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 AND INDUSTRIAL WORLD  
 DEVOTED TO THE MANUFACTURING INTEREST OF THE DOMINION

Vol. 29.

TORONTO, FEBRUARY 15, 1895.

No. 4.

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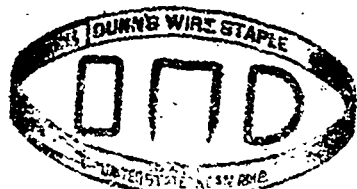
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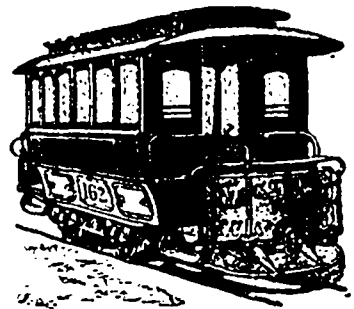
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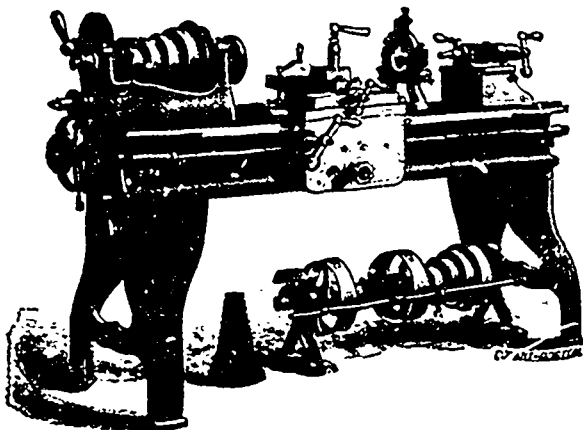
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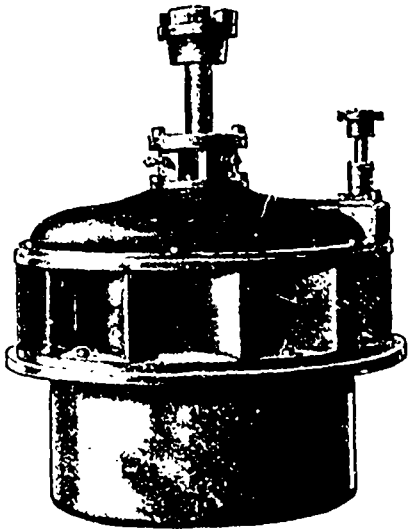
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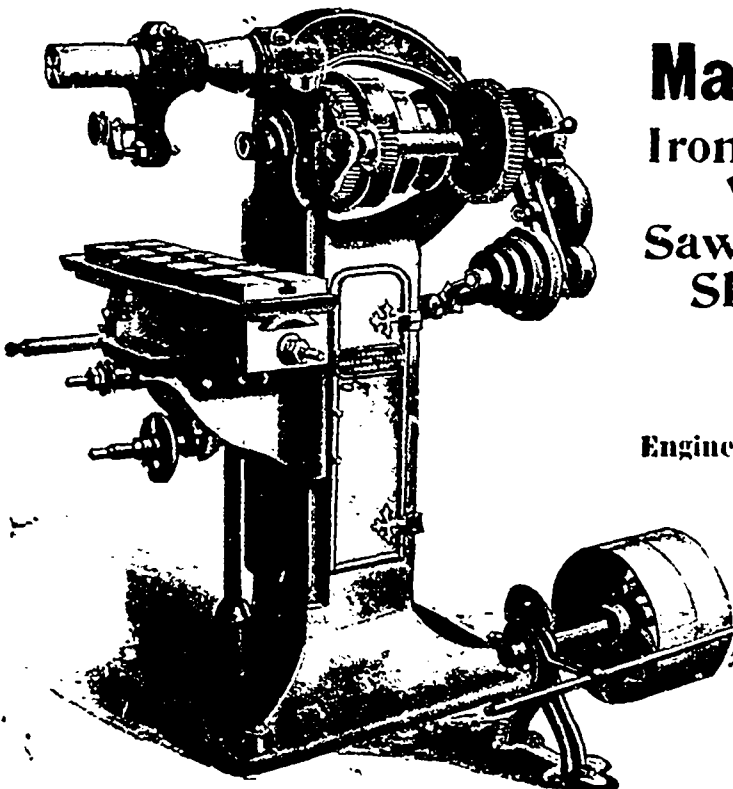
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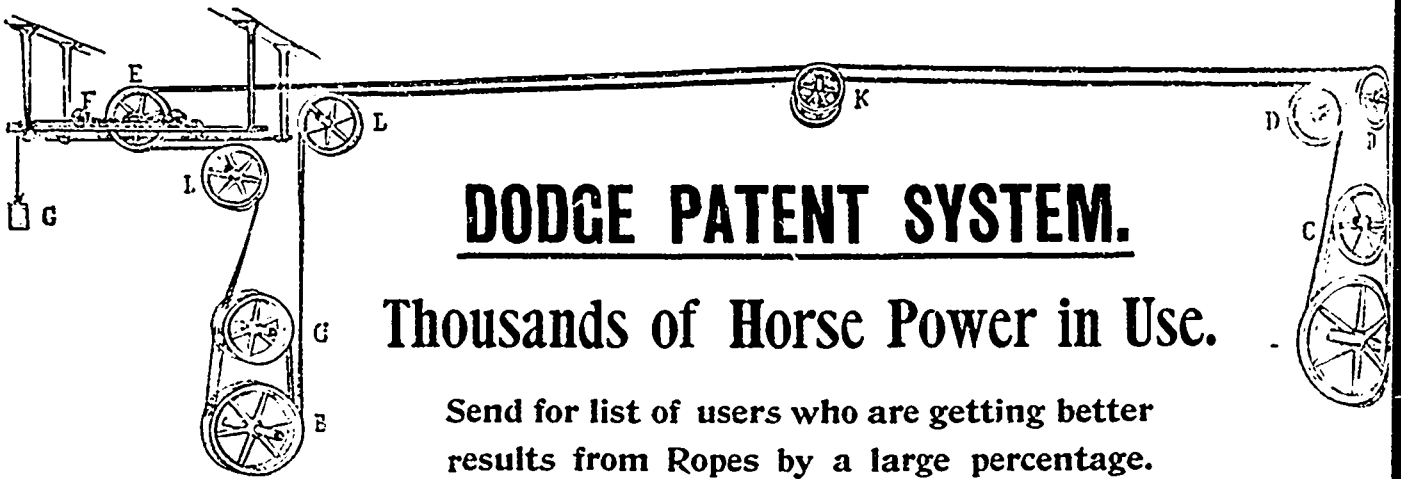
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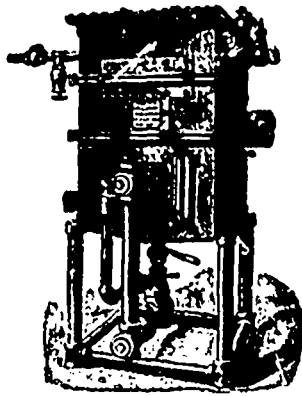
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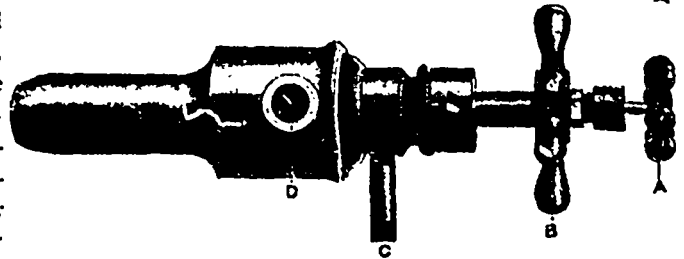
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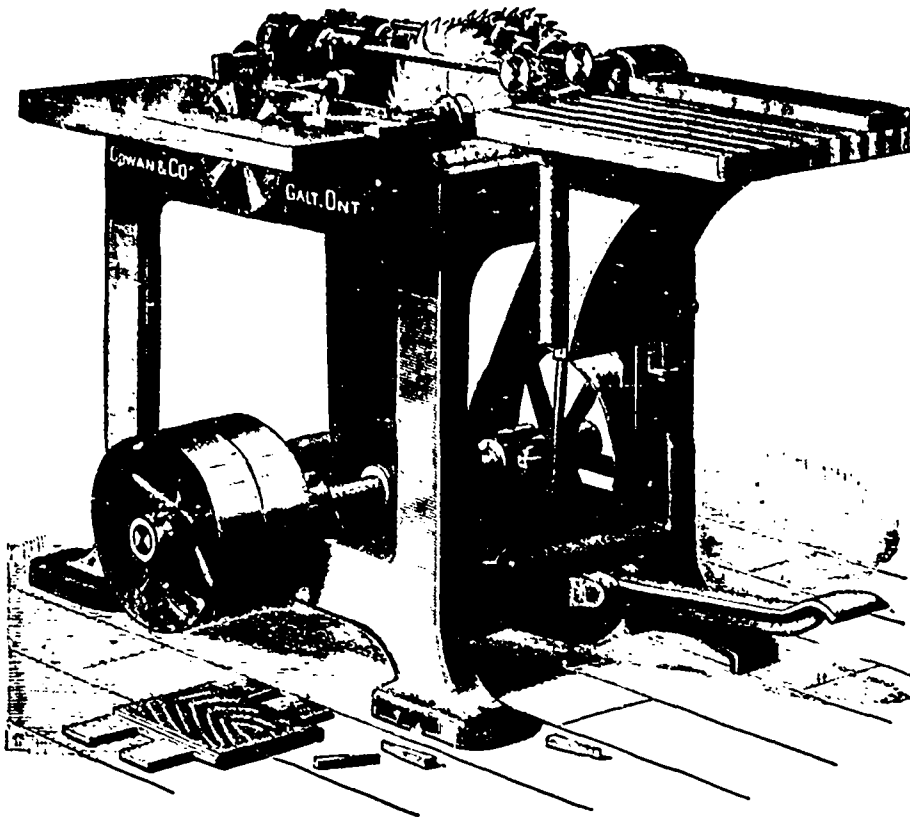
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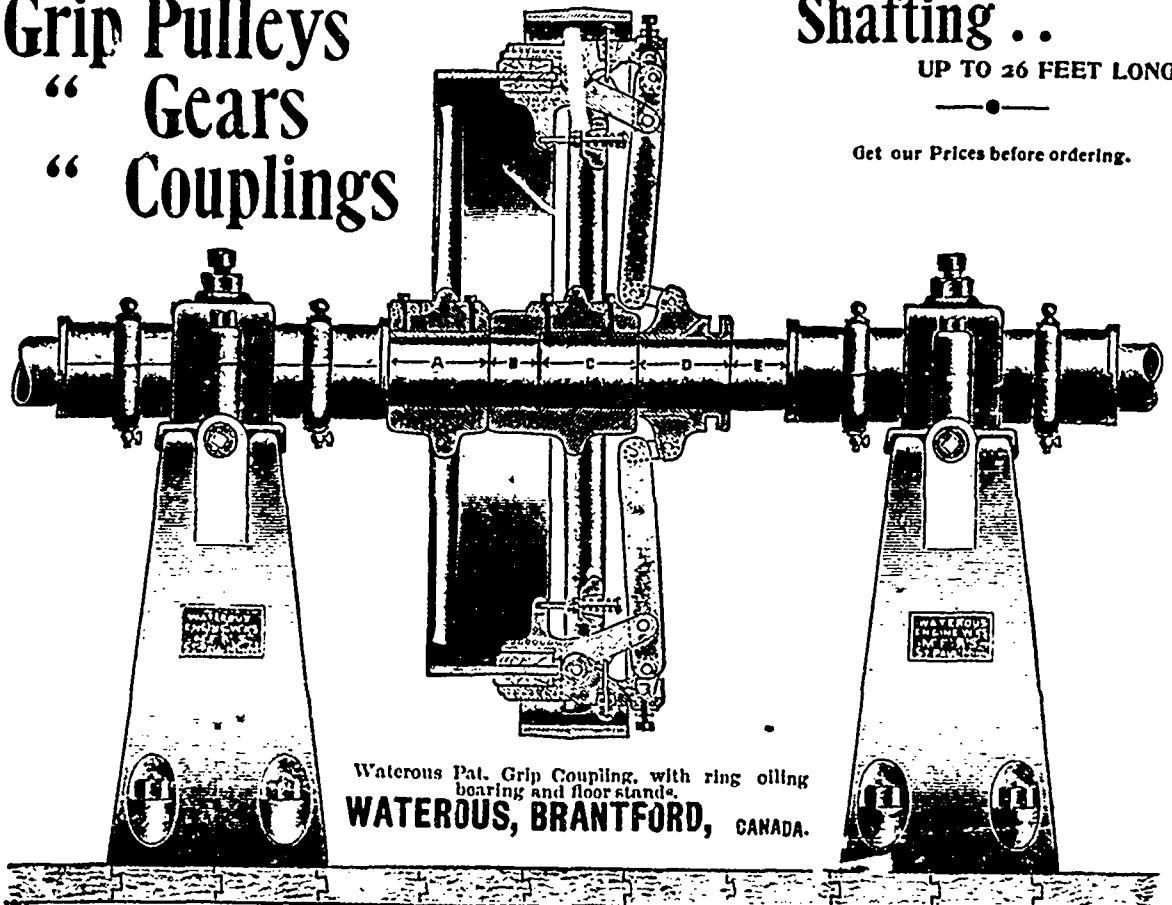
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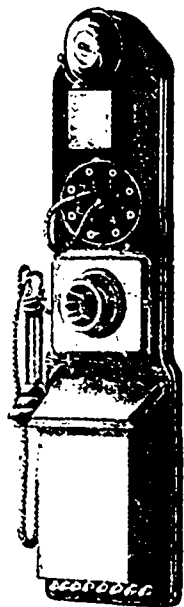
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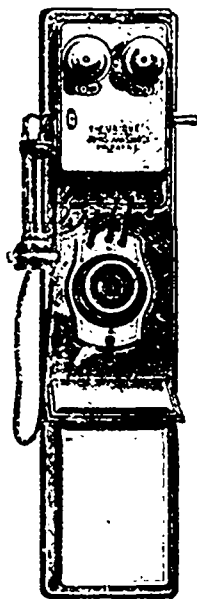
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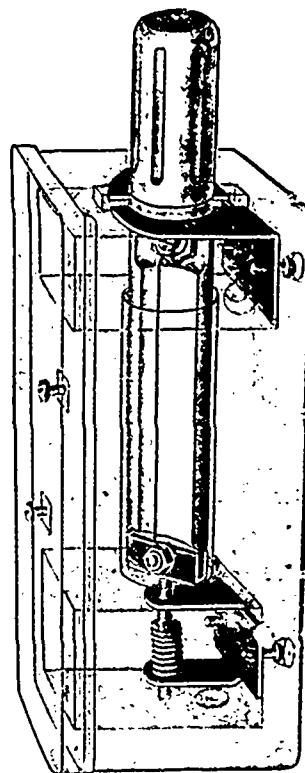
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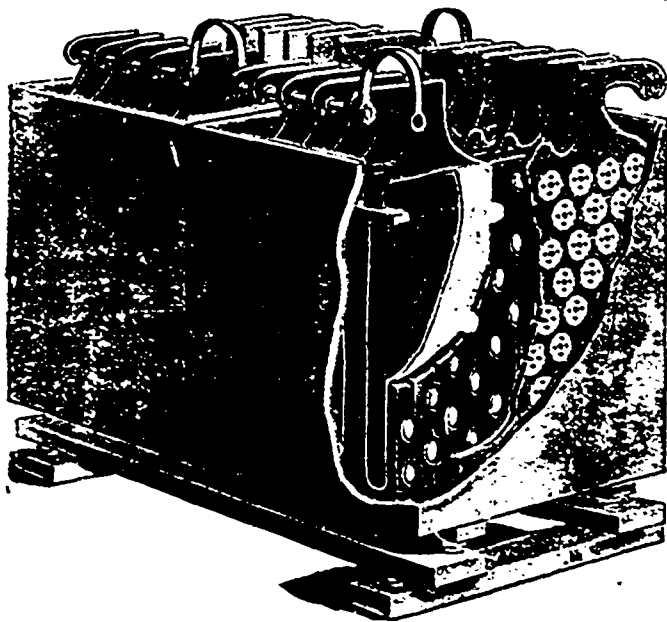
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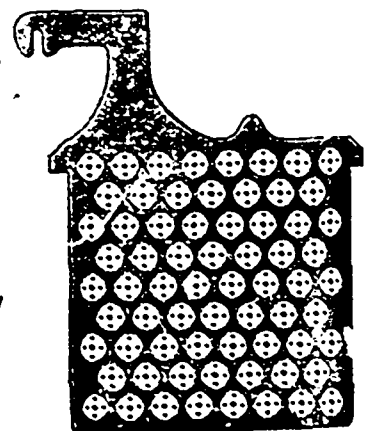
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**BONUS OR DRAWBACK WHICH?**

