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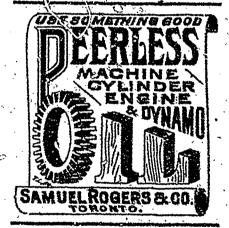
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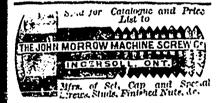
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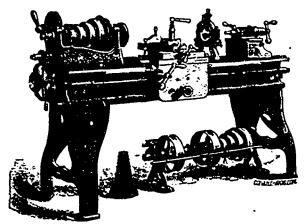
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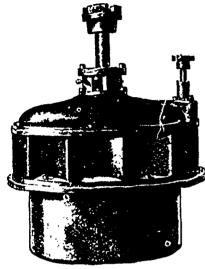
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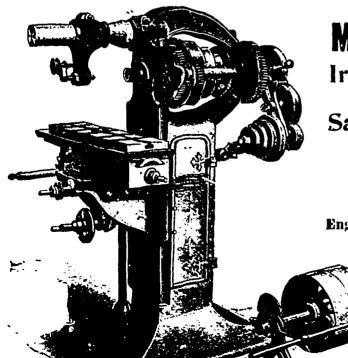
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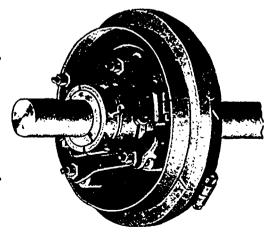
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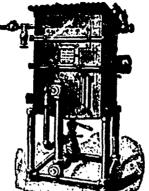
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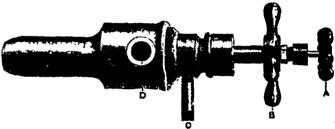
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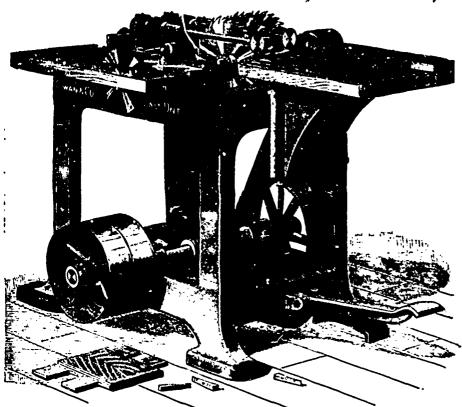
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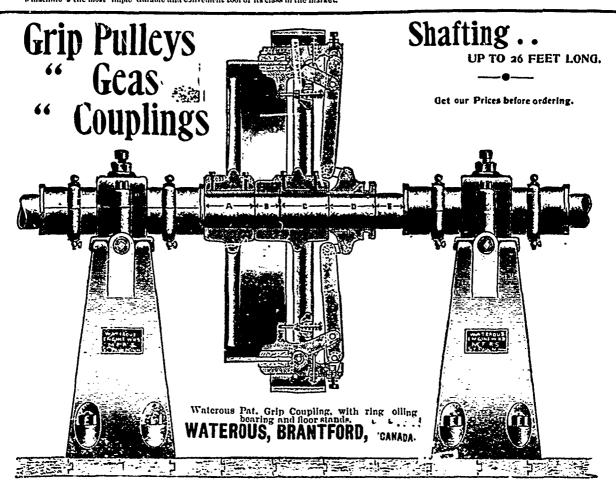
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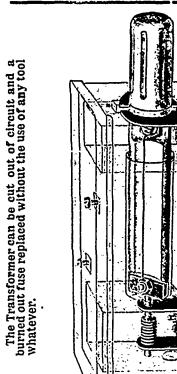
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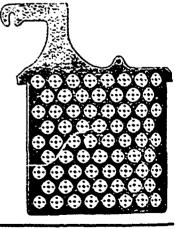
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Secretary	-	-	-	J. J. Cassidey.
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#### **WOOLEN MANUFACTURERS' ASSOCIATION**

President -	-	-	-	-	B. ROSAMOND, M. P.
Vice-President	-	-	-	-	Jas. Kendry.
Secretary -	-	-	-	-	J. J. Cassidey.

#### KNIT COODS MANUFACTURERS' ASSOCIATION

President -	-	-	JOHN PENMAN.
Vice-President	-	-	J. HEWTON.
Secretary -	-	-•	J. J. Cassidey.

#### CARPET MANUFACTURERS' ASSOCIATION

UMBEL	mnn	OI NO	UNENO	MOSCULATION
President	-	-	-	JAMES P. MURRAY.
Vice-Presid	cnt	-	-	ROBERT DODDS.
Secretary	-	-	-	J. J. CASSIDEY

#### **CLOVE MANUFACTURERS' ASSOCIATION**

President	-	-	-	W. H. STOREY.
First Vice-President	-	-	-	JOHN MACLAREN.
Second Vice-Presiden	t -	-	-	A. R. CLARKE.
Secretary	-	-	•	J. J. CASSIDEV.

#### REPRESENTATIVES TO

#### TORONTO INDUSTRIAL EXHIBITION ASSOCIATION

R. W. ELLIOT.	George Booth.			
W. K. McNaught.	Samuel May.			
J. J. Cassidev.				

#### TWENTIETH ANNUAL MEETING.

OF THE

### Canadian Manufacturers' Association.

#### REPORT OF PROCEEDINGS.

The twentieth regular annual meeting of the Canadian Manufacturers' Association was held in their offices in Canada Life Building, Toronto, Wednesday, February 27, 1895.

