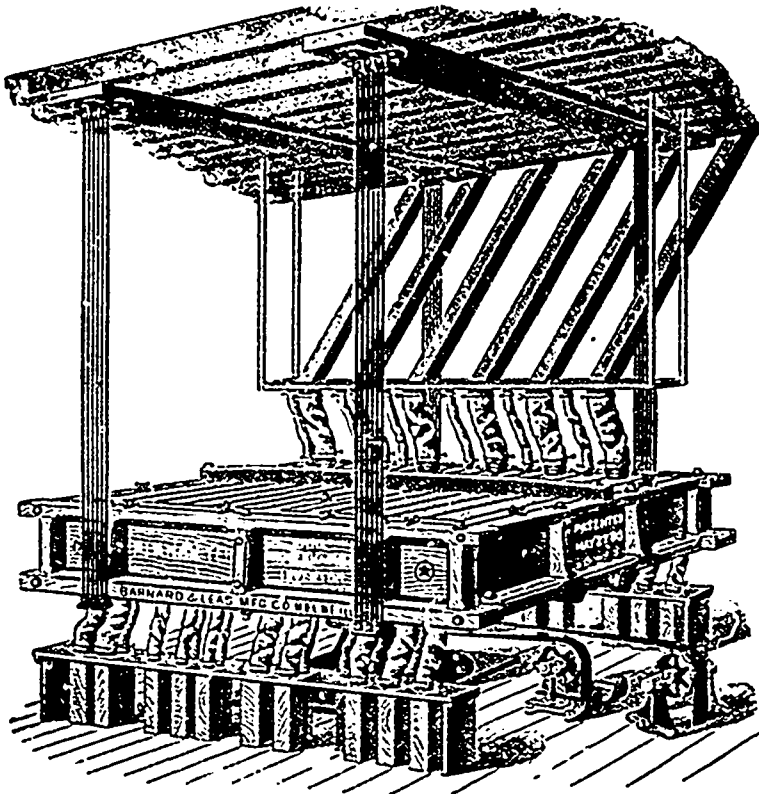
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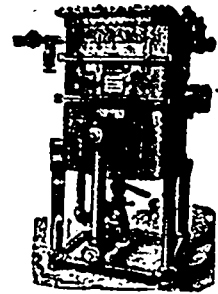
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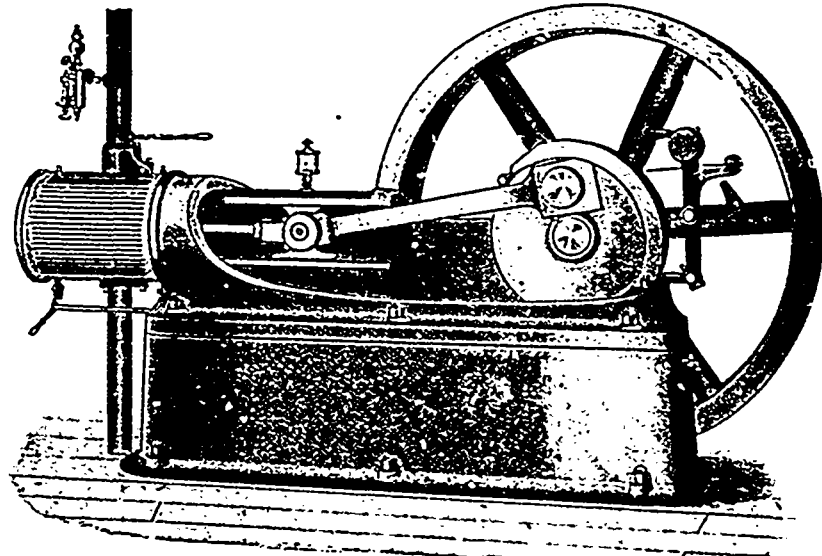
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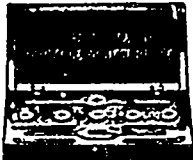
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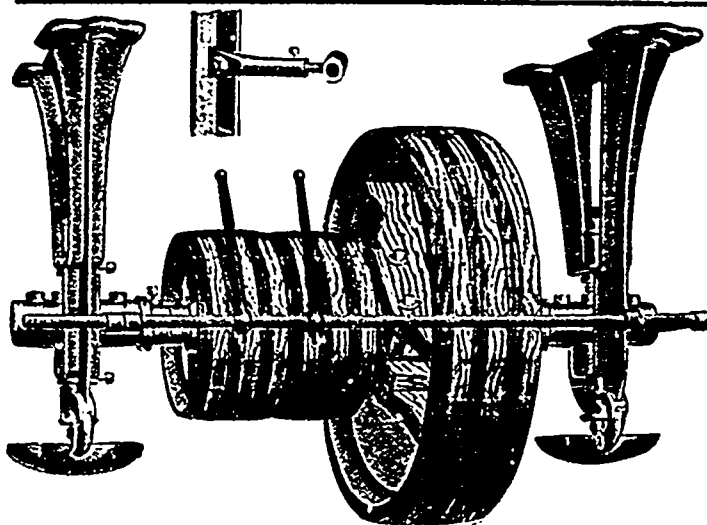
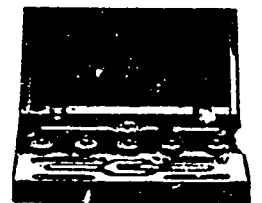
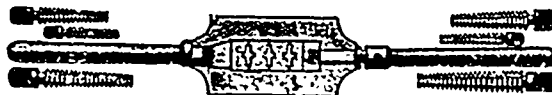
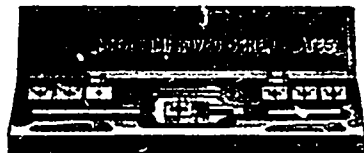


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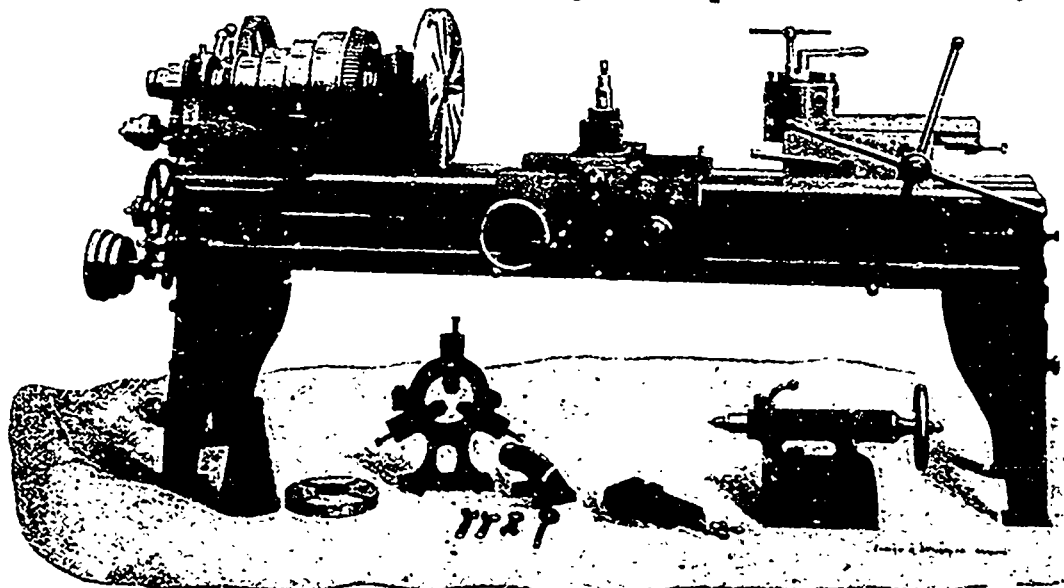
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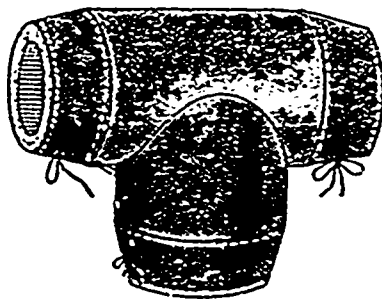
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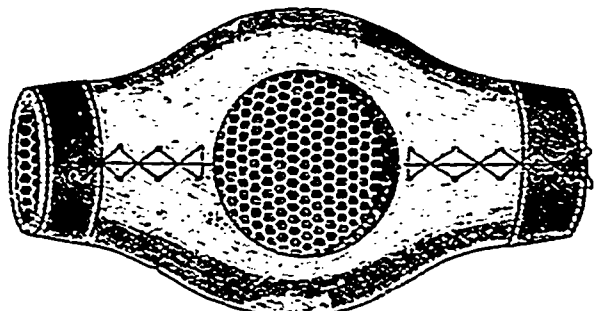
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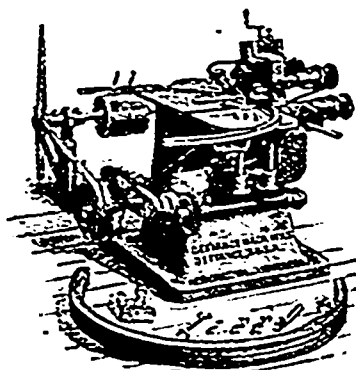
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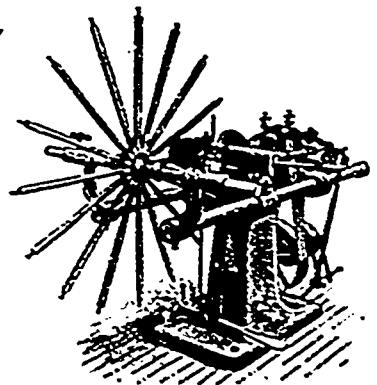
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THEN AND NOW.

Time changes all things. Nothing is immutable. Everything changes—everything but the Globe—the great, the good, the consistent, the upright, straightforward advocate of simple justice for everybody. A story is told of a philosophic, plain-spoken, albeit self-conceited Quaker who said to his wife:—"Martha, all the world is queer, excepting thee and me (a pause), and, Martha, even thee, even thee is a little queer." Martha's feelings are not recorded by the story but they must have been somewhat like the feelings of those upon

whom the Globe turns the search-light of its own irreproachable radiance in the endeavor to prove them of a lower moral or political type than itself. The Quaker was satisfied; so is the Globe; and yet to outsiders both the Quaker and the Globe must appear to be arrant humbugs.

The Globe, the organ of the Liberal Opposition in the Ottawa House, and the Globe, the organ of the Liberal Government in control of the affairs of this country are consistently inconsistent. We should scarce have expected aught else of the Globe. It is really too bad that such an enterprising journal as our morning contemporary has never bethought itself to have its editorials indexed, tabulated and arranged so that it might be easily possible to discover the vagaries they have pursued during the Globe's lifetime. A ready reference guide of that kind would prove extremely useful and its use might prevent the occasional—not to say frequent—discrepancies in opinion that keep cropping up in the Globe's editorial columns to destroy the peace of mind of persons whose good memories are teaching them to lose faith in that exclusive proprietorship of infallibility which the Globe calmly arrogates to itself.

Mr. Geo. H. Bertram was elected recently to represent Centre Toronto in the House of Commons. Mr. Bertram will make a good member of parliament, and, as we have stated before in these columns, he was elected by the assistance of gentlemen who are members of the Canadian Manufacturers' Association and who believe, as we believe, that the business interests of this city and this country will be well served by such men as Mr. Bertram. On the public hustings Mr. Bertram made his boast that he had had the ear of the Laurier Government and advised them upon many of the articles enumerated in the tariff. And here is where the Globe's inconsistency comes in and where an index of its editorial vagaries might have saved it from absurdity.

Away back in 1894 the Conservative Government made alterations in the tariff. On that occasion the Canadian Manufacturers' Association utilized its organization to collect every available scrap of information and presented these collected opinions from the men best posted in these affairs throughout the country to the then Minister of Finance, Hon. Geo. E. Foster. In so doing they acted perfectly within their right. Their experience taught them exactly what was necessary to further the industrial progress of Canada and they placed their views before the Government in the most concise manner possible. What would be more natural or more proper, and what more to be expected than that the Government should gladly avail itself of such assistance.

Yet, the next spring, immediately subsequent to the meeting of the Manufacturers' Association, the Globe, on March 1st, 1895, made a bitter attack on the Association and declared that Hon. Geo. E. Foster, in his budget speech, acted as their counsel and that the statement prepared by the Association had more effect upon Mr. Foster's tariff than the year's work of himself and his colleagues. Listen to this:—

If there is any doubt in the mind of any man that it is wrong for a servant of the public, dealing with a great public question, to act as the counsel of a class having an enormous private and pecuniary interest in that question, that doubt may be removed by reading the Minister's own promises and declarations of policy.

The Globe was not satisfied with this sweeping condemnation. It went further—it condemned the report of the Secre-

tary of the Canadian Manufacturers' Association because that report dared to express gratification that the Government had seen fit to adopt some of the Associations suggestions. A most curious conclusion truly. That because a body of men lay their views before the Government and the Government chooses to adopt their recommendations both the Government and the Association are culpable in the highest degree. Listen to the Globe in as it laid a foundation for the subsequent reversal of its own reputation for justice and fair play:—

All this after Mr. Foster's solemn promise, "It shall not be said that only one class has the ear of the Government," and "every class in the country, the agricultural class, the artisan class, the manufacturing class, the producers of any class, shall have ample and abundant opportunity to state their case." What opportunity had the farmers, the artisans, the taxpayers to pronounce their views upon the proposals of the protected manufacturers, who declared that one item in the tariff might be modified and that another must stand unchanged? The meetings with the farmers were public. Everybody knew what they wanted, and how cleverly the Controllers fenced with them and told them of the folly of their demands for reform. Then the protected manufacturers, knowing all this, with their opponents' case before them, prepared their own in secret, transmitted it to Ottawa in secret, and saw it secretly incorporated into the speech of the Minister "Ear of the Government," forsooth! Both ears, faculties and intellect, body and bones, seem to have been handed over to the privileged class.

Behold the Globe in 1895—the unrelenting enemy of a Government who accepted the recommendations of qualified men, and condemning in no unsparing terms the men who had the temerity to make the recommendations that were adopted. And who shall say the Globe in 1895 was not able and fit to be the arbiter of the actions of all mankind but itself? Who shall gainsay the uprightness, the righteousness and the altogether holiness of this Solomon among newspapers? Behold again and see the Globe in 1897. Who shall to-day point the finger of protest at the Globe—a supporter of Liberalism in power? Would anyone be rash enough to take such responsibility—to insist that the Globe, the infallible Globe, could possibly be wrong?

And yet—there is just a doubt—just a shadow of a doubt. In the recent Centre Toronto campaign The Globe was a most unequivocal supporter of Mr. Bertram. In 1894 it was wrong for a body of manufacturers to present their views to the Government and wrong for the Government to adopt their suggestions. In 1897 it was right for one manufacturer to inflict his views on the Government and for the Government to profit by his advice. It was all right for Mr. Bertram to have the ear of the Government, but all wrong for the Canadian Manufacturers' Association to meet with even ordinary consideration from the Government.