In a recent issue of this journal was an article written by Mr. George E. Drummond, manager of the Canada Iron Furnace Company, giving a review of the pig iron business of Canada during the year 1894, in which he made allusion to an effect that was being had upon that industry by the operation of the Order-in-Council of November 2, 1894, entitled "Re drawbacks on imported goods used in Canadian manufactured articles, and exported." Regarding this Order, Mr. Drummond says that it was passed with a view of encouraging the exportation of agricultural imple-

ments to foreign markets; that the principle of encouragement is perfectly correct, but the way in which the Order is framed, and the manner in which it works, are most detrimental to the development of the Canadian iron industry. "As it stands to-day," he says, "it obliges Canadian consumers to use foreign raw material before they can avail themselves of the encouragement offered by the Government, and it bars out altogether the use of Canadian raw material." He illustrates this point by the fact that an Ontario plow manufacturer, in writing to a furnace company, had stated that much as he desired to use Canadian pig iron at competition prices with American, yet inasmuch as he exported largely to Australia and Great Britain he was compelled to use American iron and steel, so as to enable him to obtain the rebate of duty offered under the Order-in-Council. He also mentioned another manufacturer who had received an order for plows for the Australian market, to be forwarded by the next out-going steamer and who regretted that he was compelled to use Canadian steel because he had no American steel in stock, and therefore he would have to forego the benefit of the rebate of duty. "It is quite evident," says Mr. Drummond, "that the manner in which the Order-in-Council was drawn up, and is now being acted upon, is merely an error, but it is one that should be rectified immediately, as it simply nullifies the protection and encouragement to the Canadian iron industry granted by the Dominion Government itself at the last session of Parliament." In the opinion of Mr. Drummond, the Government to be entirely consistent with their policy of encouraging the manufacture and use of Canadian iron, should have so framed the Order-in-Council that manufacturers of agricultural implements would be awarded whatever sum the duty would amount to if they had imported the iron and steel used in constructing their machines, but leaving them free to use Canadian raw materials. In other words the encouragement to manufacturing for export should take the form of a bonus rather than a rebate of duty.

It was the belief of the Government, no doubt, that the Order-in-Council embodied about all that was necessary to encourage the export trade in agricultural implements and other articles of Canadian manufactured products, and that it did not embody any feature that would operate against any Canadian manufacturing industry, particularly the iron and steel industry. And it is an open question now whether the iron and steel industry are any worse off now, under the operation of the Order-in-Council, than it would have been if that Order had not been passed. The argument is advanced by some that if it was impossible to use Canadian iron and steel in the construction of agricultural implements made for export before the passage of the Order, the iron and steel industry cannot possibly be injuriously affected by the Order, but it would remain substantially as it was before. If this contention is correct, and it is the view of the subject entertained by the Government it may be that the change desired by Mr. Drummond and the other manufacturers of iron and steel will not be made; but the contra arguments advanced by these latter have force and weight, and are certainly entitled to the most profound consideration.

The impression prevails that the Order-in-Council under

discussion was intended to give to Canadian manufacturers just such advantages regarding refund of duty on materials imported to be manufactured into merchandise for export as is given to American manufacturers under the United States law made in that behalf. No doubt this was the object of the Dominion Government in passing the Order, but it is to be regretted that while they were about it they did not copy and adopt both the wording and the spirit of the American law. It is true that no American law provides for the payment of any bounty upon any manner of exports from that country; but if the Dominion Government should contemplate granting any such bounty it could easily be provided for in such a law as that of the United States regarding drawback of duty on exports.

For the better understanding of this matter we here give the United States law as embodied in Section 22 of the Tariff Act of 1894, and which is almost identical with Section 25 of the McKinley Tariff of 1890:—

Sec. 22. That where imported materials on which duties have been paid are used in the manufacture of articles manufactured or produced in the United States, there shall be allowed upon the exportation of such articles a drawback equal in amount to the duties paid on the materials used, less one per centum of such duties: Provided, That when the articles exported are made in part from domestic materials, the imported materials, or the part of the articles made from such materials, shall so appear in the completed articles that the quantity or measure thereof may be ascertained: And provided further, That the drawback on any article allowed under existing law shall be continued at the rate herein provided. That the imported materials used in the manufacture or production of articles entitled to drawback of customs duties when exported shall, in all cases where drawback of duties paid on such materials is claimed, be identified, the quantity of such materials used and the amount of duties paid thereon shall be ascertained, the facts of the manufacture or production of such articles in the United States and their exportation therefrom shall be determined, and the drawback due shall be paid to the manufacturer, producer or exporter, to the agent of either, or the person to whom such manufacturer, producer, or exporter, or agent shall in writing order such drawback paid, under such regulations as the Secretary of the Treasury shall prescribe.

It will be observed that this law provides for drawback of duty upon only such materials as may have been imported—in other words no bonus is given upon the export of any materials of domestic production.

The question at issue then is, considering the fact that the Dominion Government have long since adopted the policy of encouraging the development of the iron and steel industries of Canada, made decidedly more emphatic in the Tariff of 1894, whether the Order-in-Council of November last militates in any manner against those industries, and whether the object of the Order—to encourage the export trade in agricultural implements—cannot quite as well be attained by amending the order or the passage of a new one offering a bonus equal to the duty upon all iron and steel of Canadian production exported in any form. If a new Order-in-Council embodying this idea were substituted for the old one, would the operation of it have an injurious effect upon the revenue of the country? If yes, would the benefit to be derived from the Order offset the disadvantage? Would it not be directly in line with the avowed policy of the Government? Does it not cast a suspicion upon the efficiency of the existing Order that manufactur-

ers should deplore the fact that in filling foreign orders they did not have in stock foreign steel, and were therefore compelled to use Canadian steel? Is it worth anything to Canada that in the manufacture of merchandise for export Canadian iron and steel be used to the exclusion of foreign iron and steel? Can the policy of the Government in this respect be expanded and rounded out to its fullest perfection when a premium is offered for the consumption of foreign iron and steel when we have establishments in our own country for the production of these articles? These are questions that obtrude themselves and must be answered.

There are manufacturers who complain that there is a vagueness about the present Order-in-Council that precludes them from enjoying the benefits of it, although they manufacture articles from foreign materials, to be exported. For instance a manufacturer of malleable iron castings for use in the construction of agricultural implements because of the location of his works, finds it convenient to use American pig iron upon which he pays a duty of \$4 per net ton. He does not himself export his product, but sells it to a manufacturer of agricultural implements who exports his goods. The manufacturer of malleable iron cannot maintain a claim for rebate of duty which he has paid, because he does not export his goods, and the manufacturer of agricultural implements cannot maintain a claim for rebate of duty on the malleable iron included in his products because he did not himself manufacture it but obtained it from another Canadian concern. This does not seem fair to any of the parties concerned. It is not fair to the manufacturer of malleable castings because he pays duty upon his raw material, pig iron, but can obtain no rebate of that duty because he does not himself export his product, although he sells it to another who does. It is not fair to the manufacturer of agricultural implements because, the duty having been paid on the pig iron, the castings cost him more than if there had been no duty; and because he cannot obtain the drawback for the reason stated. The consequence of this anomalous condition is that the manufacturers of agricultural implements have virtually ceased having their malleable castings made in Canadian foundries, that is those intended for their export business, and are sending their patterns to American foundries where all their malleables will hereafter be made. This looks very much as if the National Policy was loaded the wrong way, and therefore more dangerous at the breech than at the muzzle.

The theory embodied in the Order-in-Council may be very beautiful, and the Order may work without a hitch in a multitude of instances, and prove to be of great value to many of our manufacturing industries, but if it fails as miserably as the iron and steel people say it does, and works a decided injury to what is perhaps the most important industry of Canada; if it is having a depressing effect upon the manufacture of iron and steel, then it should be amended. The Government cannot afford to encumber the iron and steel industry with one hand and strangle it with the other.

#### BONUS UPON EXPORTS OF IRON AND STEEL

In his recent speech in Montreal Mr. Laurier thanked Heaven that the raw materials of cotton and woolen fabrics

are admitted into Canada free of duty, and most pathetically inquired "Is iron free?" "Is coal free?" His desire was to create the idea that if the first two named articles were admitted free of duty, the last two should be free also. He ignored the fact that there is no necessity for a duty on wool, and that Canada is not fitted by nature to be a producer of cotton, that being an article that grows to perfection only in tropical or sub-tropical countries, and that no amount of protection could stimulate its cultivation in this country. He ignored the fact also that Canada has inexhaustible deposits of both coal and iron, and that the great wealth of them should be developed. In Nova Scotia both these articles are found in close juxtaposition, with the result that most excellent iron is being made there, that we have there an extensive steel works, and that Nova Scotia coal finds a large and remunerative market as far west as Montreal. We know, too, that there are large deposits of iron ore in the Province of Quebec, and that no better charcoal iron is made than that produced there by the Canada Iron Furnace Company. We know, too, that Ontario contains immense deposits of iron ore, and that a large furnace for the manufacture of pig iron from it is now almost ready for operation at Hamilton.

The Dominion Government have very wisely undertaken to stimulate and encourage the production of pig iron in Canada, and have, as an inducement to that end, imposed a duty of \$4 per ton upon imported iron, and have offered a bonus of \$2 per ton upon the production of iron in Canada made from native ores.

In addition to this the Ontario Government have shown much liberality in an effort to develop the iron mines and the production of iron in this Province. At the recent session of the local Legislature an Act was passed entitled "An Act relating to mines and mining lands," by which an appropriation was made of the sum of \$125,000 to aid miners and producers of iron ore in developing the ore deposits of the Province. Clause 12 of the Act authorizes the payment to the miners or producers of iron ore which shall be mined and smelted in the Province the equivalent of \$1 per ton on the pig metal products of such ore, this for a period of five years to a maximum of \$25,000 per year.

Except under such hard times and commercial and financial distresses as have enveloped the world during the past few years, and except for the constant dread that should the Conservative Party be ousted from the control of the Dominion Government, these most favorable inducements for the encouragement of the iron industry in Canada would have resulted in the materialization of very many more iron furnaces than what we now have. But these generous offers hold good, that of Ontario being a most acceptable supplement to that of the Dominion; and, from the spirit that we know prevails at Ottawa, we have every reason to hope that if anything yet remains undone to accomplish and round out the fulfillment of the desire to firmly establish a Canadian iron industry, it will be done and that promptly.

Is there anything else that can be done, and what is it? The Government have observed that certain Canadian industries have so expanded and grown under the influence of the National Policy that it was necessary, to assist in their fuller development, and that they might become ex-

porters to foreign countries, and that they might compete on equal terms with American manufacturers in such business, that they should be favored by having granted to them a rebate of the duties they might pay on foreign materials imported for the business, and exported. To do this an Order-in-Council was passed providing for such drawback, and that Order is now in force. The object of the Order was most commendable, and the spirit of it in strict consonance with that of the National Policy; but while it seems to work satisfactorily in some directions, unfortunately it is looked upon as a boomerang that is injuring the iron industry. Is this Order-in-Council, then, just the thing desired by the Government to benefit that industry?

What else could the Government do?

Could a system of bonus upon exports be adopted that would bestow all the advantages obtained by the Order-in-Council, avoid the objections made to that Order, not be overburdensome to the public treasury, be no clog upon any Canadian enterprise, and be of most decided advantage to the iron industry? It is contended that such a policy could be adopted with great advantage. It already exists in spirit in the bounty that is already being given upon the production of iron, in which both the Dominion and the Ontario Governments join. Liberals and Conservatives alike throughout Ontario and elsewhere in Canada have time and again endorsed the bonus system. The Montreal Herald in a recent article pointed out the fact that the Order-in-Council was already causing great injury to that most important part of the Canadian iron industry, viz., the manufacture of iron products from Canadian raw materials; and when such journals as the Montreal Star is found strongly fighting for the maintenance of the iron duties while they demand the lowering of duties upon other articles, the Government need have no apprehension as regards the popular verdict if it should adopt the bonus upon exports system in their policy for the development of our iron mines. Such a system might be initiated by granting a bonus upon all exports of iron and steel, in whatever form, equivalent to the duty imposed upon such forms of iron and steel were they being imported into Canada.

#### LIBELLOUS HYDROPHOBIA.

A case which was recently on trial in the Assize Court, Toronto, before Chancellor Boyd—that of the American Watch Case Company, of Toronto, against W. F. Doll, of Winnipeg, for libel, is of exceedingly great interest to Canadian manufacturers.

For a proper understanding of the merits of the case it should be stated that some two years ago Mr. Doll sold a lot of stamped up gold goods to a firm in Victoria, B.C., that is to say, low karat gold, which were stamped up to 18 karats. These goods it appears were ordered by the Victoria firm from Doll to be stamped up, and they no doubt knew what they were buying. Later they refused to pay their indebtedness to Doll, alleging that he had sold them stamped up goods instead of a quality indicated by the stamp mark. Doll sued them for the amount of his account, their defense being as above stated. A ver-

dict was rendered in favor of Doll without costs, in rendering which the judge stated that although the defendants well knew what they were buying, and the plaintiff, Doll, well knew what he was selling, the practice was misleading, not to say dishonest, and calculated to cheat the public. The account of this trial was published at the time in the Victoria Colonist, and copied into The Trader, where it was commented upon. Mr. W. K. McNaught who was then as now secretary-treasurer of the American Watch Case Company, was also editor of The Trader, a trade journal devoted to the jewelry interests. The Trader took occasion to criticise the business methods that had led to the British Columbia episode, and of all who observed such methods, contending that such methods should be frowned down in the community, and those who practised them should turn over a new leaf. These articles in The Trader gave great offence to Doll, and his resentment soon began to manifest itself in many ways, all intended to injure the good name of McNaught and the business of the company with which he was connected. Features of this resentment were the publication of a pamphlet by Doll which contained much libellous matter against McNaught and the American Watch Case Company; and the display in a store window in Toronto, which he had obtained for the purpose, of a number of watch cases manufactured by the Watch Case Company, which had been corroded and defaced by the action of powerful acids, the intention being to show that the cases were not what the manufacturer had represented them to be. Beside these cases were placed similar watch cases, made in the United States, which had not been defaced by acids, all intended to show that the Canadian articles were not true to standard, were of inferior workmanship, and that the American Watch Case Company were practising fraud upon their customers. Another feature of Doll's resentment was, by the use of these displays, to attack the tariff policy of the Dominion Government, and to illustrate the fact that because of the National Policy the people of Canada were compelled to pay outrageously high prices for Canadian watch cases, and were denied the privilege of purchasing better and more reliable cases of American make for less money. These proceedings called forth some caustic comments from McNaught, published in The Trader, which brought Doll to Toronto where and when he endeavored to have published in the daily papers a defamatory attack upon McNaught. Failing in this, his resentment prompted him to have McNaught arrested and taken before a magistrate upon a charge of fraud in selling watch cases that were not what they were represented to be. This charge was promptly dismissed by the magistrate. Doll continued his attacks in various ways upon McNaught and the American Watch Case Company, and forbearance having ceased to be a virtue with them, the company brought an action for libel against Doll, also asking for an order of Court restraining him from continuing his libellous acts.

In the trial, after the testimony was all in, his Lordship, Chancellor Boyd, in charging the jury, said:—"The defence is that what Doll published is true; if not exactly

true it is true to the belief of Doll, and that a public duty rested upon him to let the public know what kind of goods the company were making so that the people would rise up and take off the duty. If a man publishes anything that is libellous, looked at by itself, and justifies the publication he must prove it in every particular and in every sense of the word. A half truth is more dangerous than a lie. What we want is the truth, the whole truth and nothing but the truth."

In view of the result of this trial it is important to bear in mind the words of the Court to the effect that the libeller, to justify himself for the publication of his libel, must prove it in every particular and in every sense of the word.