Among those who were present were, W. H. Law, Cen-

tral Bridge Co., Peterborough, Ont., president; J. Cassidey, secretary; R. W. Elliot, A. E. Kemp, Kemp Mfg Co.; W. K. McNaught, American Watch Case Co.; F. H Wright, Aug Newell & Co.; Wm. Pender, Etrick & Co.; G. Huchinson, Dovercourt Twine Mills Co.; Joseph Simpson, Berkeley Street Knitting Mills; Samuei May, Dodge Wood Split Pulley Co.; John Taylor, Dominion Dyewood and Chemical Co.; P. W. Ellis, P. W. Ellis & Co.; John Dick, Dick, Ridout & Co.; C. H. Hubbard, P. Freysens: Geo. Booth, Booth Copper Co.; A. G. Booth, Toron o Steel Clad Bath Co.; J.C. Copp, Toronto Silver Plate Co.; J. C. Gardner, H. D. Warren, Gutta Percha and Rubber Mfg. Co.; Frederic Crompton, Cron vton Corset Co.; Robert Watson, R. & T. Watson; Robert Crean, Crean & Hastings; C. E. Pease, American R. van Co.; Thomas Robertson, Robertson Bros.; John M. Taylor, Toronco Radiator Mfg Co.; A.R. Clarke, A.R. Clarke & Co.; G.F. Haworth, Robin, Sadler & Howarth; J. P. Northey, Northey Mfg. Co., Toronto; James Phymister, Londonderry Iron Co; W. J. McMillan, The Fairbank Co., Montreal; James Kendry, Auburn Woolen Mills; John Carnegie, Peterborough Lock Co., Peterborough, Ont.; John Cowan, Ontario Malleable Iron Co., Oshawa, Ont.; R.H. Frees, Walkerville Malleable Iron Co.; Robert Kerr, Kerc Engine Co., Walkerville, Ont.; C.A. Birge, Canada Screw Co., Hamilton, Ont., and many others.

W. H. Law, President, occupied the chair. J. J. Cassidey, Secretary.

The minutes of the last regular meeting were read and approved.

#### PRESIDENT'S ADDRESS.

President Law read the following address:-

Gentlemen of the Canadian Manufacturers' Association :-It affords me much pleasure to address you on this occasion-the twentieth annual meeting of your Association. The fact that so many years have elapsed since the first meeting of those earnest and anxious manufacturers who were the fathers of this Association, to devise ways to prevent their industries being crushed out of existence by the unfair competition of those in other countries engaged in similar industries, and that this Association has been a strong factor in Dominion politics ever since, is the best evidence of the necessity for its existence. With but one single object in view, and that to exert all its influence to maintain and uphold that financial policy of the Government that would in all Canadian industrial enterprises give the home market to the home producer, that would encourage the investment of capital in workshops and factories, and that would give diversified employment to Canadian labor, we have seen that that policy has produced and is producing its legitimate and intended results, and that in about all essential things Canadian production is meeting the home demand most encouragingly. It is true that Canada has not yet recovered from the effects of the financial and industrial depression that has for a few years past enveloped the whole world, but a bright gleam of satisfaction is ours that however the world may have suffered and is suffering, Canada is, without doubt, in better financial, commercial and industrial condition at this time than any other country. To a large extent this is due to the stability of our Government, to the excellence of our financial institutions, and to a fiscal system that gives employment to Canadian capital and Canadian labor in preference to the capital and labor of other countries.

We are all aware that while we feel that the prosperity of the country depends upon the continuance of the policy of tariff protection, there is a strong and influential element constantly at work to subvert that system and to introduce one that stands discredited throughout the world save in the case of Great Britain. If the circumstances that environ Canada were identical with those that prevail in Great Britain there might be some plausible reasons why we should reject protection and adopt free trade, but such identity of circumstances does not exist, nor can they, therefore there can be no force in the argument that we should make our fiscal system conform to that of the Mother Country. On the other hand we observe that the most prosperous nations are those that encourage their home industries by judiciously arranged systems of protective tariffs and by giving bonuses for domestic products. This latter feature is exemplified in the bonus given by Canada upon the production of iron, and by Germany upon the production of sugar.

It is interesting to observe the methods by which the free traders seek to discredit Canadian manufacturers. At one time they are taunted with being unable to hold their own, in their own country, against foreign competition. At another time they are denounced as thieves and robbers. At another time they are consigned to the custody of the Evil One. Then cajolery is used and they are told that under a change of policy no injury would be done or attempted to any manufacturing industry. It may be that our present system is not perfect-perfection is not attained in this life-and no doubt many manufacturers feel that it would be to their advantage if certain changes were made in the tariff; but we do not usually call in quacks as medical advisers when we are ill, neither do we consult with our enemies on important business matters, and it would not be wise to ask the enemies of protection to correct any incongruities that may exist in the tariff.

One of the objects of this Association is to influence public opinion to appreciate the necessity of the imposition of adequate duties upon imported products by which to protect Canadian labor, capital invested in Canadian industries, and Canadian manufacturers against the unfair competition of other countries. Since the inauguration of the National Policy Canada has prospered and the social weil being of the people elevated. The cost of production and the expenses of living have steadily diminished Wages have been increased, and the working classes have reaped great benefit from the general cheapening that has followed home production and healthy competition. Under the National Policy the intelligence and skill of the working classes, encouraged by remunerative wages, have enabled them, in connection with the manufacturers, to compete with the cheaper labor of other countries not only in our o vn market, but in foreign markets also; and the Government are to be commended in the efforts that have been made and are being made to open up new avenues of trade by which manufacturers may with advantage increase their consumption of raw materials and increase the number of workmen employed in the establishments.