'Tis strange, 'tis passing strange. Perchance The Globe can explain this right-about-face in its ethics. And, perchance, it cannot. At any rate this great journal will pardon our calling its attention to this trilling discrepancy in its reasoning and doubtless will easily explain away the difficulty that presents itself to us.

Should this prove too easy a task The Globe might turn its attention to the Government now in power—a government that earnestly desired an opportunity and a reason to introduce free trade. The tariff commissioner travelled the country over and tendered the fullest and freest opportunity to every

man to present his views on tariff matters. What was the result? The men who gave evidence before the commission were the manufacturers and the artisans whose interests were identical with the interests of the manufacturers. Where were the farmers—the men for whom The Globe had cried out in an agony of appeal? Why did they not come forth and insist upon free trade? Why were they derelict to their principles?

As a matter of fact they were not. Free trade would hurt them as well as the manufacturers. They knew it and they said never a word. Their silence was an eloquent protest against The Globe's attempt to saddle upon them responsibility for its own foibles. What did the Government do? Why, in view of the evidence they heard from every quarter of the country, they acted like sensible men and decided to make no radical changes inimical to every business interest in the Dominion. They did exactly what the Hon. G. E. Foster did in 1894—took the best advice they could get and acted in accordance with it.

Should The Globe find our first query too easy we would be pleased to hear the condemnation of the present Government which its consistency will force it to, in view of the circumstances as stated above. We would like a kind explanation of all this and The Globe's reasons why it blew hot in one case and cold in another.

GIBSON TIMBER BILL.

The "Act respecting the manufacture of pine cut on the Crown Domain," introduced into the Legislature by Hon. J. M. Gibson, appears to cover the ground with due regard to any possible legal difficulties that might have been encountered in case any restriction had been put on the export of logs cut this winter on Ontario timber limits. It is not ours to comment as to whether the action of the Government was based upon the strong stand taken by the Opposition or upon their own conclusions.

Let those interested discuss that. Suffice it to say they have introduced much needed legislation which will be a great benefit to the lumber trade of Western Ontario. The provisions of the Act are:—

1. All sales of pine timber limits or berths by the Commissioner of Crown Lands which shall be hereafter made, and all licenses or permits to cut pine timber on such limits or berths hereafter granted by the Commissioner, shall be so made or granted subject to the condition set out in the just regulation of Schedule "A" of this Act, and it shall be sufficient if such condition be cited or mentioned as "The Manufacturing Condition" in all notices, licenses and permits, or agreements or other writing.

2. The regulations set out in Schedule "A" to this Act are hereby approved.

3. The Lieutenant-Governor in Council may make any further or additional regulations necessary to enable the Commissioner of Crown Lands to carry into effect the object and intent of the regulations contained in Schedule "A."

4. Section 1 of this Act shall come into force on the passing hereof, and the other parts of this Act shall come into force on the 29th day of April, 1898.

As is very frequently the case in statutes the Schedule "A" contains the real gist of the whole regulation. That it should be widely circulated so that everyone interested may obtain knowledge of the effect it is likely to have, the Schedule is also hereto appended. The provisions are as follows:—

1. Every license or permit to cut pine timber on the ungranted lands of the Crown, or to cut pine timber reserved to the Crown on lands located, sold, granted, patented or leased by the Crown, which shall be issued on or after the 30th day of April, 1898, shall contain and be subject to the condition that all pine which may be cut into logs or otherwise under the authority or permission of such license or permit shall, except as hereinafter provided, be manufactured into sawn lumber in Canada, that is to say, into boards, deal, joists, lath, shingles or other sawn lumber, or into wainsot board or square or other timber in Canada; and such condition shall be kept and observed by the holder or holders of any such license or permit, who shall cut or cause to be cut pine trees or timber under the authority thereof, and by any other person or persons who shall cut or cause to be cut any of such pine trees or timber under the authority thereof, and all pine so cut into logs or otherwise, shall be manufactured in Canada as aforesaid.

2. Should any holder of a timber license or permit, or any servant or agent of such holder, or any person acting for him, or under his authority or permission, violate or refuse to keep and observe the condition mentioned in the preceding regulation, then and in such case the license or permit to cut pine timber on the berth, territory, lot or lots included in the license or permit, and on which or on any part of which the pine was cut, and in respect of which or any part of which there was a breach of such regulation or a refusal to observe or keep the same shall be suspended and held in abeyance, and shall not be re-issued, nor shall a new license issue unless and until so directed by the Governor-General in Council, and then only upon such terms and conditions as the Lieutenant-Governor in Council may impose.

3. The Commissioner of Crown Lands, his officers, servants and agents may do all things necessary to prevent a breach of the aforesaid condition or regulation, and to secure compliance therewith, and may, for such purpose, take, seize, hold and detain all logs so cut as aforesaid, and which it is made to appear to the Commissioner of Crown Lands it is not the intention of the licensee, owner or holder, or person in possession of to manufacture or cause to be manufactured as aforesaid in Canada, or to dispose of to others who will have the same so manufactured in Canada, until security shall be given to Her Majesty satisfactory to the Commissioner that the said condition will be kept and observed, and that such logs will be manufactured in Canada as aforesaid, and in the event of refusal on the part of the licensee, owner or holder, or person in possession of such logs, to give such security within four weeks after notice of such seizure and demand of security by or on behalf of the Commissioner, then the Commissioner may sell or cause to be sold such logs by public auction after due advertisement to some person or persons who will give such security to Her Majesty as the Commissioner may require that such logs shall be manufactured in Canada. The proceeds of such logs shall, after such sale and after deducting all expenses of such seizure and sale, and any sum due and owing to Her Majesty for or in respect of any timber dues, trespass dues, ground rent, or on the account of the purchase of any timber or timber berths by the owner, licensee, or holder of a permit, or other person who has cut or caused to be cut such logs, or who is the owner or holder of the same, be paid over to the person entitled to the same.

4. Provided, nevertheless, that nothing in the preceding regulations which requires pine logs or timber to be manufactured in Canada as aforesaid, shall apply to logs or timber cut and in use in Canada for any purpose for which logs or timber in the manufactured state, are or may be used.

5. Provided, further that these regulations shall not apply to the east half of the township of Aweres, in the District of Algoma, containing 18½ square miles, nor to 22 square miles in the district of Thunder Bay, composed of berths 2, 3 and 4 of the timber sale of 1890.

6. The foregoing regulations shall not come into force unless and until they shall be approved by an Act of the Legislature.

OUR PAPER EXPORT TRADE.

The attention of English capital is again turned to Canada and to a branch of Canadian industry hitherto untouched from that direction. Mr. Geo. Mawson, a paper dealer of London, Eng., is in Canada with letters of introduction from Lord Strathcona to Sir Richard Cartwright and others of the Laurier Cabinet. Mr. Mawson will endeavor to arrange for the export of Canadian made paper to England. He reasons that as Canada is now exporting wood pulp to England where it is made into paper, there is strong ground to presume that the paper might as well be exported as the pulp. He points out that there would really be a saving in freight inasmuch as paper is lighter than pulp, it being practically pulp with all the moisture expressed. Mr. Mawson is more than welcome to Canada and his errand should be heartily forwarded by every Canadian with whom he comes in contact.

The trade and navigation returns of the Dominion of Canada for 1896 show that the paper exported from Canada is wall paper only, and in that year we sent out 35,967 rolls valued at \$3,593. That comprised all the paper exported from Canada. During the same time pulp exports from Canada were: To Great Britain, \$113,557; to France, \$5,135; to the United States, \$557,085.

In the first ten months of 1897 the United States exported paper to the value of \$3,589,184, this being an increase of over one million dollars over the value of the amount of paper exported by the same country during the corresponding period of the previous year. It is interesting to note that wall paper totalled but \$128,183 of this sum, while printing paper amounted to \$836,108. Writing paper and envelopes amounted to \$116,292, and other paper formed the bulk of the export, their value being the neat little sum of \$2,508,601.

Now, why should not Canada either secure a part of this big trade or derive a revenue from the Canadian pulp wood which United States paper mills manufacture into paper for export? As it is United States paper manufacturers pay a little over half a million dollars annually for Canadian pulp wood. In addition to this sum they should be made to pay an export duty of one hundred per cent. into the public treasury of this country. If they choose not to buy our pulp wood then we can secure their paper trade with other countries. Business common sense should lead us to act accordingly.

This statement of the position may be disputed but it cannot be contradicted. The American paper mill men buy our pulp wood because it is nearer their mills than any supply they can secure from American forests. Canadian paper mills are on the edge of the pulp wood area that reaches from the height of land to James Bay. If American mills secure their pulp wood from American forests the very nearness of our raw material to our factories will enable us to make paper more cheaply than the American manufacturers can possibly make it.

Again, let us urge it, that Mr. Mawson be afforded every possible facility and that the Canadian Government be strongly memorialized to take steps that will mean the accretion of an immense revenue to Canada privately, or publicly, or both.

The Triangle Wheat Company of Ontario, Limited, of Toronto, has been incorporated, with a capital stock of \$24,000, to deal in prepared food products.

WHERE BRITAIN STANDS.

In The Nineteenth Century for December is an article by Lieut-Col. Geo. T. Denison, of Toronto, a gentleman who needs no introduction from this pen. It would be for Canada's good should every citizen of the Dominion read, mark, and digest the logical arguments of this capital contribution to the demand for an Imperial Trade League. With reference to the free trade policy of the United Kingdom the article says:—

Protection in foreign countries has fostered and encouraged their own manufactures to such an extent as to reduce very much their imports of English goods, and to enable them to compete very successfully with the English trader and cut down his trade as well as his profits. To prove this we need only look at the imports and exports of the United Kingdom and compare the figures of the year 1873, for example, with those of last year. We find that in 1873 the total imports were £371,287,372, and that in 1896 they had risen to £441,807,335, an increase of £70,519,963. In 1873 the exports from the United Kingdom were £255,164,603, while in 1896 they had fallen to £239,922,209, a decrease of £15,242,394; so that, while the balance of trade against the United Kingdom in 1873 was £116,122,769, in 1896 it had risen to £201,885,126. I was informed also on the best authority that even this reduced trade is carried on at a very small profit indeed to the manufacturer. These figures show that a population larger by some 7,000,000 produces for export less merchandise at less profits, while it purchases from abroad £70,519,963 more than when its business was greater and more remunerative. At present England is living on her own fat, so to speak—the balances being made up by expeditures of capital, and interest on the earnings and profits of years gone by.

Surely some eloquent free trader can explain away such slight difficulties as these? Surely we shall hear some voice raised in protest against this being an argument against free trade? Surely this cannot be true? Have not the free traders told us—do they not still tell us—that Great Britain is prosperous and was never so prosperous, and that free trade is the cause of it all? And yet—when they peruse the remainder of the statement—how shall they answer it?

Col. Denison proceeds to show how free trade has destroyed the agricultural interests of the United Kingdom and is driving the population into the manufacturing towns, increasing competition and making life harder to bear. See the effect:—

Paupers are increasing in number every year, and the poor-rates constantly going up. According to the Statesman's Year Book for 1897, the number of paupers in receipt of relief in 1892 was 951,375, at an expenditure of £10,814,916. The number receiving relief in 1896, only four years later, was 1,025,364, at an expenditure of £11,910,324.

The danger of all this comes home forcibly to one upon following out the writer's observations of the physical degeneracy consequent upon the rearing of children under such adverse conditions as exist in the manufacturing centres. He describes the small proportion of the two hundred men of an English regiment he examined who "looked like a lot of school boys," and quotes Sir Charles Dilke who says:—

Our breakdown is also evidenced by the lowering of the standard of enlistment. The guardsman is now habitually taken at five feet seven inches, and the linesman at five feet three and a half inches. The shapes of the men now enlisted for the line are more startling than their small stature, and owing to our present system we are clearly drawing in an increased degree on inferior classes of the population.

The next point taken up is one which has been often dealt with in these columns, and which must weigh strongly in favor of the union of the whole British Empire for purposes of trade and to support the military and naval power of Great Britain in case she is called upon to defend herself against the arms of Germany or Russia, or, more probably, of both. In dealing with this, Col. Denison says:—

Above and beyond all the other evils I have mentioned is one which creates a great and pressing danger to our race, which should certainly be remedied at once in some way or other. The United Kingdom is dependent for its food on various sources of supply. The cultivation of wheat in England has decreased through foreign competition from 4,213,651 acres sown in 1856 to 1,456,200 acres sown in 1895-6 (Corn Trade Year Book, 1896, p. 80), and the sources of supply now are mainly confined to the United States and Russia, and countries under the control of Russia. According to the Corn Trade Year Book for 1896, the United Kingdom imported that year 23,431,000 quarters of bread-stuffs, and produced for home consumption 4,325,000 quarters. Of these imports Russia and the United States could control directly and indirectly about 19,160,000 quarters, leaving only 4,271,000 quarters of her imports coming from countries free from the control of those two powers. In saying that they could control "directly or indirectly," I mean, for example, that England imported from France in 1896, 564,000 quarters, and from Germany 308,000 quarters, but France imported that year 4,471,000 quarters and Germany 6,924,000 quarters. Would not an embargo at once cut off the bulk of French and German imports, and thereby stop all exports? Would any nation, either to make money or to help a belligerent, allow the export of food, with the certain result of bringing on a famine among its own people? Self-preservation is a law of nature, and if Russia and the United States withheld food products from all the world, as in case of war with the British Empire they undoubtedly would, the importing nations such as France and Germany would be forced to prohibit exports of food to prevent famine and revolution at home. The 4,271,000 quarters which England might be able to get, come from Canada, Argentina, India, Chili, the Persian Gulf, and sundry other places, necessitating in order to obtain them the command of a number of divergent sea routes of immense distances. The supply of all other coarse grains which might be used for food is also badly placed, Russia and the United States controlling a very large proportion of it, as they do of bacon, ham, cheese, lard, cattle and fresh beef, the stoppage of which would be felt in every direction.