In the hearing of the case the defense introduced a witness but Doll, although a large number of witnesses had been summoned and were present ready to testify in his behalf. Doll spoke of the large number of jewellers all over the country who desired that he should succeed in carrying out his point which, it was hoped, would result in the downfall of the National Policy, but as these witnesses would have shown upon their examination that the business methods of the American Watch Case Company were the same as those of all other similar concerns, particularly those of the most reputable manufacturers in the United States, and that the Canadian goods were equal to and in some respects superior to similar classes of the best American goods; and as the life or death of the National Policy was not an issue of the trial, the witnesses were not put upon the stand. Doll relied for his justification upon his own personal testimony and the exhibition of the acid-eaten watch cases shown in comparison with cases of American manufacture. On the other hand McNaught's testimony regarding the honesty of his company's goods, and the knowledge of their construction and of their intrinsic value was confirmed and substantiated by the certificates of the Assayer of the United States Mint and of other assayers whose integrity could not be impeached, and also by a number of manufacturing and wholesale and retail jewelers, who all testified that there was neither fraud nor deception in the goods manufactured by the American Watch Case Company, Mr. M. C. Ellis, a member of the old and well known jewelry manufacturing firm of P. W. Ellis & Co., Toronto, testifying that his firm had bought about \$250,000 worth of cases from the plaintiff company, that they had never had any complaints from their customers concerning them; that they compared favorably with the best cases imported from the United States; that they had frequently tested them and had in every way found them to be as represented; that the comparisons made in the store window display were not fair, that cases of different quality and price were put side by side, and that the weights and values stated in the invoices of the company were always found to correspond with the goods.

There was also uncontradicted testimony showing that the Canadian Jobbers' Association had never advanced prices, but that Canadian goods were sold to the Canadian trade at actually lower prices, value for value, than American goods were sold at to the American trade. In other words that the effect of the National Policy had been

reduce prices in Canada lower than they were in the United States.

In committing the case to the jury his Lordship formulated a series of questions which they were requested to answer. The first, second and eighth of these questions were as follows:—1. Is there, on the part of the American Watch Case Company, a bogus guarantee on the 14 karat United States assay watch called the Victoria? 2. Have the American Watch Case Company made cheap cases and stamped them as of higher value or quality? 8. Is it fair to compare the Canadian Eagle case and the American Eagle case? To these three questions the answer of the jury was "No." That is to say, that Doll did not justify himself in his libel in charging as he had done that the American Watch Case Company had given bogus guarantees on the Victoria case; that the company had made cheap cases and stamped them as of higher value or quality; and that it was fair to compare a certain case made by the company with a dissimilar case, but of similar name, made in the United States.

In his charge to the jury his Lordship laid down this law: "If a man publishes anything that is libellous, looked at by itself, and justifies the publication, he must prove it in every particular and in every sense of the word." It was charged against Doll that he had libelled the American Watch Case Company in the particulars set forth in questions one, two and eight propounded by his Lordship, and the jury declared that Doll had not justified himself; and, according to the law laid down by his Lordship, Doll was therefore guilty. Question ten, however, which was "Do you find that there was or was not a libel in any part of the matter complained of, and if so what part?" was not answered at all, because the jury agreed not to answer it. And because this question was not answered in the affirmative, there was a mistrial, although questions one, two and eight had been answered in the negative. There were several other questions propounded, upon none of which were the jury agreed, but there was no question asked which received an answer favorable to Doll.

In commenting upon the most singular result of the trial his Lordship expressed the hope that Doll would desist from the course he had been pursuing, suggesting that if he did not do so he would give favorable consideration to an application for an injunction to compel him.

The ways of a petit jury are past finding out. In this case they found the defendant guilty on three of the counts of the indictment, but in another count where it was asked if the defendant was guilty in any particular they failed to agree. This was simply a miscarriage of justice. The general result, however, was a complete vindication of the American Watch Case Company against the hydrophobic libels of Doll.

#### CANADIAN PRODUCTS AND BRITISH PRICES.

The great necessity for Canadian farmers to diversify their crops and to engage in other branches of industry is most strongly emphasized in The Canadian Gazette, which, speaking of the outlook for 1895, says:

The bane of the Canadian farmer in 1894, and through him of the whole community in Canada, as of all exporting

countries, has been the continued decline in prices, and he is a bold man who would say that the tide has yet fully turned. The extent of this continued decline may be gathered from a glance at the experience of the country which sets the standard of prices. In Great Britain the yield per acre last harvest was  $4\frac{3}{4}$  bushels for wheat,  $5\frac{3}{4}$  bushels for barley, and 6 bushels for oats more than in 1893, yet the return per acre of all the corn sold since harvest has averaged 12s. 5d. for wheat, 1s.  $2\frac{3}{4}$ d. for barley, and 5s. 6d. for oats less than was obtained for the corn sold during the corresponding period of the year before, bad as the results were then; or to put it in another way, the lowest wheat price prior to 1894 was 24s. 8d. per quarter; by October, 1894, it had reached 17s. 6d. per quarter. Indeed, mutton seems to be the only item of British farm produce that has materially increased in the wretched market values before prevailing, and it is little wonder that Mr. Everett, M.P., should tell us that in the choice English county of Norfolk, the capital of the tenant farmers during the last twenty years has shrunk by  $6\frac{1}{2}$  millions, and that the capital of the owners of land has contracted to the extent of 30 millions. Norfolk has sent many excellent settlers to Canada, and we have heard of none who regret the change from heavily-rated to practically free homesteads. Could some means be devised of helping others to follow their example, we have no doubt that many more would gladly make a fresh start in Canada. The £30 to £50 which is needed to effect the transfer of themselves and families from the old land to the new is the one great stumbling-block at the present moment. They can still in most cases command a little capital—enough to give them a first start in Canada, but they will not face the initial outlay. And the plight of the small farmer is to a large extent the plight of the farm laborer. One of the marked features of English agriculture in 1894 has been the extension of depression to the agricultural laborers, whose wages have fallen 1s. to 2s. a week in most counties. Since winter set in a greater number of men have been reported as out of work than in any recent season. It is of just such material that the average prairie farmer of to day is made, but here again the difficulty is largely the difficulty of transfer.

This aspect of the question is well worthy of serious attention among those who desire by one stroke to relieve embarrassment at home and people the waste places of the prairie region. That, despite Canadian prices and the inevitable influence of the commercial depression of the whole continent, the North-West has abundant attractive powers cannot be denied. The influx of settlers from the United States to the Canadian prairie tells its own tale. So does the official crop bulletin issued by the Manitoban Government, of which we give a summary this week. A decade ago Manitoba and the Territories were practically non-existent as a wheat-producing country; the wheat yield of 1894 is placed at 20 million bushels; and we realize how conservative an estimate this is when we find that the yield of Manitoba alone was 17,170,000 bushels. Oats, barley, peas, flax, rye, potatoes, and roots all find their place in the bulletin with substantial yields. Of even greater importance is the evidence of the increased raising of live stock and the extension of dairying, for it is by mixed



farming that the burden of low prices may best be borne. No fewer than 11,000 cattle and 8,000 hogs were exported from Manitoba during the season, and poultry-raising to meet the local demand has opened up a promising industry. Of butter, the farmers disposed of  $2\frac{1}{2}$  million pounds, at an average price of 15 1-5 cents per lb., bringing, in all, \$380,000 into the pockets of the farmers, one creamery alone realising 20 cents per lb. on an output of 85,000 lbs. Helped by these developments, farmers have, we are told, increased their buildings in Manitoba alone to the extent of \$725,000. These are gratifying evidences of progress in the face of difficulties, and suggest the truth of the assertion that, though the prairie farmer has been getting less for his wheat, he has found new outlets for his enterprise, and has, moreover, been paying less for the things he has to buy.

#### LAND TAXES.

It is understood that Mr. Joseph L. Haycock, the leader of the Patrons of Industry party in the Ontario Legislature, will, at the forthcoming session, introduce a bill which will provide for an experiment in a new method of taxation. Under Mr. Haycock's bill any municipality which may desire to do so may abolish all taxes upon buildings, improvements, machinery, plant, personalty and income; or it may abolish the taxes upon any one of these things, and raise its revenue by taxation of land values only. It is contended that this method of taxation—this principle of local option as to how revenue shall be obtained for municipal purposes, is entirely fair and equitable. Under it any municipality,

large or small, will enjoy the privilege of raising its revenue as it may see proper, without reference to any other method that may be observed by any other municipality. Such a system would be entirely novel in Ontario, but not throughout Canada; and it is in operation in many parts of the British Empire and also in other countries.

The question of taxation or exemption from taxation is of the utmost importance to manufacturers. It is often to be observed that municipalities are bidding against other municipalities to secure the location of factories whose owners are influenced in their choice of location by the inducements that may be offered for such location. Of course every municipality is anxious to have as many manufacturing establishments as possible located within its boundaries, chiefly because it increases the population and the number of consumers of such things as are offered for sale there. In most instances the question is as to what inducements it may be possible to offer to secure such location. Generally these include exemption from taxation for a term of years, and perhaps free water or water power or some similar thing. But these inducements if accepted are at the expense of the whole community; and it would be evidently unfair and unjust to any similar manufacturing establishment that might be located there if its taxes were increased for the sake of securing to the place a competitor who would be exempt from taxation. Such wild hunts for peripatetic and perambulating manufacturing concerns, always on the search for bonus-offering municipalities, has become such a nuisance as to demand the enactment of laws regulating or restraining such transactions; and there seems

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to be much justice in preventing a municipality from offering money bonuses to secure the location of establishments that are already established in some other place. The system is wrong and indefensible. It does not present any feature of justice to those who may already be established in a place that those who are there, and who have to pay taxes, should have those taxes increased in order that competitors in business may be induced to locate there and who will have to pay no taxes.

The remedy for the condition that countenances such things seems to lie in prohibiting the payment of any bonus or the granting of any privileges as an inducement to secure the location of a manufacturing establishment other than what is freely granted to every other such establishment. In other words, to quote a homely adage, "every tub should stand upon its own bottom." But under existing methods of taxation this seems impossible, and no better remedy that we are aware of can be devised than that where no tax whatever is imposed upon an, buildings, plant, tools, materials or anything else that a manufacturer might require in carrying on his operations, the revenue necessary for municipal purposes being raised only upon the land occupied by him, and which is no greater and no less than the taxes imposed upon contiguous lands whether occupied or not. If such were the case—if such a law prevailed, the natural advantages such as contiguity to navigable waters, the presence of abundant water power, etc., and such other advantages as might exist in railroads, proximity to large distributing centres, etc., would regulate and influence the

presence of manufacturing establishments, and there would be no necessity for municipalities to overtax certain industries so as to offer unfair advantages to certain other industries to locate there. A manufacturer should not be punished in any manner for introducing capital into a locality, for investing his money there, and for giving employment to labor. But that is what is being done constantly where land is valued according to the improvements that capital places upon it, and where land sharks are allowed to fatten upon the public by obtaining possession of desirable lots, and, without the expenditure of any capital upon them, hold them for the increased increment that accrues through the efforts of the whole community.

Mr. Haycock should be encouraged in his effort to have his bill made the law of the land.

EDITORIAL NOTES.

The twentieth regular annual meeting of the Canadian Manufacturers' Association has been called to assemble in the office of the Association, Room 66, Canada Life Building, Toronto, at 3 o'clock in the afternoon of Wednesday, February 27th inst.

Retaliatory tariffs and export bounties betray a state of public simplicity really distressing in this year of grace 1895.—Toronto Globe.

Simplicity if you please but not very distressing, Germany for instance. The people in that country do not seem to suffer for cheap food although American beef is

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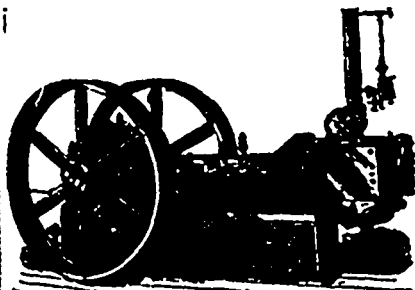
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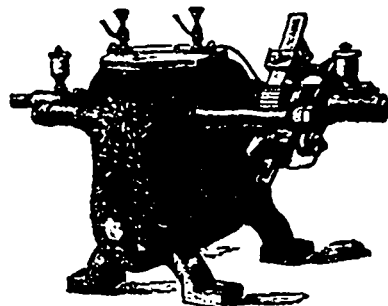
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ruled out, and the retaliatory tariff don't hurt much. So too with the export bounty on sugar. Under that system probably the greatest industry of Germany is the growth of the sugar beet and the manufacture of beet sugar, and in the face of these facts the remarks of The Globe betray a state of journalistic simplicity really distressing.

Germany, by her retaliating policy, has forced the United States to repeal its discriminating duties on bounty-fed sugar. By a vote of 239 to 31, Congress agreed to a proposition to that effect, but what will be the fate of the amendment at the hands of the President it would be hard to say.—The Empire.

It is surprising how much some people and papers don't know about things. The Empire tells us that the United States Congress has agreed to repeal its discriminating duty on German sugar, thereby attempting to create the impression that Congress had done all it could do in that direction. It seems to be ignorant of the fact that the Congress consists of two different and distinct bodies—the Senate and the House of Representatives, and that nothing that one body can do can become law without the concurrence of the other. If the amendment to the tariff passed by the House is not concurred in by the Senate it will never reach the President, and therefore he can never have a voice in the matter. It is well to be both particular and precise in stating facts, and also to remember that one branch only of the National legislature does not constitute the Congress.

Any trade maintained by a bonus must be a losing trade. The necessity of a bonus is a proof of the unprofitable na-

ture of it. The outlay must be greater than the returns. The bonus merely distributes the loss among the whole people.—Toronto Globe.

Germany established its sugar industry by means of a bonus, which has been anything but a losing trade. The industry would probably never have been inaugurated had it not been for the bonus bestowed upon it, and instead of it being unprofitable it has grown to be the largest and most profitable industry in the Empire.

Bids for the steel construction of the New York and Long Island Bridge have been opened and the contract has been awarded to the Pencoyd Iron Works, of Philadelphia. This is the heaviest bridge contract ever awarded in the United States. The magnitude of the undertaking may be realized when it is stated that there are to be 70,000,000 pounds of metal in the structures of the bridge and viaduct. Work will be proceeded with at once, under the supervision of Mr. Charles M. Jacobs, chief engineer, who is well known to New Yorkers by the successful joining of New York and Brooklyn by means of the East River Tunnel. This bridge will be second only to the Forth bridge in its length of span, but greater than that bridge in its weight per lineal foot, as it carries four railroad tracts, while the Forth carries but two, and this bridge is designed to carry a heavier strain, due to the much heavier railway equipment in this country than in England. Considerable progress has been made on the site of the bridge. Two coffer dams have been sunk complete on the east and west side of Blackwell's Island. The third coffer dam was sunk on Long Island (Ravenswood)

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MARTINTOWN, ONT., June 14th, 1891.

THOMAS WILLING.

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ORDERS RECEIVE CAREFUL AND PROMPT ATTENTION.

on Monday last. The coffer dam on the east side of Blackwell's Island is pumped out, and drilling, blasting, and excavating of rock is now proceeding. The contract for granite was let a few weeks ago, and the dressed granite will be shipped and workmen will commence to lay it in place for the piers before the close of this month. —The Bulletin.