Since the last annual meeting of this Association some startling events have occurred in the history of our courtry, the most important of which was the death of SirJoh Thompson, the Premier and head of the Government. In the prime of his useful life, at the zenith of his glory and greatness, at the very moment of having bestowed upen him honors of the most exalted character at the hands of the Majesty the Queen, and almost in her immediate presence, he was called away from his sphere of useful ness. He was a true friend of Canadian manufacturers for he was an earnest upholder, supporter and advocated that policy of protection that has placed Canada most eviably in the forefront of the rank of nations. May the remembrance of his invaluable services to his countrylog remain fresh.

It is comforting to know, however, that in this country there are always those who are able to assume any datis that may devolve upon them; and although we will log deplore the loss of Sir John Thompson, we congratulate ourselves that in Sir Mackenzie Bowell we have a Premier who is in close touch and sympathy with us, and in whose hands our interests will be safe. We are assured by his and by his colleagues in the Government that in the future as in the past, protection to Canadian industries will be the inscription upon the banner under which they will fight the political battles of the country.

#### SECRETARY'S REPORT.

Secretary Cassidev read the following report:

Mr. President and Gentlemen of the Canadian Manufacturers' Association:

At the general annual meeting of this Association held on February 7, 1893, it was brought to the attention d the Association that after their previous meeting Sir Jeb Abbott, the Premier of Canada, had retired from office be cause of ill health, and that Sir John-Thompson had acceded to that high and honorable position. Since that time Sir John Abbott has passed away; and now Canada is still mourning the death of Sir John Thompson, who was the illustrious and beloved head of the Dominion Gerernment. It was under peculiar and historic circumstance that our Premier passed from the active scenes of his ofcial labors, the circumstances of which, being of such recent occurrence, are too fresh in the memories of ality call for any recapitulation here. Sir John Thompson wasa true Canadian, loyal to his country and to his Queen, at most in the immediate presence of whom he died, and staunch and uniform supporter of that system of goverment under which the manufacturing and industrial inteests of the country have so wonderfully grown and prepered.

Within a very few days of the announcement of the death of Sir John Thompson it pleased the Governor-Graceral, Lord Aberdeen, to call upon Hon. Mackenzic Bowell, who has since been knighted, to reorganize the Government; and there can be no question regarding the wisder of Lord Aberdeen's choice. Sir Mackenzie, the oldest means

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ber of the late Cabinet, is a statesman who has given the best years of his life to the service of his country; and the character of the gentlemen whom he has called to assist him in the management of public affairs is a guarantee that the welfare and prosperity of Canada will be most carefully and judicicusly looked after. For many years Sir Mackenzie most acceptably filled the position of Minister of Customs; and it was only a little more than two years ago that Parliament established the Department of Trade Commerce, over which Sir Mackenzie was called to Preside. As Minister of Customs Sir Mackenzie was brought into intimate touch with the manufacturers of the country; and his close observations, viewed from the standpoint of a practical business man and a statesman, led him to the conclusion that it was necessary to our continued and greater prosperity to open up new avenues of trade particularly for our manufacturers. Under the benign auspices of the National Policy many of the manufacturing industries of Canada had virtually become possessed of the home market, and required outlets into other markets for their surplus products.

Having arrived at this conclusion Sir Mackenzie was quick to formulate methods by which his schemes might become realities; and, having the full and cordial co-operation and support of his confreres in the Cabinet, he made a long and tedious, but most interesting and instructive, journey to Australia with results that are already well known. With a keen perception of the necessities of the case, he obtained the services of Mr. John S. Larke as his lieutenant, who was appointed Commissioner to Australia, and who is now but recently arrived at the scene of his future labors. We are all aware how for many months Sir Mackenzie and Mr. Larke travelled over Canada, visiting every important manufacturing establishment the better to learn of their true capabilities for production; how they interviewed the manufacturers pointing out to them new and important change to flow: channels into which their business might be made to flow; and how popular and instructive addresses upon this theme were made to Boards of Trade and assemblages of citizens in all the chief cities, towns and business centres of the country. This Association was quick to observe the value of the undertaking Sir Mackenzie had imposed upon himself, and to invite him to explain his views before the members.

This This was immediately after his return from his visit to Australia; and his campaign of information regarding his scheme to extend and increase the foreign trade of Canada was begun at the time of the last general meeting of this Association, when he accepted your invitation to a luncheon at which many of the most prominent and influential manufacturers of Canada were present, before whom he first in such a public manner unfolded his plans. The important portance of this work cannot be too highly appreciated by our manufacturers, for it opens before them a vista of enlarged markets and material prosperity which may be fully realized if they will but reach out and grasp it.

Some anxiety may be felt that Sir Mackenzie being no hote the export trade of Canada may not be as active and such anxiety. As Premier, he will be none the less the matter, and we are assured that the

new Minister in that department, Hon. Mr. Ives, will push it and do as much for it as the most enthusiastic could desire.

It is gratifying to know that under the newly organized Government the interests of Canadian manufacturers will receive the best consideration. With one of the Fathers' of Confederation, one of the originators and organizers of the National Policy, and one of the best friends the manufacturers ever had in the Government as Premier, with Mr. Foster still in charge of the Finance Department; with Mr. Ives as Minister of Trade and Commerce, and Mr. Wallace as Controller of Customs, manufacturers should experience a feeling of the utmost security and confidence.

At the time of the last annual meeting of this Association the Finance Minister and the House of Commons were struggling in the revision of the tariff. There had been a fierce andunreasoning demand for such a revision as would, if carried out, have amounted to a revolution; and it required the best generalship on the part of Mr. Foster and his protectionist colleagues and supporters to withstand the onsets of the free trade enemy. On March 27, the House, sitting in Committee of Ways and Means, Mr. Foster introduced his tariff bill which instantly became operative. Quite a number of amendments were, from time to time, made to this bill, and before its final passage on July 26, it became modified to an extent that gives much satisfaction to the country—certainly to the friends of the Government.