The danger of the situation is enlarged upon at some length. Two not over friendly nations could combine, and without capturing a gunboat or firing a shot, possibly, they could starve England into submission. Even if the sea-routes were kept open the supply of grain, outside of Russia and the United States, is now but 4,271,000 quarters and the nations that supply it could not send the additional 19,160,000 quarters required to feed the people of the United Kingdom. The conclusion drawn, and logically and properly drawn, is that "the food to feed the British people should be grown upon British soil, under the flag of the Empire, where it could be secured in case of war and where it would be among people ready to fight for it and guard it for the common cause." After pointing out the probability that the United States would join Russia in a trade embargo in case of an Anglo-Russian war, the Colonel continues:—

No one seemed to appreciate that in the great wars with Napoleon the United Kingdom was able to feed itself, and that even as late as the Crimean war in 1854-5 the home

production was, after deducting seed, 16,427,742 quarters and the imports only 2,983,000 quarters. The present condition of Great Britain is without a parallel either in its own history or the history of any great nation. England is living from hand to mouth more than people have any idea of. I found from the best authority I could get in Liverpool that in August, when I was there, the supply of wheat in the hands of importers was for between three and four weeks only—inquiry in a number of bakers' shops disclosing the fact that the average supply in them was for about four or five days, in the large bakeries less than a week, in the mills three or four weeks. Two months' stoppage of foreign corn would reduce the rations for the people to about one-fourth of what is required, and half of it would have to be secured by the command of many divergent and lengthened sea routes.

The remedy for this state of affairs is aptly set forth. A small duty on corn instead of a duty on tea, tobacco, and other articles in common use, is proposed as a remedy that would benefit England:—

A sufficient duty, and it need not be large, would insure within the British Isles the growth of 15,000,000 quarters of wheat, instead of five or six millions as at present. A small preference of two or three shillings a quarter against the foreigner would increase the Canadian production by leaps and bounds. We have in Canada fertile wheat bearing land, capable of producing the finest wheat in the world, in quantities far more than sufficient to feed Great Britain; and a slight preference would send emigration to fill up our fields and strengthen a portion of the Empire, instead of fostering and encouraging and building up foreign countries, which may at any time be hostile. The sea route from Canada to England from the Straits of Belle Isle to the north of Ireland is almost a British route. It has no foreign naval stations to the north, and it is guarded by our stations at Halifax and St. John's on the west, and Portsmouth, Plymouth, Milford Haven and Bear Haven on the east. It is, without any doubt, the safest and most easily defended sea route from England in any direction.

Thus Col. Denison argues in favor of a "war measure of defence." He draws a striking picture of the condition that would ensue upon war and the position in which Canada would be placed in event of an onset upon us from the United States. The time is coming—it must come, and come soon—when some such measure as he suggests shall be adopted. There is no way out of it or around it. The statements are facts, and as such they must be faced. The commercial prosperity of the British Empire depends upon some change in the present conditions of trade. Great Britain's manufacturing industries are crying out for it. Great Britain's agricultural industries demand it. We in Canada ask that the Mother Country combine with measures to secure the return of prosperity to her self-consideration for us, to the extent of placing Canada in a position where British trade shall develop Canada and not the United States. The greatest minds in Great Britain are focussed upon the problem. British statesmen have said that what we ask is warranted and that something must be done. There is no need to search for the remedy. It is close at hand and needs but the application. You will hardly find a thinking Canadian who denies the advantages that would accrue to Canada from a preference in the markets of Great Britain. The free trade members of the Laurier Cabinet but make objection that England will not grant us the privilege we ask. They are not warranted in their objection. If these men who are thus passively negative would but join hands with us and sue for the favor, its coming would be hastened.

No man can say what may be done except the effort has been made. Blood is thicker than water. A long pull, a strong pull and a pull all together, and we shall see Canada commercially and nationally uplifted, and honor ourselves by signal aid to the impregnability of the supremacy of the British Empire.

CANADIAN COMMERCIAL AGENCIES.

The Globe's Winnipeg correspondent refers thus to the proposition for Canadian merchants to be represented by a commercial agency in the Old Country:—

The Board of Trade and other bodies appear not to have had it before them in their collective capacity, but individually they approve generally of the suggestion, though realizing, at the same time, that much will depend upon the carrying out of the scheme. None of the gentlemen seen pointed out any insuperable difficulties. A few, on account of the nature of their business, did not see how a commercial agency would be of benefit to themselves, but they did care to say whether or not others would be advantageously affected. The fact was clearly pointed out that the duties of such an agent would be quite distinct from those of the High Commissioner; but it was agreed that if the two offices existed they should be associated together, and not conducted independently.

Thus it appears that the business men of Winnipeg favor a commercial agency to advocate in England the sale of Canadian products. We are glad to note this significant fact. In these columns it has, from time to time, been urged that the manufacturers of Canada should lose no opportunity to put forward their claim to a share of every market. In many countries the merchants of Germany and England have established commercial agencies. Germany, especially, has devoted herself to this method of securing markets and this plan of procedure is to a very considerable extent responsible for the progress Germany has made within the last twenty-five years. The consuls of the American Government are everywhere acting, in so far as they may, in the interests of the manufacturers of the United States, and the CANADIAN MANUFACTURER has, from time to time, quoted letters and reports from American consuls who were tendering commercial advice to American manufacturers.

Canada has not to bear the expense of consuls to protect the civil rights of her sons in foreign lands. The long arm of the British diplomatic service is extended for their protection in every country and in every clime. But the consuls of Britain are British born and it seems to be expected they will choose to advance the interests of the manufacturers of Canada in a way inimical to the interests of the manufacturers of the British Isles.

Under these circumstances Canada must look out for herself in the extension of her trade with foreign countries. The business men of Winnipeg are right. Commercial agencies must be established to represent Canadian manufacturing interests abroad. Let the first step be taken just as soon as it may be arranged for. A practical business man is what is wanted for the position—an up-to-date, progressive, alert man who will let no chance slip past him. Every moment's delay is practically the handing over of a certain amount of valuable trade to some other country whose manufacturers have been first in the race. Give us a commercial representative in Great Britain and we are not afraid of the result. Others will follow until Canada has the best organized system of commerce promotion that any country ever had.

Just a word more. Don't neglect the possibilities of industrial exhibitions as commercial agencies. The trans Mississippi Exhibition this year will be visited by a large number of business men from the western part of the United States. Canadian manufacturers who can profitably sell their wares in that part of the continent should see to it that those who attend at that exhibition may have every opportunity to learn all there is to learn about their wares. That is for individuals. The Dominion of Canada and the Provinces of Canada cannot afford to be unrepresented. American public school geographies teach the youth of the United States that Canada is a sort of arctic country producing furs and lumber. Such influences must be counteracted and such an opportunity as this should not be passed lightly over. The natural resources of Canada should be illustrated completely and pamphlets containing correct information about this country should be scattered with no niggard hand.

To sum up—would that the lesson might be indelibly impressed on the mind of every man in Canada—that it is the duty of every Canadian to aid to the extent of his ability the development of the unequalled commercial possibilities of this great country.

NOT ALL OF ONE MIND.

Recently throughout the press was published a despatch from Washington in which was reported an interview with Mr. Tunis, representing the American Lumbermen's Association. If Mr. Tunis is correct in his conclusions it would appear that we may expect an offer of reciprocity from the Washington Government. Mr. Tunis is reported as saying:

It is evident the Administration is bent on a commercial treaty with Canada under section 4 of the Dingley bill.

This will be rather a surprise to some people in Canada who put another construction on the case and thought that the government of Canada were making advances to the powers at Washington. The next words attributed to Mr. Tunis' dilate upon the little the lumbermen ask from the government of the United States by way of protection. He said:—

As Chairman of the Executive Committee of the National Lumbermen's Convention I said to Commissioner Kasson what we said to the last Congress, that the great interest we represent, employing more than 600,000 workingmen and directly supporting a population of more than 3,000,000 of people, ask for no special privilege. While they are willing to pay a duty for other manufactured goods equal to forty to fifty per cent. of their value, they only ask for their own less than twenty per cent.

They only want a little, but they are very certain of what they want. They think they are being placed in an exceptional position and they do not like it. American gentlemen who are proprietors of Canadian forests seem to be anathema to the main body of the lumbermen of the United States. The lumber industry in the United States is a very important industry and the capital invested in it weighs heavily in influence with the government at Washington and their attitude is by no means one of uncertainty. They have determined not to allow any reduction in the \$2 duty on Canadian lumber sent into the United States and Mr. Tunis announces it forcibly. Continuing his statement he said:—

As they then said, they are unwilling to be singled out of all the other manufacturing industries of this country to test

the theories of free trade. They are now unwilling to be understood as opposing any policy of the Government looking to the extension of our export trade, and will cheerfully go as far in the consummation of that policy as will any other interest, but are unalterably opposed to sharing with coal and fish the burden of a policy which the great masses of our people are utterly indifferent to, but which is urged on the Administration by a few Americans interested in the seal fisheries and a few other American citizens who are owners of Canadian forests. As a matter of principle, policy and business, the average American student of every-day affairs can see no more reason, justice or demand for reciprocity with Canada than with her Imperial mother, our best customer for our wheat, corn, hay, cotton, lumber, etc., all of which she buys, not on any sentimental grounds, but simply because she wants them. The danger to our interests lies in reciprocity with nations located in the same temperate zones as our own, and of whose products we are entirely independent. The case may be different in the countries in the tropics, producing things which we need and which cannot be produced at home. Representatives and Senators from the south, regardless of politics, realize that a reduction in the duty on white pine would be as harmful to them and their constituents as it is to the white pine, hemlock and spruce interests in Michigan, Wisconsin, Minnesota, New York, New England and the Pacific coast; and in view of the hearty approval given by their constituents to their votes in favor of raising the duty on white pine to \$2, will oppose the article being singled out for lower duties in Canadian reciprocity negotiations.

If Premier Hardy and his government read the above, any lingering doubt they may have had must be quickly dispelled. The National Convention of American Lumbermen are not wholly delighted with any change that might admit Ontario lumber on easier terms to the United States. The Michigan lumbermen who waited on the Ontario Government at the famous "secret interview" threatened all kinds of vengeance by way of tariff reprisal. They may now join hands with the lumbermen represented by Mr. Tunis and proceed to shut out Canadian lumber altogether from the United States. Such action would result in a regular tariff war. In many ways it would be more than undesirable. Its effect on various lines of Canadian industry would be decidedly inimical but it must, in the long run, show Canadians that they can justly put faith in themselves and their country and that our Dominion can exist without any atom of aid from the big republic across the line to the south of us.

EDITORIAL NOTES.

Up to 1890 no tin plate was made in the United States. Under the McKinley tariff the industry started in a small way. In 1892 the industry started to boom and to-day not only are Great Britain's tin plates shut out of the American market, but the tin mills of the United States are shipping to Europe. How is this for an accomplishment of Free Trade?

What Canadians want is not less but more protection—protection against the cheap labor of Japan, against the sweat shops of Germany—against every form of foreign production that threatens any part of our industrial life. The Reporter ventures to predict that in less than five years this will be the cry of the people, and the farmer and mechanic will be found with the manufacturer in the demand made to hold Canada for the Canadians.—Galt Reporter.

That is a sort of talk we cannot have too much of in Canada. The era of our development is at hand and with it will come broader knowledge of the conditions necessary to industrial success.

In 1896 the United States sold to Great Britain products valued at \$478,448,592, and bought from Great Britain products amounting to only \$167,947,809. Even from that disparity there is an increase to be expected, as the Dingley Tariff has already destroyed in part Great Britain's tin plate trade and wire trade with the United States. Give Canada a chance and the demands of Great Britain will be supplied while Canada's resources are developed.

The State of Michigan gives a bounty of one cent per pound on sugar refined in the State, from beets grown therein, provided the refinery has paid the farmer not less than \$4 a ton for the beets containing twelve per cent. of sugar, and a higher price in proportion as the beets showed a higher percentage of sugar. The bill guarantees the manufacturer this bounty for seven years. This gives time to establish the industry and is not too great a burden for the State. Let us hear from Ontario. The Legislature is now in session. The Government have introduced a bill to prevent saw log exportation. Let them give us a beet-root sugar bonus and they will make themselves solid for the coming election.

Manufacturing industries in small towns are a direct benefit to agricultural interests in the surrounding district in many ways. Farm improvements and the production of new food crops forthwith make the value of farm land go higher. The farmers get a better price for their products and have a market that will consume a much larger quantity by the advent of the mill operatives. And yet some people insist on telling the farmers that their interests and the interests of the manufacturers are not only different, but are wholly opposed to each other.

Canada is taking the first steps toward a wonderful industrial development. As a necessary preliminary it has awakened to a full appreciation of the value of its natural resources. Just how to make them available is the problem which is now perplexing the Canadians and their government.—The Paper Mill.

Our New York contemporary is perfectly correct. It appears to be thoroughly sound in its sizing up of the situation. Albeit the above remark was made upon the eve of the recent tariff changes it applies to-day. We are awakening to appreciation of the value of our natural resources and just in so much as that appreciation increases will it become more difficult for the United States to take unfair advantage of us.

We object with all our might to this everlasting clamor for cheapness. It appeals to the mean side, the unpatriotic side, of human nature; it nurses selfishness and all uncharity. Right-thinking men do not regard themselves as paupers, that the Government may give them cheap clothes and cheap sugar. What these men most desire is the general prosperity.—Philadelphia Record.

"Cheapness," "cheapness," "always cheapness," has been the clamorous cry of The Globe and other Grit journals of Canada who have advanced preposterous arguments to prove THE CANADIAN MANUFACTURER wrong in its denunciation of cheapness. A cheap article is a very desirable thing but when the labor necessary to manufacture it is reduced below its fair value surely cheapness can hardly be considered desirable.

In its ability to sustain itself the United States is unique among nations. Its independence, politically and commercially, may well excite the envy of other powers. They cannot, however, stay its progress. The ghost of a demoralized currency having been effectually laid, the danger of internal troubles is past. In our case more is always to be feared from dissensions among our own people than from attacks by other countries.

Thus The Iron Age concludes a prophetic vision in which it sees the United States about to become "the richest country in the world" and "the leader among nations in other respects." It is well for our contemporary's peace of mind that it can thus ignore the coming union of all British lands to control the commerce of the world. And it is also well that the last clause quoted above should have been inserted. A policy of protection has done wonders in developing the manufacturing interests of the United States. Their external progress has been great. Let them look to their system and cure the internal troubles that the prophetic eye of The Iron Age might easily have seen.

The strongest protest which is likely to be made against a reciprocity treaty with Canada is that of the fishermen of New England and the business men of the towns which depend upon the fishing industry. Already a meeting has been held in Gloucester, Mass., at which a committee was authorized whose duty it will be to present the interests of the people of that place to the Government. The presiding officer at this meeting said that he did not believe the fisheries of the United States could survive without the present tariff rates.—Buffalo Express.

The Express, evidently, like many of its confreres, has arrived at the conclusion that Canada is about to sue for a reciprocity treaty with Washington. It should not, and cannot afford to, overlook the growing tendency among Canadians to favor reciprocity within the Empire and shut out all others. Canada's eyes are opening to the main chance and Canadian hearts are turned to Westminster and not to Washington. For the sake of the commercial and national dignity of Canada may the day never come when a Canadian Government, by asking the American Government for reciprocity, acknowledges that the independence of the Canadian people has succumbed to the high tariff of the United States.