Are not the manufacturer and his employes united in one business? Banded by a common interest? Are they not a distinct body, of which one is the head and the other the limbs? Now, if in the desperation of famine, the head proceeds to gnaw the limbs, will not the feet have an instinctive impulse to kick, and the hands to strike? And if they kick and strike, would it not be well for the head to consider that, upon the whole, it is better to preserve the entire body intact, and so unimpaired that it will not be on worse terms than any other body in the strife for maintenance? And would it not be well for the heads of other bodies to come to a like conclusion? Neither the business of making machine tools, steam engines, cars, printing material, farm implements, dynamos, sewing machines, guns, watches, steamboats, houses, furniture, carriages, or any other thing, should, by the suicidal policy of cutting prices degrade itself, and fall below any other business. Do wise men buy things simply because they are cheap? Did any body ever get rich by bidding against itself at auction? The sum of all this is: stiff prices. Stiff prices sets money in motion. Idle money now rusts in the vaults, moulders in safes. Its

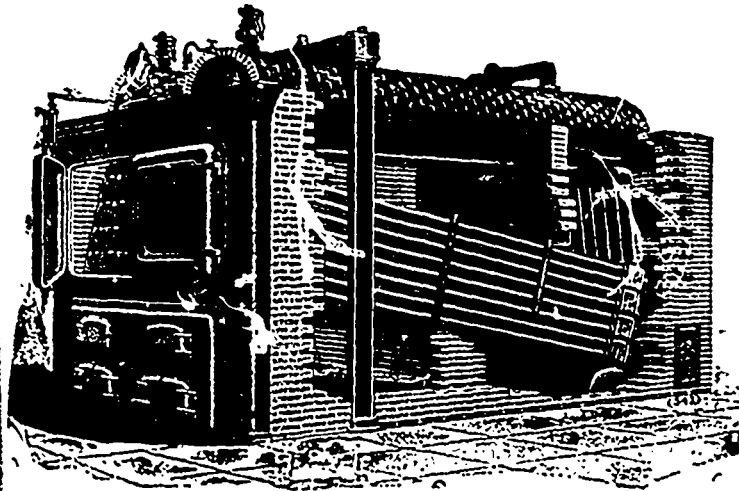
celibacy is as infecund as a monk in a cloister on the orb of Diana. Married to labor, it is fruitful, and its offspring is prosperity. Good times are come when the toil of the mechanic is so well remunerated that he can amply recompense the corn grower, beef raiser, coal winner, metal miner, the mariner, and the oyster dredger, and each of these is so well requited by the others for his corporate exertions that favors may be reciprocated all around. Then, not only will each of these separate corporations thrive, but the greater and wider communities, the States, the nations, the world, will rejoice in the bounties which nature scatters with a lavish hand. —The Age of Steel.

At the recent annual meeting of the Halifax, N.S., Board of Trade the following resolution passed at a conference of Boards of Trade of New Brunswick, was unanimously approved of:

Whereas, it is manifestly the duty, as well as the interest of each section of the Dominion to assist in promoting the welfare and prosperity of the whole country; and whereas it would be advantageous to the Dominion generally that the import and export trades should be conducted over Canadian railways and through Canadian seaports.

Therefore, resolved, That the managers of the Grand Trunk, the Intercolonial and Canadian Pacific railways, as well as the various Boards of Trade throughout the Dominion, be requested to promote the foregoing idea as far as practicable, especially by utilizing maritime province seaports during the winter season, when the St. Lawrence is closed to navigation. And, further, resolved that the Dominion Government also be requested to co-operate in every possible way, more particularly when arranging future steamship subsidy contracts, which should always

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stipulate for the use of Canadian ports only, and thus carry out the policy of "Canada for Canadians."

No doubt every manufacturer in Canada in common with all other business men, heartily endorses the sentiments of the above resolution, and will do everything possible to give it full effect. In union is strength, and we all appreciate the fact that it is the duty of each section to assist in promoting the welfare of every other section and of the whole country. The managers of the several lines of railroads connecting Ontario and the west with the Maritime Provinces are requested to promote this idea by utilizing the seaports of Nova Scotia and New Brunswick during the winter season; and the Dominion Government is applied to to co-operate in the matter; and it really seems that the accomplishment of this much to be desired object rests entirely with the railroads and the Government, and not with the manufacturing and mercantile community. It is a question with the railroads whether they will haul freight from Halifax to Toronto at the same cost of through freight from Liverpool as the cost would be via Portland, Boston, or New York. If they will do so, the freight, or much of it, will come via Halifax—if not it will come by the old routes. One of the greatest obstacles, too, in the inter-provincial trade between Nova Scotia and Ontario is the high rates of rail freight between those sections on such articles as iron, steel and coal. If special low rates were given for bringing those articles from the Maritime Provinces to Ontario a much larger trade would be done than what now exists—in fact no ton of Nova Scotia coal ever finds its way to Ontario—and it is because of the high

freight charges that the products of Nova Scotia iron furnaces and steel mills are in no greater demand in Ontario than they now are.

Mr George A. Clare has been nominated by the Conservative convention of the South Riding of Waterloo, Ont., as their candidate for the House of Commons at the next Dominion elections. Mr. Clare is one of the most energetic and well known manufacturers of Canada, and for many years head of the firm of Clare Brothers, of Preston, manufacturers of heating furnaces, etc.; and he is also a prominent member of the Canadian Manufacturers' Association. It is to be hoped that many other constituencies will do as Mr. Clare's has done and nominate and elect manufacturers to represent them in the Dominion Parliament. This course is specially recommended to the several constituencies included in the city of Toronto.

The German Minister of Agriculture wants the State to supervise the importation and sale of foreign cereals. As Germany is a grain-importing country, farmers can be assisted at the expense of other people, by restrictions on imports. But when the farmer comes to pay the bonuses which supply Englishmen with cheap sugar and certain lines of cotton goods he is very little ahead. This belief is strengthened by his present financial condition.—Toronto Globe.

By a proper supervision of the importation of sugar into Germany, and with the assistance of a bonus upon the exports of sugar, the German farmer with the assistance of the manufacturer has become the master of the sugar situ-

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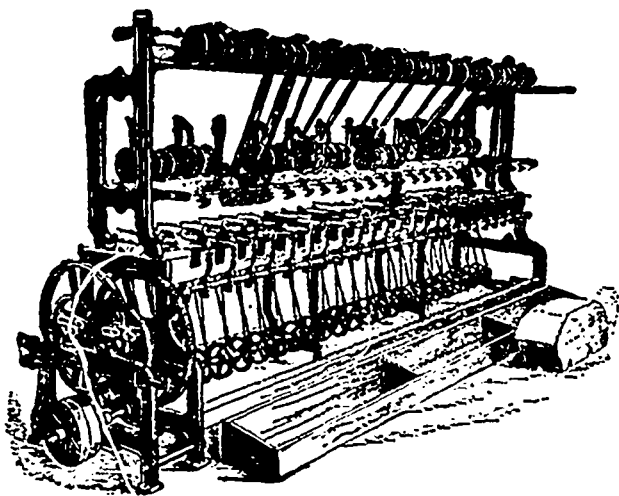
ation of the world. Tariff protection and bonus upon exports have accomplished the business.

One of the interesting industrial facts of the time is that the use of shoddy in the woolen mills of this country has had notable increase. The McKinley tariff placed a duty of 30 cents a pound upon shoddy, with the result that the material ceased to come into this country. Under the operations of the act, however, the imports of wool increased in a remarkable manner. Upon the pretense that the American people could not obtain good clothing at low prices, the Wilson bill cut down the duty upon shoddy to about two cents a pound and made wool free. This was followed, of course, by an immediate increase of the imports of shoddy; but, meantime, the imports of wool fell off heavily. American manufacturers, compelled to cheapen their fabrics because consumers are poor, and because of sharp competition of foreigners, naturally have been driven to larger use of materials of the lowest cost. Thus the outcome of the grand movement for giving better clothing to the people is that they have obtained inferior clothing; and, to accomplish this result, woolen manufacture has been injured, wages have been reduced, and American sheep husbandry has been started on the way to extermination, to the heavy loss of the farmers. Shoddy, rightly used, is a good thing. It plays its part, and an important and not at all discreditable part, in the economy of manufacture. But its enlarged employment at this particular juncture helps to emphasize the fact that the Democratic reform scheme, pushed through for the benefaction

of the people, is both a fraud and a failure.—The Manufacturer.

The exact figures representing the diminution of the use of wool by the American people are offered in a circular just issued by Justice, Bateman & Co., of this city. They show a falling off of wool consumption during last year of 23 per cent., as compared with that of the year 1893. In the latter year the consumption was more than 9½ pounds per person. In 1894 it had declined to 7½ pounds. Thus it would appear that, under a system of undutiable wool, the people of this country are using nearly one-fourth less wool than they used when the fibre was subjected to high duties. No doubt they buy actually a smaller amount of clothing; but, of the clothing that they do purchase, the quality is inferior, shoddy in more than the usual instances replacing sound wool. No amount of argument respecting the oppressive nature of the duties upon wool has ever been able to deprive of its force the fact that, with high duties, the people of this country, not more than 5 per cent. of the population of the earth, have consumed more than one-quarter of all the wool grown in the world. The free trade theory appears to prove that high duties restrict consumption. Actual experiment demonstrates that the theory is not sound. The protective system, as a whole, has given to the people phenomenal prosperity, with which they have been able to live better in every way than the people of other nations. Protection for wool was a part of that system and its operation was, first, to increase the total supply of wool, and, second, to permit farmers to ac-

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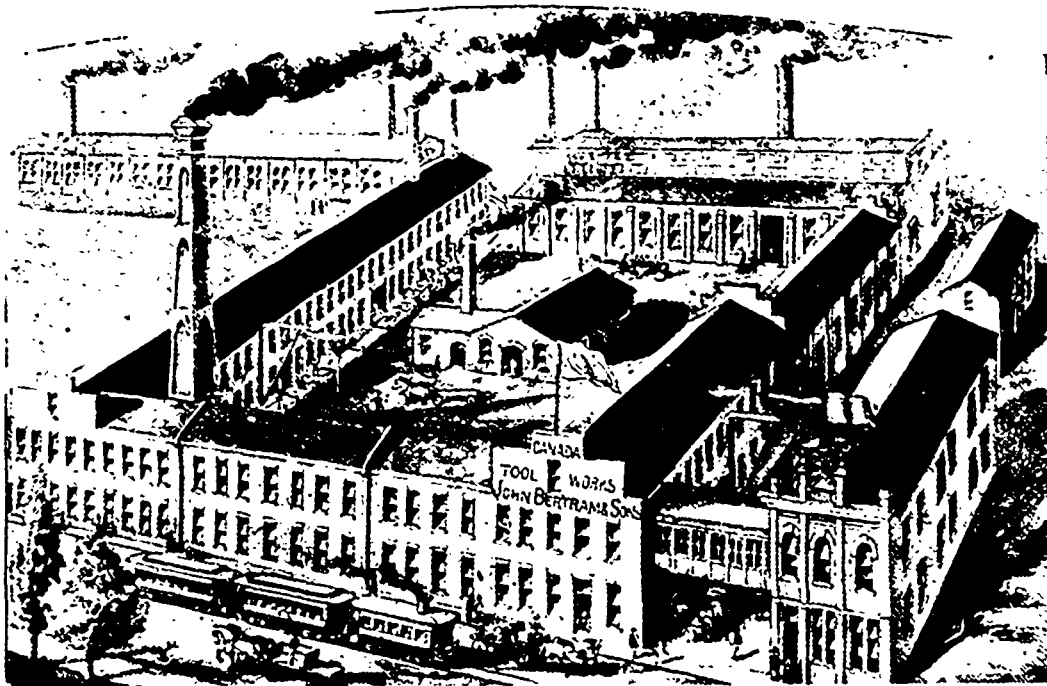
A.W. LEITCH, 16 Hughson St. South, HAMILTON, ON

quire means with which to buy clothing in greater quantities and of higher qualities than would have been possible with this source of revenue cut off. The Manufacturer.

The great falling off in Canada's foreign trade will doubtless be regarded as a healthy sign that this Canada of ours is depending on her own resources and vitality that the people are now able to consume the domestic products and the industries are able to supply the native demand. Almost any situation is cheerful to men engaged in the comfortable task of encouraging industries at the public expense.—Toronto Globe.

That sort of talk may pass with The Globe as an argument against the National Policy, but it is too diaphanous to bear inspection. The Globe should inform us why there has been a great falling off in Canada's foreign trade. We produced as largely last year of farm crops, timber, fish and manufactures as we did the year before; and we consumed as much of the necessaries of life. What are the articles that we did not export as largely of last year as the year before? What became of them? If we imported less last year than the year before, into what new channels has the trade been diverted? Does The Globe expect Canada to become wealthy by purchasing abroad merchandise that we can produce at home; and by sending products abroad that could be consumed at home? The Globe seems to be living in a fool's paradise where what it professes to believe is a bad situation affords cheerfulness in its task of encouraging the idea that the prosperity of a country depends upon the amount of trade it can do with its foreign neighbors. The more a nation produces and consumes of its own products the richer it becomes.

If the production of sugar from beet-root is to continue to cripple the cane-sugar industry of the world—a circumstance which many authorities would dispute—it is eminently desirable for English machinists that that production should take place in British Colonies rather than in foreign countries. Happily, there are some reasons to hope for such an addition to the varied list of our Colonial industries. Capital has been obtained for the culture of beet and its manufacture into sugar at the Cape, where the soil and climate are said to be favorable, and other conditions are satisfactory, notwithstanding its proximity to Natal and Mauritius. It is now declared that at the Cape two "campaigns" can be had in a year against one in Europe. The Victorian Government have not only granted a bonus of £15,000 to beet sugar producers, but have violated their own darling protective principles by enacting the free admission of all machinery required. In New Zealand application has just been made for the extension of the Beet Sugar Act for a further period of 15 years. So far the Act seems to have had very little effect, but the fall in the prices of produce has made the growth of beet seem much more attractive than formerly to New Zealand agriculturists. From land in that country crops of beet varying in value from £14 to £45 per acre can be obtained. The New Zealand Government is to be asked to procure a quantity of the best sugar beet seeds for distribution, and to carry out experiments with the industry on State farms. The attention which is being forced upon this beet sugar question by depressed trade and the clamor of the unemployed in our Colonies seems very likely to result in establishing an important market for British machinists. Colonial fiscal principles, less rigidly orthodox than those of the home country, will permit them to meet State-aided Continental competition with its own weapons. And, in Australia at all events, beet culture has an additional advantage that it would help the rapidly-growing dairying



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industry by supplying a valuable food for cattle. The extraordinary growth in the Colonies, not only of butter and cheese-making, but also of the frozen meat and fruit trades, wine-making and flour-milling, should inspire machinists with a somewhat sanguine interest in this latest development of our Colonies' own peculiar quicksilver enterprise and their Britannic perseverance.—London, Eng., Implementation Review.

Protectionist journals that have suddenly conceived great love for the farmer will please take notice that the sugar beet as a field crop is rapidly coming to the front all over the world, and that the cake, or pulp, after the extraction of the saccharine, is a valuable food for cattle. If these journals want to encourage the production of butter in Canada they should also encourage the cultivation of the sugar beet.

When the Free Press first advocated that Ontario convicts be set to labor on the farm rather than in the workshop, objection was made by those interested no doubt in the Central Prison contract system, that to control a large number of men lying under condemnation, while given such liberty in the field as would make their work effective, would be next to impossible. We are able to prove, however, that it is not only possible, but that it is a plan widely adopted in other countries, and always with benefit to the moral character of the men, as well as profit in regard to their maintenance. Now it is announced that the State of Mississippi is proposing to discontinue the barbarous penitentiary lease system, and to establish a farm on which its convicts will be employed. It is proposed to purchase a farm of not less than 5,000 acres. Texas has such a farm, which has proved profitable. Would it not be better to put the three hundred convicts usually to be

found in the Central Prison at Toronto, on a well-appointed farm, where they might learn the most useful of industries without conflicting with any other tradesmen, than to pen them behind iron bars in a workshop, where their labor, under the pernicious contract system, inures to the injury of free labor? The plan has been entered upon in the raising of garden stuff, fruit and fodder, and in the starting of a conservatory from which large quantities of flowers are sold. In 1892 hogs to the value of \$1,000 were raised. Here is the nucleus of a profitable prison industry which could be extended indefinitely and so as to avoid the delay and loss due to the capricious working of the contract system. It is a reform worth considering.—London Free Press.

The Toronto Globe tells us that although the manufacture of binder twine in Central Prison labor is "somewhat socialistic," yet it is "beneficent socialism;" and if it is a beneficent act to produce binder twine by convict labor, why not extend the beneficence to include all sorts of agricultural products? Convicts must be employed at something, and why not farming?