In accordance with the usage of this Association previous to your last meeting, the Tariff Committee of the Association, in the discharge of their duty, entered upon a close and careful examination of all matters brought before it by members of the Association relating to the tariff. The situation at that time was critical. An excitement, amounting to a furore, had been work ed up by the enemies of protection, and some who had previously declared themselves staunch adherents of the National Policy weakened. It was evident, however, that some changes in the tariff were imperative, and that if they were not inaugurated by the friends of protection, the Government could not survive, and that the enemies of protection would accede to power. under these circumstances that the Tariff Committee entered upon their labors, having the counsel and assistance of many of the most experienced members of the Association, the result of which was the embodiment of their views in a communication to the Finance Minister (a copy of which is here before you) which elicited from him a kindly letter in which he alluded to it as a well prepared brief in which all the matters therein discussed had been done full justice. Perhaps it might be going too far to even surmise the effect these recommendations of your Tariff Committee to the Minister may have had in the final arrangement of the tariff; but it is but an act of justice to the committee to direct attention to the large number of changes that were made in the tariff along the lines suggested in the recommendations, and that in many instances the language used in both are substantially identical. This is particularly noticeable as regards the iron schedule, the duties upon textiles, the duties upon drugs,

chemicals, alcoholic preparations, etc., as well as upon an extended list of miscellaneous articles, and large and most important additions to the list of non-dutiable articles. It is also to be noticed that in many instances where the recommendations suggested that no changes be made in the duties upon articles therein enumerated, no changes were made.

A matter upon which your Committee laid strong stress was that relating to drawback of duties on exports. It was shown that if Canadian manufacturers were to become exporters of their products, in competition with American manufacturers, the tariff conditions of Canada as affecting the importation of raw materials for manufacture into products for export must as nearly as possible approach the tariff conditions of the United States. In frequent interviews with the Finance Minister your Secretary urged that this policy be embodied in that of the Government, and this was finally done by an Order in Council, as a necessary supplement to the efforts of the Minister of Trade and Commerce to extend the export trade of the country. It is unfortunate, however, that the operation of this Order in Council has not proved as acceptable to some of our manufacturers as was hoped for and intended by the Government. In fact in some industries it is working much harm, while in others it is calculated to nulify, and does nulify the benefit bestowed by the Government in the recently enacted tariff. It has always been the policy of the Conservative Government to encourage the manufacture of iron in Canada, and in addition to the inducements offered in previous legislation, the new tariff makes considerable and important extensions of such encouragement. It is contended by many manufacturers engaged in producing different forms of iron goods that the Order in Council encourages the sending abroad for certain lines of such products which were previously made in this country. This is a matter that demands the immediate attention of the Government.

The Association has just reason for congratulating itself upon the influence it possesses in assisting to mould public opinion in the matter of alfording tariff protection to our manufacturing industries, and in shaping the laws of the country in conformity thereto. There never was a time since the formation of this Association twenty years ago that its influence was stronger or more pronounced han now. The personnel of its membership now greater than ever before, is of the highest standard, and composes a glorious array of patriots who are making this Canada of ours one of the most important nation of the earth, and the brightest and most valued jewel in the British Crown.

United and harmonious as they have always been it is of the utmost importance that as members of this Association our manufacturers should continue to hold together and to work together for the perpetuation of the great cause they have in view—that of protection. No other body of men better comprehends the true interests of Canada—no other body is more concerned in her prosperity. In the face of infamous abuse and villification, long continued and never ending, you have shown courage, perseverance and ability, without which our system of manufacturing industries would never have developed

into the large proportions it now possesses. The stake for which your political enemies struggle is valuable, and they are always active in endeavors to create dissatisfaction and unrest among you, and to destroy your organ-Foreign competitors desire to obtain free access to this market, and, with the assistance of their free trade allies amongst us, they endeavor to repress your production in favor of their own. As Captains of Canadian In. dustry you have always stood well together. You are at. You have an interest in your country. tached to Canada. You are not birds of passage, here to-day-gone to-mor. You are here to stay; and therefore you desire that the legislation of our law-makers shall be such as you can live under. The fortress of protection does not totter to its fall, as its chemies declare, because you and such as you sustain it. There will be no collapse as these enemies predict, neither will any great tidal wave of adverse public sentiment destroy a system that has made us a great and important people. It is pleasant to contemplate that the outlook for the maintenance of the National Policy is much brighter now than it was even a year ago. In Sir Mackenzie Bowell we have a man at the head of our national affairs who is a sturdy and devoted adherent to our existing system, and who, having the courage of his convictions, will hold his way steadily in the course he long since helped to mark out, and as an Association, and as individuals, no doubt your best and most earnest support will be given to the Government as long as the Government adhere to the principle of tariff protection to Canadian manufacturing industries.

Owing to the fact that at the last annual meeting the Association was favored by the presence of Sir Mackenzie, then Minister of Trade and Commerce, the Secretary's report was not read; and it may be interesting to the Association to learn what important actions have been recently taken by your different committees and the trades associations affiliated with yours.

On April 10, 1893, at a special meeting of the Tailf Committee, Mr. R.W. Elliot, the chairman, explained the desirability of a delegation of members of the Association waiting upon Sir Oliver Mowat, Premier of Ontario, and request that some substantial encouragement be given by his Government towards the development of the iron industry of the Province. The suggestion met with much favor, and the Secretary was instructed to see Sir Oliver and request a hearing for the proposed delegation, and also to prepare a memorial to be presented to him. la pursuance of these instructions the Secretary arranged with Sir Oliver to receive the delegation; and on April 24, 1893, a large number of members of the Association composing the delegation waited upon Sir Olive,, presented their memorial and explained their views in the matter. They were most kindly received by Sir Oliver and several of his Ministers; and it may be observed that since that visit a lew has been placed upon the Statute books of Ortario providing for the payment of the equivalent of one dollar per ton on all pig iron made in Ontario from ors mined in the Province.