Since the Merchandise Marks Act of 1887 was enforced it has been the subject of complaints. Merchants and ship-owners especially have been loud in their expressions of disapproval. Perhaps, also, a few manufacturers, or the increasing class who pose as manufacturers, have been unhappy. Before the Act passed it was possible to be a "manufacturer" in Yorkshire, to have cutlery made on the continent, to stamp it there with English names and trade marks, and to ship it from Belgium or Germany or London as a thoroughly sound piece of British workmanship. When the new Marks Act came into force this kind of manufacturer naturally felt sore, and he with his friends, the shippers whom he employed, soon made it warm for the Government. Wherever shipowners, shippers, and these soi-disant manufacturers met they opposed the Merchandise Marks law. A Select Committee accordingly was appointed to inquire into their grievances, with the result that the Act was held to be a beneficial one.—British Trade Journal.

Which gives an idea of what benefits we may expect should a similar Act be passed for the benefit of bona fide Canadian manufacturers.

In 1890, in the United States, the manufacture of tin plates alone was 8,200,751 pounds; under high tariff, in 1896, the production was 92,086,259 pounds, and of black sheets 105,230,767 pounds, and tin was never known to be so cheap, and this is but another example of how the United States has become one of the greatest manufacturing countries of the world.

If any of those products can be better raised at home, I delight in it. If they can be raised better and cheaper here, I rejoice in it, and, sometimes, when I find that 1,200,000,000 eggs are laid all over Europe in order to be imported into England, I cannot help thinking it would be a very good thing if 500,000,000 or 600,000,000 of those eggs were laid at home—because you may depend on this, that the nearer the egg is laid to the place where it is consumed, the fresher and the better it will be. I do not believe that the egg-producing capacity of this country is half exhausted, or, in point of fact, is exercised to the degree to which it ought to be exercised, and, therefore, while I rejoice that the foreigner is allowed to supply the Englishman, I say the more the Englishman can grow that cheap food at home—that cheap food and the accessories of food such as are the objects of this horticultural meeting to promote, the better am I pleased.

These words were uttered by Hon. W. E. Gladstone no later than at the recent flower show in England. They would

seem to indicate that the great Liberal and apostle of free trade has changed his mind about some things since he left the fields of political activity in Great Britain. The disciples of Cobden and Bright should have a care lest they find the Grand Old Man supporting a policy of protection for England with an imperial customs union of all the colonies as its foundation stone.

Reciprocity with Canada is again a possibility, and it is not strange that there is renewed talk of it. There could have been no reciprocity under the Gorman-Wilson tariff, for reciprocity implies the granting of commercial favors on the one side in return for compensatory favors on the other, and the Gorman-Wilson tariff, in the words of a Canadian member of Parliament, "Gave Canada all she wanted without requiring anything in return." But if there is to be reciprocity, it must not be of the jug-handled variety. That is, there must be more than a "swapping" of natural products. There must be some substantial benefit for the manufacturers of New England.—Boston Journal.

Canada cannot afford to entertain any reciprocity proposals from any nation if the reciprocity proposed is of a nature inimical to any part of the industries of Canada. If the manufacturers of New England benefit the manufacturers of Canada must suffer.

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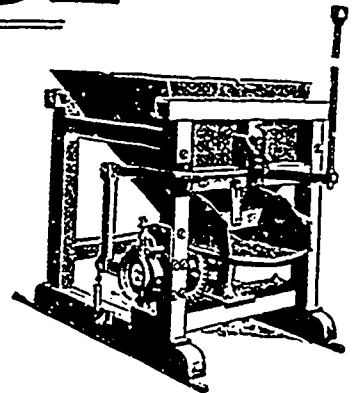
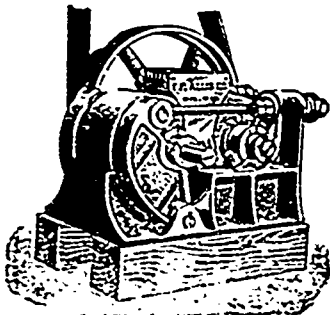
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While a European commercial alliance against the United States is being mooted, a section of the United States press asserts that the new German minister is loaded with instructions about opening negotiations for a reciprocity treaty with the United States. With their customary self-conceit these journals placidly remark that a tariff war would be disastrous for Germany, while the United States could easily find markets to supply what it might lose in Germany. 'My' what lungs the eagle has. Such insufferable self-sufficiency richly deserves the rough lesson it must learn when Germany, France and Austria form a commercial Dreibund and the British Empire is united in a trade league that will shut the United States into its own market.

The motor carriage is something of which we read much in the newspapers of Europe. How is it that we cannot—or rather have not—gone more into this line of invention in Canada? True, there are motor carriages to be seen in our streets, but they are of a style too costly to ever become of universal use. In thus saying there is no desire to disparage these inventions in the least degree, but the fact remains that a motor carriage, or, better, the auto-car, will never come into universal use unless its price is reduced so as to place it within reach of the average individual who is not burdened with several hundred dollars to expend for this species of vehicle. Why doesn't some capitalist set inventors and mechanics to work to construct a machine that can be sold at a price within common reach? There is an immense field here for brains and money to work out a satisfactory solution

to this problem, the solving of which will introduce into everyday life something that will be a feature of the civilization of the next century.

The maritime policy of the United States has been such as to drive one flag from the sea. At one time American enterprise owned and operated the best steamship line in the world, but it was killed by an English subsidized line. Attempts have since been made to restore American maritime interests, but they were made unsuccessful by the action of free traders. Consequently, we find that Japan, the youngest of the nations in point of modern development, is away ahead of us in establishing sea-going commerce.

The confession contained in the above paragraph must have wrung the soul of the American Manufacturer. The United States has been able to put into execution a policy that has served for manufacturing development, but there is one line in which the United States is out of the running—and open confession is good for the soul.

The Behring Sea Commissioners awarded \$964,000 to the Victoria sealers who claimed damages for interference of the United States with them. This includes all but the cases of the Black Diamond and the Ada, the determination of which will be left to diplomatic arrangement. The claims made reached \$786,166. The settlement made is apparently on the basis advised by President Cleveland when he declared three years ago that \$425,000 was an equitable sum to pay by way of settlement.

The Ladies' Home Journal during 1898 will contain a series of biographies of famous Americans, among them being President

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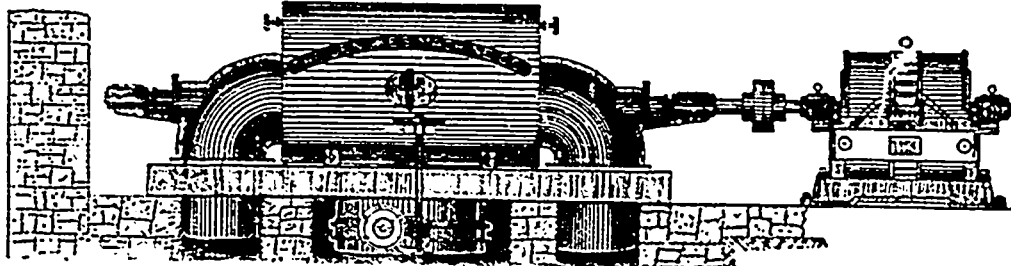
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McKinley, Mrs. Cleveland, Mark Twain, Joseph Jefferson, and Thos. Alvan Edison. These biographical sketches are to consist of stories and anecdotes hitherto unpublished and relatives and friends of the subjects have assisted by giving the Journal the best stories and anecdotes within their knowledge. The articles will be credited to no authorship.

The publishers of Scribner's Magazine for 1898 have laid out a great programme. Among the authors who will contribute are Senator Henry Cabot Lodge, Capt. A. T. Mahau, Thomas Nelson Page, Rudyard Kipling, Richard Harding Sans, Joel Chandler Hains, George W. Cable, Robert Grant, Walter A. Wyckoff, Senator Horn and others. Charles Dana Gibson will also contribute land drawings—“A New York Day,” and “The Seven Ages of American Woman.”

Outing for January, is the holiday number, and its very handsome cover encloses a charming variety of seasonable reading and fine illustrations. The contents are as follows. “Bells of the Season,” (poem) by C. Turner; “Holly,” by Justine E. Ingersoll; “Canadian Winter Pastimes,” by George W. Orton; “Knights of the Lance in the South,” by Hanson Hess; “Rabbits and Rabbiting,” by Ed. W. Sandys; “Philistines on the Nile,” by Emma P. Tilford; “Baby Mine,” by Geo. J. Leovy; “Sport in Jamaica,” by L. C. Shirley; “Tarpon Fishing in Florida” by O. P. Hay; “Wheeling in North Georgia,” by Hele F. Huntington; “Ice-Yachting Up to Date,” by H. P. Ashley; “Jack Frost Through the Camera,” by Dr. John Nicol; “A New Year's Day Ski Run,” by R. W. Jackson; “Ice Hockey,” by J. P. Paret, and the usual editorials, poems and records.

The January issue of the Canadian Home Journal contains some interesting features. Among these the story of “The Canada Club” is of especial interest to manufacturers. It relates how Miss Averley visited a carpet factory and what she learned of Canadian carpets. The Canada Club's meeting is described and the reader is favored with a description of its sanctum sanctorum and promised that the club's future doings shall not go unrecorded in the Journal.

A USEFUL DEVICE.

The typewriting machine, now an inseparable part of every business office, is to have its sphere of usefulness largely extended by its combination with a computing machine. Any approved adding, calculating or computing machine is employed, being so placed between the legs of the typewriting machine as to enable the operator to see the computing machine's sight holes, through which the amounts being added and registered by said machine is exhibited. The invention will be especially useful in banks, clearing houses, and wherever addition and computation and typewriting are to be done on the same piece of paper.—Boston Journal of Commerce.

COTTON AS A WEAPON.

An American exchange propounds the following interesting theory for the extinction of England by means of a novel industrial weapon:—

If the warships of the United States could be multiplied by ten and their strength increased in the same ratio, their power of doing harm to England would be but a small fraction of the injury which would be done that country, in case of war, by her being cut off from supplying her great mills with raw cotton raised in the United States. When this supply, so necessary to her, was stopped on account of the civil war, hundreds of thousands of men in England were thrown out of employment, and starving, desperate men, women and children thronged the streets of her great cities clamoring for bread. The condition which existed at that time by the failure of her mills to obtain the raw material sufficient to keep them going would be aggravated many fold at the present time in case of war between the two countries. The number of cotton spindles and workmen have increased enormously throughout the United Kingdom since the war occurred between the States.

The difference between the price which is paid for the raw cotton and the manufactured product is the margin on which a large proportion of the population of England lives to-day. Her exports—which are made up from the fruit of her looms, would fall off to an alarming extent and the scenes of 1862 and 1863 would again be repeated in all of her industrial centres. To how great extent this would be, the purchases of cotton by England from this country in 1894 will show.

The United States raises about seventy-five per cent. of the crop of the world. Of this amount we exported in 1894 to all countries

one billion eight hundred and seventy million seven hundred and nineteen thousand pounds.

Of this sum England took almost one billion pounds, or about one-half. In the event of a war she would be unable to buy a single pound.

The power which would enable this country to shut up the cotton mills of the United Kingdom is a weapon besides which the great guns of the American navy are insignificant.

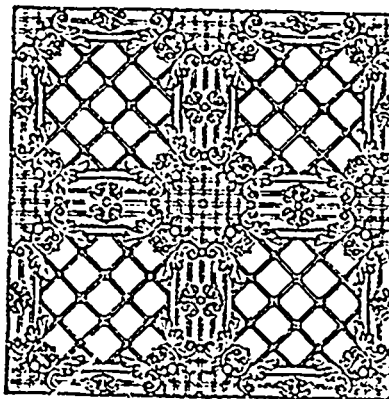
CHRISTENING AT A LAUNCH.

The following story is from a recent issue of Fairplay, London: “A good story reaches me of a good-looking and successful Semitic shipowner. He attended at a launch of a new vessel of his fleet, and invited a large number of friends to the christening. Some one intimate enough with him to talk on such a subject said: ‘My dear friend, I am very much surprised that a gentleman of your religious leanings should lend himself to the use of such a term as ‘christening,’ in connection with the vessel, considering the derivation of the term.’ ‘Oh,’ replied the owner, ‘it is a mere formality; there is nothing to make a fuss about, and the word does not carry any particular meaning in regard to the launch of a ship.’ ‘Just so,’ said the party, ‘but why break a bottle of champagne on the vessel's bows by way of completing the ceremony? I should have thought that it would have been more in accordance with the fitness of things if you had cut a little bit of the bowsprit.’”

“Mechanical Draft” is the title of a very useful work with a copy of which we have been favored by the B. F. Sturtevant Company of Boston, Mass. It is a practical treatise of 375 pages, and deals with mechanical draft from every imaginable standpoint. It points out the possibilities of this new departure in boiler practice and discusses the whole subject, clearly pointing out the advantage of the new system and the special adaptability of Sturtevant fans to this purpose. By way of leading up to the subject proper, chapters on water, steam and fuels have been included and a study of comparative efficiency of fuels and boilers is also presented in their relation to mechanical draft. The uncertainty and variableness of the system of chimney or natural

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Residences,
Etc., Etc.

draft is dwelt upon to the extent of proof, and the argument of the conclusions is that mechanical draft is better because it is easier controlled and regulated and is cheaper to establish. In case of ship furnaces mechanical draft is now looked upon as a necessity, especially in small boats with a high rate of combustion and intense draft. A fan is adaptable to location and economical of space, it is independent of climatic conditions, portable, and economizes by enabling cheaper fuels to be burned and lessening in the quantity of fuel used. The especial suitability of the Sturtevant fans is clearly set forth in this work which no one interested in power plants can afford to be without.

CHICORY CULTURE

Chicory grows best on a soil containing considerable sand, but rich in plant food. In most parts of Nebraska these conditions are found and the crop has been successfully produced. During the past three or four years extensive experiments have been made and in nearly all cases results have been most satisfactory.

