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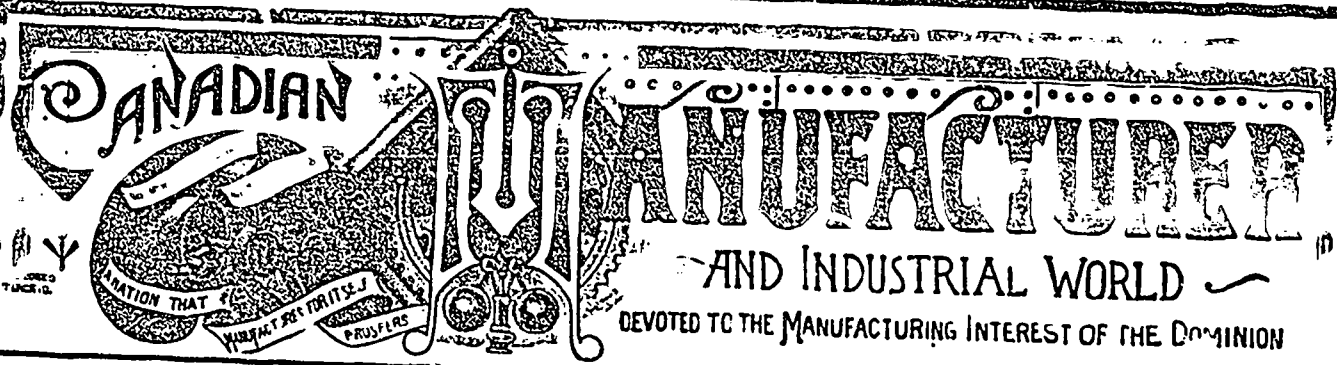
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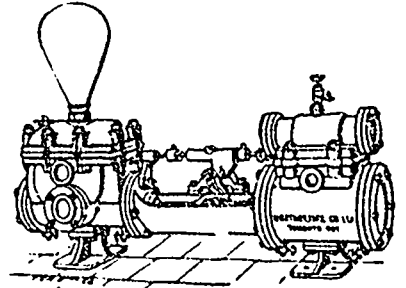
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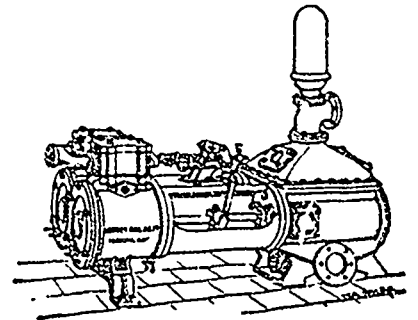
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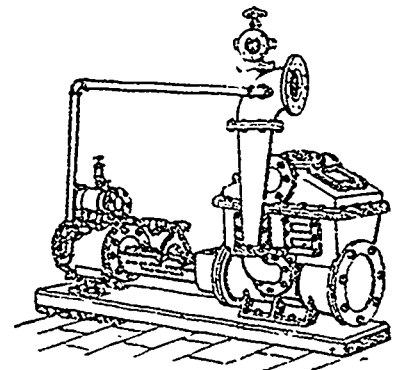


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THE TARIFF.

AFTER one of the longest sessions ever held by the Dominion Parliament, adjournment was had on last Saturday.

It was a repetition of the fable of the mountain being in labor and bringing forth a mouse.

Aside from necessary legislation, which might have been accomplished in a week or so, it would have been well for the country if Parliament had not been convened.

Important business which should have been transacted was left undone, and much that was done might have been left undone without any detriment to the welfare of Canada.

Ever since the adoption of the present tariff it has been evident that there were incongruities in it which needed correction. The tariff, like other human institutions, is not perfect, and it is evidently the duty of the Government to correct its weaknesses and to strengthen it where strength is necessary. The Government now in power were put there by the friends of the tariff. They were not only favorable to the National Policy, but were also the friends of those who demanded and upheld that policy. That is to say, they professed to be and were accepted as such friends, otherwise it would have been impossible for them ever to have been chosen as members of the Canadian Parliament and to have been entrusted with the reins of government.

Canadian manufacturers had much to do with placing the present Government in power. They did not lend their efforts to do this as adherents of the Conservative party, but as upholders and supporters of the National Policy. This policy afforded a platform upon which they could all stand, and in the support of which they could all work, and for which they did work. If the manufacturers had not advocated this policy, and had not worked for it, it would not have been accepted as the policy of the Government, and if it had not been thus accepted the administrators of the Government who are in authority to day would now be reposing in the cold shades of political oblivion in their respective homes or somewhere else.

It is therefore obviously due to the manufacturers that when they approach the Government and point out incongruities in the tariff—point out that these incongruities are working injury to them—that they are defeating the very object for which the National Policy was created—their views should receive the consideration they deserve and they should be acted upon.

Trusting that men whom they had assisted so largely in placing in power were their friends, and that they would be glad to forward their interests the manufacturers have time and again gone to Ottawa and respectfully asked that their petitions might be considered. It is due to the Government to say that they have always been courteous in their intercourse with those who have approached them. They have listened to the arguments and representations presented to them, and they have uniformly promised that the matter under discussion should receive their careful consideration.

His gentlemanly treatment was all good enough in its way, but of what benefit has it been to the manufacturers that all the redress for their grievances which they could obtain at Ottawa consisted in gentlemanly treatment and a careful consideration of their business, which, while pleasant to contemplate and affording flattering anticipations of fulfilment, were like the beautiful apples of Sodom which turned to ashes and bitterness on the lips.

"Vanity of vanities," saith the preacher "all is vanity." Likewise vexation of spirit.

If the manufacturers had asked for unreasonable things—if they had asked for a general revision of the tariff, looking to an increase of duties all along the line—if they had singled out even a few articles upon which duties are laid and asked that these duties be increased—if they had asked that certain lines of products be changed from the free list and placed in the dutiable schedules—answer might have been made that circumstances did not favor such changes, and that it was not in the opinion of the Government, desirable to make them.

But they made no such sweeping demands and the resolution introduced by the Minister of Finance in the expiring hours of the session proves this.

The changes introduced by the Minister affecting glove leather, oleostearine and nitrate of soda represent the character of what the manufacturers had requested of the Government.

Regarding glove leather, it is a fact that nearly all the leather used in the manufacture of gloves is made from the skin of the lamb, but is known in commercial circles as kid skin. The tariff, in enumerating glove leathers, mentions

leather made of kid, buck, deer, antelope and waterhog, but omitted lamb. The glove manufacturers asked that glove leather made of lamb skin be mentioned in the tariff list, and to this the Government have graciously assented.

So, too, as regards oleostearine. Degras and stearine are substances essential in the manufacture of certain kinds of leather, but they are not made in Canada, nor is it likely they will be for many years to come. Degras is a grease found in the wool of sheep, and is recovered as a by-product in the cleansing of the wool, the chief sources of supply being Great Britain and Germany. Stearine is made from the fat surrounding the kidneys of cattle, the oil being expressed therefrom. It is made only near the abattoirs in the United States where large numbers of cattle are slaughtered. For years the tanners have been asking the Government to remove the duty from these articles. The high duty imposed—three cents per pound—amounted almost to a prohibition of the use of them, and was a very serious drawback to the tanners in exporting leather to the European markets in competition with the products of American tanneries, there being no duty on these articles in the United States.

After repeated solicitations in this matter, last fall the Government very kindly consented to put degtras in the free list, but declined to do the same for stearine, and although some slight relief was felt as regards degtras, until now the tanning industry of Canada—that where leather was being made for export—has been in a condition of depression, almost collapse, because of the duty on stearine.

Manufacturers are anxious to know why stearine should not have been placed on the free list when degtras was put there. Arguments to place degtras there were entirely applicable to stearine; and if it is proper to put stearine in the free list in July, 1892, why not have placed it there with degtras in October, 1891? Why handicap the tanning industry for such a length of time?

But this is just what the Government has been doing.

When the tariff was formed several years ago nitrite of soda was not an article of commerce. It is somewhat of similar character to nitrate of soda, which is on the free list. It has now become essential for dyeing purposes, and since its introduction it has been charged duty as an unenumerated article. The Government have been repeatedly requested to place nitrite of soda in the free list, and now, at the tail end of a long session of Parliament, the favor (?) is granted. Why the delay?

So too as regards flax seed. When the tariff was formed it was thought that a duty of 10 cents per bushel on flax seed would encourage the growth of the article in Canada, but it has not done so. We import large quantities of linseed oil which might as well have been manufactured in Canada, or a very large portion of it, for we have extensive crushing mills for that very purpose, but until recently they have been in disuse and going to decay. For years the manufacturers have been asking the Government to give them free flax seed, but until last fall this favor (?) has been denied them.

These particular instances are mentioned to show the character of the requests which the manufacturers have been preferring to the Government. Nothing unreasonable. No great

sacrifice of revenue. Asking nothing which would injuriously affect any existing industry.

The requests which have been so graciously granted, as shown in the Finance Minister's tariff resolutions, comprise but a small proportion of those which the manufacturers have for a long time been making to the Government.

Why they have received such scant consideration perhaps the Government might explain.

THEY HOLD THE POWER.

MR. FOSTER introduced his tariff resolutions into the House of Commons almost in the dying hours of the session. He brought them in on July 6th, and the House adjourned July 9th. We believe this is the first time in the history of Canadian Legislation that such delay has occurred; and thus far no explanation has been given for it. When Mr. Foster had closed his remarks anent the matter, Sir Richard Cartwright objected to the bringing down of tariff changes at so late a day in the session, declaring it to be a bad precedent from which evil consequences would follow. Mr. Bowell, late Minister of Customs, defending the event by saying that it was not the rule of the Government to give the mercantile community notice of any changes which were to be made.

Certainly not, but this was not what Sir Richard contended for. He did not ask that any disclosures should be made prematurely, but thought that the tariff changes should have been made earlier in the session to the end that if any of the changes were not in the interest of the country, or if other changes should also be made, the questions could be fully discussed.

To many of those who are deeply interested in the administration of the tariff this view also obtains. The session of Parliament was a remarkably long one, and it is well known that frequently before it began, and during its continuance a very large number of important changes were suggested to the Government, and the question is asked why these suggestions were not considered. They involved and involve the success of some of the most important manufacturing industries of the country, and this fact was duly certified to the Government when the suggestions for changes were presented. Very few, if any, of these suggestions involved any loss of revenue, they being almost entirely in the line of correcting obvious incongruities, and are represented in the changes which were made affecting glove leather, tanners' supplies, etc. The industry of tanning leather for export was almost at a standstill because of the duty on stearine, and to give it its wonted activity the article was transferred to the free list. We can enumerate a dozen or more other industries which were in the same category with tanning, and which required modifications of the tariff quite as much; and it passes comprehension why if the tanners were to be relieved the others should not be accorded the same consideration.

Now, if Mr. Foster had brought down these tariff resolutions earlier in the session there would have been time enough for him to have answered a great many questions as to why these other industries had been passed over, and the questions would have been asked. He would have been afforded the

opportunity to explain the situation. It is true he might have been interviewed by numerous delegations of manufacturers who would not be in very happy frame of mind; and who might also have made it so fervently uncomfortable for their respective members that they would not feel like giving some Government measures the beastly majorities they received until the interests of their constituents, the manufacturers, had been accorded proper consideration.

The interests of the manufacturers have not been given the attention their importance demand. They have been ignored while the most unseemly wrangling has prevailed, quarreling in which the country was not specially interested, but which appeared to be the very breath of life to the contestants. With a two-thirds majority on the Government benches all unreasonable obstruction to business should have been suppressed to the end that absolutely necessary legislation might be promptly enacted. Included in such legislation some tariff changes were of the greatest importance; and yet this was neglected and the prosperity of the country made to suffer thereby.

Right now—to-day—is a good time for the manufacturers to take action to correct this unhappy state of affairs. There are quite a number of members of Parliament who were elected by the help of the votes of the manufacturers, and who certainly would not have been elected without them. Let the manufacturers confront these men and demand of them that they go straightway to the Government and insist that where it is possible to do so, the neglect of their interests be met by prompt action in Council. If this is done—if these members are thus stimulated—if they perform their duty to their constituents, well and good. If they do not, the manufacturers should see to it that the delinquents are holding their seats for the last time.

The manufacturers have it in their own hands to protect their interests.

WHY ARE THEY THERE?

ONE whom we are told was possessed of great wisdom said: "Put not your trust in princes." At this time there are many Canadian manufacturers who might well exclaim: "Put not your trust in members of the Dominion Parliament," meaning those who make abundant promises to the ear, pending an election, and forget them when they get to Ottawa.

Not that these members do not stand up in their places in the House of Commons and orate fluently and frequently about the benign blessings bestowed upon Canada through and by the National Policy; not that they do not keep their ears keenly alive to the clanging of the division bell when a test vote is to be taken, and rush in with utmost alacrity to sustain the Government when their assent is required; not that they do not show the utmost attention and courtesy to their constituents when they go to Ottawa to talk business with the Ministers, arranging interviews and escorting delegations—they do these things with the utmost grace and decorum, and they may be counted on every time for such occasions.

But a candidate appealing to the electors for their suffrages and more or less afraid that he will not obtain enough of

them, and a member of Parliament snugly ensconced in his seat in the House of Commons are different personages. The candidate tells the manufacturer that his best service shall be devoted to upholding the National Policy and looking after the minutest details of his constituents' interests. The member thinks it is his bounden duty, as it is his pleasure, to stand in with the Government and allow the Government to do all the thinking for him. It is, in his opinion, no part of the duty of a member to think. He can talk against time in a debate, and he can spread himself over unnumbered pages of Hansard for Buncombe and his constituents; he can send the pages to escort visitors past the door-keepers and seat them in the galleries where they can feast on the intellectual pabulum which flows in a never-ending stream of eloquence from the benches beneath, and he can play the agreeable promiscuously and unceasingly; but he never, no, never, considers it his duty to look after the small details of the business for which he was elected.

Consider the situation. A manufacturer understands that the continuance of the N. P. is essential to his prosperity and that of Canada, therefore a staunch tariff man must represent him at Ottawa. He also knows that incongruities in the tariff are constantly presenting themselves by which his interests are injuriously affected; that they must be remedied, and that his representative at Ottawa is the proper one to look after the matter. The candidate is very loud in declaring that if he is elected it shall be his pious care to look after these matters which so vitally affect the manufacturers, and so the vote of the manufacturer is secured to the candidate. The manufacturer is, perhaps, a tanner. There are a great many of him, for tanning is one of the most important industries of Canada, and tanneries are to be found in almost every constituency. The tanner finds that he can sell his leather to good advantage in Europe, but in doing this he is in competition with the American tanner. He also finds that in the manufacture of leather both degreas and stearine are absolutely essential; that these substances are liable to heavy duty; that they are not produced in Canada; that they are free of duty to his competitor the American tanner, and that if he is to compete with the American tanner in the European market it is absolutely essential that his degreas and stearine be free of duty. With this fact firmly fixed in his mind our tanner, numerously attended by other tanners, goes to Ottawa to interview the Government in the matter. Before going he notifies his member of his coming, and the member very kindly arranges an interview with the Ministers. When the numerous tanner appears the member marshals the delegation, escorts him into the presence of the Ministers, introduces him, and exhibits great patience while listening to the statement of the case and the discussion thereon. When the interview is ended the member very kindly tells the tanner that he has presented a strong case, and that the request should most assuredly be granted. He promises to look after the matter and the tanner returns home in the hope, or belief, that degreas and stearine will be placed in the free list probably before breakfast-time next morning.