On May 23, 1893, a largely attended meeting of the Woolen Manufacturers Association, of which Mr. B.Roszmond, M.P., is president as held in this office radiscuss

matters of interest to that industry; and later, on December 19, 1893, and again on January 10, 1894, a special committee of that Association held mattings in Ottawa.

On January 5, 1894, the Knit Goods Manufacturers' Association, of which Mr. John Penman is President, held an important meeting in this office, at which a special committee was appointed to meet with that of the Woolen Manufacturers' Association in Ottawa on January 10, 1801.

On January 5, 1894, a large number of blanket manufacturers held a meeting in this office with the intention of forming a Blanket Manufacturers' Association, but the idea was abandoned, the gentlemen concluding that their interests would be quite as well looked after if they connected themseives with the Woolen Manufacturers' Association.

On February 13, 1894, the Glove Manufacturers' Association, of which Mr. W. H. Storey is President, held a meeting in this office for the consideration of matters affecting that industry.

On May 1, 1894, the Carpet Manufacturers' Association, of which Mr. James P. Murray is President, held a meeting in this office to discuss the interests of their industry.

On February 14, 1894, a largely attended joint meeting of the Tariff and Executive Committees of the Association, and of other members, was held in this office, Mr. R. W. Elliot presiding. The meeting was called to take final action upon all such tariff matter as had been previously submitted to the Association, the business having been previously arranged and prepared for consideration. The brief as prepared by the Secretary was accepted and adopted as expressing the views of the Association, and the Secretary was instructed to present the same to the Minister of Finance. This brief was presented to the Minister, Hon. Mr. Foster, at Ottawa, on February 26, 1894, the receipt of which was acknowledged by him as herein before alluded to.

As may be perceived, a large portion of the work of the Association is accomplished by its committees and the sub-organizations in affiliation with it. These sub-organizations include many of the most important industries of the country, and, all working in harmony with the Association, consolidates and intensifies the influence which it has always wielded.

#### TREASURER'S REPORT.

Treasurer Booth presented his annual financial statement which was read and adopted. It showed the Association to be in a sound financial condition, and that the membership was larger than ever before in the history of the Association.

#### **ELECTION OF OFFICERS.**

The following officers were elected for the ensuing year:-

#### CHAIRMEN OF COMMITTEES.

The following chairmen of committees were elected:—
Executive Committee......R. W. Elliot
Tariff Committee......W. K. McNaught.

### RE. RESENTATIVES TO TORONTO INDUSTRIAL EXHIBITION ASSOCIATION.

The following named gentlemen were re-elected to represent the Association in the Toronto Industrial Exhibition Association:—

George Booth, R. W. Elliot, W. K. McNaught, Samuel May, J. J. Cassidey.

#### RESOLUTIONS.

The following resolutions were read, discussed and adopted:—

REGARDING THE DEATH OF SIR JOHN THOMPSON.

Whereas, an inscrutable Providence has removed from the scene of his usefulness Canada's beloved Premier, Sir John Thompson:

Resolved: That the Canadian Manufacturers' Association in general meeting assembled do hereby place on record this expression of the great sorrow they feel at the death of so great and so good a man.

He died at Windsor Castle, England, on December 12, 1894, whither he had gone to be sworn in as a member of the Queen's Privy Council, and afterwards to dine with her Majesty. At the very time he was enjoying the Royal hospitality; virtually at the very approach to the throne, and almost in the immediate presence of her who was so pleased to bestow such distinguished honors upon her beloved Canadian servant, he was without warning called to another state of existence.

Sir John Thompson almost from his youth was a devoted servant of Canada. For years he was an influential member of the Legislature of Nova Scotia, his native prevince; and while yet a young man he was appointed a judge of the supreme court of that province, subsequently becoming Chief Justice thereof. He was translated from that position by Sir John Macdonala to become Minister of Justice in the Dominion Cabinet, where he won great renown as a statesman. He retained this important position under the Premiership of Sir John Abbott; and when that gentleman retired from the cares of office because of ill health, Sir John Thompson was selected to take his place and direct the destinies of Canada. And it was while he was thus serving, and while in the discharge of other important duties that he had taken upon himself, being in the harness of hard official work, the sun of his usefulness was darkened while at its meridian height.

The exit of such a man from the councils of a nation is an event greatly to be deplored. He was a noble and highminded legislator and statesman. He was a most valuable citizen. To those who knew him intimately he was a friend to be loved and trusted. In his private life he was an example that the youths of the land might well imitate. He was a loving husband and an affectionate parent. And because he was such a man we reverence and revere his memory.

Resolved: That the Secretary be instructed to convey a letter to the widow of our late Premier assuring her of the

respectful sympathy of this Association in her bereavement and its sincere wishes for her welfare.