The culture of chicory is similar to that of the sugar beet. Plow the ground to a good depth and subsoil; pulverize thoroughly and pack. Sow the seed in rows 18 to 20 inches apart. A common onion drill is quite convenient for this purpose. After the plants have appeared above ground, thin so that they will be four to six inches apart in the row. By proper thinning much expense is saved in trimming at harvest time. Cultivate as much as possible with horses, keeping down all weeds. Much hand labor, however, is required, especially while the plants are

young. The chicory yields on an average about six tons per acre. Last year the farmers received \$9 a ton, to which, if an appropriation is made to pay the state bounty provided for by law, \$1.50 more will be added. Contracts have been made for 1897 at \$7.50. At the factory the roots are fed into machines, which cut them into slices a quarter of an inch thick. After slicing, the material is run into a drying room with a perforated steel floor, under which are pipes for the distribution of the heat, generated in coke furnaces which are kept going night and day during the drying season. After being dried, the sliced chicory is stored in large rooms adjoining the kiln until it is wanted at the factory. Roasting is the next process, which is accomplished by placing the dried sliced roots into large perforated iron cylinders which constantly revolve, and a perfect uniformity of color is secured. From the roaster the chicory passes to a cooling car, which is connected with an exhaust pipe through which the smoke and heat are carried out of the building. When sufficiently cooled, the chicory is elevated to the mill, where it is ground to the various degrees of granulation desired by the trade. Persons of foreign birth who have been accustomed to the use of chicory in the old countries, want the powdered article. Five-pound rolls of this product are preferred. To meet this demand, the chicory is ground to a powder and subjected to a special process to solidify and darken it. The American trade, however, prefers chicory in the granulated form, which so closely resembles coffee, that it cannot be distinguished from it until after it is boiled. Coffee grains remain hard, while the chicory boils soft. From the receiving mill the chicory passes to separating machines

and is run to different bins—coarse, medium, granulated and fine granulated. Up to last year all the chicory produced in Nebraska was sold in bulk direct to wholesale dealers, but this season the American Chicory Company have put up neat one-pound packages, which retail for 10 cents.

The average yield last year was about six tons, but as farmers become more familiar with the crop, this yield will be increased. All the growers were more than pleased with the result of last year's work and are anxious to go into the business on a more extensive scale the coming season. The factory at Omaha employs 40 hands and during the drying season 10 hands are required at the Fremont kiln; and 40 at the O'Neil factory.

The product is handled in Nebraska by the American Chicory Company that owns a factory at O'Neil with a small drying kiln of 20 tons capacity, one at Omaha and a large drying kiln at Fremont, which has a capacity of 100 tons of green root every 24 hours. Fremont is a central point easily reached by many farmers. The roots are delivered by cars or by waggon.—American Agriculturist.

It is reported that another mill will be built at South Edmonton, N.W.T.

A new flour mill has been built at Emo River, Ont.

R. H. Little will erect a flour mill at Lisle, Ont., in the spring.

Gardner & Harris are building a new flour mill at Springfield, Ont.

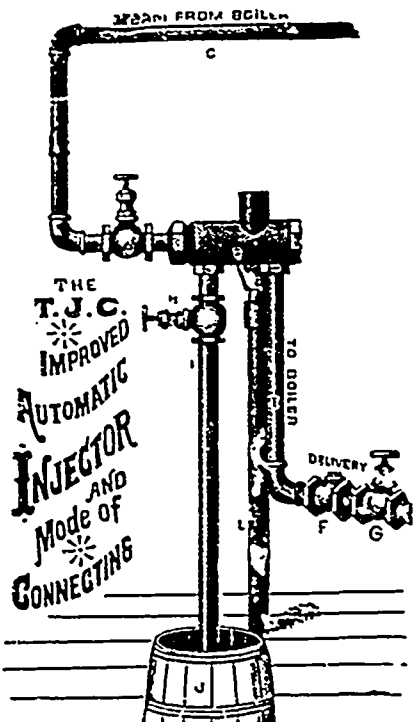
The Cummings Milling Company of Lyn, Ont., has been incorporated with a capital stock of \$75,000, to carry on a general flour and sawmill business.

THE IMPROVED AUTOMATIC INJECTOR,

Pat. by T. J. CARROLL.

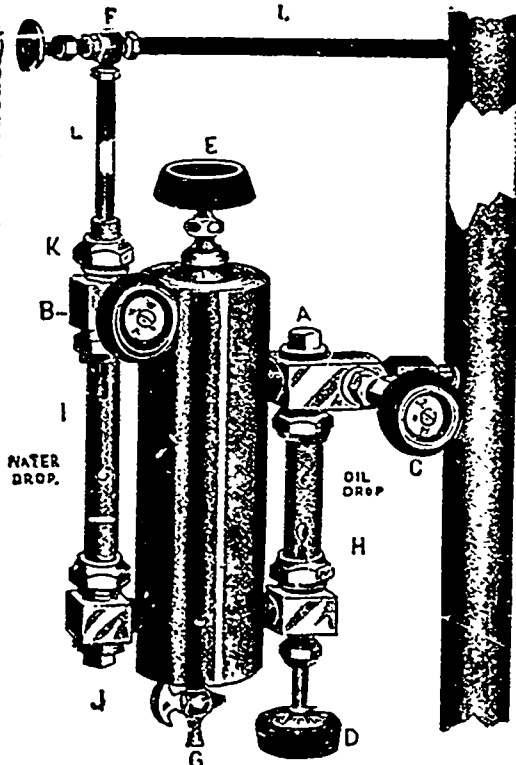
PRICE LIST.

No.	PRICE.	GAL. PER HR. @ 150 POUNDS PRESS.	SIZE OF PIPE CONNECTION.	HORSE POWER.	
				8 TO 16	16 TO 300
10	\$7.50	120	1 1/2	16	16
15	19.00	300	2	40	40
20	22.50	500	3	72	72
25	25.00	900	4	120	120
30	30.00	1,710	5	210	210
35	38.00	2,870	6	320	320



REDUCED PRICES OF

Michigan, Eagle, and Queen Lubricators.



PRICE LIST.

SIZE,	BRASS,	NICKEL-
1 Pint.....	\$1.50	\$5.00
1 Pint.....	2.00	6.00
1 Pint.....	3.00	9.00
1 Quart.....	11.00	12.00
2 Quarts.....	16.00	18.00

For STATIONERY, MARINE, PORTABLE and LOCOMOTIVE BOILERS Simple, Reliable, and Durable. Range 20 to 150. Will lift 20 feet. A written guarantee with each Injector for two years.

HAMILTON BRASS MFG. CO., Limited, 259 to 265 James Street North HAMILTON, ONT.

CAPTAINS OF INDUSTRY.

The following items of information, which are classified under the title "Captains of Industry," relate to matters that are of special interest to every advertiser in these pages, and to every concern in Canada interested in any manufacturing industry whatever, this interest extending to supply houses also.

If a new manufacturing enterprise of any kind is being started, or an electric lighting plant instituted, or an electric railroad, or a telephone, or a telegraph line is being constructed; or a saw mill, a woolen, cotton, or nitting mill; or if any industrial establishment has been destroyed by fire with a probability of its being rebuilt, our friends should understand that possibly there may be something in the event for them. Do you catch on to the idea?

The starting of any such concern means a demand for some sort of machines, machinery, or supplies, such as steam engines and boilers, shafting, pulleys, bolting, lubricants, machinery supplies, wood or iron working machinery, ventilating and drying apparatus; pumps, valves, packing, dynamos, motors, wire, arc and incandescent lamps, and an infinite variety of electrical supplies, chemicals, acids, alkalis, etc. It is well worth the while of every reader of the Canadian Manufacturer to closely inspect all items under the head of Captains of Industry.

Messrs. C. A. Ahrens & Company have allowed the majority of their employees holidays, until the firm has remodelled their factory. A staff of workmen are now busy tearing out partitions, and the placing of the machinery will shortly be proceeded

with. On the second floor of the building will be situated a commodious office, sample room, storage and packing rooms, as well as part of the machines. The upper flat will also be remodelled to furnish more room.—Berlin News Record.

The Fort William and Port Arthur Electric Railway car barn and three cars were recently destroyed by fire. The town of Port Arthur owns the plant, and the loss is estimated at \$15,000, partially insured. No cause is assigned for the fire.

S. S. Stratton and R. Ronan, of Ottawa, secured the contract to supply mail bags to the post-office department for four years, beginning with January 1, 1898.

Magog, Que., has established an electric lighting plant under municipal control. The power is obtained from Magog River by a water-wheel plant of the Crocker Special type, furnished by the Jenckes Machine Co., Sherbrooke, Que. The electrical plant was put in by the Canadian General Electric Co. The town are considering the establishment of a municipal water-works plant to be run in connection with the lighting plant.

The Richmond Light and Power Company, of Richmond, Que., are adding to their electric lighting equipment, and have placed with the Royal Electric Company, Montreal, an order for one of their 75 K.W. S.K.C. generators, with switchboard apparatus, complete.

MACHINERY and EQUIPMENT

FOR

Mines

MANUFACTURED BY

Canadian Rand Drill Co.,
MONTREAL.

ATTENTION CENTRAL STATION MANAGERS!

A GOLDEN OPPORTUNITY!

Are you desirous of purchasing

ARC LIGHTING MACHINERY, LEATHER BELTING,
WATER WHEELS, or SHAFTING?

If so, you cannot afford to miss this opportunity. Owing to extensions necessitated at our generating station we are obliged to discard the above-mentioned material. Communicate with us at once for all information and particulars.

THE MONTMORENCY ELECTRIC POWER CO., - - QUEBEC.

Sulphur

ROCK
ROLL
FLOUR
GROUND

English Recovered

- Sicilian -

Etc,

The Anglo-Sicilian Sulphur Co.,
Limited.

Arthur P. Tippet & Co.,

CANADIAN AGENTS,

30 St. Francois-Xavier Street,
MONTREAL.

ABBEE IMPROVED CHILLED SHOT CO.

(LIMITED)

NEWCASTLE.

THIS SHOT IS NOW MADE BY A NEW PROCESS.

Samples sent on application.

Read the following Reports on our New Make of Shot:—
Sporting Goods Review states:—"The size and shape of pellets are good and are exceedingly hard. We understand that the demand for this shot has considerably increased and gaining in favor with sportsmen, to whom its excellence of manufacture appeals."
Arms and Explosives states:—"For soundness and general regularity of surface the pellets possess a very high degree of excellence."

W. W. GREENER, "the Great Authority on the Gun," speaks highly of Chilled Shot, and strongly recommends it in preference to soft shot.

The Guelph Acetylene Gas Generator Company, Guelph, Ont., has been incorporated with a capital stock of \$1,000, to manufacture acetylene gas generators.

The Jubilee Grate Bar Company of Toronto has been incorporated with a capital stock of \$45,000, to manufacture grate bars, stoves, boilers, engines, water and steam fitters, supplies, etc.

Reid Bros. Manufacturing Company are exporting several thousand bent rim pulleys to England; have been shipping them in large quantities for the past two years and Messrs Reid Bros. state that the outlook for an export trade in their pulleys is encouraging.

The Brockville Navigation Company has awarded the contract to the Polsons to construct a large passenger steamer for the Brockville Union Park route. The boat is to be of modern design, elegantly finished, lighted with electricity, and a capacity of 350 passengers. The contract price is \$10,000, and calls for the delivery of the craft early next spring.

The estate of R. Donaldson & Son, machinists, builders, constructors of iron works, etc., Montreal, have been succeeded by the Phoenix Bridge and Iron Works.

The Standard Light and Power Company, Montreal, have bought out the Temple Electric Company, also of that city. The Lachine Rapids Hydraulic and Land Company will furnish the power to be used by the Standard. Power will also be furnished to the Imperial Electric Company of Montreal by the Lachine Rapids Hydraulic and Land Company.

Two carloads of screens were supplied by the Jenckes Machine Company, Sherbrooke, Que., to the Chicoutimi Pulp Company.

The town of Collingwood, Ont., is applying for legislation authorizing by-laws to be submitted to the ratepayers to raise \$200,000 to build elevator accommodation at that town.

The Edmonton Electric Light Company of Edmonton, N. W. T., are improving and extending their plant. The new electrical equipment purchased by them from The Royal Electric Company, consists of one 75 K. W. S. K. C. two-phase generator, complete with exciter and switchboard, as well as the necessary material for the other changes.

Darling Brothers, of Montreal, have issued a very handsome catalogue describing the various styles of pumps they have on hand for their 1898 trade. It describes how to order pumps for various special purposes and describes pumps fitted to perform these special services. They will be pleased to send a copy to any reader of THE MANUFACTURER.

Mr. J. M. Smart, representing Perkins, Weber, & Company, a big Chicago cold storage firm, is considering the establishment of cold storage systems in Ontario to facilitate the export to Great Britain of perishable products from Canada.

The Canadian Rand Drill Company, of Halifax, have secured from the Jenckes Machine Company, of Sherbrooke, Que., one of their 20-inch Cracker Special Turbines for use with their hoisting plant at the Torquoy Mines.

The Columbia Handle Company are removing from Thamesville to London, Ont.

The Brush factory of John Allen, Oshawa, Ont., has been destroyed by fire.

D. E. Falardeau & Company, the well-known Quebec tanners, have dissolved partnership and a new firm to carry on the business has been organized under the old style with Mr. Pierre E. Falardeau as sole proprietor.

A forty thousand dollar fire devastated the business part of Moncton, N.B., early on the morning of Dec. 20th.

An experiment made by the Owen Sound Sugar Importing Company, in the growing of the German Sugar beet in the country about Owen Sound, Ont., this year, has resulted most satisfactorily. According to an analysis of forty average samples made by Mr. Harcourt of Guelph Agricultural College, the percentage of sugar found in the beets is considerably above that of any of the sugar beet countries of Europe. The purity of the juice is very fine, and the experiment shows that the soil and climate of Ontario are admirably adapted for the production of sugar beets of superior saccharine quality and affording a large yield per acre.

Mr. F. B. Polson reports that the Polson Shipyards and Iron Works have work in hand to last them four months if they run their works day and night, and orders enough on hand to keep them busy for a year.

The Arrowhead Saw and Planing Mills of Arrowhead, B. C., have been incorporated.

The town of Trenton, Ont., is asking for special legislation to authorize it to grant bonuses to the extent of \$25,000 for the encouragement of manufactures within the town.

The Packard Electric Co., Limited.

MAKERS OF

Lamps and Transformers

Sole Agents for SCHEEFFER RECORDING WATT METERS
ST. CATHARINES, ONT.

CLEVELAND WIRE SPRING CO.,
CLEVELAND, OHIO, U.S.

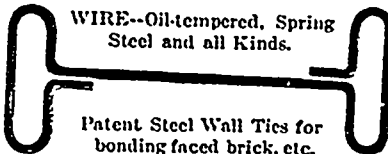
TEMPERED STEEL MACHINE SPRINGS.



Tempered Steel Machine Springs
A Specialty.

SPECIAL SPRINGS of all description to order, and for Upholstery, Furniture, Beds, Chairs, etc. Close prices upon application.

WIRE--Oil-tempered, Spring Steel and all Kinds.



Patent Steel Wall Ties for bonding faced brick, etc.

.. STEEL ..

LA BELLE STEEL CO.

PITTSBURG, PA.

Manufacturers of STEEL
PLOW SHAPES, HARROW DISKS,
CULTIVATOR PLATES, and
AGRICULTURAL STEEL of all Kinds.

FINE TOOL STEEL

— FOR —

DIES, DRILLS, TAPS,
BICYCLE CONES,
PUNCHES, MAGNETS, Etc.

And for all purposes where requirements are exacting.

For Prices, Etc., Address,

W. G. BLYTH,

Agent for Canada.