Vain hope.

The member feels that he has performed his whole duty in the matter. The Ministers have been made acquainted with

the situation; they have solemnly promised to take it into their serious consideration; the papers are pigeon-holed, and that is the end of it as far as the member is concerned. The tanner returning to his business, feeling the weight with which he is handicapped, waits expectantly. He expects that an Order in-Council will be promulgated forthwith, placing degrass and stearine in the free list. The Order is not promulgated as he had expected, and then he waits patiently, hoping that it will be soon. But it isn't, and then he waits impatiently with precisely the same result. Then he goes to Ottawa again and receives some more flapdoodle in the way of vague promises of serious consideration. He spends much money in this running back and forth, likewise valuable time, which is worth money. And so he inadvertently says naughty words, or thinks them, and consigns the whole outfit to the region of intense heat. He feels that his interests have been trifled with, and that he has done much travelling on fools' errands. He queries why, if the Government intended to accede to his request it is not done. Later he wonders why the request is granted by piecemeal—degrass in 1891, stearine in 1892.

It is not recorded even in the secret archives that the member ever goes to the Minister, and, metaphorically speaking, catches him by the throat as he might do and demand some decisive action in the matter. If nothing is to be done, make him say so and give sufficient reasons therefor; or if it is intended to accede, insist on the doing of it without further delay. That is what members are elected for—to look after the interests of their constituents, and that is what the candidate most faithfully promised to do when he was canvassing our manufacturer for his vote. But that is just what they do not do.

The manufacturers have it in their power to remedy this indifference to their interests on the part of members of Parliament. There are quite a number of members who were elected by very small majorities, and if at another election the manufacturers who have received such shabby treatment at their hands should refuse to go to the polls and cast their ballots, the delinquents would be incontinently retired to the shades of private life.

It is evidently of but little use for manufacturers to go to the Government expecting prompt attention to their suggestions, or any attention at all, unless the members whom they elected to serve them perform their duty with spirit and energy. Mere perfunctory service will not answer. A member should have independence enough to demand of the Government a full and quick compliance with the reasonable demands of the manufacturers, or to decline supporting the Government until it is accorded. A few energetic examples in this direction would soon convince the Government that the will of the people should be the rule and guide of their actions.

If such energy is not shown by the members chosen for just that purpose, they will be left at home and more sensible men sent to fill their places.

ASKING for bread and receiving a stone does not strengthen the tie that binds the Canadian manufacturers to the Conservative party.

THE TARIFF CHANGES.

THE resolutions affecting the tariff introduced into the House of Commons by Finance Minister Foster on July 6th, are as follows:—

1. *Resolved*, that it is expedient to amend the act, chapter 33, Revised Statutes, entitled, "An act respecting the duties of customs," by repealing item numbered 510 in schedule C to the said act; and to amend the act 53 Victoria, chapter 30, entitled "An act to amend the act respecting the duties of customs," by repealing the items numbered 95 and 122 under section 10 of the said act; and to amend the act 54, 55 Victoria, chapter 45, entitled "An act to amend the acts respecting the duties of customs," by repealing the item numbered 1, under section 1 of the said act, and provide otherwise by enacting that the following rates of duty be substituted in lieu thereof:—

1. Eggs, 5 cents per dozen.
2. All molasses n. o. p., all syrups n. o. p., all tank bottoms, all tank washings, all cane juice, all concentrated cane juice, all beet root juice and all concentrated beet root juice, when imported direct without transshipment from the country of growth and production; (a) testing by polariscope forty degrees or over, and not over fifty-six degrees, a specific duty of one and one-half cents per gallon (1½c. per gallon); (b) when testing less than forty degrees, a specific duty of one and one-half cents per gallon, and in addition thereto one cent per gallon for each degree or fraction of a degree less than forty degrees (1½c. per gallon, and 1c. per degree additional); (c) and in addition to the foregoing rates a further specific duty in all cases of 2½ cents per gallon; when not so imported direct without transshipment 2½ cents per gallon additional; the packages (when of wood) in which imported to be in all cases exempt from duty.

3. Paraffine wax, stearic acid and stearine of all kinds, n.e.s., three cents per pound (3 cents per lb.)

4. Glove leathers when imported by glove manufacturers for use in their factories for the manufacture of gloves, viz, kid, lamb, buck, deer, anteelope and water hog; tanned or dressed, colored or uncolored, 10 per cent. (10 p.c.)

2. *Resolved* that it is expedient to provide that the duties of customs, if any imposed by the said acts on the articles named in this section are hereby repealed, and that the said articles may be imported into Canada or taken out of warehouse for consumption free of duty:—

1. Oleostearine, when imported by manufacturers of leather for use in the manufacture of leather in their own factories.

2. Tin strip waste

3. Nitrite of soda.

4. Lime juice, crude only.

3. *Resolved*, that it is expedient to provide that the Governor-in-council may order at any time when he may deem it in the public interest to do so, that item 2, under the foregoing resolution 1, shall be suspended for such period as he may name, and that during such period the following be substituted therefor:—

1. All molasses n. o. p., all syrups n. o. p., all tank bottoms, all tank washings, all cane juice, all beet root juice and all concentrated beet root juice, (a) testing by polariscope forty degrees or over, and not over fifty-six degrees, a specific duty of one and one-half cents per gallon (1½c. per gal.); (b) when testing less than forty degrees, a specific duty of one and one-half cents per gallon, and in addition thereto one cent per gallon for each degree or fraction of a degree less than forty degrees (1½c. per gallon and 1c. per degree additional); the packages (when of wood) in which imported to be in all cases exempt from duty.

And also, that for the like period item 2, of section 1, of the act 54-55 Victoria, chapter 45, entitled "An act to amend the acts respecting the duties of customs," shall be suspended; and

the Governor-in-council may, as aforesaid, further order that section 2, of the said act 54-55 Victoria, chapter 45, shall be suspended for such period as he may name, and that during the said period the following be substituted therefor:—

The duties of customs, if any, imposed by the said acts on the articles mentioned as follows, are hereby repealed, and the said articles may be imported into Canada or taken out of warehouse for consumption free of duty, that is to say:—All cane sugar not above No. 14 Dutch standard in color, all beet root sugar not above No. 14 Dutch standard in color, all sugar sweepings, all sugar drainings or pumpings drained in transit, all melado, all concentrated melado, all molasses n.o.p., all cane juice n. o. p., all concentrated cane juice n. o. p., all beet root juice n. o. p., all concentrated beet root juice n. o. p., all tank bottoms n. o. p., and all concrete n. o. p.

PREFERENTIAL TRADE.

THE free traders generally, and all those who do not favor preferential trade within the British Empire, are drawing some grains of comfort from the fact that at the recent Congress of British Boards of Trade, held in London, a motion in favor of such trade looking to the Mother Country imposing import duties upon the products of all foreign countries, was voted down. While it is to be regretted that a majority of the delegates did not favor this motion, it is well to remember that more than one-third of them did favor it; and that the occasion was the first when this question was submitted to so influential an assemblage. The friends of the movement are not discouraged by the event. Indeed they have much cause for congratulation at the exceeding large minority vote which was given. Questions of as much moment as this are not settled in a day; and with a knowledge that this matter was to be discussed, the free traders included in the various Boards of Trade in England, saw to it that the delegates of their Boards were men who would fight against any change in the fiscal policy of their country. But there were English delegates there who strongly advocated the movement, and besides these a very large portion of the delegates from the colonies were of the same way of thinking, the exceptions being such unrepresentative men as Mr. Wiman. Revolutions do not go backward, and no doubt the seed sown at the recent Congress will fructify and in due time bear fruit. Imperial federation, based on the inspiration of discriminatory duties against foreign countries is within measureable distance—almost within sight.

There is no good reason why it should not be. There are but two features in connection with the proposition which can influence it, and which are to be considered; whether the imposition of tariff duties by Britain would have the effect desired, and whether the people of Britain would sanction the change. It is quite evident that there is great and widespread dissatisfaction in that country growing out of the excessive introduction of manufactured articles, the annual imports of which from the continent of Europe and from the United States amount to about \$350,000,000. There are thousands of smaller manufacturers in England, whose business is being destroyed who are asking themselves and their Boards of Trade and their law-makers why they should not be permitted to supply this demand, and why foreigners should be permitted to supplant them in their own home market. The Board of Trade returns are constantly loaded with the enumerations of imports of

manufactured goods which might be supplied from British workshops and factories, but which are produced by the cheaper labor of European countries, and the superior mechanical advantages of the United States. An effort to prevent this disastrous competition was made in the passage of the Merchandise Marks Act, but whatever popularity this law may have met with, was not so much because it prevented fraud by the imitation of a better class of goods, but rather because it checked the imports of foreign goods. The small British manufacturer who produces for the home market, and who has no particular interest in the export trade of his country, is naturally a protectionist. He bears the burden of all the onerous taxes which the Government impose for the purpose of raising revenues to the end that the mercantile and shipping interests may enjoy the widest measure of free trade. His land, his buildings, his machinery, all are taxed until he can scarcely exist. Behind this is the question of wages, and his normal position is between the devil of foreign competition on the one hand, and the deep sea of excessive taxes and higher wages on the other. To him the question of Britain's mercantile supremacy in the world, and the universality of the British flag floating over British ships on every sea and in every port, is a sentiment which does not weigh as much with him as that of his bread and butter; and from this materialistic standpoint he advances the question whether Britain should not adopt a protective policy as well as the United States, Germany or France, whence comes the fierce competition which is overwhelming him.

Canada's position in this question of preferential trade should not be misunderstood. There are those whose anxiety for closer trade relations with the Mother Country, would lead them to accept terms which would require a considerable lowering of our present schedules of tariff duties. This, in our opinion, is not the correct view. From the standpoint of the National Policy, and in the interest of Canadian manufacturers, the necessities in the case would require that the preference, should be along the line leading to higher duties as against all foreign nations, substantially retaining our present schedules as against all British countries. No other arrangement would be acceptable to our manufacturers. Of what benefit would closer trade relations with the Mother Country be to our manufacturers and to the labor element employed in our workshops and factories if it destroyed our manufacturing industries? But this is just what it would inevitably do should there be any material reduction in our duties. If closer trade relations, or Imperial unity, or any system called by any other name, is to be advocated for and by Canada, it must be along lines which will not injure or destroy our manufacturers. If this rule can be observed, then welcome Imperial Federation; but if not, then Canada will have none of it. We may love Britain, and we may desire preferential trade, but Canada's greater interests must be observed. Canada first.

THE NEWSPAPER WAR ON THE TARIFF.

SOME of the papers connected with the Canadian Press Association which favor the destruction of Canadian manufacturing industries which do not advertise their business with them,

are showing great sensitiveness at having their proposition publicly discussed. They do not relish having the true inwardness of their position dissected and exposed to the test of newspaper investigation. Notable among these are the *Printer and Publisher*, which was issued into the newspaper world for this very purpose, so it informs us; the *London Advertiser*, which is inherently defective in its thinking apparatus whenever the question of the tariff is advanced, and *The Week*, which does not profess any political affiliation but which in this matter fails, in our opinion, to grasp the importance of the situation.

This last named contemporary does not seem to absorb and assimilate the light with which we have endeavored to surround the question, and it announces its understanding of it as being "whether the legitimate aim and effect of a protective tariff should be to prohibit importation and establish monopolies." Of course this depends. In Canada there is no duty levied upon any article which prohibits its importation. Our duties are of a protective character and not prohibitive. It never was the aim or object of the tariff to prohibit the importation of any article which might otherwise be allowed to come into the country; but the tariff has failed, because of the inefficiency of the duties, to establish and build up some industries which our necessities absolutely require. *The Week's* remarks are made in view of the baking powder question, but we take it that our contemporaries, like ourselves, accept this article as representative of a long list of other things which are similarly affected. As we have shown, the tariff does not prohibit importation; and *The Week's* question might be enlarged to include whether we should give tariff protection to any article which might be manufactured in Canada, or whether we should incorporate into our tariff any system of protection whatever. The abstract principle of this question is too broad to be discussed here now, and it has already been very thoroughly explained in these pages. The intimation is made that protection is also chargeable with encouraging monopolies. Of course this is not true, indeed it cannot be true. Monopolies are in no way dependent for existence upon any fiscal system, for if they prevail in countries where protection prevails they are also to be found where free trade exists. It would be impossible under any fiscal system to prevent combinations of capital, either for aggression or self defence. If we have what *The Week* would call a sugar monopoly in Canada, we can observe quite as powerful a salt monopoly in England. It would be quite in order at this time, too, for *The Week* to inform its readers what it understands to be the real meaning of the word "monopoly," for the definition which it has evidently attached to it in what it has said is rather at variance with the commonly accepted understanding of the word. We understand a monopoly to be, as applicable in this question, the exclusive power, right or privilege to manufacture some certain article. The proprietor of a patent article enjoys a monopoly during the life of his patent to manufacture and sell his invention; but this idea does not relate to the question under consideration, and yet *The Week*, which prides itself on being an "independent" paper, as glibly adopts the Grit definition of the word as the *Advertiser*, the *Globe* and all the other partisan free trade papers.

As might have been expected, the *Printer and Publisher*, just like the other Grit papers, attacks the N.P. in detail. In one issue it singled out baking powders and did what it could to induce other papers to denounce and destroy the industry. In another issue it selected patent medicines with the same object in view, and it may be safely inferred that each succeeding issue will find it engaged in singling out for destruction some Canadian manufacturing industry which declines to be blackmailed into paying blood money to impecunious newspapers. That is what it is here for, so it informs us in its initial number. There seems to be some lack of unanimity among the disgruntled fraternity, however, for we observe that the papers which have been fortunate enough to obtain ads from the baking powder manufacturers do not join in very heartily in denouncing the tariff as affecting that industry, while those which are patronized by the patent medicine makers do; and thus it is we observe the *Advertiser*, having no baking powder ads, but carrying a fine line of assorted quack medicine ads of the "Before and After" character, producing labored editorials intended to injure the manufacturers of baking powder, but never a word does it say against the duty on patent medicines. The *Printer and Publisher* publishes and endorses the views of a newspaper publisher in Nova Scotia whose lament grows out of a failure to capture some of the patent medicine business. This Blue Nose Grit declares that Canadian newspapers are losing hundreds of thousands of dollars every year because of the duty on patent medicines. This may be hard on papers like the *Advertiser* which must have a share of this "Before and After" business or die, but the people of Canada, no doubt, breathe a fervent "Thank God" that the N.P. shuts out not only many of the innumerable quack nostrums that flood the American market, but also helps to purify and keep clean the columns of hundreds of Canadian newspapers which would otherwise be overflowing with the indecent and pernicious advertisements of them. Of course some of these vile preparations find customers in Canada, else the proprietors of them would not find it profitable to advertise them in such journals as our London contemporary; but the decent element in the community have cause for thankfulness that the N.P. mitigates the evil to such a large extent.