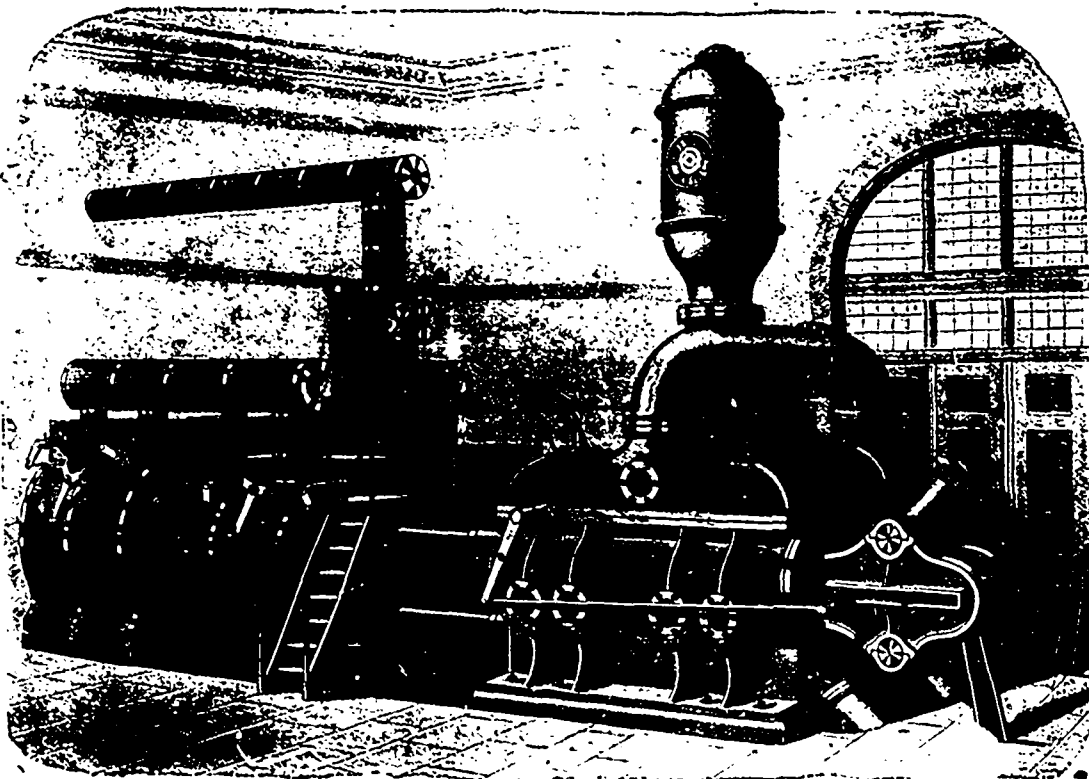
Cecil Rhodes thinks it will be necessary for the British people, in the event of general legislation on the lines of the McKinley Act, to impose retaliatory duties. But if every nation in the world adopted McKinleyism the British people, it is to be hoped, would still have sufficient wisdom to know it was neither necessary nor desirable to follow their example. Toronto Globe.

The Globe thinks that the whole civilized world, including even a large and influential section of Great Britain, are political fools the exception being another influential section of Great Britain, known as the free trade party, and

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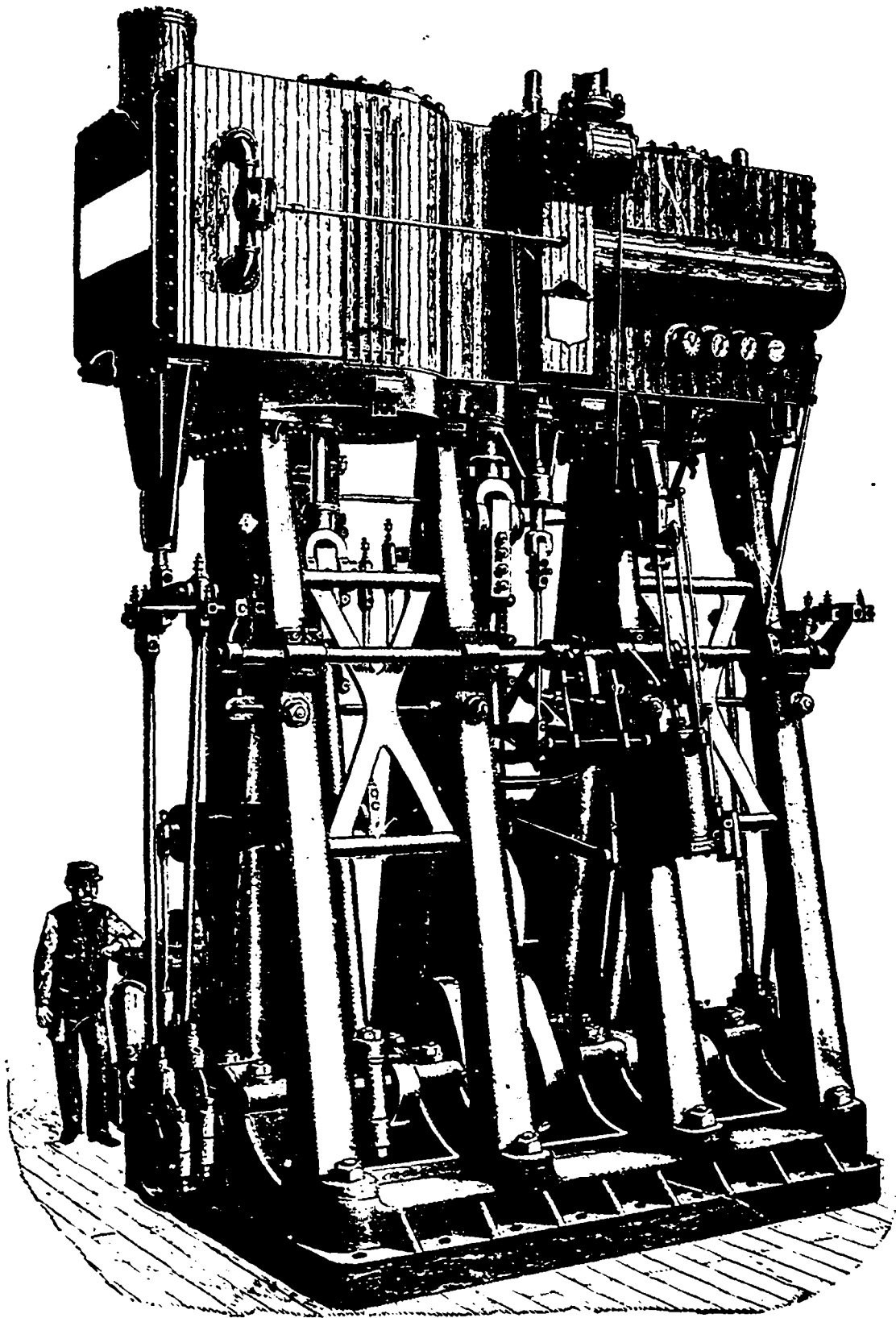
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The Globe itself. Britain stands solitary and alone among the nations in nursing the free trade fad, all the others having adopted some sort of protection.

The latest discovery in the Conservative press is that the Canadian tariff is a tariff for revenue. How John Bull will rub his glasses and stare when he hears it.—Toronto Globe.

And thus do the political enemies of the Conservative Empire laugh it to scorn. The Canadian tariff is a tariff for protection as we were taught by Sir John Macdonald.

Another proof that British industries suffer from foreign development under protection is afforded by Sir John Jenkins' statement before the Swansea Chamber of Commerce yesterday. The Welsh tin plate trade has greatly fallen off owing to the creation and expansion of that industry in the United States by means of a protective duty. Sir J. Jenkins predicts that the industry will expand in the States, and that the Welsh makers will have to look elsewhere for a market. Formerly Britain did the manufacturing and the States the buying. But protection changed all this.—The Empire.

The protection that is transferring the tin plate industry, or a very large portion of it, from Swansea to the United States, is the protection provided for by the McKinley tariff, which The Empire denounces as class legislation of a most objectionable character. There is a heavy demand in the United States for tin plates to supply which makes a heavy demand for labor, and Mr. McKinley, more interested in giving employment to his own people and to American industries than to others, advocated such a policy. No doubt the McKinley tariff is regarded in Wales as

class legislation of a most objectionable character, as The Empire puts it, but it seems to suit those in whose interests it was made whether it pleases the Welshmen or not. Mr. McKinley decided the question whether tin plate of American consumption should be produced by American labor in the United States or not.

We are in receipt of a letter from Mr. J. W. Siddall, a Toronto architect, criticizing an article that appeared in the February 1 issue of this journal re Architects and Architecture. We regret that Mr. Siddall's letter did not reach us until it was entirely too late to be printed in this issue. We will, however, publish it at our earliest opportunity. The matter will bear discussion.

Beet culture pays in Quebec for sugar making. If a man cultivates five acres or under he receives at the rate of \$5 per ton for the roots at the factory; but if the raiser is energetic enough to put ten acres of his farm under beet root cultivation he receives \$5.60 per ton. One farmer is instanced who produced beet root to the value of \$200 from two acres, while another cleared \$325 for five acres. The average return, however, is about \$75 per acre. A parish priest in the County of Berthier is authority for the statement that as there is no end to the market he believed that the cultivation of beet roots would be continued with the greatest energy and profit by the French-Canadian farmers.—London Free Press.

We frequently find such items floating around, even among professing protectionist journals, but we do not observe either the Free Press or any others of them making themselves hoarse demanding that the Dominion Gov-

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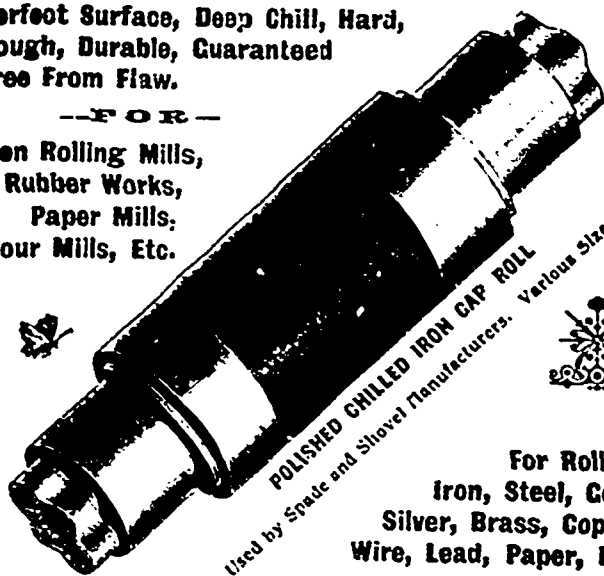
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ernment do something to encourage the sugar beet industry. There are thousands of Canadian farms that are not yielding any very profitable returns to their owners, but eminently well calculated to produce sugar beets, and yet we send millions of dollars out of the country annually to support labor in foreign lands employed in the production of sugar.

The Canadian Manufacturer: Those who are interested in the industrial affairs of Canada will find a great deal of information in this semi-monthly journal, published at Toronto, Ont., by the Canadian Manufacturer Publishing Co. Yearly subscription, \$1. It is devoted primarily to manufacturing interests, but freely discusses all the concerns of industrial life and trade in the Dominion, including politics, in its bearings on manufactures and trade. Its notes of trade cover the Dominion from the Atlantic to the Pacific and reveal the extent and variety of works in operation or proposed. It is a handsomely printed paper of forty-eight pages and cover. Its advertising columns are well filled and prove the enterprise of Canadian manufacturers, while numerous advertisements from the States show that our people are awake to the importance of reciprocal trade.—New York Sewing Machine Times.

The February number of The Methodist Magazine has for its initial

article a well illustrated sketch of Evangeline's Land, including the Annapolis Valley, the Basin of Minas, and the Little Village of Grand Pre. The artist is Mr. H. D. Young. Rev. Dr. Withrow has one of his instructive articles—the result of personal acquaintance with Everyday Life in Bible Lands. In a part of the world where

immobility of the people and persistence of customs are so striking a social feature, such accounts of their condition to day cannot but be useful to all Bible students. Another article of note is one on the work of the celebrated Pastor Wichern, under the title of The Rough House and Its Inmates. The purely literary part of the number is well up to the average.

A varied and attractive table of contents is offered by The Popular Science Monthly for February. Prof. James Sully opens the number with one of his Studies of Childhood entitled First Attacks on the Mother Tongue. A Day's Hunting Among the Eskimos, by Fridtjof Nansen, follows. It is a vivid story of Greenland life, with several striking illustrations. The Serum Treatment of Diphtheria, which is rapidly making "antitoxine" a household word, is described by Dr. Samuel T. Armstrong, of the Contagious Diseases Hospital, New York. An article on The United States Geological Survey is contributed by the new director, Mr. Charles D. Walcott. Under the title Nature's Triumph the way in which tropical vegetation resumes sway over an abandoned clearing is picturesquely described by Mr. James Rodway. Mr. Garrett P. Serviss continues his examination of the starry heavens in his Pleasures of the Telescope series. M. Henri Coupin describes a series of experiments on The Thorns of Plants. Certain tendencies and conditions of modern life are described by Prof. John W. Langley in an essay on Some Material Forces of the Social Organism. Hon. G. Hilton Scribner discusses well filled with a variety of interesting scientific matters. New York: D. Appleton & Company. Fifty cents a number, \$5 a year.

**Land Taxes.**

Editor CANADIAN MANUFACTURER :

SIR,—Permit me to say, that the article appearing in your issue of January 18th, under the caption Land Taxes, struck me very forcibly. I cannot but agree with you that our present system of taxation is radically wrong, and, so far as you have gone in suggesting a remedy, I am heartily in accord with you. Permit me to supplement what you have already pointed out, by a few remarks bearing on the question of assessment and taxation, and which must be of interest to manufacturers. To the observing man, it must be evident, that where restrictions are unfairly placed upon the efforts of individuals, companies or corporations in the development of natural resources, upon the construction of public or private works, such as railroads, bridges, shops, factories, etc., upon the manufacture of articles of commerce, and upon buying and selling, the

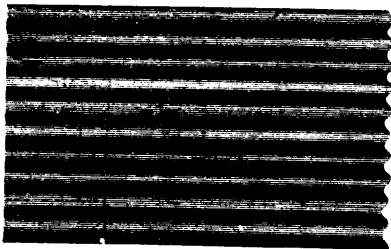
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tendency of such restrictions is the dwarfing of enterprise, and the restraining of men of capital from investing in businesses in which successful developments could otherwise be reasonably expected. While manufacturers and other business men are willing to abide by the present assessment laws, which contain anomalies inconsistent with the progressive legislation of other countries and even in some Canadian Provinces, and which, in its application, bears unjustly on the producer and particularly so on the manufacturer, so long will heavy burdens have to be borne by them in silence.

But why not cry halt! There is a remedy. Under an optional clause in the Assessment Act of Ontario, municipalities are empowered to exempt the buildings, plant and tools of new manufacturing industries from taxation for a period of years, and what industry in Ontario coming in under that Act, has not been benefited by doing so? Has it not an advantage over the older established industries? I think no one will differ with me in this conclusion. The room for complaint does not lie here. I hold that every building, factory, or store, all merchandise and machinery and also one's income should bear no taxes whatever. The chief complaint is, that landowners or, properly speaking, ground rent collectors, escape paying any share of the general taxes; and it is always the man of industry who has put up a building or added improvements where none before existed, who is pounced upon for an increase of taxes. His next door neighbor, who may be and often is the holder of a vacant lot, pays but a small rate and is enabled to hold on waiting for a rise in land value which comes solely through the increase of population and the demand for land. Under the law as it now stands, we permit the do-nothing speculator to pocket the unearned increment which, under an equitable law, would go to the community which made it. But how does this affect the manufacturer? In this way: two men co-operate and decide to go into the manufacture of goods, the question arises as to how much can they afford to pay for a suitable location, various properties are brought to their notice and they approach the owner of some particular piece of land and ask his figure, and they are told it is worth so much per foot; that that is the price he intends to have, and if he can't get it now, he will get it some day when the demand for it grows more imperative. But these two men may say to him, "We have only \$10,000 capital, all of which is needful in our business," and the reply generally given by the land owners is that that is not his affair. And thus it is that the manufacturer must do one of two things, either proceed to buy out the privilege which would afford employment to labor or cease his efforts to do any business at all.

No, if we placed a tax on land values irrespective of the improvements, the community would obtain its just due, sufficient to

meet its obligations, without levying any other tax, and by this process, whether a man put his land to its best use or held it vacant, his taxes would be the same. It can easily be seen that under such a law the land speculator would soon drop his hold, and men of enterprise would need no better encouragement than free land, with but a single tax to pay. To accomplish this very much desired thing our business men and manufacturers should combine to bring into effect a law which would operate in this direction or at least to give an opportunity of trying and testing the plan.