29 Melinda St., - Toronto, Ont.

The DRIER the STEAM the GREATER the POWER.

"Eureka"



OUR SECTIONAL PIPE AND BOILER COVERING

Almost Entirely Prevents Condensation of Steam when Passing Through the Pipes

EUREKA MINERAL WOOL & ASBESTOS CO.

132 BAY STREET, TORONTO.

ASBESTOS GOODS.

MINERAL WOOL.

ENGINE PACKING.

A new grain elevator has been completed in connection with the Brechin Flour Mill at Brechin, Ont.

Alexander Kelly & Co., millers of Brandon, Man., will establish a barrel factory in connection with their mill.

J. Cawthrope has leased his flour mill at Ridgetown, Ont., to a company of which his son, C. Cawthrope, will be the manager.

J. H. Francis has sold his roller flour mill at Pakenham, Ont., to Mr. Guest, of the firm of McKay & Guest of Renfrew, Ont.

James Wilson, of Monkland, has purchased the flour mill owned by Andrew Semple, M.P., at Fergus, Ont. The consideration was \$5,000.

A meeting of the council of the Winnipeg Board of Trade was held recently, at which a number of oatmeal millers of the Dominion were present. The principal question discussed was the tariff on oats and oatmeal. It was finally decided that the council should lay the matter before the government without suggesting whether the duty should be lowered on oats or raised on oatmeal, but urging that the duty should at least be equalized.

Hon. Sidney Fisher, Canadian Minister of Agriculture, has had about 1,000 samples of Canadian wheat sent to the country millers of Great Britain. His design is to call the attention of the British millers to the excellent quality of the wheat and to emphasize plainly the difference between Canadian and American grown wheat, as it is claimed that the Britisher calls all wheat from America, American.

It is reported that a new mill will be built at Fleming, Assa., in the spring.

An Ottawadespatch says. Canada is going to adopt the postal note system in vogue in the United Kingdom. Mr. Mulock has been studying the question for some months and is now considering the details with a view of bringing the system into operation on July 1, 1898. Paper notes about the size of a bank bill will be printed on thin linen paper of the following denominations:—Twenty, 25, 30, 40, 50, 60, 70, 80 and 90 cents, \$1, \$1.50, \$2, \$2.50, \$3, \$4, and \$5. The cost of obtaining these notes will be one cent each up to 40 cents, two cents between that figure and \$2.50 and three cents each for all above that. These postal notes will replace

the postoffice money orders for the transmission of all small sums through the post.

Messrs. Cowan & Co., Galt, Ont., have supplied a new engine and boiler to Messrs. Shaw & Peters, Merlin, Ont., who have just completed its installation.

The Montreal Milling Company of Montreal, Que., has been incorporated with a capital of \$50,000, divided into shares of \$100 each, to carry on a general milling business, and to buy and sell grain. The incorporators are: Frederick Richard Scandreth, John McLaren, Daniel Morgan Sexton, John Halladay Rowell and Felix Casey.

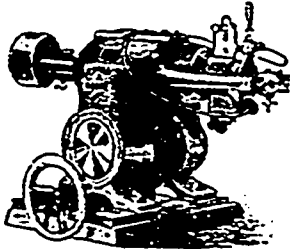
Harper & Co. will remodel and complete a number of improvements in their flour mill at Lundas, Ont.

The Toronto Jewellery Case Company are busy placing machinery manufactured by Cowan & Co., Galt, Ont.

Ed. Petyold has purchased the flour mill owned by Paul Stein at Denbigh, Ont. It has been operated for many years under ease by H. Zlaser.

W. J. South has increased the capacity of his flour mill at Brampton, Ont.

ELECTRIC BARGAINS.



ONE EDISON MOTOR,
ONE BALL MOTOR,
TWO DYNAMOS.
Above almost new.

We install complete plants at lowest possible figure. Write us before buying.

Motors, Dynamos and Platers
Manufactured in all sizes.

THE JONES & MOORE ELECTRIC CO.
22 Adelaide Street West,
TORONTO.

VALVES AND PIPE . . . FITTINGS

WRITE FOR LATEST PRICES

RICE LEWIS & SON, Limited

Corner King and Victoria Streets
TORONTO



TRADE MARK.

ATLAS FACTS METAL

Speak louder than words, and

ATLAS does not rely on empty talk for its UNSURPASSED REPUTATION.

It Has Been Undeniably Proved that ATLAS METAL is Superior to all and has stood under Enormous Pressures and Phenomenal Speed.

TRY ATLAS METAL WHERE ALL OTHERS HAVE FAILED.

WE CHALLENGE A TEST

Against any Anti-Friction Metal on the Market.

THE ATLAS METAL CO., Limited
75 Queen Victoria St., London, Eng.

H. G. McLAREN, General Agent for Canada.
318 ST. PAUL ST., MONTREAL, QUE.

The name of WESTINGHOUSE is a guarantee.

Westinghouse

Electric & Mfg. Co.
Pittsburgh, Pa.

Westinghouse

We originate

others imitate inventions which revolutionize electrical work. Our motors, meters, lightning arresters, switches, circuit-breakers are never supplanted. Westinghouse electric apparatus is the standard throughout the world.

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Westinghouse Electric Co., Limited, 32 Victoria St., London.

Mechanical, Electrical and Scientific Books

A Practical Treatise on Hydraulic and Water-Supply Engineering. By J. T. Fanning. 188 illustrations. 8vo, cloth, \$5

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Handbook for Mechanical Engineers. By Henry Adams. Fourth edition, revised and enlarged. 12mo, cloth.....\$2.50

A Handbook on Modern Explosives, Being a practical treatise on the manufacture and use of dynamite, gun cotton, nitro-glycerine and other explosive compounds, including the manufacture of Colloid-cotton, with chapters on explosives in practical application. By M. Eissler. 12mo, cloth.....\$5.00

One Hundred and Fifteen Experiments On the carrying capacity of large riveted metal conduits up to six feet per second of velocity of flow. By Clemens Herschel. 122 pages, cloth.....\$2.00

Fetting Gold. A practical treatise for prospectors, miners and students. By J. C. F. Johnson. Illustrated, cloth.....50c.

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Motive Power and Gearing for Electrical Machinery. A treatise on the theory and practice of the mechanical equipment of power stations for electric supply and for electric traction. By Tremlett E. Carter. 8vo, cloth, illustrated, \$5

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Steam Heating for Buildings, or Hints to steam fitters. While this book bears the same title as the original book, by Mr. Baldwin, it is in fact an entirely new book having been re-written, reset, and brought up to date. 350 pages, 12mo, cloth, \$2.50

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Steam Boilers. By C. H. Peabody and and E. F. Miller. From preface:—"In this book we have attempted to give a clear and concise statement of facts concerning boilers, and of methods of designing, making, managing and caring for boilers." 350 pages, 142 illustrations and folding plates, 8vo., cloth.....\$4.00

A Complete Treatise on the Electro-deposition of Metals. By G. Langbein. 450 pages.....\$4.00

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Gas, Gasoline and Oil Vapor Engines. By Gardner D. Hiscox, M.E. A book designed for the general information of everyone interested in this new and popular motive power, and its adaptation to the increasing demand for a cheap and easily managed motor requiring no licensed engineer. The book treats of the theory and practice of gas, gasoline and oil engines, as designed and manufactured in the United States. It also contains chapters on horseless vehicles, electric lighting, marine propulsion, etc. About 300 pages. Illustrated with 220 handsome engravings. 8vo, cloth.....\$2.50

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Highway Construction. A text and reference book for all engaged in the location, construction and maintenance of roads, streets and pavements. By Austin T. Byrne.....\$5.00

MECHANICAL ELECTRICAL AND SCIENTIFIC BOOKS

American Foundry Practice. Treating of loam, dry sand and green sand molding, and containing a practical treatise upon the management of cupolas and the melting of iron. By Thomas D. West. Fully illustrated. 408 pages; cloth.....\$2.50

The Practical Electroplater. A comprehensive treatise on electroplating, with notes on ancient and modern gilding and formulas for new solutions. By Martin Branor. 8vo, half leather, illustrated. Price reduced to.....\$6.00

The Metal Worker's Handy Book of Receipts and Processes. Being a collection of chemical formulas and practical manipulations for the working of all the metals and alloys, including the decorating and beautifying of articles made therefrom, as well as their preservation. Edited from various sources by William P. Braunt, 520 pages, cloth.....\$2.50.

Painter, Gilder and Varnisher's Companion. Twenty-seventh Edition. Revised, enlarged and in a great part rewritten. By William T. Braunt, Illustrated; 12 mo; 415 pages; cloth \$1.50. This volume comprises the manufacture and test of pigments, the arts of painting, graining, marbling, staining, sign-writing, varnishing, glass staining and gilding on glass, together with coach painting and varnishing, and the principles of the harmony and contrast of colors.

Any of the above Books sent, post-paid, on receipt of Price, by

Canadian Manufacturer Publishing Co., Limited
TORONTO, - CANADA

A Crocker Turbine, horizontally set, with penstock and draft tube will be supplied by the Jenckes Machine Co., of Sherbrooke, Que., to the Shipton Electric Co., of Danville, Que., who are extending their power plant.

Messrs. Fontaine & Deschambault have begun business as carriage manufacturers in St. Remi, Que.

The plant of the Phelps Machine Company of Eastman, Que., has been bought out by the Jenckes Machine Company of Sherbrooke, who will continue the manufacture of the Dako Engine in their Sherbrooke Works.

S. W. Oxner, Arthur H. Zwickler, C. E. Kaulbach, J. J. Rudolph, Alex. Knickle and William F. Acker, of Lunenburg, N.S., are the names of the applicants for incorporation of a new company to be known as the Lunenburg Marine Railway Company, (Limited), for the purpose of building, constructing and maintaining dry docks, marine railway or such other facilities for the repairing of vessels as may be deemed necessary. The capital stock of the company is \$25,000 and Lunenburg is to be the place of business.

Abbott & Company, of Montreal, have signed an agreement with the city of Kingston. The company agrees to erect substantial up-to-date buildings, furnished with modern machinery and appliances, able to turn out bar iron and steel horseshoes, pressed spikes, nails (cut and wire), and washers. The plant and buildings must be worth \$250,000. The company's pay list must aggregate \$40,000 per annum with 125 workmen. The company is to receive a cash bonus of \$50,000 and a free site valued at \$10,000, and must deposit with the City Treasurer a certified check for \$1,000 to reimburse the city for expenses incurred in submitting the by-law to the people.

The Pulp Mills at Chicoutimi, Que., are in full operation. Four of the Jenckes Machine Company's special Crocker Turbines, with a 70 foot head, furnish the power.

The by-law upon which the town of St. John's, Que., voted, in favor of granting a bonus for the removal of the Lefebvre vinegar factory from Montreal was carried by a large majority.

The Le Roi mines have placed an order for a Knowles Sinking Pump with the Rossland B. C. branch of the Jenckes Machine Co., of Sherbrooke, Que.

A FAST DARK BLUE DYE.

Bulletin No. 64 of W. J. Matheson and Co., Limited, 162-4 Front Street, New York, is to hand, and shows results obtained from dyeing with Alizarine Lanacyl Navy Blue 3B. It dyes a deep heavy shade of blue with a light overcast and a tinge brighter and bluer than their Alizarine Lanacyl Navy Blue B. The dye is very soluble and does not precipitate in the dye-bath, so even dyeing cannot result. It will not fade under alkalis used in washing, and under light. It will stand sponging and potting, and does not smut or rub. It is extremely valuable to the piece goods trade because of its fast properties. It is also useful in dyeing yarn, and especially in dyeing woolen piece goods with cotton effects, as it does not tint the cotton.

The Manufacturers' Life Insurance Company

Wish their Present and Prospective Policy-Holders

A Happy and Prosperous New Year.

GEORGE GOODERHAM,
President.

J. F. JUNKIN, Gen. Manager.

WASHERS

Rhode Island Horse Shoes

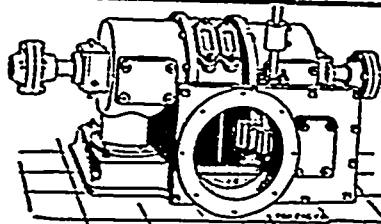
Cut Nails

Bar Iron and Steel

Railway Spikes

Pressed Spikes

ABBOTT & CO., - MONTREAL



Horizontal Type.

**"LITTLE GIANT"
TURBINE**

....FOR ALL PURPOSES....

HORIZONTAL AND VERTICAL
BUILT IN 44 SIZES.

We guarantee a higher percentage of power from water used than any other wheel on the market.

Water Wheel Governors, Machine Dressed Gearing, Palkeys, Shafing and Bearings.
Catalogue and Gear List mailed on application.

Correspondence Solicited.

J. C. WILSON & CO., - - GLENORA, ONT.

J. A. CULVERWELL,

LOCAL MANAGER

TORONTO & CENTRAL ONTARIO

London & Lancashire Life Assurance Co.

12 ADELAIDE STREET EAST,
TORONTO.

AULD MUCILAGE CO.

Manufacturers of the Celebrated

Premium Mucllage, Lithogram Composition, Lithograms Ready for Use.

Printers' Premium Roller Composition.
Write us for Quotations.

759 CRAIG STREET, - MONTREAL, P.Q.

Leitch & Turnbull

Canada Elevator Works,

Queen and Peter Streets, Hamilton, Ont.

Patent Safety Hydraulic Hand and **POWER ELEVATORS**

Telephone Connection.

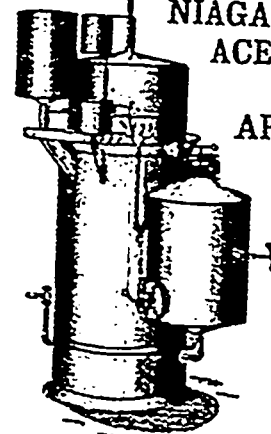
BOILERS.

YOU WANT THEM. WE MAKE THEM

WRITE FOR PRICES

BANNERMAN & FINDLATER,
Boiler Makers, OTTAWA, ONT.

THE
**NIAGARA FALLS
ACETYLENE
GAS
APPARATUS**



Patented in
Canada, United
States and
Great Britain.

This is the
only machine
perfectly auto-
matic in its ac-
tion, requiring
little attention.
Machines
made in 10 sizes
costing \$15 and
upwards.

Acetylene Gas the Coming Light.

CHEAPER THAN ELECTRIC LIGHT

COAL GAS OR COAL OIL

For Private Dwellings, Business Houses
Churches, Public Halls and Offices.

For particulars write to the

NIAGARA FALLS ACETYLENE GAS MACHINE CO.
NIAGARA FALLS, ONT. LIMITED.