It should not be imagined, however, that all patent or proprietary medicines are of a pernicious character, or that of those which are really meritorious, many of them are not manufactured in Canada. Any well-informed person should be aware of the fact that the Canadian demand for many of the best American preparations are manufactured in this country. They are identically the same as these made in the United States, and while none of them are higher in price to consumers, many of them are actually cheaper. This, then, being the case, the Canadian public is not especially concerned that unsuccessful papers should suffer for lack of Yankee patronage.

From what these papers say it might be imagined that both foreign baking powders and patent medicines are excluded by the tariff from the Canadian market. The duty upon these articles is high—on baking powder six and eight cents per pound, and upon proprietary medicines twenty-five and fifty per cent. ad valorem, yet last year our imports of the first named were valued at \$105,696 and of the latter \$181,254,

and yet in the face of these high duties these foreign articles are sold in the Canadian market at no higher price than in the United States—some of them at less.

The fight against the duties imposed on patent medicines is not popular and had better be abandoned.

EDITORIAL NOTES.

JOHN MORLEY, the great free trader: *non est inventus*.

The Week has ceased battling in the cause of the Canadian Press Association and its organ against the Canadian manufacturers of baking powder.

WHAT the manufacturers of Canada require with burning vehemence is a Finance Minister who will consider their interests as being of quite as much importance as those of sugar barons, steamship owners, and importers of foreign merchandise.

Oh for the return of the days of such sturdy legislation as that had when Sir Leonard Tilley and Sir Charles Tupper represented the Treasury Department of the Canadian Government. They recognized the fact that they were servants of the people, not masters.

It is no joy to Canadian manufacturers to know that two-thirds of the members of the Dominion House of Commons are the obedient servants of a Government that refuses to listen to urgent prayers for relief from tariff incongruities which should have been promptly granted on presentation.

THE chief interest a large proportion of the Canadian manufacturers have in the Conservative party is because it is the advocate and upholder of the N.P.—or was. It is a strong tie—or was. The influence of the manufacturers put that party in power; but if that influence becomes apathetic the party might regret it when another election occurs.

THE CANADIAN MANUFACTURER commenced its Twenty-third volume on Dominion Day, and the *Pioneer* hastens to throw the old slipper, rice, and other expressions of good wishes for its increased prosperity. As a leading aggressive, manly advocate of the principles of Protection, our Toronto contemporary has few equals.—*Algoma Pioneer*.

To be able to recognize an opportunity when it presents itself is a wonderful accomplishment. Our Finance Minister has had a wonderful opportunity presented to him to benefit many Canadian manufacturing industries by slight modifications of the tariff, and at the same time securing their enduring friendship, but unfortunately his obliquity of political vision prevented his recognizing it.

THERE is a factory in New York for the manufacture of "refined American butter." The stuff is made of imported grease, with imported salt added, and the manufacturers of it obtain a drawback of 99 per cent. of the duty paid in these materials when the product is exported as American refined butter. The stuff can never be anything else than greasy and unwholesome, and disgusting to those who know what it is;

but it goes abroad in competition with the genuine and whole some article.

CANADIAN manufacturers are as devotedly attached to the National Policy as ever they were. In fact, the industries of many of them would quickly fall into decay without it, and they think that as long as this is the professed policy of the Government the spirit of it should prevail. There are numerous manufacturing industries now in need of tariff modifications which will suffer seriously without it. Parliament has adjourned without giving this relief, although the necessity for it had been made apparent to the Government.

IF the Government have the power to regulate railroad fares, then Mr. Maclean was right in forcing a division on his compelling the railroads of Canada to adopt a rate of two cents a mile for passengers. It is well for the people to know who of the representatives in the House of Commons are their friends. Also who are influenced by the passes they carry in their pockets against the public interest. The question is not settled by the heavy majority polled against the measure. Mr. Maclean will no doubt bring his motion before the House at the next session, when it is to be hoped that it may receive the sanction of the Government.

THE most conspicuous and financially the most powerful combination of capital or trust, in this country to-day is that which controls the production and prices of anthracite coal, one of the leading necessities of our American everyday life. And yet anthracite coal has been on the free list of all our tariff legislation since 1870. There is absolute Free Trade in this great mineral trust-controlled product. Upon the other hand bituminous coal is subject to a duty of seventy five cents a ton; yet we hear of no trust anywhere, large or small, in its production or sale. Free Traders who assert that Protection fosters trusts and that Free Trade is their natural enemy will be in no hurry to tell a waiting world why the above facts do not accord with their theories.—*The Bulletin*.

THE *Empire's* editorial professor of belles-lettres speaks of Andrew Carnegie as "an eminent English Liberal, American Republican, British free trader, American protectionist, general monopolist and emphatically generous philanthropist; a purse-proud conceited man of money and political windbag who is now shown to the world from Homestead in his true colors." The head and front of Mr. Carnegie's offending in which, according to the *Empire*, he is shown up in his true colors, is that he endeavored to place a number of men in his steel works at Homestead to protect them from destruction by a mob of strikers who had gained possession of them. Only this and nothing more. The question arises: Did Mr. Carnegie have a right to protect and care for his property?

A TORONTO flour miller declares that the Grand Trunk Railway Company discriminates against flour sent to Montreal for shipment abroad in favor of flour sent to Boston for like shipment. Until recently the rate from Toronto to Boston, a distance of 673 miles, was actually less than to Montreal, only 333 miles. Upon remonstrance being made against this palpable injustice, the best arrangement that could be effected as to pay the same rate to Montreal as to Boston. The

remedy for this lies with the Dominion Parliament, but the Government, probably out of kind consideration for the railroads, declined to interfere. This is a matter in which every miller in Ontario and Manitoba is interested, and the question is: How long will they submit to this imposition? These millers are all voters.

ALGOMA is rich in the possession of immense stores of pine, nickel, and fish. But these rich treasures are rapidly disappearing without conferring any benefit upon the owner other than the pleasure of production. The pine is cut and hauled away, free of duty, to be manufactured into lumber in the United States, while our own mills stand idle; the nickel is dug and carried out of Canada, free of export duty, to be refined and manufactured into plates in the United States; and the contents of the rich fisheries of our upper lakes are used to swell the exodus of Canadian products across the border, to swell the wealth and increase the enterprise and labor of the United States which forbids any Canadian earning a dollar there, stops our horses, grain and eggs by heavy duties, and tries to force us into annexation by making our trade relations with them as unpleasant as possible. Canada pays for Protection that protects her interests. Impose the duty. —*Algoma Pioneer.*

THERE was no reason to expect that any other result would have followed from the recent discussion at the Congress of British Chambers of Commerce than what did. Mr. Medley's free trade resolution, that a fiscal union between Great Britain and her colonies by preferential duties, based on protection, would be politically dangerous and economically disastrous, was carried it is true, but the fact that more than a third of the delegates voted against it indicates that there is a strong current moving in the direction of protection. Of course Canada would be pleased to have closer trade relations established with the Mother Country, but she will never consent to any such arrangement if it involves the sacrifice of her present fiscal policy of protection. This fact might have been emphasized with more force than was given to it in the Congress. If Canada is ever called upon to state her position in this respect it will be along the line of retaining our present duties against Britain and increasing it against foreign countries.

THE *Montreal Gazette* discusses the tariff changes in an exceedingly light and airy manner. In a leading editorial given to the subject, half of it relates to the desirability of placing a duty on eggs, a thing which might with much propriety have been left undone; the resolutions which give the Government power to impose duties on the products of tropical countries refusing favored nation treatment to Canada in exports being, in its opinion, the most important feature. "The other actual tariff changes," it says, "except those relating to molasses, call for little notice." It has no remonstrance against the refusal of the Government to listen to the requests of manufacturers to correct obvious incongruities in the tariff, although it knows, and it knows that the Government knows, that these incongruities are working great evil to our manufacturing industries, and that the correcting of them would not have materially affected the revenues in either direction. But then the *Gazette* is a party paper which can see no ill in anything the Government pleases to do.

SPEAKING of the glove industry, Mr. Foster, in his tariff speech, said:

Glove leathers, which are a special item by themselves, are admitted at 10 per cent., while leathers of similar kind, but not used in the manufacture of gloves, pay a duty of 15 per cent. In that list of glove leathers the names were given, but among the names that of lamb was left out. Everyone knows that the finer grade of kid which is used is made from the skin of the lamb, a sort of imitation of prepared kid made from the skin of the lamb, and in order to make the item consistent and prevent difficulty in the rulings of the customs department the word lamb has been inserted with the other indications.

The glove manufacturers will be rejoiced at this. When the tariff was being formed, which went into effect in March, 1890, it was understood that the word "kid," as applied to glove leather was a generic not a specific term, which included also the skin of the lamb, and because of this understanding the word "lamb" was not mentioned. The omission caused much annoyance to the trade, from which it is now relieved.

THE *Glasgow Herald* of a late date, dealing with the question of Canadian tariff in relation to British trade, shows how British exports to this country decreased under the rule of Sir Richard Cartwright, and increased since the higher tariff was put in force. In 1873 the exports were \$68,492,492. In the five years following they fell so much that in 1879 but \$30,943,703 were returned. The following table for 1891, given by the *Herald*, furnishes some interesting comparisons:

	Imports from Great Britain.	Imports from United States.
Earthenware and china	\$451,000	\$67,000
Fancy goods	996,000	252,000
Flax, hemp and jute	1,370,000	39,000
Iron and steel	4,570,000	4,844,000
Cottons	3,405,000	773,000
Gutta percha	461,000	381,000
Silk	2,221,000	118,000
Spirits	382,000	70,000
Woolens	9,199,000	106,000
Lead manufactures	283,000	30,000
	\$23,188,000	\$6,649,000

The argument of the *Herald* goes to show that under preferential treatment, of the kind proposed in Parliament, British trade with the Dominion would be improved.

A DISPATCH from Sudbury states that the Emmens Metal Company will erect extensive nickel and smelting works at or near that place. They had endeavored to obtain a supply of nickel matte for their large refinery in Pennsylvania, but found the output of all the existing smelters already contracted for. The company have therefore obtained possession of extensive deposits of nickel ore and will mine the same, the smelting into matte to be done in their proposed new smelting works, the product to be shipped to their Pennsylvania works to be refined and manufactured for commercial purposes. It is said that although 1,200 men are now employed in the Sudbury mines no matte is offered for sale. The American duty upon refined nickel is \$200. per ton, but nickel ore and matte are on the free list. If Finance Minister Foster had really desired to imitate the M-Kinley tariff instead of piddling with a duty of five cents a dozen on Yankee eggs he should have put an export duty of \$200. per ton on the nickel

contained in ore and matte exported from Sudbury. Impose the duty.

When the Finance Minister moved the House into Committee of Ways and Means to introduce his resolutions affecting the tariff, speaking of the tanning industry, he said:—

Strong representations have been made by the tanners of this country in favor of the introduction, free of duty, of two articles used in the process of making leather. One is an article known as degris and the other oleostearine, neither of which is manufactured in this country and both of which are necessary, to the manufacture of the better grades of leather, especially leather which is now being made in increasingly large quantities for the English and foreign market, especially the English market, and in which a considerable and promising trade is opening up. This article, oleostearine, was classed with stearic acid and wax and charged a duty of 3 cents per pound. The value of the article is 6 cents a pound, so that the duty is a very heavy one, and it is proposed to allow that article to come in free of duty for the use of tanners in making their leather.

The tanners of this country have been for a long, long time asking to have degris and oleostearine placed on the free list. Last year this was done as regards degris, and there was no good reason why it should not have been done as regards oleostearine. After being unnecessarily handicapped for years the tanners will rejoice that they are now more nearly on a footing with American tanners in foreign markets than ever before.

AND still the tin-plate importation increases. For the month of March it amounts to 67,498,960 pounds, valued at \$1,940,080. For the month of April, as shown by the statistical report just issued, it was 70,480,102 pounds, valued at \$1,973,840.—*Detroit Free Press.*

Canada permits the importation of tin plates free of duty. In the last fiscal year all the tin plates and sheets imported weighed 214,683 cwt., valued at \$854,770. This was at the rate of 3.55 cents per pound. The imports into the United States for March and April weighed 137,979,062 pounds, valued at \$3,913,920, or 2.83 cents per pound, in addition to the duty. This is less by nearly three quarters of a cent than Canadians pay—to be accurate 72 cents per 100 pounds. Does it not appear that of the duty of 2.2 cents per pound the people pay two-thirds and the manufacturer one-third? And to say nothing of the value of the duty in building up a domestic industry is it not profitable to compel a foreign manufacturer to pay part of the duty?—*Hamilton Spectator.*

Canada is not yet prepared to manufacture tin plates, and therefore it may be well that the article be admitted into the country duty free. But the facts above shown indicate that we pay 72 cents per 100 pounds more for what we buy than the Americans pay for their purchases. This discrimination against us cost us last year \$173,120. And thus we see that because of our free trade in tin-plates we are sweated to this large amount more than American consumers are in an equal quantity of goods. If we imposed a heavy duty the Welsh manufacturers would readily consent to bear at least a portion of the burden.

The Philadelphia *Manufacturer* relates how great injury is done to trade by inadequate canals, citing the case of a canal boat which loaded at Newburgh, on the Hudson river, for a Canadian port, taking a return cargo of lumber at Louiseville, Quebec, to go to New York City. The complaint was against

the insufficient depth of water in the Champlain Canal. The *Manufacturer* is one of the American papers which makes loud outcry against what it calls discrimination against American vessels passing through Canadian canals; and we appeal to its spirit of fairness to consider this proposition:— If it is desirable in the interest of American vessel owners to load an American vessel at Newburgh and deliver the cargo at a Canadian port, passing through both American and Canadian canals, and loading a cargo at a Canadian port, transporting the same through American and Canadian canals to New York; would it not be equally desirable in the interest of the Canadian vessel owners to be permitted to load a Canadian vessel at a Canadian port and deliver the cargo at an American port, passing over the same route of Canadian and American canals to New York, there taking a return cargo over the same route to a Canadian port? This is the simple and plain proposition which we desire the *Manufacturer* and other American contemporaries to consider. American vessels have this free privilege of travel through Canadian canals by the grace of the Canadian Government, but Canadian vessels do not have the privilege of thus passing through American canals, it being denied to them by the American Government. This is a bad rule, for it does not work equally both ways. The *Manufacturer* and other American papers declaim loudly against what they call discrimination against American vessels taking cargoes at Duluth or Chicago for delivery at Ogdensburg. Only American vessels can participate in this trade, although they can only do it by grace of the Canadian Government allowing them to pass through the Welland Canal. Canadian vessels are denied participating in this trade by the unfriendly action of the American Government. American papers which indulge in unfriendly remarks about Canada would do well to consider and discuss the propositions here laid down.