Toronto.

Yours truly,  
GEORGE J. BRYAN.

**Light vs. Current.**

Mr. Edison was recently interviewed for *Lighting*, and made the following shrewd remarks in regard to electric lighting interests in Britain:

Nearly all the operating companies are on a wrong business basis for any rapid development. Now a-days the chief concern of the station manager is to grind out as much current possible for every pound of coal he burns; he gets economical boilers, engines, and generators, and studies their arrangement; these are so near the practical limits of their perfection that only a 2 or 3 per cent. improvement can be expected, and so long as the station has a fair load, shows a good efficiency, and does not have breakdowns, everyone appears satisfied. The consumer grumbles at the cost of electric lighting, but pays his bill, the shareholder pockets the small dividend, and the manager is happy. They are selling current by Board of Trade units, although in competition with gas; it is light the public wants, not amperes.

It has been my pet idea ever since electric lighting started, for the operating companies to sell light, as it is here that the improvement is to be made and the grand financial incentive lies. Let them produce more light—more candle-power per horse-power hour. I will grant the difficulty of fixing a "unit of light," but it is not necessary; it is an easy matter to charge from the meter indications for the lamp hours delivered. If the station simply receives payment only for watts delivered, it has no inducement to increase the efficiency of the lamp; they will even frown upon the inventor or lamp manufacturer who gives the consumers lamps taking half as much current, because it lessens their demand and the total consumption; in fact, it is to the station's interest to see lamps chewing as much current as the poor consumer will pay for. Again, on the other hand, lamp improvements are kept back because the efficient lamp is a short-lived one, and to educate the vast public to study their meter bills

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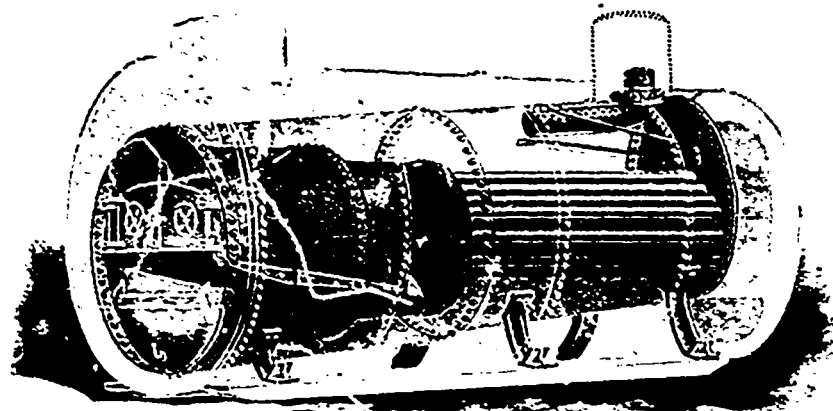
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instead of their lamp bills is a slow and tedious process at best, and a herculean task at that. To an ordinary householder each 30 cents spent on a lamp-renewal is an evident out-of-pocket expenditure; his main idea is to get the lamp that requires replacement least often; he draws an analogy with the physiological truth, and decides that a "short and merry" life of the wayward one costs him too much. It is the long-suffering lamp the public wants every time, and electric lighting drags along also.

If you enquire of all the stations doing a remunerative business, almost without exception they are charging for light (lamp hours) and prefer to renew customers' lamps free of charge. There is Boston, as a typical example, where they have satisfactorily proved that it pays better to try and burn up lamps and remove those that won't give out. You see, then, every improvement in the lamps, either for life or efficiency helps the station; it means increase of profits with the division in the shareholders' hands, and the public will not suffer, because it is doubly to the companies' advantage to lower the prices.

In connection with the above the editor of *The Electrical Engineer* in a recent issue comments as follows:

Mr. Edison would not charge for current, but for light, and believes that the charge for watts consumed is largely responsible for the poor results obtained in central station profits. The aim of the station manager to grind out a lot of current to be registered on the meters makes him slow to adopt the highest efficiency lamp, and hence the customer plodding along with an old low efficiency lamp, not only gets a poor light but is paying for current which would bring probably twice the number of lamps to full brilliancy. The remedy for this state of affairs, Mr. Edison sees in the adoption of a high efficiency lamp and the lamp-hour basis of charge. While the latter is more a question of expediency and to some extent of convenience, and therefore open to argument, there can be no question as to the soundness of the proposition that the high efficiency lamp is the most economical from the standpoint both of the consumer and of the central station. We need not again quote the figures to prove that it pays to smash an incandescent lamp long before its filament breaks, but there are many persons, it seems, who still cling fondly to the belief that a lamp ought to be kept on the circuit as long as it can be distinguished in the dark,—and then they wonder why the station does not pay. Mr. Edison again hints at the possibility of a 200-volt lamp and what such a lamp would mean to electric light distribution. Lamps of 150 volts have come into use to some extent on the continent of Europe but the slowness of their general adoption is perhaps due to causes not dependent on the qualities of the lamp. "High efficiency," however, is the watchword of the present.

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### The Outlook in the Sugar Trade.

Although there has been a general decline of prices, it is highly significant that during the past month speculative German 88 per cent. beet-root sugar has fallen to 9s. 1½d. per cwt., a point lower than any on previous record. This is but a sign of the times, seeing that fine West India sugar, now quoted 9s. 6d. to 10s., stood in November, 1893, at 13s. 9d. to 14s. 3d., while good brown West India sugar, which can now be bought at 8s. 6d. per cwt., cost 12s. 6d. a year ago. These comparative statistics certainly indicate abundance in supply, but those who have been watching closely the trend of sugar enterprise in the Austral world can plainly perceive that some considerable changes are preparing there which cannot fail to have very important economic effects and to materially affect the sugar trade of the not very remote future. That the development of bounty-favored Continental beet seriously depressed the cane sugar industry is well understood, but now changes are quietly preparing which will almost certainly result in the production of a very greatly increased cane sugar output at exceedingly moderate prices.

The British West Indies from a variety of causes have lost their old supremacy in sugar, and it is a very noteworthy fact that the coming crop of cane sugar in Queensland is over 100,000 tons, or, roughly, double what Jamaica yields, and about as much in fact as the total West Indian supply. Except Cuba, indeed, which still yields close on a million tons, it is now a fact that Queensland is only excelled in the production of this staple by Brazil in the New World.

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and is only rivalled by British Guiana. For some time past a representative from Queensland has been installed at the London agency of the colony for the purpose of promoting the further development of the great sugar-growing zones of the colony, and in this work he has already achieved such success that there is now no room for reasonable doubt as to the coming indefinite expansion of cane production in North-East Australia. We may put the probable sugar harvest of Queensland at half a million tons, but it will exceed that in the issue, and after satisfying the intercolonial needs, we reckon that 350,000 tons would be available for export. But this, though much, is not by any means all. The vast area known as the Northern Territory is now believed to be capable of growing cane, while the Victorian Government is at present engaged on some experiments in sugar beet culture, which, if successful, would add considerably to the Austral output of cane and beet sugar as really large factors in the trade calculations of the world's sugar supply. It is known that the coming Continental beet-root harvests, on Herr Licht's authority, will be over a million tons in excess of the estimated harvest, and decidedly the outlook is towards generally increased supplies. The visible supply of beet and cane sugar combined may be taken roughly at full seven million tons, whereas in 1885, less than a decade since, the combined crops of beet and cane only totalled about four and a half million tons. *British Trade Journal, Dec. 1.*

Information comes from the far West that much suffering from cold may be averted by the knowledge of how to construct such a stove as is used largely in Dakota. The stove saves the purchasing of fuel, and can be used in any district where straw or hay is plentiful. The device can be made by any tinsmith. A drum is constructed of sheet or stove-pipe iron, two feet in diameter and four feet or more, high. This is placed on a stand, which may be roughly and inexpensively made, with a top of sheet iron, rimmed to hold the drum in place. The legs are of hoop iron riveted. The top of the stove is cone-shaped, sliding into the stove-pipe just tightly enough to insure the carrying of the smoke, and yet to enable the drum to be removed for the purpose of emptying and replenishing. The draught is a hole at the lower part of the drum, with a sliding door by which the draught can be regulated. The drum should be filled with straw, hay or any material of like nature, and the fire is started at the top. One filling will last about six hours. The introduction of this stove into Dakota is said to have been a veritable god-send, and it is so cheaply and easily made that there is nothing to prevent its use in many districts throughout the country where the price of coal is too high for slender purses.

CAPTAINS OF INDUSTRY.

*This department of the Canadian Manufacturer is considered of special value to our readers because of the information contained therein. With a view to sustaining its interesting features, friends are invited to contribute any items of information coming to their knowledge regarding any Canadian manufacturing enterprises. Be concise and explicit. State facts clearly, giving correct name and address of person or firm alluded to, and nature of business.*

H. C. Rees' lumber and stave mill at Woodslee, Ont., was destroyed by fire Feb. 5th, loss about \$7,000.

Messrs. Dupont & Wilson, manufacturers of rugs, carpets, etc., Kingston, Ont., contemplate enlarging their business.

The Niagara Neckwear Co. has been incorporated with a capital stock of \$20,000 to manufacture neckwear and men's furnishings.

The Richmond Industrial Co., Richmond, Que., are applying for incorporation with a capital stock of \$100,000 to manufacture wood-ware, etc.

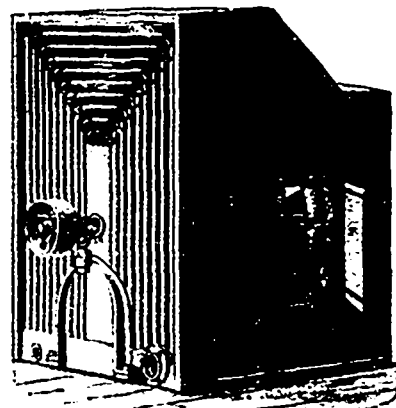
The Canadian Fire Extinguisher Co., Montreal, are applying for incorporation with a capital stock of \$50,000 to manufacture fire extinguishing apparatus.

The Garden City Carpet Mfg. Co., of Ontario, has been incorporated with a capital stock of \$10,000, to manufacture carpets, fringes, and similar products.

The Hall Mowing Machine Co., of Canada, headquarters at Sherbrooke, are applying for incorporation with a capital stock of \$100,000 to manufacture agricultural implements.

The Robb Engineering Co., Amherst, N.S., have received the following letter from Principal Grant of Queen's University: "The Mining Institute of Ontario held its quarterly meeting here last week, and we took that occasion of formally opening the Mining Laboratory; and your engine and boiler were both voted satisfactory. As a Nova Scotian I was delighted that we had so much of our machinery from Nova Scotia, and as this is the only Mining Laboratory in Canada, I was delighted that you had contributed to its equipment."

McEachren's System of Heating, Ventilating and Drying



SOMETHING NEW

Cheap and Effective.

Highly approved of by practical and unbiassed men. The following is a sample of letters I get from customers.

For Particulars Address

J. D. McEACHREN, Galt, Ont.

J. D. McEachren, Esq., Galt.  
 Dear Sir, Replying to your enquiry of the 21st inst., we may say the HOT BLAST HEATING SYSTEM we purchased from you about 15 months ago is giving entire satisfaction. Our factories contain about 200,000 cubic feet of space which we heat with exhaust steam, except in very severe weather when we use live steam in one half of the heater in the morning only.  
 As regards the DRY KILN, the Heater and 42 inch Fan you supplied us, they are doing excellent work. We dry about 500,000 lbs of seasoned lumber, chiefly 1, 1 1/2 and 2 inch walnut per week. We use exhaust steam exclusively in the dry kiln and that during working hours only. It does not require much power to run the fans and they handle a very large quantity of air. We find yours to be a great improvement on the old system of heating with pipes around the factory and under the lumber in the dry kiln.

Yours truly,  
 W. DOHERTY & Co.,  
 Organ Manufacturers.

**Buffalo Planing Mill Exhaust Fans**

EFFICIENCY UNEQUALLED  
 DURABILITY UNSURPASSED  
 SMOOTH RUNNING  
 INCOMPARABLE

THE LARGEST  
**FORGE**  
 In the World

Thirty-Eight Other Designs of Portable and Stationary Types.

**BUFFALO LUMBER DRY KILNS**  
 Blowers, Blacksmiths' Tools, etc.  
 SOLD IN  
 TORONTO, ONT., BY H. W. PETRIE.  
 BRANTFORD, ONT., BY CANADIAN MACHINERY & SUPPLY CO.  
 MONTREAL, QUE., BY CANADA MACHINERY AGENCY.  
 CHICAGO STORE, 22 and 24 WEST RANDOLPH STREET.

The capital stock of the Galt & Preston Street Railway Co., has been increased from \$50,000 to \$100,000.

Mr. James Lochrie, Toronto, Ont., manufacturer of the Antelope bicycle, has sent us a circular regarding the same in which the merits of his really excellent machine are set forth.

Mr. J. D. McEachren, Galt, Ont., informs us that he has just supplied the heater and necessary apparatus for the lumber dry kiln for the organ factory of Mr. Wm. Doherty, at Clinton, Ont.

The Hubbell Primary Battery Co., of Ottawa, Ont., has been incorporated with a capital stock of \$45,000 to manufacture electric motors, batteries, generators, and other electric appliances.

W. L. Hibbard's sawmill at Farnham, Que., was destroyed by fire Feb. 5th. Included in the building was J. R. Smith's furniture shop and also the plant of the Farnham Electric Light Co., all of which were a total loss; loss about \$6,000.

Messrs. H. M. Whitney, of Boston, and James Ross, of Montreal, are organizing a company to take over the street railway in Halifax, N.S., and convert it into an electric road. The concern will be known as The Halifax Electric Tramway Co.

The Henderson Cycle & Mfg. Co., of Brantford, Ont., has been incorporated with a capital stock of \$24,000 to manufacture sporting goods, bicycles, sulkies, etc., and to acquire the business at present carried on by David S. Henderson under the name of The D.S. Henderson Manufacturing Co., etc.

The Ontario Malleable Iron Co., Oshawa, Ont., are placing temporary roofs over a portion of their works for the purpose of working up a large quantity of material that they had on hand at the time their works were destroyed by fire. The new arrangement will give employment to about forty hands. It is not likely that the company will rebuild until there are some changes made in the existing tariff.

The Pedlar Metal Roofing Co., Oshawa, Ont., have sent us a circular which has special reference to a new corrugated conductor pipe just being introduced by them. This pipe is spoken of as having no soldered joints; will not burst when full of ice, and will yield to the expansive force of water without breaking. It is made in lengths of 8 or 10 ft. as may be desired, without a cross seam, and is claimed to be the longest single piece of corrugated pipe made in the Dominion. It is made in either galvanized sheet, steel or copper. At the price quoted for this article it should be in very large demand. This company are getting out a new calendar which will be ready for distribution to the trade in a few days.

Messrs. S. Davis & Sons, cigar manufacturers, Montreal, Que., are considering the erection of a new factory.

H. Close of the Universal Knitting Co., Toronto, Ont., contemplates building a factory in Peterboro' 100 ft. long by 45 ft. wide.

The Whaley-Royce Piano Co., of Toronto, Ont., are applying for an order to change its corporate name to that of The Standard Piano Co., of Toronto.

The Niagara Fruit Package Co. has been incorporated with a capital stock of \$50,000 to manufacture crates, boxes, barrels and all other classes of fruit and vegetable packages, etc.

The Maclaren Match Co., of Buckingham, Que., are applying for incorporation with a capital stock of \$40,000 to carry on the business of lumberers, manufacturers of matches, sashes, doors, wooden ware of all kinds, pulp, etc.

The Tulameen Mining Co., of Ottawa, are applying for incorporation with a capital stock of \$20,000 to carry on the business of hydraulic mining, exploring for gold, silver, copper, nickel, lead, iron and other metals, etc.

The Colonial Iron and Coal Co., of New Brunswick, are applying for incorporation with a capital stock of \$1,000,000 to acquire coal, mineral and other lands in any of the counties of that province to manufacture chemicals, etc.

The Grand Valley Railway Co., are applying for incorporation with power to construct and operate a radial railroad from Berlin, Ont., via the valley of the Grand River to the City of Brantford, and also an extension of the same to Waterloo, Listowel and Elora.

The Ontario and Sault Ste. Marie Water, Light & Power Co., will apply at the next session of the Legislative Assembly to have the name of the said company changed to the Lake Superior Co.; and to empower the said company to increase its capital stock from \$400,000 to \$2,000,000.