#### CONGRATULATING PREMIER BOWELL.

Whereas that true and tried friend of Canada, Sir Mackenzie Bowell, has been elevated to the Premiership of Canada:—

Resolved: That this Association tender its congratulations to Sir Mackenzie upon his elevation—the highest and most honorable office obtainable for any Canadian. His accession to the Premiership is an event at which we rejoice. It is no new and untried hand that has been called to assume control of the Dominion Government. In him we recognize a statesman who has given the best years of his life to the service of his country. For many years he most acceptably filled the position of Minister of Customs, and it was while acting as such that he was brought into close and intimate touch with the manufacturers of Canada. His ambition always was to see Canada a great and self-reliant nation, and he possessed an abiding faith in the ability of the people to make it such. It is his pleasure now to see that in many lines of our manufacturing industry the home market has been quite fully occupied, and \(\mathbb{G}\) at Canadian enterprise is reaching out for new markets. As Minister of Trade and Commerce Sir Mackenzie was indefatigable in his endeavors to extend the foreign trade of the country; and all appearances indicate that these efforts will be crowned with eminent success. Even in the wider sphere to which he has been called we are confident he will continue to give a liberal portion of his time and energies to the fuller development of the plans that have already effected so much for Canadian manufacturing industries. It is due to him as head of the Dominion Government, as it is our pleasure, that this Association should declare and make known to him our entire confidence in his ability to manage the affairs of this country; and that that management will be along the lines that he has so closely followed for so many years. And we hereby assure him that in the administration of the great trust that has been reposed in him, he will have the most cordial support of this Association.

Resolved: That the Secretary be directed to convey to Sir Mackenzic Bowell a copy of these resolutions.

#### THE NATIONAL POLICY.

Whereas, from its geographical position and surroundings, the prosperity of the Dominion of Canada depends largely upon the maintenance of a fiscal policy which will foster the agricultural, the mining, the manufacturing and all its other interests;

And whereas, the existing National Policy of protection to Canadian industrial enterprise, inaugurated by Sir John A Macdonald, in 1879, has proved itself well suited to the needs of this country, inasmuch as it has been of inestimable advantage to all classes of our people;

A policy which makes the interests of Canadians paramount to those of foreigners by preventing this country from being made a slaughter market for the surplus products of foreign nations;

A policy which, while fully protecting Canadian industry and enterprise, loyally refuses to consent to trade ar-

rangements with foreign countries which will in any way discriminate against Great Britain;

A policy which gives confidence and stability to capital, ensures prosperity to our manufacturing industries and enables our artisans to maintain a scale of wages for in excess of those which obtain in European countries,

A policy which, by retaining our skilled artisans at home at wages which enable them to live in comfort, has provided our farming population with a profitable nome market for many lines of agricultural products which cannot be exported;

A policy which has kept Canada on the highway of national prosperity while almost every other country has been suffering from severe commercial depression,

Applicy which, while it has stimulated production in our own manufactories, has also increased our toteign trade to dimensions hitherto unknown in Canada,

A policy which has enhanced our national credit in the money markets of the world, and placed Canadian securities at the head of all British colonies;

A policy which has encouraged and developed interprovincial trade, and welded this vast Dominion into an homogeneous whole;

A policy which has produced amongst Canadians a feeiing of security, of national pride and of commercial and industrial independence, without which no people can ever attain to the acme of national prosperity.

And whereas, by the popular vote at three general parliamentary elections, the people of the Dominica of Canada have unmistakably declared themselves in favor of a tariff which will afford adequate protection to Canadian manufacturing industries;

And whereas, in response to these popular verdicts over \$188,000,000 have been invested in manufacturing enterprises in this country since the inauguration of the present protective policy in 1879;

And whereas, nothing imperils the security of capital, or paralyses industrial or commercial enterprise more surely or quickly than uncertainty in regard to the fiscal policy of the country;

Therefore be it resolved that this Association places it self upon record as opposed to any changes in the present tariff system which will imperil the safety of our existing Canadian industries and subject them to unfair competition from foreign manufacturers.

Resolved, that in the opinion of this Association, the prosperity of this country imperatively demands a fixed and definite policy of protection to Canadian industries, from the general principles of which there shall be no deviation.

#### DISCRIMINATION IN RAILWAY FREIGHTS.

Whereas this Association recognize the fact that the prosperity and success of the manufacturing industries of Canada depend, to a great extent, upon the facilities of transportation afforded by the railroads;

And whereas, while perfectly willing to pay fair and remunerative charges for all services rendered by the railroad for transportation of freight, manufacturers are not willing to pay higher charges for short hauls than for long ones;

And whereas, on the same line of railroad higher rates are charged on some kinds of goods as compared with others, although the cost to the company of performing the service is no greater in the one case than in the other;

And whereas, in many cases lower rates are charged for goods imported or for export than for the same articles produced or for consumption in Canada;

And whereas, preferential rates are granted to one port or place as against another;

And whereas, excessive rates although perhaps not illegal prevent the development of traffic to the prejudice of the public and of the railroads themselves;

And whereas, the charges for hauling freight from points in the United States to points in Canada are frequently and generally much less than the charges for hauling similar freight between points both of which are in Canada, the distance being very much less;

And whereas, the charges for hauling freight reaching Canadian seaports from across the ocean to interior points in Canada are frequently and generally much less than the charges for hauling similar freight originating in Canada from such seaports to such interior points;

And whereas, such discrimination against Canadian manufacturers gives an undue and unjust advantage to foreign competitors;

And whereas, the difficulties in the way of obtaining redress by private individuals against railroad companies for overcharge or illegal preference are almost iusuperable; therefore be it

Resolved: That this Association memorialize the Do-

minion Government to constitute a Court of Railway Commissioners whose duty it shall be to make rules and regulations for the government of all Canadian railways by which all such discrimination and unfairness as here alluded to shall be prevented.

Resolved: That the Secretary be instructed to transmit copies of these resolutions to the Premier of Canada; to the Minister of Railways and Canals, and to the President of the Privy Council; and also to the Boards of Trade in the principal cities and towns of Canada.

COREIGN TRADE AND IMPERIAL FEDERATION.