Sub-
scribe for **The Canadian Manufacturer**

The British Columbia exhibit at the Spokane fruit fair surprised some of the Americans. It included 140 varieties of apples, and 40 varieties of pears, which were gathered over an area of 300 miles. The Americans were still more surprised when British Columbia apples carried off nine first prizes and a number of second and third premiums. A hundred and ninety pound squash from British Columbia was another feature of the show.

Canadian tanners who use the Tunkhannock Bark Mill can now secure grinders and other parts without the delay and the extra expense of duty and freight in bringing them from the United States. See G. Fleury's Sons advertisement in this issue of the MANUFACTURER.

The Dairy Commissioner reports that creameries under government supervision in the Northwest Territories this summer produced 478,873 pounds of butter. Sixteen creameries were running instead of three as last summer. The butter is being packed for the Japan trade and for the Klondike.

The Royal Paper Mills Co.'s Pulp Mills at East Angus, Que., are nearing completion. The Jenckes Machine Co., of Sherbrooke, have the contract for the tank work.

Dr. J. C. Edgar, of North Hatley, Que. and W. O. Roy, of Montreal, have bought a water power on the Mississippi River, and will supply electric light and power to North Hatley, Eustis and Waterville.

The B. Greening Wire Co., of Hamilton, have sent us their handsome calendar for 1898. It is ornamented with pictures of their numerous factories, which are accompanied by the portraits of the founder of the English works, his successor, and head of the present establishment in Hamilton. The calendar is as handsome as it is useful, and is a credit to the judgment and enterprise of the Greening Company.

The Dominion Dyewood and Chemical Co. of this city, are sending out the calendar pads to fit the aluminum base which they sent out last year. The calendar serves not only to remind one constantly of the people to whom he is indebted to for this little courtesy, but it serves as a valuable accessory to the overworked memory of the man of affairs.

The Ontario Sewer Pipe Company boast the largest sewer pipe kiln in the world at their works at Mimico, near Toronto. It measures thirty-six feet seven inches in diameter, just seven inches larger than the one built by the Great Western Sewer Pipe Company of Toronto, Ohio, and about nineteen inches larger than those of the Black Horse Sewer Pipe Company of Virginia. The new kiln is in operation this week and another of the same size will be built next spring.

The W. Paterson & Son Company, of Brantford, are contemplating additions to their factory and plant and an increase in their staff.

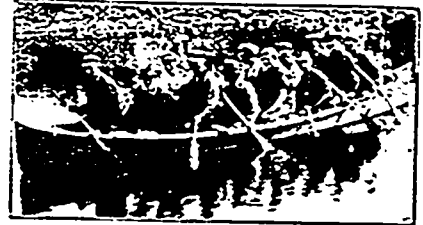
GEORGE WHITE-FRASER.

Member Can. Soc. C.E.
Member Am. Inst. Elec. Eng.
CONSULTING and Electrical Engineer.
CONSTRUCTING
Railways, Lighting, Power Transmissions,
Factory Plants, Reports, Specifications, Tests,
18 Imperial Loan Building,
TORONTO.

Superintendent Wanted.

A COMPETENT SUPERINTENDENT
wanted for Agricultural Implement
Works

D. BELL & SON,
St. George, Ont.



Canoes for Alaska and Gold Regions

This cut is one of our 19 foot No. 6xx
Canoes, and shows carrying capacity
Write for our catalogue and discounts.
Peterborough Canoe Co., Limited, Peterborough

TANNERS!

Grinders and other parts for Tunkhannock Bark Mills.

Guaranteed to be superior to the American in WEARING QUALITY
and at LESS COST.

DAVILLE TANNING CO., write:-

"The Grinders LAST MUCH LONGER and GRIND MUCH BETTER than
any we have ever had."

J. FLEURY'S SONS,

Founders and Machinists, - - - AURORA, ONT.

**ELECTRIC MOTORS,
WATER MOTORS,
DYNAMOS,**

Hand-Feet and Automatic. **ELECTRIC LAMPS,**

Cinematographs,
Telephones and Graphophones

WRITE FOR PRICES.

A. SCHNEIDER & CO.,
21 and 23 Pearl St., Toronto.

TO BELT USERS:

IT IS NOT WIND YOU WANT.

RESULT OF MY TRIP:

GENUINE

ENGLISH OAK

TANNED BELTING

D. K. McLAREN

24 Victoria Square, - MONTREAL

FORD, RUTHVEN & CO.,

26 PITT ST., SYDNEY, AUSTRALIA.

Wool Buyers' on Commission.

Letters of Credit must accompany Orders.

BANKERS: Bank of Australasia, Sydney.

Dominion Oil Cloth Co.,

Manufacturers of....

OIL-CLOTHS OF EVERY DESCRIPTION

Floor Oil-Cloth, Table Oil-Cloth, Carriage Oil-Cloth,
Enamelled Oil-Cloth, Stair Oil-Cloth, etc, etc.

Office and Works

Cor. St. Catharino and Parthenais Sts., MONTREAL, Que.

ADVERTISE in

...The Canadian Manufacturer

SEND FOR RATES.

A. C. NEFF, **JAMES WOOD,**
Chartered Accountant. Late Sec. The T. Eaton Co., Ltd.
NEFF & WOOD
PUBLIC ACCOUNTANTS, AUDITORS
ASSIGNEES, ETC.
Room 600 McKinnon Bldg., Toronto

"Off to the Central"

Will be a common saying among Young Men and Women throughout our Province on Monday, January 3rd, when the winter session of the

Central Business College
OF TORONTO

Begins. Those who attend this popular SCHOOL OF BUSINESS TRAINING will enjoy the best facilities to be found in Canada.

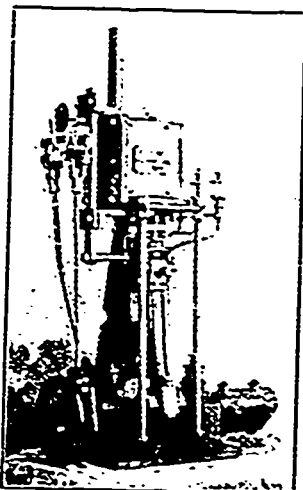
TELEGRAPHY, BOOK-KEEPING AND BUSINESS PRACTICE, SHORTHAND AND TYPEWRITING

taught. Students assisted in situations. GOOD RESULTS GUARANTEED. New Prospectus ready.

Address. W. H. SHAW, Principal, Yonge and Gerrard Sts.

ALBERT BELL ENGINE WORKS

DUNNVILLE, ONT.



Maker of

YACHT ENGINES, 1 H.P. to 50 H.P.
Safety Water Tube BOILERS
PROPELLER WHEELS
Stationary Engines and Boilers

WRITE FOR CIRCULARS

The civic authorities of Montreal are making a regular crusade this winter to compel all users of steam boilers to provide smoke-consuming apparatus in connection with their furnaces.

In Montreal, Gordon and Ironsides have asked permission from the City Council to erect a slaughter house. J. Alcide Chausse, architect, is preparing plans for a large school building to be erected at Maison-neuve, Que., a church at Bonfield, Ont., and six dwellings on Nonencourt street for F. X. Lalonde. — Robert Findlay, architect, is calling for tenders for seven houses, corner of Prince Albert street and Chesterfield avenue, for E. Balmer. — Tenders have been called for tenement houses to be erected at the corner of Guy and St. Antoine streets, for A. F. Gault.

Mr. Albert Bell, of Dunville, who has been engaged in the manufacture of yacht

engines and machinery, is carrying on business again in spite of the recent decision against him. He writes us that he has a new shop almost ready on a lot near the G.T.R. yard and close to the station at Dunville. He has orders on hand already sufficient to keep him busy all winter, constructing marine and stationary engines. The name of the new establishment is the "Albert Bell Engine Works," and Mr. Bell proposes to get his share of the trade in this part of the country.

It is said the Richelieu & Ontario Navigation Company will add to their splendid steamer line a big hotel at the Point in Riviere du Loup. It is to be ready for the summer trade and will accommodate two hundred guests.

Mr. Wm. Williamson proposes to build a wood working factory at Eastern Avenue and Water St. in this city.

(From "Free Press," London, Ont., December 9th, 1896.)

"Number two Committee of the Board of Education met last night. . . . It was decided to put in two No. 25 Heeson Fire Grates in the Collegiate Institute furnaces. One of these Grates is said to have saved four tons of coal at Princess Ave. School last winter."

These Grates, 16 x 26 inches, are supplied by

The HEESON ROCKING GRATE BAR CO. OF TORONTO (Limited),
120 VICTORIA STREET.
Phone 1924.
Twelve additional sets of these bars have since been put in for the London Board of Education.

ALEX. GARTSHORE, President. J. G. ALLAN, Sec.-Treas. JAS. THOMSON, Vice-Pres. and Gen. Mngt.

THE GARTSHORE-THOMSON PIPE & FOUNDRY CO.

Limited



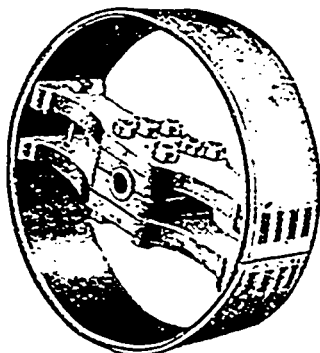
3 in. to 60 in. diameter.

For Water, Gas, Culverts and Sewers

Special Castings and all kinds of
WATER WORKS SUPPLIES

FLEXIBLE AND FLANGE PIPE

HAMILTON, ONT.



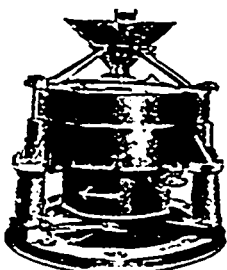
BENT WOOD SPLIT PULLEYS,
RIM... (REID'S PATENT).

The Strongest, Lightest and Best Belt Surface in the World

No Glue, no Nails in Rim like Segment Rim Pulleys, to be affected by Steam, Dampness or Moist Temperature.

EVERY PULLEY GUARANTEED.

The Reid Bros. Manufacturing Co., of Toronto,
102-108 Adelaide St., West, Toronto.

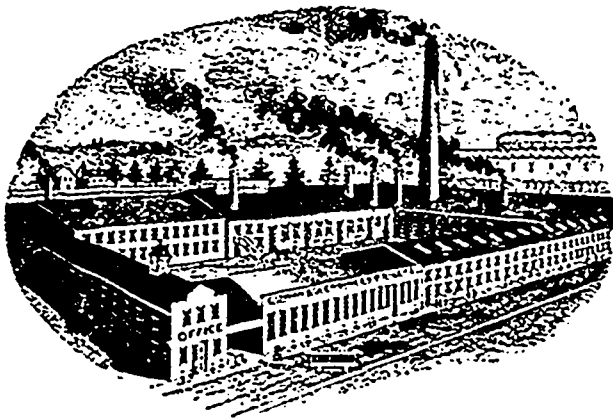


ROCK EMERY MILLS
AND
CRUSHERS MILLSTONES.

FRENCH BUHR AND ESOPUS STONES. *Send for Circular.* **STURTEVANT MILL CO.**
BOSTON, MASS.

COWAN & CO.

GALT, - ONTARIO.



We have on hand a number of

REBUILT WOOD TOOLS, ENGINES and BOILERS,

Which we offer at low prices and most favorable terms.

Write for Terms, Prices and Catalogue.

Manufacturers of

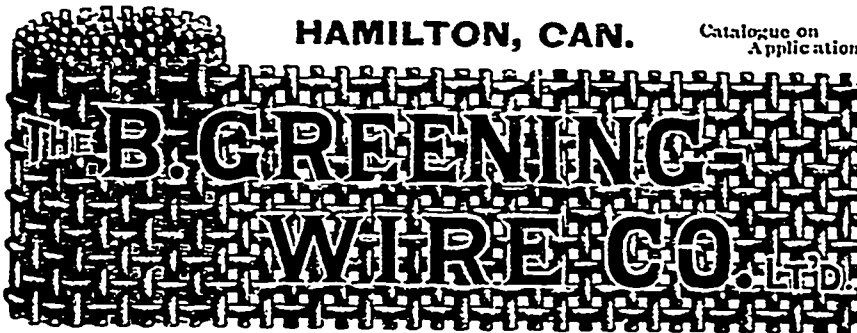
Woodworking Machinery

Corliss and Slide Valve Engines. Boilers, Dakin Patent Feed Water Heater and Lime Extractor, and Saw Mills.

Old Wood Tools, Engines and Boilers, taken as part pay on new.

HAMILTON, CAN.

Catalogue on Application.



JOHN J. KELLER & CO.

104 and 106 MURRAY ST.
NEW YORK

220 Church St., Philadelphia.

135 Pearl Street, Boston.

**Aniline Colors,
Dyewood Extracts,
Sumac and
Nutmeg Extracts.**

FAST COLORS for Wool Dyeing,
One Dip Cotton Colors, Novelties
and Specialties for Calico
Printing.

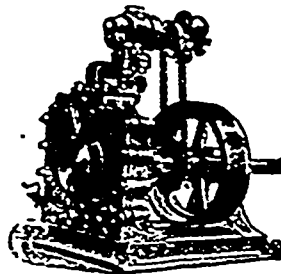
MANUFACTURED BY

JOHN R. GEIGY & CO.

BASLE, SWITZERLAND

The Dake Engine

For Running Dynamos In



Small Isolated Plants.

CONTRACTORS' HOISTS

STEADY AND EVEN MOTION,

ALSO FOR

Attachment Direct to Fans, Blowers, Centrifugal
Pumps, Stokers, Steering Gear, Etc.

Correspondence Solicited.

Phelps Machine Co'y,

EASTMAN, P.Q.

Building permits issued in Toronto are :
House of Industry, two-story addition, cost
\$5,000 ; J. R. Barber, three-story addition
to warehouse, north-east corner Jarvis and
Duke Streets, cost \$3,200 ; estate James
Murray, alterations and additions to Nos.
36, 38, and 40 Wellington street, east, cost,
\$4,000 ; C. R. Rundle, pair of dwellings on
Wellesley, near Blecker, cost \$7,500.

A fine new building is that which Messrs.
S. F. McKinnon & Co. will occupy on York
street, just below the Rossin House,
Toronto. The firm is about to begin the
manufacture of jackets, mantles, costumes,
etc., thus adding another industry to the
city. They are putting in 100 machines and
will employ 125 hands to begin with. The
new building is six stories high with a base-
ment. It is built of pressed brick faced with
stone and has windows facing in all
directions. The main entrance is by a fine
doorway with handsome pillars and capitals.
Each floor contains 3,600 square feet of floor
space. On the first floor will be the offices
and the hat department. On the second
floor will be kept goods of a more staple
character, such as dress silks, velvets, velvet-
eens, ribbons, laces, veilings, etc. The
third floor will be devoted to flowers,
feathers and millinery novelties. The
fourth floor will be divided. At the front
will be the mantle show rooms, which will
be lighted practically from three sides ; to
the rear will be the millinery work room,
stock room and office. On the fifth floor the
mantle material and trimmings stock room
will be situated ; completed mantles, jackets,
etc., will be stored in the front end of the
floor. The sixth floor will contain the
operating room and will be exceptionally
well fitted for such a purpose ; there will
also be an office for the designers and cutters
and other conveniences for the manufacture
of goods. The building will be extremely
convenient and well fitted up, and its build-
ing marks an important step forward.