The growth of one great industry in foreign countries will suffice to show how rapidly they are running ahead of free trade England.

FIG. IRON PRODUCTION.

Years	Great Britain. Tons.	United States. Tons.	Germany. Tons.
1880.....	7,749,233	3,835,191	2,729,038
1881.....	8,144,449	4,144,254	2,914,009
1882.....	8,586,680	4,623,323	3,380,806
1883.....	8,529,500	4,585,510	3,469,719
1884.....	7,811,727	4,097,868	3,650,612
1885.....	7,415,469	4,044,526	3,687,433
1886.....	7,009,754	5,683,329	3,528,658
1887.....	7,559,518	6,417,148	4,023,953
1888.....	7,998,969	6,489,738	4,229,481
1889.....	8,322,824	7,603,642	4,387,504
1890.....	7,875,130	9,202,703	4,563,025
1891.....	7,228,466	8,279,870	4,452,019

Protection, high as it can be placed, has raised production in the United States from 3,800,000 to 8,200,000 tons, and has almost doubled that in Germany. Free trade in England has actually reduced this great staple product by half a million tons in eleven years.—*Toronto Empire.*

The prosperity of a country may be accurately measured by its consumption of iron. It can also be measured by its production of iron. The United States is not as large an exporter of iron as Great Britain, yet it produces more iron than any other country. As the *Empire* states, protection has done this. Canada's greatness and prosperity would be greatly enhanced if we were a great iron producing nation, or even if

we made the comparatively small quantity required for home consumption. But we will never do this until we have sufficient tariff protection. We have studied the *Empire* quite closely ever since it came into existence, but it has never yet advocated the elevation of the duty on iron, without which we need never hope to see the industry on a satisfactory footing in Canada.

The Cleveland Marine Review, discussing the situation re the so-called discrimination against American vessels passing through the Welland Canal, says :

No one will question the right of the United States Government to adopt regulations at the St. Mary's falls canal similar to those now in vogue on the Welland. If there is any violation of party stipulations in such action it would apply first to Canada's present canal regulations. Arrange at the Sault canal a system of tolls and rebates on freights (not on vessels) that will discriminate against grain and other commodities bound through the canal to and from Canadian ports, just as the present Canadian canal tolls discriminate against freight bound to and from American ports. The claim that Canada will soon have a canal of her own at the Sault, is of little account. Even the Canadian authorities do not claim that more than a small corner of the St. Clair Flats canal is in Dominion waters. In all the controversy over this canal toll question only one point made by the Canadian newspapers that have been discussing it is worthy of consideration. It has been said that Canadian vessels are not allowed to take cargo free through the Erie canal. This claim is, however, of little account, as it is a subterfuge, Canada having no use for the Erie canal.

Our contemporary should understand that Canada does not discriminate against American vessels, which she would have no right to do under present treaty arrangements. But she does discriminate in favor of Canadian ports as against American ports, as she has an undoubted right to do. We would be pleased to have our contemporary indicate wherein freight carried in Canadian vessels is favored more than freight carried in American vessels; but our generous friend desires to have and does have Canadian vessels excluded entirely from participation in a traffic which cannot be carried on at all except through a Canadian canal. *The Review* thinks that the refusal of the United States to allow Canadian vessels to take cargo through the Erie canal to be a "subterfuge," seeing we have no use for that canal. Is not this assertion a subterfuge? Suppose Canadian vessels desired to take cargo through the Erie canal, would it be allowed? Certainly not. A bargain is a bargain, but the American Government get around the bargain to grant us the same privileges in American canals as we grant American vessels in Canadian canals by saying that Canadian vessels may thus use their canals, but they must not carry any cargo. How is that for a "subterfuge?"

In order to stimulate American composition, *The Ladies' Home Journal* has just made public an attractive series of liberal prizes for the best original musical composition by composers resident in the United States and Canada. The prizes call for a waltz, a piano composition, a pleasing ballad and a popular song, an anthem and the four best hymn tunes. The competition is open until November 1st, next. The opportunity has an additional attractiveness, since the prize compositions will form part of a series for which Strauss is writing an original waltz, and Charles Gounod and Sir Arthur Sullivan each an original song.

A vigorous statement of the scientific principles upon which the treatment of criminals should be based will open *The Popular Science Monthly* for August. It is by Prof. Edward S. Morse, who takes as his title "Natural Selection and Crime." "The Warfare of Science" papers, by Dr. Andrew D. White, will be continued with a chapter on "Cosmography," in which are given the various mythological and theological ideas concerning the form of the earth and the proper mode of representing it that have prevailed in ancient and mediæval times. "The Manufacture of Boots and Shoes" will be described by George A. Rich. This is one of the illustrated series of articles on American Industries, and, in both the text and the pictures, tells a story of wonderful progress. An ethical study on "Voracity," by Herbert Spencer, will be among the contents of the August *Popular Science Monthly*.

Good Housekeeping, for July, opens the fifteenth volume of that admirable journal; and though a midsummer number, its generous table of contents will be found as interesting, as valuable and as varied as ever. It deals not alone with the material interests of the household, but treats in its careful, thoughtful and thorough way every subject of interest, from the making of preserves and the management of the laundry, to the study of the servant question and the cultivation of that spirit of kindly helpfulness and consideration which gives to the home its vital spirit. Among the articles of special merit are those on "Carving," by Frances Spalding, "A Perfect Treasure," by Judith Spencer; "Concerning Servants," by Josephine E. Martin; "New Designs in Laces," "Jams and Jellies," "Bags, Useful and Ornamental," "The Household Laundry," "The Food of the People," "A Supper in the Woods with the Children," and many others, a goodly number of which relate especially to the duties and details of the household. Clark W. Bryan & Co., publishers, Springfield, Mass.

The July Wide Awake contains a stirring Revolutionary story by Adelaide Cilley Waldron, the chief incident of which furnishes the frontispiece for the number. It is called "Jock's Journey," and is full of dramatic action. The "Flag on Top" is a novel and humorous Fourth of July story, with California surroundings, by G. Adams; Edith Robinson's quaint Marblehead story, "Betty Martin's Ghostly Grandfather," is delightful in motive and development. Charlotte M. Vaile has a Denver Fourth of July story, "Benny and the Major," which young and old will alike enjoy, and still another brief story celebrates the Fourth, Grace Stuart Reid's "A Grasshopper's Fireworks." Harriet C. W. Stanton contributes another of her delightful literary-descriptive articles, "Sir Philip Sidney and his Oak," illustrated from Penhurst photographs, and Jennie E. Thompson has a paper on our every-day birds under the title, "Summer Sweethearts." Vesper L. George tells the boys "How to make a Mime-dart," and Margaret W. Leighton describes "A Girl's Museum." Lieut.-Col. Thorndike has a sketch of adventure, "In the Changing Monsoons," and Emma E. Brown tells of "Manoel," a boy of the Azores. The poetry is excellent, including verses from Ella Wheeler Wilcox, May Riley Smith, "Clara Augusta," Katharine Pyle, Mary F. Haynes, and others, while the new serials, "The Coral Ship," by Kirk Munroe, and "That Merry Ann," by Kate Upson Clark, are absorbing and full of go. The number is an excellent summer issue, readable in every page.

The July number of The Dominion Illustrated Monthly opens with a thrillingly interesting story by Jessie A. Freeland, called "The Renunciation of Grahame Corysteen," dealing with a tragic and most uncommon phase of Canadian life. Mr. Frank Veigh's excellent paper on "A Century of Legislation," is concluded, and for us in all a valuable addition to our legislative history; the article is well illustrated. The most amusing article in the number is a story, "Fooling and Fishing about Megantic," by E. W. Sanderson; it is very appropriate at the present season. We note with pleasure the re-appearance of the familiar hand of "Pastor Yelta;" his article, "Old Acadian School Days," is written in his happiest vein. Miss Maud Ogilvy, of Montreal, who has recently come to the front with several popular works of fiction, contributes a charming little sketch, entitled, "A Feminine Camping Party," a paper well worth the attention of all fond of open-air life. "The Dominion Educational Association Convention," and "Yachting on Lake Ontario," are two well-written and richly illustrated articles, the scope of which is well indicated by the titles, the writers are masters of their subjects and fully cover the ground. A charming poem by Miss A. M. MacLeod, and a short instalment of "Scraps and Snaps," from Mr. Crofton's pen, closes the number, the size of which we regret is not larger. The illustrations are unusually good and profuse. The frontispiece is a view of Lake St. Joseph, while the supplement is an excellent por-

President, W. K. McNAUGHT

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The Canadian Manufacturers' Association

THE OBJECTS OF THIS ASSOCIATION ARE:

To secure by all legitimate means the aid of both Public Opinion and Governmental Policy in favor of the development of home industry and the promotion of Canadian manufacturing enterprises.
To enable those in all branches of manufacturing enterprises to set in concert as a united body whenever action in behalf of any particular industry, or of the whole body, is necessary.
To maintain Canada for Canadians.
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J. J. CASSIDY, Secretary.

TELEPHONE 1274.

trait of the late Sir Alex. Campbell, Ontario's late Lieut.-Governor. The Sabiston Litho. & Pub. Co., Montreal and Toronto, are the publishers, and at the low price asked—\$1.50 yearly—the magazine should have a very large support from the Canadian public.

The viscosity of oil is determined by several methods; in one a plate of glass is placed in an inclined position (forming a tolerably steep incline), and kept at about a temperature of 200 F. by boiling water. A drop of the oil is placed at the top of this incline, and the time consumed in its descent to the bottom is noted and compared by some assumed standard by means of a suitable scale. In another plan a given quantity of the oil is placed in a species of pipette and kept at a uniform temperature by immersion in a body of water suitably heated. The oil is then allowed to flow from a small orifice at the bottom of the pipette, and the time required for it to flow out is the measure of its viscosity. As before, some standard of comparison is used. Or, instead of letting the oil flow out of a vessel, the oil is placed in a tall, narrow cylinder of glass, kept at a suitable temperature, and a ball of glass, closely fitting the chamber, is allowed to fall through the oil. There are other methods in use, but the foregoing are those commonly employed.

The financial agent of a great insurance company, in a city of a hundred and twenty-five thousand inhabitants, recently died. The manager of that company went to that city to appoint a successor. Out of twenty or thirty applications for the position not more than two could be regarded as eligible. The capable man in any walk of life is rare. The capable boy is rare. It is a very difficult matter to get a good office boy or a steady, capable fellow to run an elevator in an office building. Really good laborers are scarce. We sometimes think about over-crowded professions, or an over-supply of help in many directions. The supply of really capable help of any kind is limited. A first-class superintendent of a works of any kind is very difficult to get hold of. They are rarely out of a job. A man who is out of a job is open to suspicion. The best and most capable help come out of the workshop—the steady, quiet, capable fellows. There are not many of them in any establishment. Generally one of good judgment can pick a leader from a gang of men. He will need a little coaching, some help and some patience. But he is nearly always to be found. When such an one is discovered the great work has been done. A man has been lifted up from a lower plane to a higher one; his horizon has been enlarged; the world has grown bigger for him. Nevertheless, the really capable man is rare, and in this prosperous period he is seldom if ever out of a job. *The Clay Worker.*

By engineers, machinists and millwrights in general and pipe fitters in particular knew of the good qualities of graphite, I dare say there would be ten times the demand for it. Its lubricating qualities are questioned only by the impractical, and it is this quality alone that sounds its key note, so to speak. Let me describe a few of what I consider its most important uses. As above stated, its primary object is lubrication, and it is to this fact we must credit good pipe joints and cool bearings. In making pipe

cement (or as I would term it, pipe smear), it is not necessary to use the best oil or grease, as it is the graphite and not the body in which it is suspended, that makes the mixture valuable and the joint perfect. I use the drippings from the line shaft bearings, caught in the ordinary way and mix it with the best flake graphite so that it can be applied with an ordinary sash tool. During the past three years I have used about fifteen or twenty pounds of dry flake graphite for pipe joints, cylinder heads, piston rod packing, etc. Bolts smeared with graphite mixed as above, I have unscrewed after having been in the dampest places for upwards of two years or more, proving the anti-rusting qualities of graphite. To cool hot bearings put it on as thick as it will mix with oil. Almost any oil or grease will answer, but don't use poor graphite. — *American Machinist.*

The original process of cleaning skins was probably the simple one of cleaning and drying them. Removal of the hair by maceration in water seems to have been common among the very early tribes, and one writer has suggested that the idea was obtained from the natural process of depilation. They must certainly have been familiar with it in the case of drowned animals, where maceration can be plainly observed. Following this, smoke, sour milk, oil, and the brains of the animals themselves were found efficacious. Many of these primitive methods are employed at the present time, thus bringing into novel conjunction the days of the roving Massageta and those of the thifty American. An acquaintance of the writer, a Massachusetts tanner, travelling recently through the province of Winnipeg, chanced upon a small Indian village. The place was in no way interesting except in the employment of the squaws. They were all busily engaged in removing the hair and muscles from the skins, largely those of deer and moose, which the bucks had taken in the chase. This they did by means of sharpened bones which they pried in a vigorous manner, rubbing away both flesh and hair. The skins, it seemed, had been taken from the animals some time before, and together with the brains partially dried in the sun. After the squaws had completed their scraping process, the skins were steeped in a leather-like mixture made from water and dried brains, and were then reduced to a soft texture by frequent kneading and similar manipulation. Ten days later this same manufacturer was in Peabody, Mass., in one of the most complete of modern tanneries, and though the space of time intervening was only a little more than a week, yet in it he had traversed the whole gamut of the art. — *The Popular Science Monthly.*

Trade in the west of Scotland is in a very unsatisfactory condition, and there is not a single branch that is not more or less depressed. In the malleable iron and steel sections business is on very restricted lines, and inquiries are scarcer than has ever been experienced for several years. Wages have been reduced in consequence of dull trade. The coal trade is also quiet, and wages have been reduced. For all classes of iron manufactures the continental enquiry is growing steadily less, and the outlook is not therefore bright. The engineering establishments are not busy by any means, and many operatives are being discharged. — *Manufacturers' Journal, London, Eng., July 1st.*

* INVENTIONS. *

This department of THE CANADIAN MANUFACTURER is devoted to the interests of inventors, of patentees of inventions, and of manufacturers of patented articles. Patents are granted in Canada for fifteen years, the Government fee for which may be paid by instalments. Arrangements have been made by which the issue of all patents by the Canadian Patent Office and all renewals and extensions thereof will be promptly noticed in this department, and a brief description thereof given. Enquiries on these subjects are invited and will receive prompt attention. No charge will be made for answers by mail when return postage is sent. Information given free regarding patent laws and the obtaining of patents in Canada, United States, Great Britain and all foreign countries. Claims for inventions, as embodied in Letters Patent, also the illustrations of them, will be inserted in this journal at moderate charges. The attention of manufacturers is specially directed to the opportunities for lucrative business which may be acquired by close observation of whatever may appear in this department.