The Milton Electric Light and Power Co., of Milton, Ont., are applying for incorporation with a capital stock of \$15,000 to acquire and operate electric light and power plants; to supply electric light or power, and to do all such other acts as may be necessary or convenient to do in connection with supplying such power, etc.

Messrs. Wm. Clendinning & Co., Stove Manufacturers of Montreal, Que., have recently erected new premises at St. Henri, Que., which cover over 6 acres of ground. A railway siding runs into the yard. The stove department is 65 x 42 ft.; machine building 110 x 70 ft.; office and warehouse 130 x 60 ft. The pattern vaults are fire proof.

## BRUNNER, MOND & CO., LTD., NORTHWICH, ENG.

Manufacturers of **PURE ALKALI** Guaranteed 58 Degrees.

The Strongest and Purest Form of SODA ASH in the Market, and the Most Economical Form of SODA for the Manufacture of



# GLASS, PAPER, WOOD PULP, SOAP AND STARCH

ALSO FOR PRINTERS, BLEACHERS AND COLORS

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Sole Agents for the Dominion of Canada

THE PAUL FRIND

Woolen Machinery Company, Ltd.

TORONTO.

Dealers in and Manufacturers of

WOOLEN MACHINERY. MILL SUPPLIES.

Specialties:

English H & T Steel Card Clothing.

Williams' Heddles, Shuttles, Reeds, Heddle-frames, Loom Repairs.

DODGE WOOD SPLIT PULLEYS

Best Oak Tanned Belting and Lace Leather.

## Canada Chemical Mnfng. Co.

Manufacturers of

Sulphuric, Nitric and Muriatic Acids, Commercial and Chemically Pure. Mixed Acids for Explosives, Liquid Ammonia, Glauber Salts. Copperas, Muriate Tin, Tin Crystals, Acetic Acid, Nitrate Iron, Bisulphite Soda, Acid Phosphate for Baking Powders and General Chemicals. Fertilizers, Etc.

LONDON,

ONTARIO

The Rubber Shoe Co., of Toronto (factory at Port Dalhousie) contemplate erecting a factory in Toronto.

Plans are being prepared in the office of the Minister of Public Works, for a new dock at North Bay, Ont.

The flax mill at Elora, Ont., with all its contents, has been destroyed by fire. The building was owned by the Grand River Mfg. Co.

The Dunsinane Mining Co., Dunsinane, N.B., are applying for incorporation with a capital stock of \$50,000 to operate coal mines, etc. in that province.

The Montreal Silver Truss Co., are applying for incorporation with a capital stock of \$10,000 to manufacture the American Silver Truss, and other surgical appliances.

The Quinze Electric Co., Ottawa, Ont., has been incorporated with a capital stock of \$80,000 to build an electric railway and supply electricity and power in Pontiac County.

The Standard Oil & Gas Co., of Essex, Ont., has been incorporated with a capital stock of \$300,000 to carry on the business of a petroleum-oil and gas producing and supply company, etc.

The Eureka Oil Developing Co., of Lambton, Ont., has been incorporated with a capital stock of \$5,000 to carry on the petroleum and power producing business at present carried on by Jas. Eugene Austin.

The Midland Electric Co., of Midland, Ont., has been incorporated with a capital stock of \$10,000 to construct and operate works for the production, sale and distribution of electricity for the purposes of light heat and power.

The Ontario Pulp & Paper Co., of Sault Ste. Marie, Ont., are applying for incorporation with a capital stock of \$2,000,000 to engage in the manufacture of pulp and paper and all goods and wares manufactured therefrom.

The Julian Sale Leather Goods Co., of Toronto, Ont., are applying for incorporation with a capital stock of \$25,000 to manufacture all kinds of pocket books, purses, trunks, travelling bags, sporting and fancy leather goods, suspenders, etc.

The Woodstock Novelty Co., Woodstock, N.B., are applying for incorporation with a capital stock of \$10,000 for the purpose of acquiring, holding and dealing in patents of inventions and to manufacture and deal in all classes of patented articles, etc.

The Canadian Cone Coupler Carriage Co., Palmerston, Ont., has been incorporated with a capital stock of \$25,000 to manufacture road vehicles of all kinds, and for the said purpose to acquire the St. John Cone Coupler patent and the right to manufacture thereunder.

Bennett & Son, Gananoque, have put in a new stove pipe machine. This machine makes a pipe up to eight feet in length.

The Ontario Malleable Iron Co., of Oshawa, whose works were recently burned, have decided to rebuild. Galt Reformer.

The London & Port Stanley Railway Co. are having plans prepared for an engine house, freight shed, turntables, etc., to be erected at Port Stanley, cost about \$10,000.

The Essex Standard Oil and Gas Co. are applying for incorporation with a capital of \$400,000. They will compete with the Ontario Natural Gas Co. in the South Essex gas fields. Petrolia Advertiser.

The Gould Coupler Co., of Buffalo, will commence the erection of their works at Niagara Falls, Ont., as soon as satisfactory arrangements have been made with the Controller of Customs at Ottawa.—Trade Review.

The Hamilton Iron & Steel Co. will apply to the Ontario Legislature for authority and power to construct a tramway to be operated by steam, electric or other motive power to connect the works of the said company with its quarry property.

The Eaton Bros. Brewing Co., of Owen Sound, Ont., has been incorporated with a capital stock of \$200,000 to purchase and acquire the business heretofore carried on by the Eaton Bros., as brewers and malsters and to carry on the said business.

An immense new chimney is to be built at the Ogilvie mill in Winnipeg. The plans have been prepared, showing the height to be 125 feet and the chimney inside will be 7 feet in diameter and 15 to 20 feet in diameter outside at the base. Four new boilers are also to be put in.

Additional piping for the government petroleum boring outfit at Athabaska Landing went north last week. The piping did not arrive as soon as was expected, and probably now that colder weather has set in there will be no further boring until spring. The intention is to go down at least 1,800 feet, if necessary, that being the supposed depth of oil bearing strata.—Edmonton Bulletin.

The concentrator at Three Forks, B.C., is expected to be in working order in a few weeks. It is an ordinary four decker and situated on Howsen Creek about a mile below Three Forks. The building contains the ordinary crushing and jigging machinery and a Huntington mill, the total capacity being 100 tons a day. Power is supplied by a Pelton wheel fed by a pipe reaching 1,400 feet, which develops about 100 horse power. The mill is the property of the Humphrey-Moore combination, and is built to reduce the ore from the Idaho and Alamo mines.

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**T**HE Cheapest Black-producing Dye for Wool on the Market. Has all the advantages of Logwood with none of its inconveniences. Can be Dyed in one Dip, or may be employed in Wool Dyeing as a self-color, or in combinations, wherever Logwood is used, by following practically the same recipes.

This is not a mixture, but a new product for which patents have been granted in U. S. A., Great Britain, Canada, Germany, France and Austria, and its use in these countries has increased constantly since its introduction.

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OVER 15,000 IN USE,  
Preventing Disease and Prolonging Life.

The most complete article ever offered for  
Protecting the Throat and  
Lungs from Dust,  
Poisonous Gases, and all  
other Impurities,

In places where persons are exposed and many  
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Mailed free to any address in Canada on receipt of \$2.15.

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ESTABLISHED 22 YEARS

COTTONS—Grey Sheetings, Checked Shirtings, Denhams, Cottonades, Tickings, Bags, Yarn, Twine, etc.

TWEEDS—Fine, Medium and Low Priced Tweeds, Serges, Cassimeres, Doeskins, Etolles, Kerseys, etc.

FLANNELS—Plain and Fancy Flannels, Overcoat Linings, Plain and Fancy Dress Goods, etc.

KNITTED GOODS—Shirts, Drawers, Hosiery, etc.

BLANKETS—White, Grey and Colored Blankets.

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Advances made on Consignment. Correspondence Solicited.



A shoddy mill is projected by Messrs. Harding & Son, Simcoe, Ont.

The manager of the Buckingham, Que., Pulp Co., Mr. Alexander Scott, contemplates erecting a saw mill.

The Lake of the Woods Milling Co. will build thirteen elevators in Manitoba and the Territories next spring. Montreal Herald.

Brackman & Kerr, oatmeal millers at Victoria and New Westminster, British Columbia, propose erecting an elevator at Edmonton.

Plans have been prepared for the half dozen or more new elevators the Ogilvie company will build in Manitoba this year. The capacity will be 30,000 bushels each.

Woodstock, N.B. has a new factory for making wrappers, tea gowns and similar goods. The concern is owned by the Maritime Wrapper Co., in which Messrs. C. & J. Dickinson of that place are interested.

A new dredge for Connolly Bros. has been started at Kingston. The hull will be steel and the boilers and most of the work will be done at the locomotive works. The dredge will be finished in June and will be the most powerful dipping dredge in America. It will cost nearly \$100,000. - Brockville Recorder.

The Hamilton, Burlington & Lake Shore Electric Railway Co. are applying for incorporation with power to construct and operate by electricity or other power, a railway from Hamilton, Ont., to the village of Burlington via the south side of Burlington Bay and across Burlington Beach, or via the north side of Burlington Bay, with power to extend the same along the north or south shore, with power to sell and lease electricity and distribute the same along or near the line of such railway.

The Hamilton, Valley City & Waterloo Co., are applying for incorporation with power to construct and operate a steam or electric railway, or railway operated partly by steam and partly by electric power, from the city of Hamilton to the town of Waterloo, passing through the townships of Barton and Ancaster and through or near the town of Dandas, and from the townships of West Flamboro' and Beverley, Wentworth County, and townships of North Dumfries and Waterloo; also with power to maintain and operate a branch line from some point in the township of West Flamboro' or Beverley to the city of Guelph, passing through the townships of West and East Flamboro' and Beverley, Wentworth County, and townships of Puslinch and Guelph, Wellington County; and with power to purchase, manufacture and otherwise acquire electric power or plant, etc.

The Canadian Wire Mattress Co., Toronto Junction, are to rebuild their factory recently destroyed by fire.

The Shirra Milling Co., of Caledonia, Ont., has been incorporated with a capital stock of \$25,000 to manufacture flour, oatmeal and feedstuffs, and to transact a gristing business.

Mr. Cherry, whose large grist mill at Preston was burned down several weeks ago, has had plans and specifications drawn for its re-erection. The new mill will be five stories high, built of brick upon a stone foundation. In size it will be 40x60. Mr. Cherry will also have a large storehouse constructed, 36x40. Work will be begun as soon as possible. - Galt Reformer.

Mr. A. G. Sinclair, late president of the New York Emery Co., having been forced out of the Combination by its so-called friendly action, has decided to stay on the outside, yet remain in the same line of business. He has, therefore, connected himself with The Tanite Co., of Stroudsburg, Pa., and solicits for that company the trade which in former times he controlled as salesman for The Ashland Mills, and later for The New York Emery Co. and the American Emery Mills. As Mr. Sinclair is one of the oldest salesmen in the emery trade, and also a practical manufacturer of emery, he knows something as to the intrinsic quality of that article and also as to the needs of the trade. Having learned what Tanite Mill emery is by several years competition with it he now offers it with confidence and asks equal confidence from old customers and friends.

While the grind stone still remains, and possibly always will remain, a popular and useful tool in the manufacture of iron and steel goods, the mechanical public were quick to see the value of an artificial wheel whose emery grains were harder and sharper than those of natural and sometimes rounded sand. Hence the solid emery wheel soon made its way into public favor. It seems strange that a similar material and process was not at the same time successfully applied to the production of honestones, oil stones and whetstones. Early attempts were made to introduce such articles, but, for various reasons failed. The peculiar properties of tanite, which fit it for a base in emery wheel manufacture, have been applied by The Tanite Co., of Stroudsburg, Pa., U.S.A., to the production of solid emery whetstones. The result has been a great practical success, though the prejudice of the trade and the novelty of the article have conspired to make the demand irregular and scattering. That this state of the trade is not due to the quality of the artificial whetstone is evidenced by the fact that in quarters where it has once been introduced the demand is regular. The tanite whetstone is adapted to the mill pick, the carpenter's and stone cutter's chisel, the bit of the moulding mill and the axe of the woodman.

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Were awarded Gold Medals at the World's Columbian Exhibition, Chicago, for their

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SEVEN QUALITIES OF INGRAINS

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FAST ONE DIP COLORS, BLACKS AND CHEMICALS

Dyeing and Printing of Cotton, Woolen, Mixed Fibres, Etc., etc. SHADES MATCHED.

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Cordage and Carpet Size Shade Cloth Colors and Size Belt Dressing

The Industrial Economizer Apparatus patented, for reclaiming the valuable products from waste waters. Apparatus in operation at our works. Patented June 26th, 1894.

This means a saving to you of thousands of dollars every year.

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Distillers of Benzole, Naptha

and Manufacturers of Carbolic Acid and Varnish.

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**Woolen Commission Merchants**

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Advances Made on Consignments. Correspondence Solicited

**FERGUSON & PATTINSON**

PRESTON : : : ONT.

Manufacturers of....

**Fine and Medium TWEEDS.**

An electric welding machine has been placed in Gillies' carriage hardware factory at Gananoque, Ont.

The Newdale, Man., people expect to have a creamery in operation in their village the coming spring. G. W. Kay has the matter in hand.

A cheese factory is shortly to be erected in or near Ottawa, Ont., by Mr. Cheetham, of Brockville. It is to be in readiness for next summer's cheese making.

Messrs Sleeper & Akhurst, Coaticook, Que., are putting in a new waterwheel of a larger size than they have heretofore used owing to the increased demand for power.

The Featherstone Piano Co., of Montreal, Que., are applying for incorporation with a capital stock of \$50,000 to manufacture and deal in pianos, and other musical instruments.

The Montreal Roofing Co., are applying for incorporation with a capital stock of \$150,000 to carry on the business of general roofers and contractors and to manufacture material for roofing, etc.

The Perce Fishing Co., of Perce, Que., are applying for incorporation with a capital stock of \$25,000 to engage in the business of catching, curing, packing, and warehousing fish, seals, etc., and to manufacture fertilizers, oils, skins and other products of such fish, etc.

The Davis Piano Cover Company have moved into their new premises, 69 and 101 Adelaide St. West, Toronto. They are extending the lines of their manufactures and are making upholstery cords, chenille cords, tassels, etc., in addition to the piano covers which they turn out in great variety.

The Toronto Dredging & Contracting Co., of Toronto, Ont., are applying for incorporation with a capital stock of \$50,000 for the purposes of owning and operating dredges, steamers and any other floating property; and owning, operating and manufacturing machinery of all descriptions, locomotives, and rolling stock for the use of contractors, etc. The operations of the company are to be carried on in the Province of Ontario.

The Stratford Mill Building Company, Stratford, Ont., have taken over the factory and plant, and succeeded to the business of the recent North American Mill Building Company, of that place. Some weeks ago this latter company went into liquidation, Mr. W. M. Thompson, of Jackson, Michigan, becoming the purchaser, and the first mentioned company have acquired the property from him. Mr. W. Preston is manager, and Mr. H. C. Malsness mechanical engineer.

The Niebergall Stave & Lumber Co., of Staples, Ont., have been incorporated with a capital stock of \$45,000 to manufacture lumber, staves, hoops, heading, veneer, etc.

The construction work on the new flour mill at Brandon, Man., is about finished. Alexander Kelly & Co., expect to start grinding at once and expect to be in a position to turn out if necessary 300 barrels of flour per day.

The St. Jean Baptiste Electric Co., of Montreal, intends building new lines and extending to almost all the commercial part of Montreal next spring and summer. Tenders are shortly to be called for a few new engines and dynamos to be added to their plant, corner of Rachel and Montana streets. Their charter is to be amended and the capital raised to \$500,000. Our friend Mr. Jules Bourbonniere, ex-secretary to the Farnham Beet Root Sugar Co. (French syndicate of 1890-91-92), is present secretary-treasurer of the St. Jean Baptiste Electric Co.