DOMINION OF CANADA.

The public accounts for the year ending
June 30, 1897, have been issued. The
receipts were \$37,829,775 and expenditures
\$38,349,759, leaving a deficit of \$519,981.
The expenditure on capital account was
\$3,595,821. Of this amount \$2,539,206 was
expended on railways and canals, as follows:
Intercolonial, \$149,112 ; Annapolis and Digby
\$41,457 ; Lachine Canal, \$282,052 ; Ottawa
River works, \$1,908 ; Rideau Canal, \$10,702 ;
St. Lawrence River Canal, \$1,355,525 ; Sault
Ste. Marie Canal, \$299,561 ; Trent Canal,
\$486,577 ; Welland Canal, \$2,284. There
was expended on public works \$129,237,
distributed as follows : River St. Lawrence,
\$163,398 ; Collingwood harbor, \$3 ; Rainy
River, \$5,295 ; Port Arthur harbor, \$9,096 ;
Nainaimo harbor, \$7,625. The Canadian
Pacific Railway was paid \$14,054. Subsidies
amounting to \$416,955 were paid to the
following railways ; Atlantic and Northwest-
ern, \$186,600 ; Canadian Pacific, \$52,000 ;
Cap de la Madeleine, \$7,424 ; Gulf Shore,
\$28,635 ; Irondale, Bancroft and Ottawa,
\$48,000 ; Lake Temiscamingue, \$6,476 ; Lot-
biniere and Megantic, \$22,400 ; Montreal
and Ottawa, \$32,000 ; Ontario, Belmont and
Northern, \$30,720 ; United Counties, \$2,700.
The amount at the credit of depositors in the
savings banks at the close of the year was
\$48,934,975, an increase over the previous
year of \$2,135,657. The net debt was in-
creased by \$3,041,163 and amounted to
\$261,528,596 at the end of the year.

Application for incorporation is being made by La Manufacture de Hardes de Warwick (Limited), of Warwick, Que., and by the Shawenagen Manufacturing Company of Montreal.

The Thompson Electrical Company, of Hamilton, have supplied a 30-light arc plant, complete, to the town of Parrsboro, N.S., and a 35-light arc plant to the town of Port Dover, Ont.

The C.P.R. will run six light draft steamers in Alaska waters. They are to be of wood, plated with steel and will be 156 feet over all and thirty feet beam. The Polson and Bortram works in Toronto are constructing the vessels.

The Dickson Lumber Company, it is likely, will locate their new mill at Lakesfield, Ont. Its capacity is to be 15,000,000 feet per season.

The Virginia mines of Rossland, B.C., have ordered a hoisting plant from Jenckes & Co., Sherbrook, Que. The mines are about to become shippers.

An incendiary fire at Bracebridge destroyed J. R. Higgins planing mills occupied by Tate & Bateson.

The E. B. Eddy Company will enlarge their match factory. This is the result of the amalgamation of the Diamond Match Company with the Eddy Company.

The Windsor Plaster Co., Windsor, N.S., are lighting their works by electricity, and have given the order for the electrical equipment to The Royal Electric Co.

The dam at James Cummings' woolen mills at Norwood, Ont., was carried away by a freshet, and the flood carried away Squire Bros. pump shop, two bridges and 450 cords of wood.

The Perine twine and cordage factory destroyed at Doon, Ont., will be rebuilt at once.

Samuel McLeod, of Prince Albert, N.W.T., has sold his lumber mill to Keith & Company.

Messrs. Fetherstonhaugh & Co., patent solicitors of this city, have informed Mr. A. H. St. Germain, of North Toronto, that they have been successful in negotiating for electric busses which are being built in London, England, and will be put on to run between Toronto and York mills next spring.

E. D. Smith, the Winona fruit, man has in prospect the construction of a \$5,000 store-house for fruit shipments next year.

Allen & Mackenzie, a hardware firm of Galt, Ont., recently shipped an oil stove to China. The Galt Reporter says: "It is the custom in China to give every caller a cup of tea, and as it is a difficult matter to keep the tea warm at all hours, and missionaries who have, as far as possible, adopted the native customs must comply with this established rule, Miss McKenzie will take the stove back with her for that purpose. Allen & McKenzie have also an application from a missionary in Asia Minor for one of these convenient appliances."

The Laurentide Pulp Company's bill has passed the Railway Committee of the Quebec legislature with few changes.

American buyers have contracted for a large quantity of pulp wood to be cut this winter on Manitoulin Island. Prices are reported good.

The mill of the Cochrane Hill Mining Co., at Cochrane Hill, Nova Scotia, has been destroyed by fire.

D. R. Fraser sawmiller at Edmonton, N.W.T., has leased his grist mills to McCallum & Blatchford.

A complete development plant has been ordered by the B. C. mine at Greenwood, B.C. from the Jenckes Machine Co., of Sherbrooke, Que.

Mr. W. H. Murray, of St. John, N.B., has secured a contract to provide a cargo of spruce logs and pulp wood for a steamer from France. This is an experimental move on the part of the French manufacturers.

The Windsor Electric Company are rapidly rebuilding and the Royal Electric Company, of Montreal, are supplying the necessary apparatus.

Messrs. A. J. Allan & Company, formerly of Chicago, Ill., will establish a show-cas factory at St. John, N.B.

HAHLO & LIEBREICH, BRADFORD, ENG.

Machinery Merchants and Exporters

NEW and GOOD SECOND-HAND WOOLLEN MACHINERY

SHAKE WILLEYS, TEAZERS, RAG PICKERS, GARNETTS, AUTOMATIC FEEDS, WASTE CLEANERS, CARDS, CONDENSERS, SELF-ACTING MULES, TWISTERS, LOOMS, HYDRO-EXTRACTORS, SHEARING MACHINES, Etc.

GOOD Second-Hand COTTON and WORSTED MACHINERY

BELTING, CARD-CLOTHING, PICKERS, PICKING BANDS, Etc.

Hamilton Blast Furnace Co.

HAMILTON, - - ONTARIO (Limited)

Manufacturers of

HIGH GRADE PIG IRON

THE . . . DOMINION WATER

SPECIAL FEATURES

Economy in Use of Water, Great Power
Equal Efficiency at any Gate-Opening
Steadiness and Strength of Motion
Sensitiveness to Change in Gate-Opening
Ease for Regulation by Governor
Strength and Durability
Freedom from Trouble with Step
Not Clogged by Ice
Accessibility to all Parts

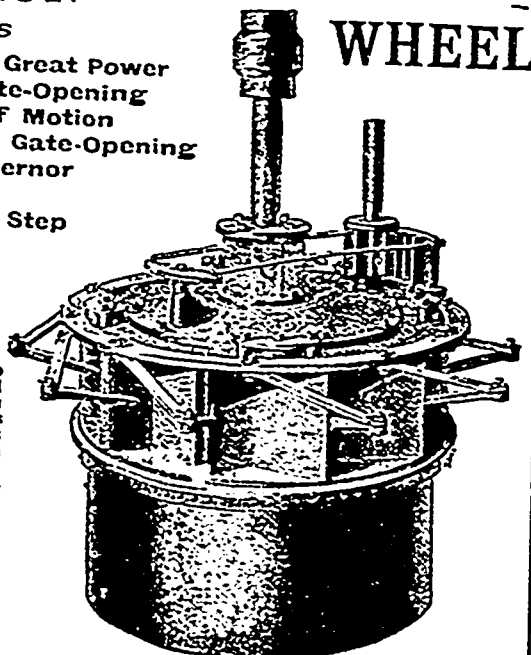
St. CATHARINES,
February 9, 1897

Messrs. Wm. & J. G. Greey,
Toronto.

GENTLEMEN.—Your favor of the 5th to hand. Have been away from home and hence delay in answering your letter. You ask us how your Dominion Wheel compares with the . . . Well, first the comparison is this—we have been using two 33 inch diameter, double wheels, and your 51 inch Dominion wheel we put in December last gives us as much power as both, and does not use but very little more water than one of the 33 inch wheels. Yours truly,
COOKE & SON.

MANUFACTURED ONLY BY

WM. & J. G. GREEY
TORONTO



THE ELECTRICAL CONSTRUCTION CO., OF LONDON,
LIMITED,
LONDON, - - ONTARIO.

DIRECT-CURRENT MULTIPOLAR LIGHTING MACHINES, From 2 to 40 K.W.
BELTED OR DIRECT-CONNECTED.

MULTIPOLAR MOTORS, up to 50 k.w.
Knife Switches, all Sizes and Kinds.

REPAIRS ON SHORT NOTICE.

Two Second-hand 150 k.w. Multipolar, and two 80 k.w. Bipolar 500 Volt Generators for Sale at a Bargain.

Patent for Sale.

**JUBILEE
SMOKE
CONSUMER**

This new apparatus is the sole one which destroys completely smoke and gases of every kind.

It is the only one which can be adapted to locomotive and steamboat boilers, as well as to boilers used in factories, workshops, etc.

THE JUBILEE gives entire satisfaction, its work being perfect.

The Canadian, British and American outright would be sold, if a reasonable offer was made, on account of the professional business of its owner.

APPLY TO

ALBERT PAGNUELO,
AGENT,

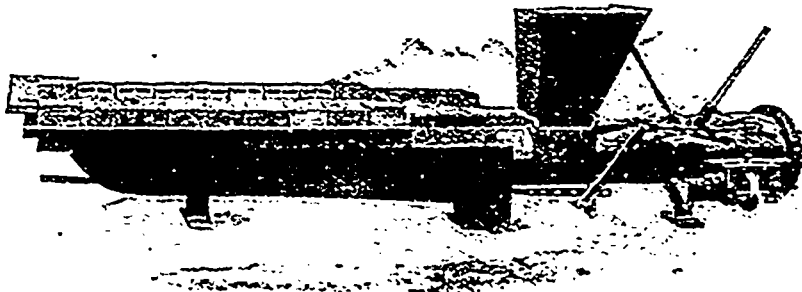
58 ST. JAMES STREET, - - MONTREAL, CAN.



THE **WEEKS-ELDRED CO.** OF TORONTO.
LIMITED

Mechanical, Civil and Sanitary Engineers

GENERAL CONTRACTORS, STEAM POWER, HEATING and VENTILATING. Sewage Disposal Plants a Specialty



Sole Canadian Manufacturers of the

**Improved Jones Under-feed
Mechanical Stoker**

Perfect Combustion. No Smoke. No Ash.
Offices..

80 CANADA LIFE BUILDING, - - TORONTO, ONT.

Send for Illustrated Catalogue

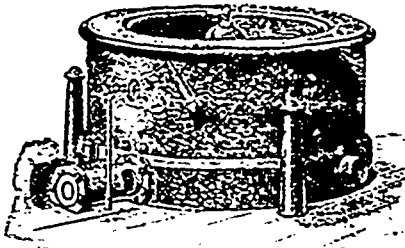
DO YOU REQUIRE

Rubber Belting?

IF SO, BUY THE BRANDS MADE BY

The CANADIAN RUBBER COMPANY of MONTREAL

CAPITAL \$2,000,000.

Manufacturers of all Kinds of Rubber Goods**ONTARIO BRANCH—Cor. Front and Yonge Streets, TORONTO.****Broadbent's
Hydro-Extractors**

Adapted for

MANUFACTORIES, DYE HOUSES,
LAUNDRIES, CHEMICAL WORKS, SUGAR
REFINERIES, etc., etc.**THOMAS BROADBENT & SONS, Limited**

HUDDERSFIELD, ENG.

Telegrams: "BROADBENT, HUDDERSFIELD."

Agents for Canada

SHAW BROTHERS, 164 MCGILL ST., MONTREAL**I**f you would keep yourself informed regarding the Carpet, Upholstery, and Furniture Business of the United States, there is one infallible way, i.e., to subscribe for and read**The American
Carpet and Upholstery Journal**Subscription Price \$2
a year for Canada
and the United States.

Each number contains valuable statistics as to the imports and exports of the country, and all the news relating to the allied industries.

Publicity - - It carries the advertisements of the leading firms in the business, and is regarded as a most valuable medium for reaching the entire trade of the United States.

Advertising rates on application. Address....

THE TRADES PUBLISHING CO.

JOHN R. KENDRICK, President.

113 N. 12th Street, Philadelphia, Penna.

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Watchman's
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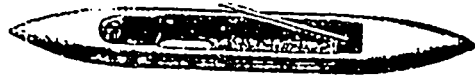
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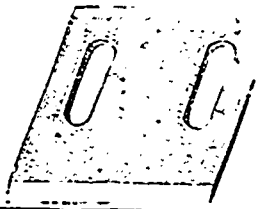
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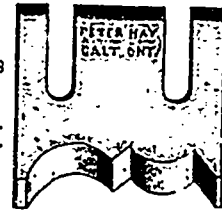
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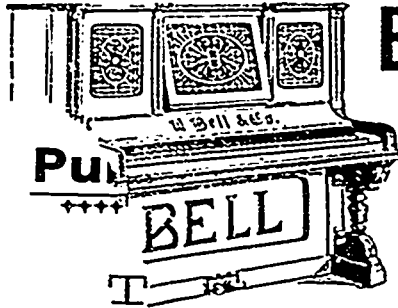
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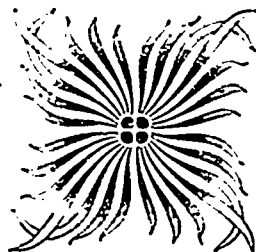
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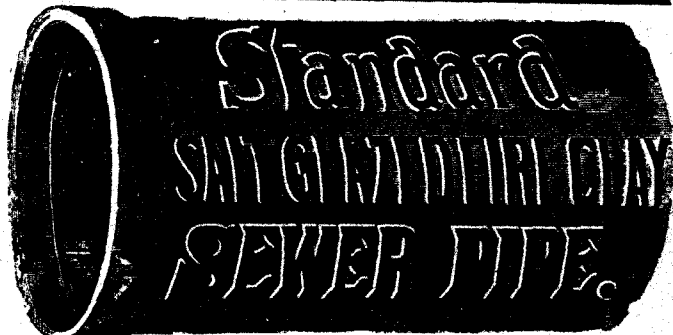
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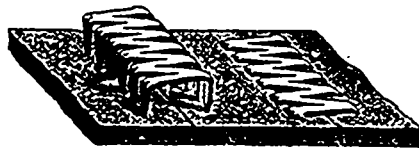
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