CANADIAN PATENTS:

The following patents have been issued from the Canadian Patent Office from June 14 to June 30, 1892, inclusive.

Information in regard to any of these patents may be had free on application to THE CANADIAN MANUFACTURER, or copies of American patents corresponding to these, where the American patent has been previously granted, can be procured through us for the sum of twenty-five cents.

MECHANICAL.

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| <p>39,137 Wire stretcher, R. Beupre, June 14th.
 39,138 Chemical fire extinguisher, J. L. Carr, June 14th.
 39,139 Fastening for oven door, J. Thompson, June 14th.
 39,140 Apple parer, corer and cutter, E. H. Elliott, June 14th.
 39,141 Portable log carrier, D. S. Stombo, June 14th.
 39,142 Excavating machine, F. W. Vollhering and I. Bernhardt, June 14th.
 39,143 Car coupler, C. H. Olds, June 14th.
 39,144 Car coupling, T. Dec, June 14th.
 39,145 Signal lamp, W. H. Brady, June 14th.
 39,146 Railway track, W. J. Hough, June 14th.
 39,147 Nut lock, D. B. Daniels, June 14th.
 39,148 Produce called "Pryosilea," for buildings, etc., M. Laffont, June 14th.
 39,149 Fire extinguisher, G. W. Haglen, June 14th.
 39,150 Laundry dryer, A. V. M. Sprague, June 14th.
 39,152 Type writing machine attachment, A. Granville and J. H. Beilby, June 15th.
 39,153 Ear for vessel, F. McDonald, June 15th.
 39,154 Firearm, W. D. Forbes, June 15th.
 39,156 Concentrator, Gates Iron Works, June 15th.
 39,157 Nut lock, D. Rhodes and A. P. Albert, June 15th.
 39,158 Car coupler, Automatic Interchangeable Car Coupling Co., June 15th.
 39,159 Feed trough, E. B. French, June 15th.
 39,160 Manufacture of steel, J. Colley, June 15th.
 39,161 Machine for cleaning cotton droppings, H. Fernhough, June 15th.
 39,162 Storm sash and window screen fastener, L. Hall, June 15th.
 39,163 Check rein worker and hook, O. Kennedy, June 15th.
 39,164 Casting iron pigs, ingots, etc., D. Dyrenforth, June 15th.
 39,166 Gate latch, G. Mallory, June 20th.
 39,167 Horse hay rake, H. A. Alden and J. E. Kirk, June 20th.
 39,168 Hot water and circulating boiler, W. and J. C. King, June 21st.
 39,169 Harness hardware, G. Mallory, June 21st.
 39,170 Organ, J. R. Hassler, June 21st.
 39,171 Hot water furnace, F. Brooks, June 21st.
 39,173 Production of butter, W. Cole, June 21st.
 39,174 Grain binder, J. R. Severance, June 22nd.
 39,175 Lubricant, C. H. Risdale and A. Jones, June 22nd.
 39,176 Continuous railroad rail, B. G. Maerklein, June 22nd.
 39,177 Vacuum pump, J. W. Fraser and J. D. Wilson, June 22nd.</p> | <p>39,178 Ventilator, P. Abrahamson, June 22nd.
 39,179 Boot stretcher, W. L. Faire, June 23rd.
 39,180 Apparatus for feeding calves, H. B. and E. Lingford, June 23rd.
 39,181 Bob-sleigh knee, P. Waite, June 23rd.
 39,182 Stove-pipe damper, J. B. Cook, June 23rd.
 39,183 Metallic fence post, B. F. Randall, June 23rd.
 39,184 Toe weight, C. Faro, June 23rd.
 39,185 Tea blending machine, F. Crompton, June 23rd.
 39,186 Water cock, W. Roberts, June 23rd.
 39,187 Tack driving machine, M. G. Mains, June 23rd.
 39,188 Oil can, A. J. Tschantz, June 23rd.
 39,189 Musical instrument, J. F. Gilmore, June 23rd.
 39,190 Saddle for cycle vehicle, C. W. Saladee, June 23rd.
 39,191 Cigarette machine, W. A. Hulse, June 24th.
 39,192 Brick kiln, J. M. French, June 24th.
 39,193 Grain binder, McCormick Harvesting Machine Co., June 24th.
 39,194 Scalper and grader, F. Noble, June 24th.
 39,195 Refrigerating compound, The Trussell Automatic Freezer Co., June 24th.
 39,196 Revolving kite, F. Ansboro and J. Liddle, June 24th.
 39,197 Horse breast collar, A. H. Fletcher, et al, June 24th.
 39,198 Buckle for shoes, Metal Goods Mfg. Co., June 24th.
 39,200 Cloth measuring machine, J. C. Craig and J. M. Taylor, June 24th.
 39,201 Ratchet wrench, H. D. Fisk and A. H. Losee, June 24th.
 39,202 Automatic central buffer coupling for railway cars, J. C. Oakman, June 24th.
 39,203 Sound arrester for steam jet smoke preventer, Western Smoke Preventor Co., June 24th.
 39,204 Egg case, W. H. Church and W. Campbell, June 24th.
 39,205 Roll paper cutter and holder, D. McLachlan and J. W. Allen, June 24th.
 39,207 Spring motor, C. A. Moore, June 25th.
 39,208 Injector, L. Schulte, June 25th.
 39,209 Vehicle running gear, C. E. Halley, June 25th.
 39,210 Folding chair, J. Coulter, June 25th.
 39,211 Sponging iron, L. H. Tarrant, June 25th.
 39,212 Pick, J. Mitchell and W. K. Birkenshaw, June 25th.
 39,213 Heating apparatus, J. N. & E. N. Gates, June 25th.
 39,214 Plow, A. M. Fitch, June 25th.
 39,215 Machine for sifting coal ashes, G. Colgate, June 25th.
 39,216 Boiling apparatus for washing wool, S. A. Mackie, June 25th.
 39,217 Filtering or purifying feed water, J. B. Edmiston, June 26th.
 39,218 Steam engine governor, F. E. & C. W. Leonard, June 27th.
 39,219 Resilient frame for mats and rugs, A. J. Worrall and T. Ball, June 27th.
 39,220 Exercising machine, D. L. Dowd, June 28th.
 39,221 Attachment for bicycle, F. H. Kinder, June 28th.
 39,224 Roofing, J. J. Giegar, June 28th.
 39,225 Gate hanging and fastening, J. H. Coleman.</p> |
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- 39,226 Combined table, prie-Dieu and confessional, H. Lavigne, June 28th.
- 39,227 Car coupling, M. W. Trexler, June 28th.
- 39,228 Railway car brake, H. Hineckley, June 28th.
- 39,229 Tank shipment and show case for liquid blacking, A. G. Farnam, June 28th.
- 39,230 Cash indicator and recorder, L. M. Mills, June 28th.
- 39,231 Car coupler, W. H. & J. T. Starkey, June 28th.
- 39,232 Securing pulleys to shafts. The Reeves Pulley Co., June 28th.
- 39,233 Pipe coupling and check valve, F. L. Messinger, June 28th.
- 39,235 Manuf. of butter, churns and apparatus therefor, Aktuebolaget Radiator, June 28th.
- 39,236 Dish washing machine, W. C. Nelson, June 30th.
- 39,237 Truck for lumber kiln, A. T. Remis, June 30th.
- 39,238 Musical instrument, C. A. Gregory, June 30th.
- 39,239 Wrench, T. Sherk, June 30th.
- 39,241 Manufacturing wire fence strands, E. F. Hathaway, June 30th.
- 39,242 Truck, J. F. Lemaître and J. C. Warren, June 30th.
- 39,243 Method of finishing the surfaces of wood, V. Victorson, June 30th.
- 39,244 Sewing machine needle, W. Piggott, June 30th.
- 39,245 Ball bearing, G. F. Simonds, June 30th.
- 39,246 Do.
- 39,247 Do.
- 39,248 Do.
- 39,249 Do.
- 39,250 Do.

ELECTRICAL.

- 39,172 Switch for electric lighting, A. P. Lundberg, June 21st.
- 39,206 Apparatus for exhausting incandescent lamps, H. S. Kaliske, June 24th.
- 39,223 Electric bolt, C. H. Dorenwend, June 28th.
- 39,234 Secondary battery, G. A. Mosher & W. Sleicher, jr., June 28th.

SCIENTIFIC PROCESSES.

- 39,151 Method for transforming heat into mechanical energy without increase of entropy, H. Mehuer, June 15th.
- 39,155 Separating sulphur from sulphurous pig iron, G. Hilgenstock, June 15th.
- 39,165 Manufacture of illuminating and heating gas, J. R. Kendall, June 20th.
- 39,199 Manufacture of beer, The Pfandler Vacuum Fermentation Co., June 24th.
- 39,222 Means for testing and recording the characteristics and properties of flour and dough, J. Hogarth, June 28th.
- 39,240 Treatment of minerals containing nickel for the separation of copper, nickel and cobalt, J. de Coppet, France, June 30th.

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Bricks made of plaster of paris and coal are now used in the construction of powder mills. In case of explosion they offer slight resistance and are broken to atoms.

An excellent substitute for coal is now being made in Sweden. It is composed of wood charcoal and coal tar. A paste of these substances is made, which is run through a press. The briquettes thus formed are allowed to dry for several weeks before using.

The new process of making tin fruit cans by machinery is said to prove a decided success both mechanically and financially. The machine is so contrived as to cut a piece of tin into four parts and then pass them to a feeder, where they are seized by a revolving wheel, by which the can is formed. By another unique process it is completely soldered, after which the machine tests it by dipping it in hot water and subjecting it to pressure. When finished the can has no solder on the inside, and is wholly free from acids.

A WRITER in a contemporary calls attention to the fact that the atmosphere exerts a pressure of a ton on a square foot, and urges somebody to get up a motor to utilize this undeveloped source of power. We will furnish the motor if he will show us some place where the atmosphere does not press a ton on the square foot to which we can carry our exhaust pipe without getting up an equal back pressure. One may as well expect to get power from a turbine by sinking it in forty fathoms of water. He would have pressure enough, but the head in the tail-race would be the same as it was in the mine, which is just the trouble with atmospheric pressure as a source of power.—*Power.*

ONE of the marvels of the recent electrical exposition at Frankfurt was a six-foot electric search light of 20,000 candle power. Schuckert, the Nuremberg electrician, astonished Europe in its construction. Schuckert is now at work on a larger light for the World's Fair. It will be seven and one-half feet, and of at least 25,000 candle power. The Frankfurt light could be seen plainly at Bingen on the Rhine, forty-five miles away. It is expected that the search light at the World's Fair can be seen at least sixty miles away. Electrical Engineer Sargent is making plans for a tower 300 feet high, on which the big light will be mounted. At a height of 100 feet above the ground will be two six-foot search lights, and the three will suffice to illuminate the skies for miles around Jackson park. Brilliant feats are accomplished with these search lights. Sheets of light can be projected with parallel, converging or diverging rays. When the rays are thrown out parallel a clearly de-

lined sheet of flame seems to be suspended in the darkness. By changing the reflector the rays are brought to a focus at a long distance from the central station. These lights, turned on the buildings and alternately shot into the heavens, or out across the lake, will produce brilliant electrical effects.

THE PREPARATION OF WEATHER AND WATER-TIGHT COATINGS FOR BUILDINGS.

IN 1883, in consequence of the upsetting of a vessel containing kitchen salt, a workman, in order to conceal the effects of the accident, brushed up some of the spilled salt into his whitewash pail; the result was the production of a wash as hard as cement, and which could not be removed by scrubbing. This was due to the hygroscopic action of the salt, which absorbs water and permits of the speedy combination of the lime with the carbonic acid of the atmosphere. A trial of this composition upon the brick wall of a well hole or shaft for light, in which case it was applied with a syringe to save scaffolding, stood extremely well, and after the lapse of four years the coating was as good as ever. The use of three parts of quicklime to one of common salt is recommended.

On the use of paraffin and water-glass, the latter of which has latterly lost all credit in the building trade, it is pointed out that a solution of melted paraffin in three parts of heavy coal-tar oil, kept fluid while being applied by immersion of the containing vessel in hot water, forms a most excellent wash or paint for buildings very much exposed to atmospheric influences.

For the successful employment of water-glass, two conditions are essential, the stucco must be uniform in texture, very hard and very thin, and the solution must not be applied while the plastering is "green," for in that case the calcium hydrate at once decomposes the silicates. Sufficient lime must be allowed for the combination of the atmospheric carbonic acid with the free lime. The water-glass may be used as follows: Ten parts of sharp dry sand, three parts of air-slacked lime, 2 parts of chalk or pulverized limestone, and soda water glass of 33 deg. B. are taken. The sand, lime and chalk are first passed dry through a sieve, and the ingredients are then mixed with the water-glass, diluted with twice its weight of water into the consistency of mortar, and used as a setting coat over the wall surface to be protected. This coating, in the course of a day or two, sets as hard as a stone, and may then be repeatedly saturated with dilute soda water glass. Various other recipes are given for colored solutions, and for varnishes or lacquers to serve as coatings for paper and felt roofings.

GROWTH OF THE BEET-SUGAR INDUSTRY.

AMONG the industries which have been greatly benefited by the McKinley law the manufacture of sugar from raw material raised in this country is conspicuous. Sugar to-day is 2 cents a pound cheaper than it was before the law went into effect, and this difference in price is made good to the manufacturer of sugar in the bounty paid by the Government. Under the policy of Protection to home industry and reciprocity with other Governments the amount of sugar consumed in the United States in 1891 showed an increase of 19 per cent. over that of 1890. The beet-sugar industry has assumed an important position within the last year, and there are now six large beet-sugar factories in operation, namely: At Watsonville, California, owned by Claus Spreckels; the Alameda

Beet Sugar Company, at Alvarado, California; one near Salt Lake City, controlled by elders in the Mormon Church; and three owned by the Oxnard Beet Sugar Company, which are at Chino, in Southern California, and at Norfolk and Grand Island, in Nebraska.