**Rope Transmission of Power.**

The Dodge Wood Split Pulley Co., Toronto, make a specialty of designing and erecting rope drives for the transmission of power. The Dodge patent American system of continuous wind is now very well known all over America, and many of the largest Canadian mills are now run almost entirely by ropes. There are of course many instances where the rope drive has its place independently, such as in the case of drives to a distance where belts would be out of the question. It is here that the Dodge system is fast superceding the old wire rope. It is a fact that thousands of horse power are to-day being successfully handled at distances varying for a few feet to several hundred feet. Again in the case of very heavy work where 40 to 50 inch belts have been necessary the rope drive has been adopted with great success. The company refer to the big lumber mills on the Ottawa river where the transmission of power is effected with ropes.

The principle of rope transmission is good, but the designing of each drive to ensure best results should be left in the hands of those who have made a study of this branch of mechanics, and, as is well known, The Dodge Wood Split Pulley Co., of Toronto, control the Dodge Canadian patents on rope driving and make a specialty of this class of work. Many of the largest power plants of the United States are now run with ropes, and the use of which for transmission purposes is becoming more general every day. Those contemplating the installing of main drives or transmissions of any kind are invited to place themselves in communication with The Dodge Wood Split Pulley Co., Toronto.

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and Strong.

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ADJUSTABLE SEAT BODY.  
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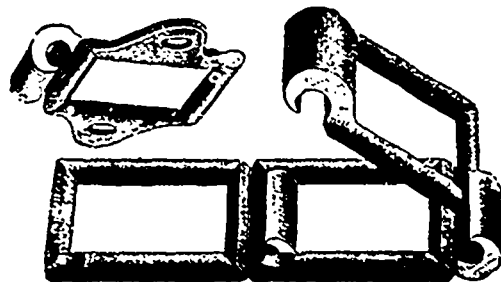
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Messrs. Snowdon, Sons & Co., Millwall, London, E., Eng., manufacturers of "Snowdrift" softening, sizings, and finishings, for the textile trades, through Mr. Alfred Boyd, their Toronto representative, have sent us a circular relative to their products in which they say:—These goods are designated by the registered title "Snowdrift," which covers the various classes.

"Snowdrift" Softening S is a neutral soluble fatty substance, which entirely dispenses with the use of ordinary tallow or other fatty matters. It softens and opens the fibre to admit of the size, gives perfect lubrication in the loom, and is a great preservative of healds and reeds—important factors recognized by all manufacturers. It cleans the warp in passing through the sow box, and greatly improves the colour of the yarn.

"Snowdrift" Sizing C is a neutral glutinous gelatinous preparation, admirably adapted for all classes of work, from pure to the heaviest sizing. It prevents dusting and fly in the loom, and retains the size in the finished cloth, besides imparting much greater strength to the warps. Where there is the slightest weakness of the yarn, presenting what is known as "snicks" or "crackels," Snowdrift C will be found invaluable in strengthening the same, thus preventing breakage in passing over the cylinders of slashing machine.

"Snowdrift" Finishing L is extensively used, and is the best possible material for lace finishing, also for special purposes by bleachers, dyers and finishers.

"Snowdrift" Softening S 2 is specially prepared for the lace trade. "Snowdrift" Size B. K. is for filling and giving a full feel with weight to woollen goods—flannels, blankets, etc.

"Snowdrift" F. V. is specially made for velvet and fustian dyers and finishers.

"Snowdrift" W. S. is used for dress goods of all kinds.

"Snowdrift" thread glaze for polishing and strengthening thread.

**Diamine Brown B. Patented.**

Wm. J. Matheson & Co., New York and Montreal, have sent us a circular having reference to their Diamine Brown B. Pat'd., in which they say:—

This, one of the latest additions to the list of Diamine Browns, is a direct dyeing dark Brown dyestuff and should fill a still existing want, owing to its excellent fastness to light and its great covering power. The shade of Diamine Brown B., the yellow cast of which when looked at across the surface (overhand) makes it very valuable for the production of full and dark browns only obtainable thus far, by combining Cutch and Logwood.

Diamine Brown B. dissolves in hot water readily. When the solution is cold a portion of the color precipitates but will dissolve on warming.

Cotton is dyed at the boil with the addition of 5% soda and 15% Glauber's salt or with Glauber's salt only. The color is equal in fastness to washing to all similar products. Its fastness to light is even superior to that of our Diamine Brown M., which excels in this respect. Hot ironing and calendaring reddens the shade temporarily.

Dyeings of Diamine Brown B. are not affected by diluted acids or alkalis. As Diamine Brown B. dyes very evenly it is well adapted for shading purposes and the production of light colors, and it can be easily discharged with zinc dust or acetate of tin. It is not designed to be discolored and developed.

By treating dyeings of Diamine Brown B. in a fresh bath at the boil for one quarter to half an hour with 2½% Bluestone (sulphate of copper) 2½% Bichromate of Potash, the shade is somewhat brightened and the fastness to washing is greatly increased. The color is not well adapted for wool and other animal fibres and is not therefore well adapted for mixed goods.

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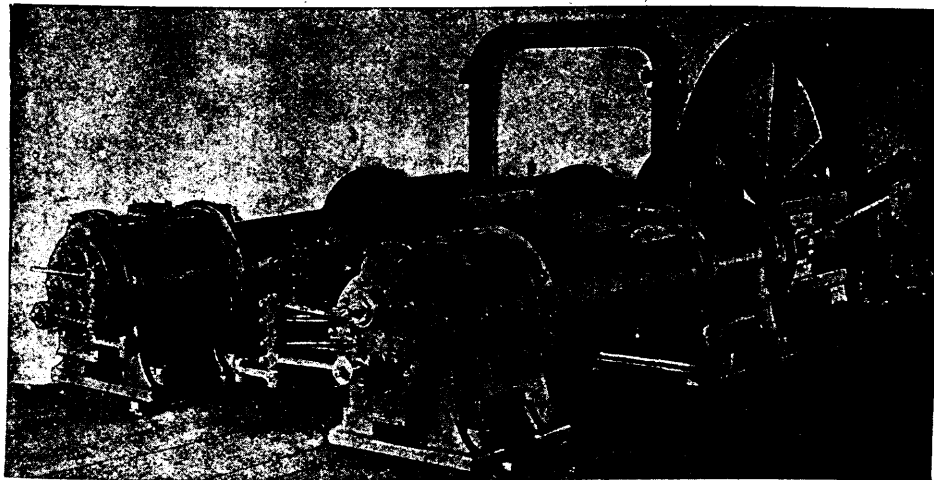
The following patents have been issued from the Canadian Patent Office, from December 1 to December 12, 1894, inclusive. Information regarding any of these patents may be had on application as follows:—

- Fetherstonhaugh & Co., Bank of Commerce Building, Toronto.
  - Ridout & Maybee, 103 Bay street, Toronto.
  - A. Harvey, Central Chambers, Ottawa.
  - J. A. Grenier, Imperial Building, Montreal.
- Copies of American patents corresponding to Canadian patents can be procured from either of these attorneys for the sum of twenty-five cents each.
- 47,562 Tunnel, J. J. Ebert and Max Loewenstein of New York, N.Y.
  - 47,563 Machine for setting up, crozing and chining barrels, F.S. Palmatier, Leeds, and F. W. Palmatier, Catskill, N.Y.
  - 47,564 Method of heating, W.P. Skiffington, New York, N.Y., and A. G. Paul, Boston, Mass.
  - 47,565 Lightning discharge protector for electric apparatus, The Canadian Gen. Electric Co., Toronto Ont.
  - 47,566 Detector for electric current meters, The Canada Gen. Electric Co., Toronto, Ont.
  - 47,567 Insulating composition, The Canadian Gen. Electric Co., Toronto, Ont.
  - 47,568 Safety device for electric arc lamps, The Canadian General Electric Co., Toronto, Ont.
  - 47,569 Car coupler, J. S. Heaton, E. R. Willson, A. M. Webber, W. A. McGrath, and M. L. S. Bunckener, all of Shelbyville, Ky.
  - 47,570 Heat regulator, The Consolidated Car Heating Co., Albany, N.Y.
  - 47,571 Screw cutting machines, Thos. B. Smith, Birmingham, Eng.
  - 47,572 Manufacture of metal boxes, E. R. Pettier, Paris, France.
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- 47,582 Road scraper, The Western Wheeled Scraper Co., Aurora, Ill.
- 47,583 Car replacer, Jas. M. Morris, Salt Lake, Utah.
- 47,584 Machine for cutting boiler tubes, C. O. Thierne and Augusta Peluski, Mo.
- 47,585 Broom, W. S. McDonel, Windsor, Ont.
- 47,586 Furnace, H. J. Donan, Tacoma, Washington.
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- 47,599 Cart spring, W. H. Robinson and Ambrose Robinson, Coldwater, Ont.
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- 47,633 Method of and apparatus for drying substances which are viscous or semifluid in the hot state, Rudolf Schicht, Aussig-on-the-Elbe, Austria.
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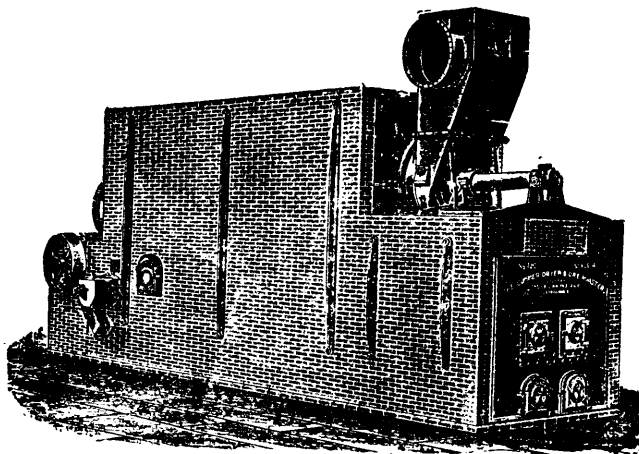
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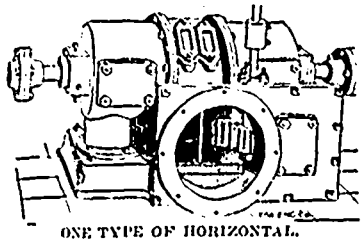
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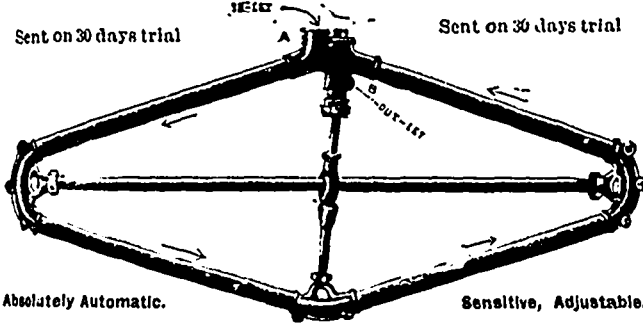
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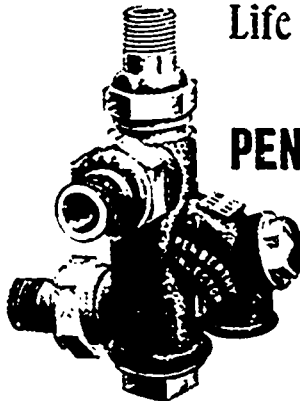
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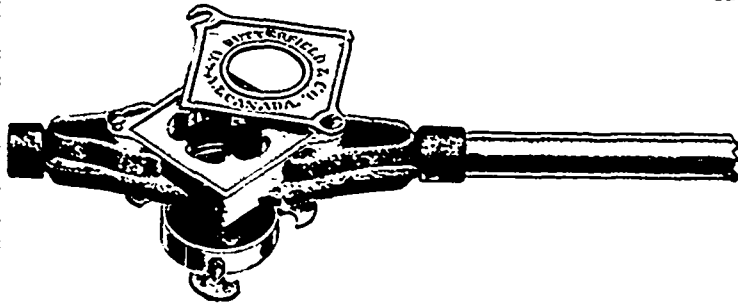
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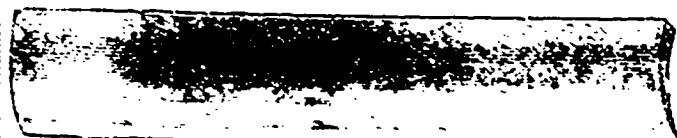
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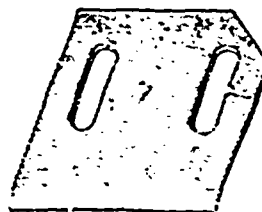
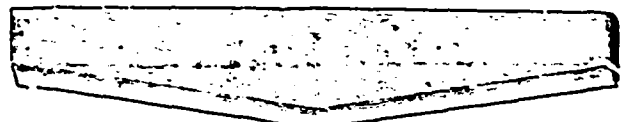
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1 3/8	1 3/8	5.01	"	3	2 1/2	22.59	"
1 1/2	1 1/2	5.94	"	3 1/4	3 1/8	26.60	"
1 3/4	1 11/16	7.46	"	3 1/2	3 1/8	30.94	"
2	1 15/16	9.83	4 cts.	4	4	42.33	5 cts.
2 1/4	2 1/8	12.53	"	4 1/2	4 1/2	53.57	"
2 1/2	2 1/8	15.55	"	5	5	66.13	"

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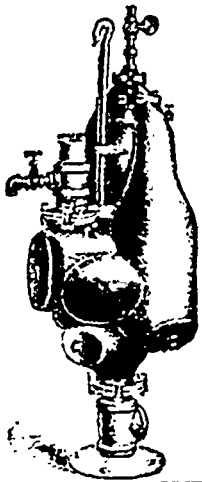
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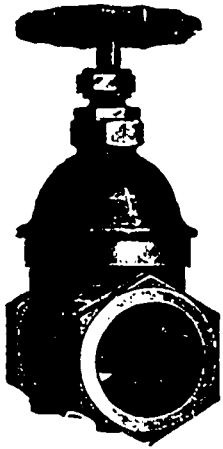
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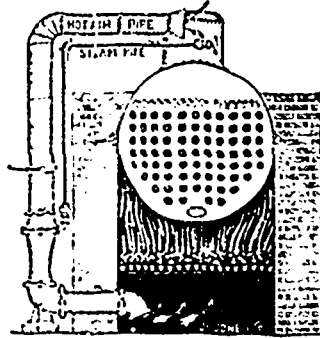
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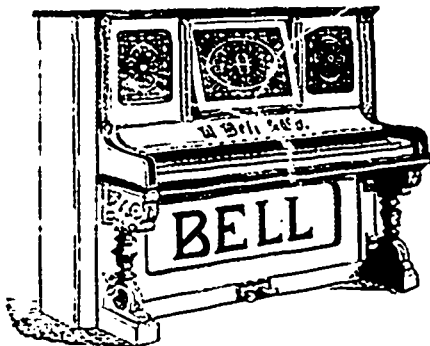
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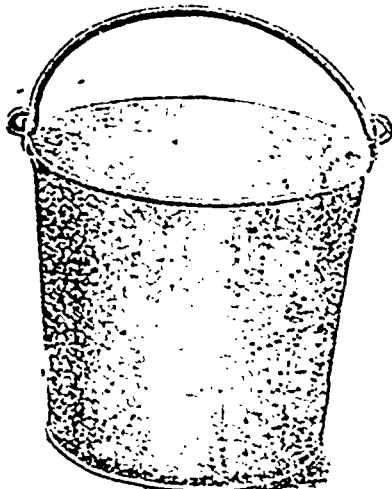
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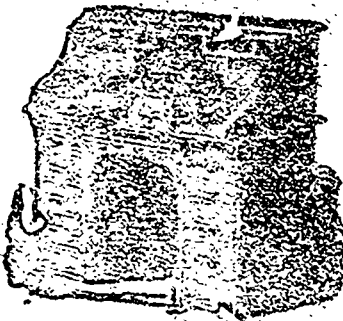
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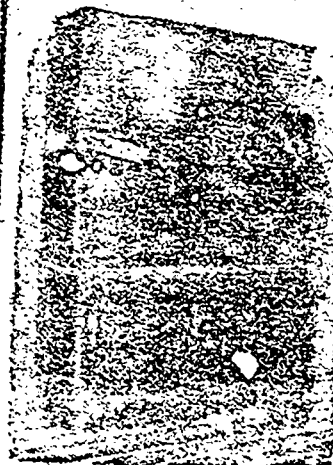
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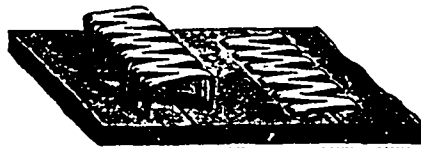
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