Resolved: That this Association most heartily endorse the efforts being made by the Dominion Government to increase and extend the export trade of Canada in manufactured products. These efforts being in the direction of increasing traffic with other British possessions are in harmony with the desire of Canadian manufacturers to create and enlarge interprovincial trade and to build up a strong national sentiment looking eventually to the federation of all British colonies with the Mother Country.

KIND WORDS CAN NEVER DIE.

Moved by Mr. R. W. Elliot, seconded by Mr. James Kendry.

Resolved: That this Association hereby desire to bear testimony to the value of the services rendered to us by our Secretary, Mr. J. J. Cassidey. He has ever been found faithful to his trust, intelligent and painstaking in carrying out our views, and courteous and affable in his intercourse with our members. It is most gratifying

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to know that the recommendations regarding tariff matters that have been made to the Government by this Association, prepared by Mr. Cassidey, have been of such a character as to call forth commendation from the Minister of Finance in recognition of the full and businesslike presentation of them.

#### READING PAPERS.

The following papers were read:--

THE NATIONAL POLICY AND ITS ADVOCATES.

BY EX-PRESIDENT R. W. ELLIOT.

I propose to give a very brief review of the work the Canadi in Manufacturers' Association has accomplished in the twenty; cars of its existence; to urge the necessity for coninued effort and to dispel some popular misapprehensions which exist within and without the Association in regard to what it should and can do.

The history of manufacturing in Canada can be written by men who have seen every stage of its developments. The beginnings were small, the machinery crude and mostly of local construction, skilled labor was scarce, and had to be imported under contract, which involved great loss if the foreman turned out unsteady or unfit for his work. Fortunately no alien labor law has ever interfered with our industrial progress.

In the early days trade secrets were carefully guarded. Recipes for dyeing, for fluxes, for tempering baths, for lacquers, for varnishes and for polishing materials, were kept in certain families for more than one generation. La-

bor saving machines were kept in locked rooms and work ed by the owners or their children.

Then again the rates of interest for capital used in manufacturing industries were higher than for ordinary loans on land and mercantile transactions. Customs duties on manufactured goods were extremely low, much less in fact than the municipal and federal taxes paid by manufacturers and their employes on necessaries of life, and on the raw material required in their industries. Roads, and means of distribution were poor and expensive, or almost entirely wanting.

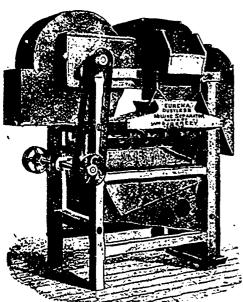
Advantages to local manufacture were found in unfrequent communication with countries where specialized goods were produced, the great cost of middlemen and of freight.

Patents for invention were, and are now, a potent means of development, because they are not protective but prohibitive both against importation and home competition. There exists reciprocity in patents between Canada and the United States, the effect being that foreigners pay no customs duties; but by means of Canadian patents they levy roll on goods produced in Canada. At the same time the outcome of this system provides employment to Canadian workmen, and the provision that a Canadian patent shall be worked in Canada should be strictly enforced. A marked evil connected with patents is that they render their holders or licensees careless as to public opinion or convenience, and ansympathetic as to the progress of other branches of manufacture.

Up to a certain point the superior adaptation of local

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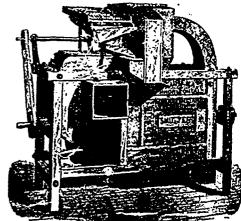
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manufactures to local requirements, the great cost of importing goods, and freedom to adopt all known improvements, sustained the foothold of the Canadian manufacturer in the home market, but a time came when all this was changed. Great lines of steamers were subsidized by our Government, great lines of railways such as the Grand Trunk, Great Western and others, all largely aided if not practically built by Government, commenced to pour in from East, South and West enormous stocks which threatened to overwhelm all our industries. These goods were carried at "through rates" far less than a Canadian shipper could secure for equal bulk going the same way at the same time and for proportionate distances.

These ever-threatening difficulties and dangers impelled those whose entire interests were bound up in Canadian industries to study carefully the argument between so-called free trade and protection, first in the light of history, and secondly in view of existing circumstances, and caused the formation of the Canadian Manufacturers' Association, has kept up its membership, and justifies its continuance.

The members of our Association have had to face discouragement from within as well as from without, from those sanguine souls who too fondly hoped the adoption of a National Policy would reproduce the Golden Age with every one free, rich and happy, and the selfish who care not on whom the burdens of the State fall so long as they are not required to pay their quota. On the other hand our labors to secure just recognition for every industrial interest of the Dominion, both present and potential have

met with a large measure of success, the reason being that the recommendations of this Association have never been dictated by motives of selfish gain to any individual or any one class of industries in which members of the Association have been interested, but by a broad view of the interests of the Canadian people in every part of the Dominion.

Our membership is composed of men who are not merely local in their interests; of men who fully recognize that an injury to any individual with whom they are bound up will react on the hand that inflicts it. The frait of this sense of responsibility is to be found in the fact that in many instances the very words of our recommendations to the Government regarding tariff matters are found in the tariff acts.

A popular superstition is that the Association is the vehicle by which an immense fund is collected to corrupt the electorate, than which nothing could be further from the truth. We have in the past, and it is to be hoped will in the future devote any small surplus of our membership fees to spreading the truth by means of campaign literature and campaign speeches, following the manner but not the matter of the English Cobden Club.

If there exists any doubt as to our "raison d'etre" just read the speeches of our gifted compatriot, Laurier; of sharp-tongued Sir Richard Cartwright, and misguided Dalton McCarthy. No! our work is not done, and never will be done. We must not say as this concerns the whole people, why should we bear so great a share of the burden? It is our duty as good citizens to show the justice and wisdom of a well regulated National Policy.