H. T. Oxnard, president of the company which has erected these last three factories, recently said: "At each one of our factories we make 60,000 pounds of sugar a day, and in doing this consume 350 tons of sugar-beets, 50 tons of coal, 40 tons of limestone, and give employment to 200 men in the factory proper. The sugar-beet can be grown successfully in almost any of our Northern Central States. I consider that Wyoming, Colorado, the Dakotas, Minnesota, and Long Island are peculiarly adapted to the successful culture of the beet. Senator W. D. Washburn, of Minnesota, is deeply interested in the subject, and has visited our factories in Nebraska twice within the last few months. He is now endeavoring to place the matter before the farmers of his State in the favorable light with which he himself regards it. Secretary Rusk and Senators Manderson, Pad-dock, Felton, Jones, Stanford, Casey, and Pettigrew are all warm supporters of and believers in the future of beet-sugar."—*New York Tribune*.

BORAX.

ONE of the most desirable articles in the laundry or the wash-room, and valuable in many purposes connected with the household economy, as well as in scientific uses, is the simple salt known to every one under the name of borax, but probably not much known as to its constituent elements or its nature, by most of those who use it more or less frequently. Biborate of sodium, to use its chemical name, first came as a natural product from Tibet, by way of India, under the name of tinal, the salt being covered with a green crust, of a soapy nature, which requires removal before the borax is available for use. It is also found in other portions of Central Asia, in Peru, in Transylvania and in Canada, but the finest and purest natural salts thus far discovered come from California, being found in what is now known as Borax Lake. This body of water, about 4,000 by 1,500 feet, though only some three feet in depth, is so heavily charged with the salt that the bed is covered with the crystals, in a state of such purity that they are ready for use in assaying and for like purposes.

The general supply, however, is principally manufactured from the elements, boracic acid and soda, though it would hardly interest the readers of *Good Housekeeping* to go through the chemical processes by which it is prepared. Boracic acid itself is an element of volcanic gases, and is found in combination with various salts in the vicinity of active or extinct volcanoes in different portions of the world. In addition to the uses above specified, borax is largely used in glass making, in pottery glazing and enameling, and medically for the treatment of external sores and ulcerations. It is valuable as an antiseptic, and in Sweden is largely used in the preservation of meat and milk, producing, it is claimed, no unpleasant or unwholesome effects.—*Good Housekeeping*.

WILM KNOX.

JOHN H. ELLIOT.

KNOX & ELLIOT,

Architects, Engineers, & Mill Constructors

OFFICE: 19 Queen St. East, Toronto.

"PERFECTION"

Stoves, Ranges, and Furnaces

Enjoy the unique distinction of being made entirely from original designs and original wood patterns. We confidently place them in competition with the best American productions duplicated by Canadian makers.

WRITE US FOR PARTICULARS.

The Jas. Smart Manufacturing Co., Ltd.

BROCKVILLE, ONTARIO, CAN.

ATTENTION, DYERS!

One Dip Fast Colors and Black

FOR ALL PLAIN AND MIXED FIBRES.

SHADES MATCHED. YOU CAN DYE

Cotton Warp and Wool Filling in One Dip

With my colors and save time and money.

ALEX. P. MENDE, 14 Water Street

Manufacturer and Importer.

NEW YORK CITY.

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.

A LARGE public grain elevator is about being built at Winnipeg, Man.

MR. FRANK LLOYD will build a large steam lumber mill at Chomainus, B.C.

MESSRS. HAMMILL & WHITE intend erecting a \$200,000 saw mill at Albert, B.C.

MESSRS. BATEMAN & CHAPMAN are erecting a 30,000 bushel grain elevator at Hartney, Man.

MR. JAMES WOODRUFF, late of Kingston, Ont., will build a 75-barrel flour mill at Killarney, Man.

THE Welseley Milling Company of Welseley, Man., are applying for incorporation and will build a grist mill.

THE Dominion Disinfectant Company has been incorporated at Montreal with a capital stock of \$5,000 to manufacture disinfectants, etc.

MESSRS. VROOM BROS., manufacturers of furniture, St. Croix, N.B., have recently made large additions to their factory in the way of machinery, etc.

THE Reimers Piano Company of Toronto has been incorporated with a capital stock of \$12,000 to manufacture pianos and other musical instruments.

THE Fraser River Fruit Canning Company, of Chilliwack, B.C., are making extensive additions to their cannery, and will in future manufacture pickles.

LA PRAIRIE Pressed Brick and Terra Cotta Company has been incorporated at Montreal with a capital stock of \$150,000 to manufacture brick, tiles, etc.

THE St. Croix Soap Manufacturing Company, St. Croix, N.B., have been making extensive additions to their works which will enable them to double their output.

THE Duncan Lithographing Company, of Hamilton, Ont., has been incorporated with a capital stock of \$50,000, to carry on the business indicated by the name.

THE Lake Weedon Pulp Wood and Lumber Company has been incorporated at Lake Weedon, Que., with a capital stock of \$25,000 to manufacture pulp wood, lumber, etc.

THE Lansdowne and Rockport Telephone Company has been incorporated at Lansdowne, Ont., with a capital stock of \$2,500, to build and operate a telephone between the two towns named.

THE West Lorne Canning and Evaporating Company has been incorporated at West Lorne, Ont., with a capital stock of \$20,000, to engage in the canning and preserving of fruits, vegetables, etc.

THE Brooks Manufacturing Company, Peterborough, are branching out into the manufacture of porcelain articles for electrical purposes. They intend making everything that is required in that line.

THE Kinney-Haley Manufacturing Company's planing mills and woodenware factory at Yarmouth, N.S., and the factory of the Chute-Hall Organ Company, were destroyed by fire July 1st, loss about \$40,000.

THE J. D. King Manufacturing Company of Toronto, late Messrs. J. D. King & Co., manufacturers of boots and shoes, have been voted a bonus equivalent to \$12,000 to establish a branch of their works at Levis, Que.

CENTRAL Bridge Works, Peterborough, have been awarded the contract for building the Cummings bridge at Ottawa. It will be two spans of 100 feet each, and two spans of 110 feet each, width of roadway 24 feet; sidewalk 6 feet.

THE English Portland Cement Company, of Montreal, who recently started works at Mailbank, near that city, inform us that they have orders booked which will keep them running at their full capacity for the balance of this season.

THE old and well established jewelry firm of Messrs. J. E. Ellis & Co., Toronto, have merged their business into an incorporated joint stock company with a capital stock of \$100,000 under the name of The J. E. Ellis Company, Limited.

THE Citizens' Electric Company of Rat Portage, Ont., have given a contract to the National Electric Light Company, of Eau Claire, Wis., to put in the dynamos with all the latest improvements sufficient to supply 2,000 lights of 16 candle power.

THE Ontario Government are establishing a binder twine plant in Central Prison, Toronto. The labor to be expended in manufacturing the twine is to be that of convicts. And thus it is that honest labor is to be supplanted by prison labor.

THE British America Starch Company, Brantford, Ont., has been incorporated with a capital stock of \$150,000 to take over the plant and business of the British America Starch Works Company, of that city, and to manufacture starch, glucose, etc.

MESSRS. PHIPPEN & GRAHAM, of Belleville, Ont., are having a screw steamer built at Picton, Ont., which will soon be ready for service. She is 127 feet long, 25 feet beam and 10 feet deep. The cylinder of the engine is 18 inches diameter and 20 inches stroke.

THE Dominion fishery cruiser *Carlew*, built by the Polson Iron Works Company, at their yards at Owen Sound, Ont., has had a trial trip when she proved to be all that was desired of her. The company are now building a third cruiser for the Dominion Government.

THE Napanea Cement Works, Napanea, Ont., are adding now grinding pans and other apparatus to their extensive equipments.



The Standard Drain Pipe Co., St. Johns, P.Q.

Manufacturers of Salt Glazed Vitrified Sewer Pipes, Double Strength Railway Culvert Pipes, Inverts, Vents, and all kinds of Fire Clay Goods. The Standard Drain Pipe Co., of St. Johns, P.Q., Ltd. W. C. THORNTON, Pres.

For Sale!

The manufacturing premises occupied by

The Masson Manufacturing Co.,

. . . OSHAWA . . .

Brick Building 300 x 45 feet, 2 stories; and 180 x 65 feet, 1 story. Can be had with or without machinery.

Easily Altered to Suit Any Business.

Small cash payment, balance to suit purchaser. Further particulars on application.

Good Factory to Let!

\$15.00 PER MONTH

Brick Building, 25 feet front, 75 feet deep, two stories, situated in the centre of town of Oshawa. 25 H.P. Engine and Line Shafting, all in good order. Apply

J. M. BROOKS, - Box 116, OSHAWA.

These works are being worked to their utmost capacity and find it impossible to fill all the large orders which they are continually receiving.

MESSRS. DARLING BROS., Montreal, manufacturers of machinery, etc., have recently enlarged their works by a 60x40 feet addition. They have just concluded arrangements with Messrs Perry & Domerott, of New York, to have control in Canada of the P & D transmitter for driving electric motors.

THE capital stock of the following named incorporated companies in Ontario, have been increased as follows: - Niagara Falls Electric Light and Power Company, Niagara Falls, from \$20,000 to \$40,000. The Novelty Manufacturing Company, of Newmarket, from \$12,000 to \$25,000.

THE Haworth Belting Company, Toronto, have just shipped two 36-inch and two 16-inch dynamo belts to the Kingston Electric Light Company, and have received an order for two 24-inch belts for The T. Eaton Company, Toronto and a large main driving belt for North Toronto Electric Light Company.

MESSRS. MILLER & Co., Trenton, Ont., a new concern who have recently engaged in the canning business have completed the erection of their factory buildings and the equipment of them with all desirable machinery and modern appliances. The floor space of their factory is about 15,000 square feet.

THE Lakeport Preserving Company, Lakeport, Ont., have built, equipped and put in operation a new factory in Trenton, Ont., in extension of their business, the capacity of which will be to put up 200,000 cans per year. Last year the output of the Lakeport factory was 600,000 cans, and during the present season both works will be operated to their full capacity.

THE Central Bridge and Engineering Company of Peterborough, Ont., has been incorporated with a capital stock of \$200,000 to manufacture steel and iron bridges, architectural and structural work of all descriptions, steel railroad cars, etc. Mr. W. H. Law, heretofore the proprietor of the Central Bridge Works of Peterborough, is at the head of the new concern.

MESSRS. W. D. SPOONER & Co. are a new firm recently established in Montreal, to manufacture morocco and Dongola, goat and calf leather. They occupy the premises formerly used by Mr. D. Parker. Mr. Spooner was connected with Messrs E. Frank

Moseley & Co. for twenty-three years, and Mr. James Widdows, his partner, was four years with the same concern.

THE Toronto Steel Clad Bath and Metal Company has been incorporated in Toronto with a capital stock of \$40,000 to purchase the patent of Mr. George Booth for his steel clad bath tub and to manufacture the same, and also other bathing apparatus and sanitary appliances. Mr. Booth, who is at the head of this concern, is the well known treasurer of the Canadian Manufacturers' Association.

MESSRS. ROSS, HALL & BROWN, of Rat Portage, Ont., have put in a 500-horse power water wheel at their water power at Norman. Several enquiries have been received for power, which have led to this being done, and arrangements have been made so that other large wheels can be put on as required. They expect at an early date to organize a stock company to erect a large flour mill on the property.

MR. W. C. WHITE, Montreal, have just imported 130 tons of Scotch and German steel plates, with which they will build 3 new gas receivers for the Montreal gas works. Mr. White is now constructing a steam boiler for the forthcoming Montreal Exhibition, which will be used as the model which is to be used at that time in the lectures which are to be given to engineers and steam users, showing how boilers should be set, etc.

MR. A. P. MENDE, 14 Water street, New York, has sent us a sample of woollen yarn, dyed with the "one dip" black dye, manufactured by him, and to which he calls attention in his business card in another part of this paper. We are informed that the cost of this dye is ten cents per pound, and that the cost per pound of yarn dyed is 1 1/2 cents. This dye is specially adapted to dyeing not only woollen but cotton and mixed yarns also. Mr. Mende informs us that he is enjoying a very large demand for this "one dip" dye.

THE Canadian Mineral Wool Company, Toronto, have issued a circular catalogue, having reference to their business, in which they call attention of steam users to the great loss sustained by them in the radiation of heat from uncovered steam pipes. They say that every square foot of wrought iron pipe containing steam at 260° loses by radiation, if uncovered, an equivalent of 340 lbs. of coal per year. Allowing \$4 per ton for coal this loss would amount to 68c. on each square foot, or \$68 on every 100 square

BELTING

Patent Rolled Shafting,

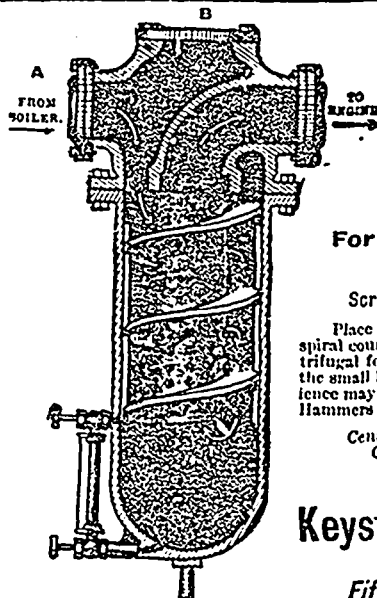
Hangers AND
Pulleys,

Wrought Iron Pipe and Fittings.

RICE LEWIS & SON

Limited.

General HARDWARE Merchants,
TORONTO.



SIMPSON'S CENTRIFUGAL STEAM SEPARATOR,

For Supplying Clean and Dry Steam to
Engines, Dry Houses, etc.

Screwing Flanges included with each Flanged Separator.

Place Separator as close to engine as possible. The steam taking a spiral course between the throats causes the water to be thrown by centrifugal force against the outer walls, while the dry steam goes through the small holes to centre of pipe. Steam can enter at A or B as convenience may require; also used in conveying steam long distances for Steam Hammers and Dry Houses.

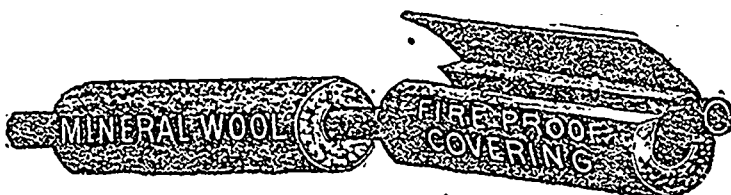
Centrifugal Steam Separators, Centrifugal Oil Extractors,
Centrifugal Exhaust Heads, Keystone Double and
Single Plunger Belt Pumps, Keystone Feed-
Water Heaters and Purifiers.

Keystone Engine & Machine Works

W. L. SIMPSON, M.E.

Fifth and Buttonwood Sts., Philadelphia, Pa.

LAMKIN'S PATENT.



What is Mineral Wool?

A Fire and Frost-proof insulating material, derived from rock. Used for covering Steam, Hot Water, and Hot Air Pipes, Boilers, and Furnaces, and for Densifying and Fireproofing buildings. Covering Hot Pipes and Boilers saves forty per cent. in fuel.

EXCLUSIVE DEALERS AND PATENTEES.

Canadian Mineral Wool Co., 122 Bay St., Toronto.

SEND FOR CATALOGUE.

foot. If enclosed with mineral wool covering (the best non conductor known) 85 per cent. of this loss will be saved and the amount of saving each year will be more than double the cost of the covering applied to the pipes.

The important improvements being made at the Smith's Falls Malleable Iron Works, Smith's Falls, Ont., of which Mr. W. H. Frost is proprietor, are being rapidly pushed to completion. A feature of this is a new moulding shop 240 feet long and 60 feet wide, and an additional furnace of six tons capacity, which will enable an output of malleable castings of 2,400 tons per year. These castings are used for the manufacture of agricultural implements, carriage hardware, etc. The entire plant will be in active operation in October.

The partial success which has attended the pioneer efforts of parties in Vancouver to develop the deep sea fisheries of the Province, has attracted considerable attention in the Eastern States, and it is stated that as soon as the firms engaged in the fish business are satisfied as to the permanence of the Pacific fisheries, they will embark all the capital necessary for the development and operation on a

large scale. Before next winter (when the demand for the Pacific supply is the greatest) we may, therefore, expect important improvements.—Vancouver, B.C., *Commerce*.

The paper mills of the E. B. Eddy Company, at Hull, Que., are to be further increased by another Fourdriner machine, which will be placed in the stone building now occupied as a sash and door factory. This building is about 180 feet by 70 feet, and is large enough for two such machines. The present one will be placed so that another can be added when required. Preparations are being made for the erection of another new stone building, about 200x80 feet, of the same substantial character as the other building. This building will be used as a storehouse and paper finishing room. Messrs. Black & Richards, who had the contract to build the company's indurated fibre ware factory in 1887 and their pulp mill in 1888, the sulphite mill in 1889 and No. 1 and 2 paper mills last year, have secured the contract for the alterations for the new mill and also for the erection of the new storehouse.

The Dodge Wood Split Pulley Company, Toronto, have recently supplied outfits of their popular split pulleys to following well-

BRUNNER, MOND & CO., Limited, 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.**

WINN & HOLLAND, Montreal,

Sole Agents for the Dominion of Canada.

A. ALLAN, PRESIDENT.

J. O. GRAVEL, SECRETARY-TREASURER.

F. SCHOLÉS, MANAGING DIRECTOR.



The CANADIAN RUBBER CO. of Montreal and Toronto. CAPITAL \$2,000,000.

Manufacturers of First Quality Rubber Boots and Shoes, Superior Quality Rubber Beltings, including The Forsyth (Boston Belting Co.) Seamless Rubber Belting. For which we are Sole Agents and Manufacturers in Canada. We hold the Patent and sole right to manufacture in Canada.

The Patent Process Seamless Tube Hose

We make all our Hose by this process. Ask the merchant you deal with for it and take no other.
RUBBER PACKINGS, VALVES, GASKETS, ETC.

Head Office and Factory: **MONTREAL.**

J. J. MCGILL, Manager.

Western Branch: **Corner Front and Yonge Sts., Toronto.**

J. H. WALKER,

Manager.

THE POLSON IRON WORKS CO., Ltd.

Capital, \$300,000

HEAD OFFICE, TORONTO

Builders of the Celebrated BROWN AUTOMATIC ENGINE.

Single, Tandem and Triple Expansion. Specially Designed for

ELECTRIC LIGHT PLANTS.

12,000 Horse-Power

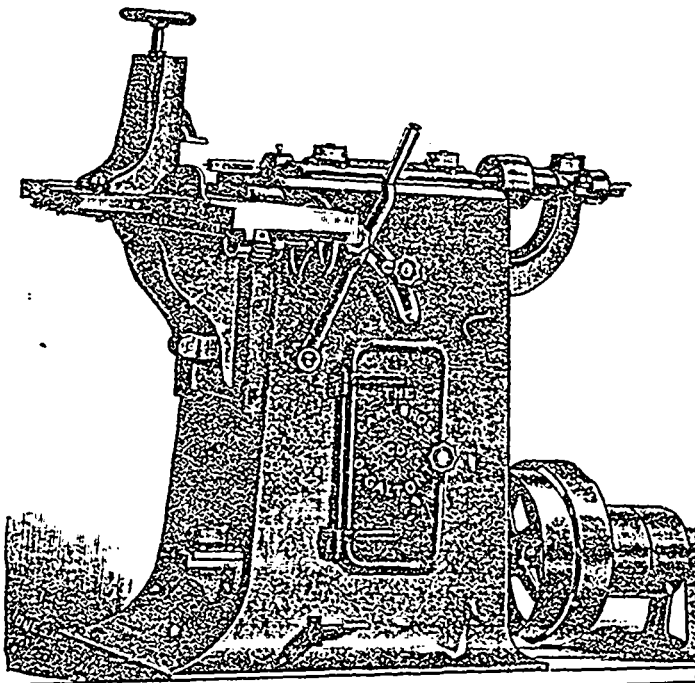
of these Engines built by us are NOW IN USE IN ELECTRIC LIGHT PLANTS IN CANADA

known power users: Messrs. Gillies Bros' new saw mills, Braeside, Ont.; Thackray & Co.'s new planing mill, Ottawa; Buell, Orr & Hurdman's new saw mills, Hull, Que. Bolts, pulleys, and five large rope drives for Rathbun & Co.'s mills at Gravenhurst, Ont., and to Robert Connors' saw mills at Upper St. Francis, N.B. One rope transmission to Ontario Agricultural College, Guelph, Ont. One rope drive to Thackray & Co., Ottawa. Also extensive shipments to their many agencies, both Canadian and European. The company are in receipt of the following letter, which explains itself—THE DOGGE WOOD SPLIT PULLEY CO., TORONTO. DEAR SIRS—The Manilla rope power transmitter you put in for our car works is giving us excellent satisfaction. We see no reason why it should not continue effective and reliable and with little probability of getting out of order. Our experience thus far warrants our recommendation. Yours truly, THE RATHBUN CO. This refers to a 75 horse power drive, 330 feet between centres, running out doors.

A REPORTER noticed the Waterous team going to the station last night with two very large pulleys, with two men on the wagon painting them. This rather raised his curiosity, and, on enquiry, he found that this was a shipment of two 82 x 16 inch face grip pulleys, arranged to work on one central driver 50 inches in diameter, being made for Hunt Brothers, of London, for their electric light plant. The order was received Monday, June 27th, and the pulleys shipped last night, making just nine working days, out of which can be counted the holiday of the 1st of July, when the Waterous people excused to Buffalo. When the mechanism of these pulleys is taken into consideration, it will be seen that this is very fast work. While on this subject, it might be mentioned that the Waterous people have shipped about twenty-five to thirty tons of these pulleys during the month of June, two of the largest shipments being to the Hamilton Electric Light and Power Company, and the Kingston Light, Heat and Power Company. The new feature of placing two pulleys on a double driver, economizing space, is highly appreciated by the electrical companies, who, as a rule, drive their dynamo from each side of their shaft, and crowd their pulleys as close together as possible. Several prominent electricians have (after a thorough examination) expressed their

approval of the Waterous grip pulley, making the statement that they had not previously seen a pulley that they would care to attempt to use, and for that reason had not up to date used grip pulleys. The shipment just made to Hunt Bros. is the fifth to them of grip pulleys, they having some ten or twelve pulleys and couplings in use at their electric station in London.—*Brantford Expositor, July 7th.*

THE Vancouver, B.C., *Commerce*, speaking of the British Columbia Iron Works Company, of that place, says: "Few industries in this Province have shown such remarkable growth and development as the British Columbia Iron Works, which is now one of the leading industries of Vancouver, and in fact of the whole Province. During the early part of 1890 several citizens thought that the business of this city warranted the establishment of a second foundry and machine shops, and the result was the organization of the British Columbia Iron Works Company. The capital stock of the company was \$50,000, but in order to meet the requirements of the increasing business, it was afterwards decided to increase the capital stock to \$250,000. The works are on Alexander street and alongside the main line of the C.P.R., in close proximity to the water front. During the early part of the present year the foundry was nearly doubled in size and new machinery put in. Steady employment is furnished to a hundred men, and frequently the men have to work overtime. As lumbering is the principal industry of the Province, the company have paid special attention to the manufacture of saw mill machinery, and in this line have been very successful. The Kendall band saw has been designed by this company, and these have given the greatest satisfaction everywhere, as they are not only cheaper to run but also cut more than any other saw. The company are also the manufacturers of the British Columbia shingle machines, which are now in use in several shingle mills, both in Vancouver and New Westminster. They are also the sole manufacturers of steam log hauling machines in this Province. This invention is one of the greatest importance to lumbermen, as it will entirely dispense with the use of oxen, while at the same time do a great deal more work. The company also make a specialty of marine work, and have made new engines for the steamers *Mamie* and *Iona*, while they have overhauled and done minor repairs to most of the steamers belonging to this port."



Hollow Square Chisel Morticer

FOR MORTICING IN HARD WOODS

CANT BROS. CO., Ltd., GALT, ONT.

Safford (Patent) Radiators

FOR

HOT WATER AND STEAM HEATING

Lead the World

MADE IN

ALL SIZES and HEIGHTS

Send for Catalogue

MANUFACTURED ONLY BY

The Toronto Radiator Mfg. Co.

TORONTO, - ONTARIO.

Branches:

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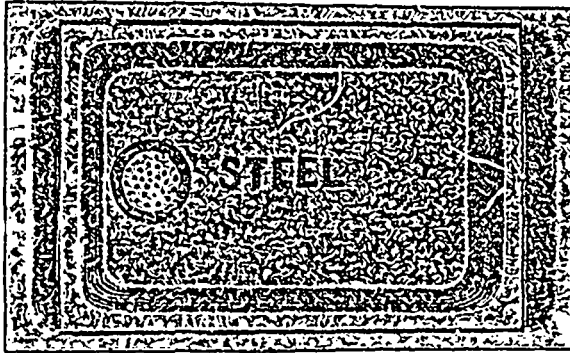
SEAMLESS WROUGHT STEEL KITCHEN SINKS.

These SINKS are pressed from
SINGLE SHEETS OF STEEL

without seams or joints, rounded at the sides and corners so that no dirt can possibly collect anywhere.

These Kitchen Sinks are finished in PAINTED and GALVANIZED.

KEMP MANUFACTURING CO.



Owing to the toughness of the material (steel)

BREAKAGE IS IMPOSSIBLE

and in consequence of their comparative lightness, FREIGHT CHARGES are less than HALF THE PRICE of the cast iron article.

TORONTO, ONTARIO

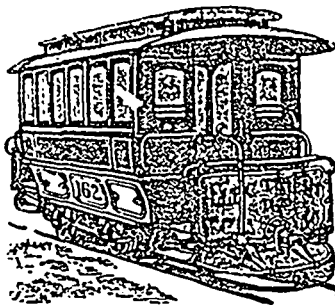
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FINE

ELECTRIC CARS

OUR

SPECIALTY



ST. CATHARINES, ONT.

MANUFACTURERS OF

Horse and Trail Cars

OF

EVERY DESCRIPTION

THE MONARCH ECONOMIC BOILER

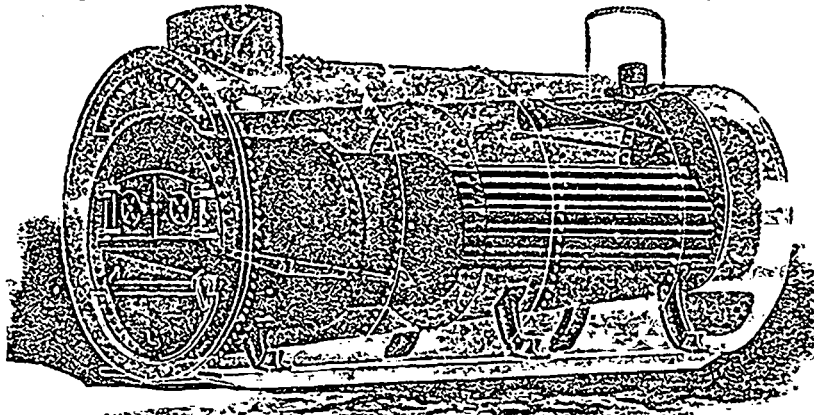
Patented Can. May 6, 1866;
Feb. 10, 1887.

Patented U.S.A. Oct. 7, 1886,
Aug. 23, 1887, May 8, 1888.

Is the strongest and most
Portable Boiler

in use, and its high economy in fuel makes it specially valuable to gold miners

Tested evaporation 10.25 lbs. water per pound of ordinary Nova Scotia coal.



Manufacturers of
The Robb-Armstrong Automatic Engine,

The Hercules Engine,
(For all purposes).

Saw Mill, Electric Machinery
BELTINGS,

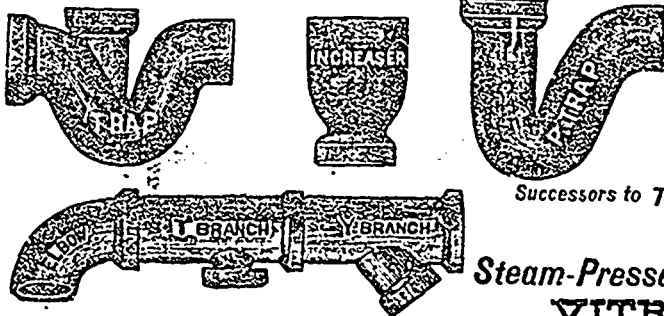
PACKINGS, OILS, Etc.

Robb Engineering Co.

LIMITED,
Successors

A. ROBB & SONS
AMHERST, N.S.

HENRY NEW, Pres. J. H. NEW, Vice-Pres. A. E. CARPENTER, Sec.-Treas.
TORONTO



THE HAMILTON AND TORONTO

SEWER PIPE CO'Y,

(LIMITED),

HAMILTON, CANADA.

Successors to The Campbell Sewer Pipe Co. and The Hamilton Sewer Pipe Co.

—MANUFACTURERS OF—

Steam-Pressed, Salt-Glazed VITRIFIED SEWER PIPE

FLUE PIPES, CHIMNEY TOPS and SMOKE PREVENTIVES.

Established 1860.

Millers' and Manufacturers' INSURANCE COMPANY.

STOCK AND MUTUAL.

OBJECTS.

1. To prevent by all possible means the occurrence of avoidable fires.
2. To obviate heavy losses from the fires that are unavoidable by the nature of the work done in mills and factories.
3. To reduce the cost of insurance to the lowest point consistent with the safe conduct of the business.

METHODS.

All risks will be inspected by a competent officer of the company, who will make such suggestions as to improvements required for safety against fires, as may be for the mutual interests of all concerned.

Much dependence will be placed upon the obligation of members to keep up such a system of discipline, order, and cleanliness in the premises insured as will conduce to safety.

As no agents are employed and the company deals only with the principals of the establishments insured by it, conditions and exceptions which are so apt to mislead the insured and promote controversy and litigation in the settlement of losses will thus be avoided.

The most perfect method of insurance must, in the nature of things, be one in which the self-interest of the insured and the underwriters are identical, and this has been the object aimed at by the organizers of this company.

W. E. HOWLAND, **JAMES GOLDIE,**
Vice-President. President.

HUGH SCOTT, Managing Director.

Applicants for insurance and other information desired, please address **MILLERS' AND MANUFACTURERS' INSURANCE COMPANY** No. 24 Church Street, Toronto.

Established 1872.

THE

Accident Insurance Co.

OF NORTE AMERICA.

NEW FEATURE:

Joint Insurance for Partnerships.

Important to Manufacturing Firms.

MEDLAND & JONES, Gen'l Agents,

Mail Building, TORONTO.

THE MANUFACTURERS' Life Insurance Company

PRESIDENT **GEORGE GOODERHAM,**
President Bank of Toronto.

**A
Five
Years'
Record**

Income	\$207,486.49
Increase over previous year	\$38,030.06
Gross Assets	437,959.11
Increase over previous year	86,219.16
Insurance Reserve for the protection of Policy-holders	289,045.00
Increase over previous year	71,795.00
Surplus on Policy-holders account	135,307.63
New Business written in 1891	2,111,100.00
Insurance in force Dec. 31, 1891	7,414,761.00

Head Office, - TORONTO.

JOHN F. ELLIS, - - - **Managing Director.**

The Bell Telephone Co.

OF CANADA,

MANUFACTURERS AND DEALERS IN

Telegraph and Electrical Instruments,

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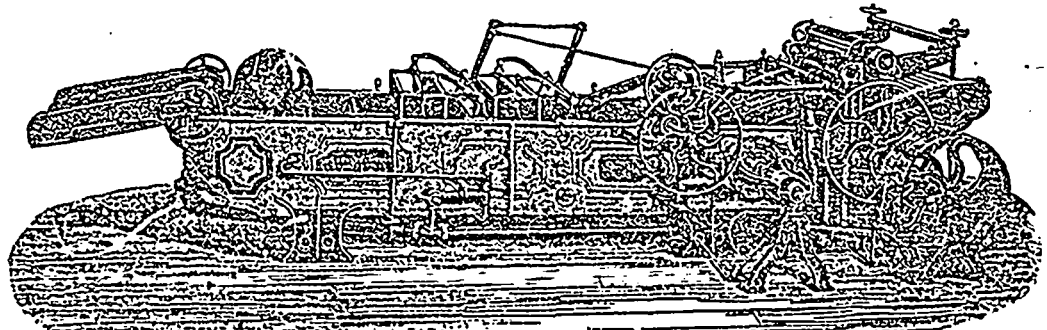
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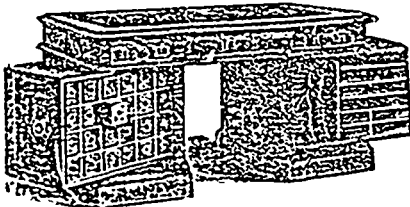
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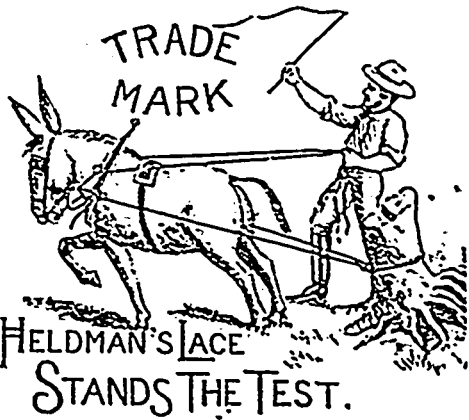
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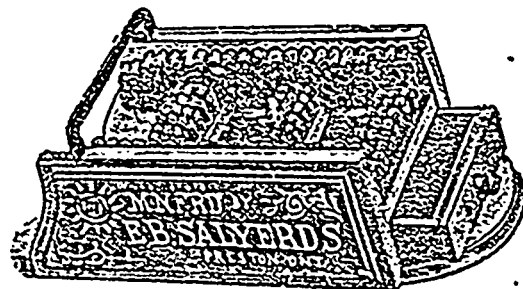
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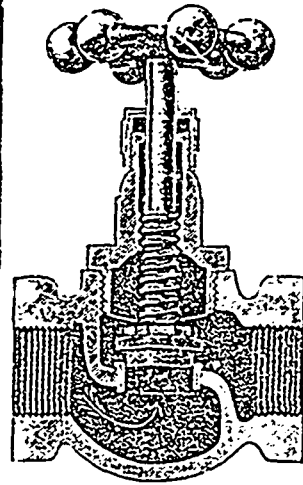
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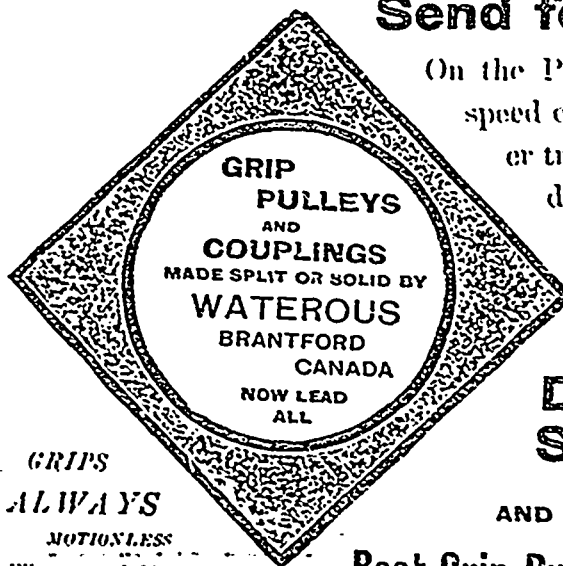
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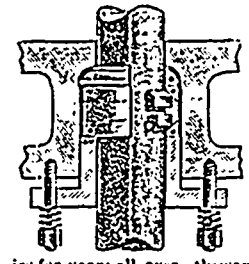
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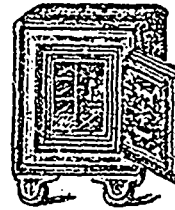
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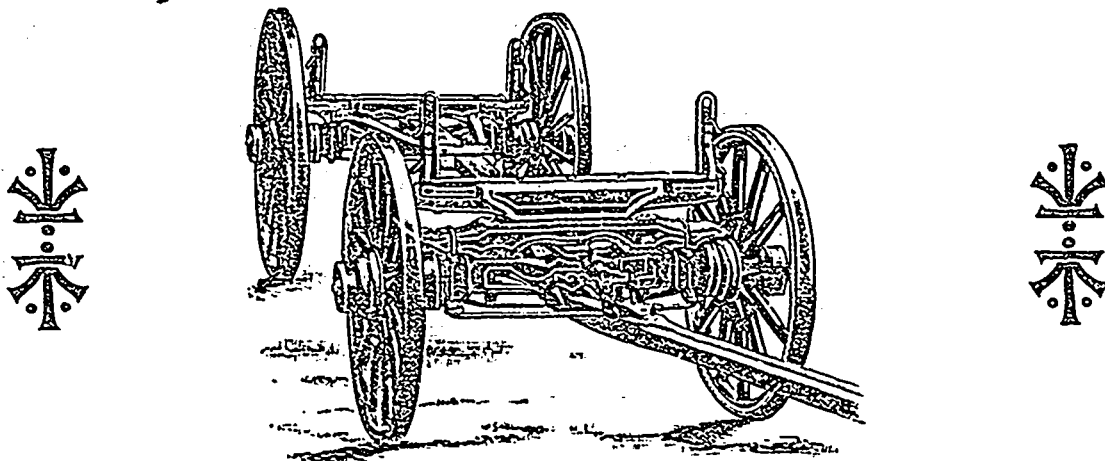
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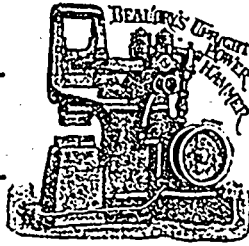
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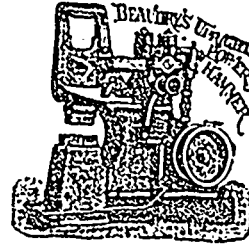
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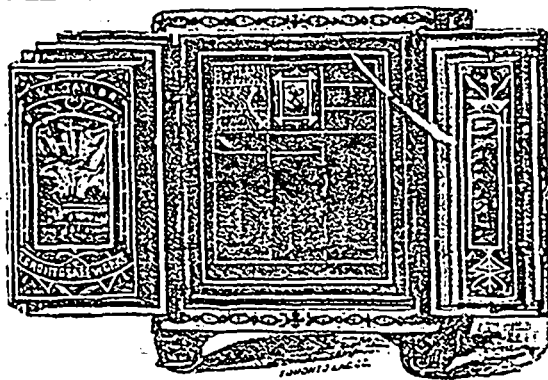


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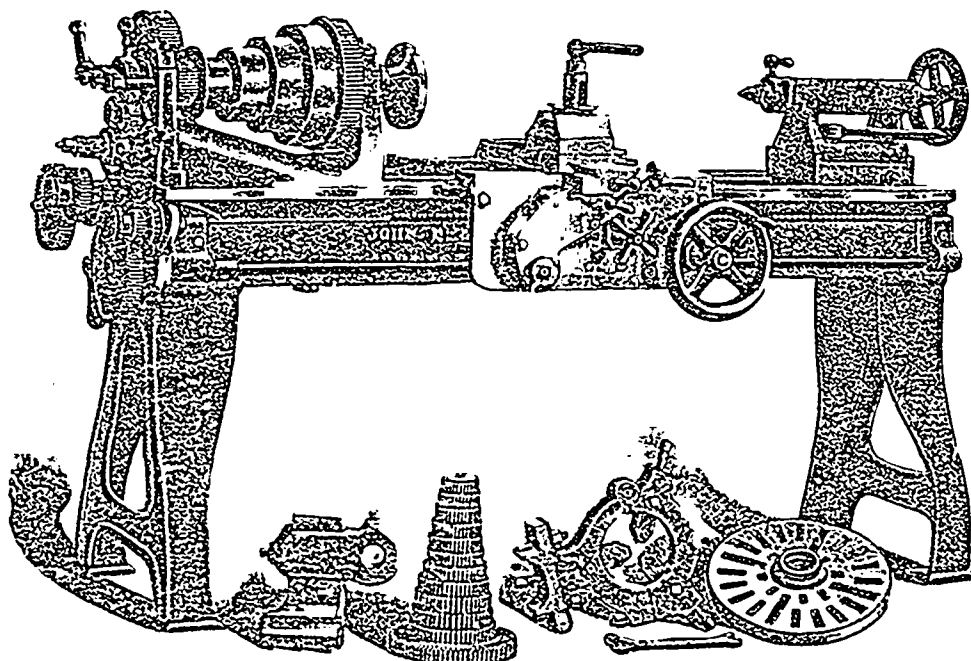
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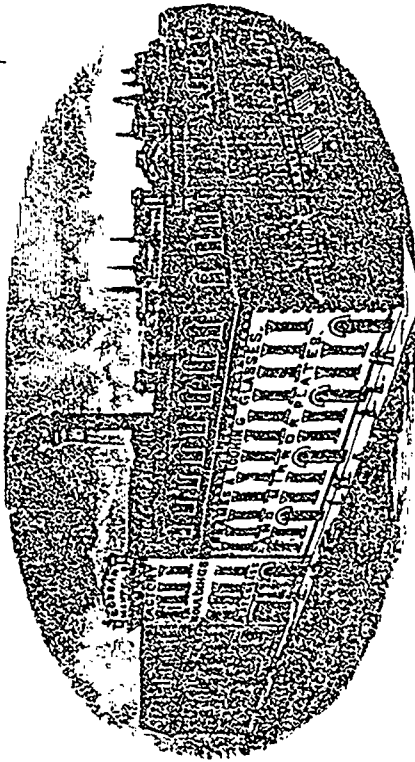
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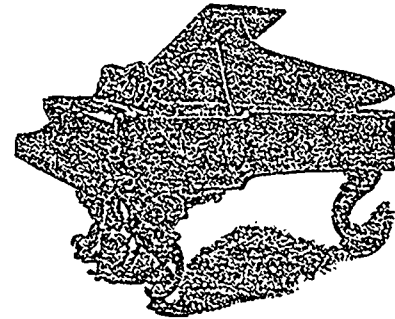
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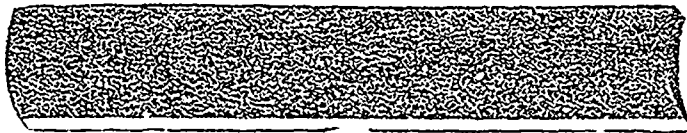
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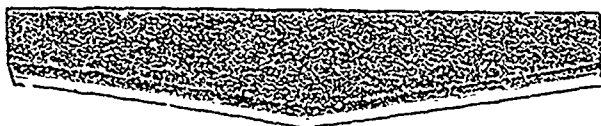
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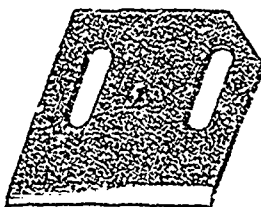
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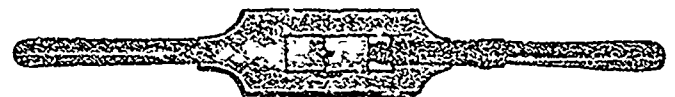
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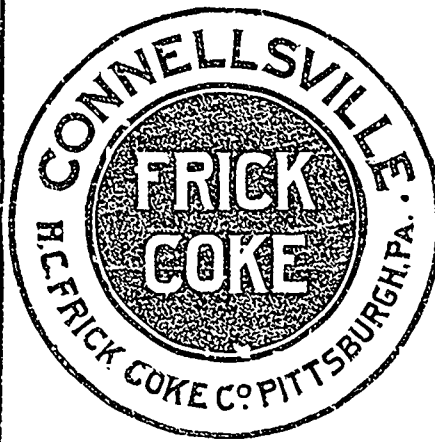
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