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At the risk of uttering truisms let me state the fundamental differences between so-called free trade and a carefully adjusted protective policy. When Great Britain changed her fiscal policy from that of a high protective tariff to what they call free trade, Benjamin D'Israeli, then a young man, addressed the British House of Commons in substantially these words: "We appear to be on the eve of making the gigantic error of mistaking free importation for free trade, whereas it is but half of free trade and the worse half."

How prophetic that warning was, let the present condition of British industry attest. Britain, fortunate even in her blunders, long escaped the consequences of an economic fallacy, this mainly by means of an unexampled merchant fleet and the greatest naval power the world has ever seen; but signs are not wanting that she wages an unequal strife with the industrial forces of France, Germany, Belgium, Italy, and greatest antagonist of all, the United States, arrayed against her. They have used her inventions; themselves have become inventors; have given their workmen the best technical education, and while protecting their home markets have used British ships and railways to carry their products to all parts of the world, even into the colonies won to the British empire by British blood and treasure; and there they compete on even terms with the products of our Mother Country. This state of affairs may look magnanimous, and is a natural part of that policy which all nations were expected to copy, but did not. At the same time this policy is unjust to all British subjects and retards the industrial growth more especially of the weaker colonies. The strong tie of mutual support, and resistance to disintegration is the tie which binds together all who owe allegiance to her Gracious Majesty Victoria, Regina, Imperatratrix, and wherever the Union Jack waves it should remind men that this community of interest should be strong enough to overcome all obstacles to preferential trade and imperial federation. I may be extreme in thinking that reciprocity treaties with other than Botish countries are undesirable, because they bind us to a course of action, which may sooner or later prove exceedingly prejudicial to our best interests. It is not at all implied that we should be actuated by feelings of selfishness or spite in our dealings with our foreign neighbors, but we should certainly retain the right to do what is just to our own people.

To one brought up in an unthinking belief in the precepts of free trade it seems strange that men thoroughly honest can find room to differ from the apparently conclusive dictum of "the greatest good to the greatest number." According to this theory the entire population, being consumers, should be allowed to buy and import what they please, where they please, without let, hindrance, or tax of any kind, and this rule should be especially applicable to goods similar to those of home production, the consequence being that the home producer shall be compelled to a competion with the poorest, most ignorant, and degraded producer of like commodities the world over.

The diligent student of political economy will discover that while every member of the body politic is a consumer, a most important distinction must be made between those

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who are consumers only, and those who are both consumers and producers; there being as much difference respecting the value to the community of these two classes, as between a bronze cent bearing the image of our sovereign and a golden sovereign with the likeness of Victoria impressed on it.

Let us state the duties the producer is required to perform and the burdens he is required to bear in matters vital to the existence, and progress of the country. Producers must support the mothers who reproduce the population, must care for infancy and childhood; must provide for education, for religion, for law, for physicians, the sick and hospitals, for the infirm and incapacitated, for police and public order, for naval and military defence, must support speculators, gamblers and criminals of all kinds and provide decent burial for the dead.

One most important section of the grand army of producers must care for the home. That our Canadian women are doing their full duty in regard to this department of National life is what gives every patriot full confidence in the growth, expansion, and future prosperity of the Dominion.

In consideration of the part wives and mothers take in National life, every possible protection should surround the marriage contract, and both parties to it should be placed, so far as just laws can provide, in a position of security.

Consider now the agricultural producer. Should he prove an unfaithful husbandman, neglecting to sow or plant to-day because he cannot reap or gather to-morrow, consumers would be in a bad way. Bad seasons and bad markets sometimes deprive him of a fair reward for his toil but he toils on, and his wellbeing should wield a powerful interest in National affairs.

Lastly, consider the producers of goods made through the use of machinery, the division of labor, and by more or less complicated processes; articles useful, convenient and necessary to civilization. This class of producers, and all others mutually bound to support each other, have as constant competitors those who do not contribute to the sustenance and increase of our National life.

The argument therefore is, that before any foreign producer enters into the Canadian market in competition with a Canadian producer, he should contribute as much or more by way of Customs duties as may be equivalent to what the Canadian producer is compelled to pay in support of the State.

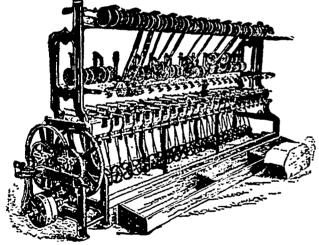
This is the National Policy in a nutshell.

What the National Policy can be expected to do in developing new Canadian industries, in finding diversified employments for our people, whether it will produce high or low wages, what industries are suitable or unsuitable to our circumstances, is left out of account in this statement.

The contention is, that by creation and maintenance Canadian producers have a right to be protected in securing the first chance in the home markets, and if this right be not secured by well considered tariffs, not only is a gross injustice done, but there is squandering and waste of the National forces.

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National Policy is involved, every member of the Canadian Manufacturers' Association, having in full view the welfare of the whole body of Canadian producers, will fight for the right.

The Canadian Manufacturers' Association entirely repudiate the idea of Governmental paternalism, but it urges that it is true statesmanship to prevent the crushing out of existence of our industries by powerful competitors who pay no taxes in Canada but who always stand ready to slaughter their products in the Canadian market while combining to maintain prices in their own country.

#### A STARTLING COMPARISON.

A PAPER READ BEFORE THE ANNUAL MEETING OF THE CANADIAN MANUFACTURERS' ASSOCIATION.

BY EX - PRESIDENT W. K. MCNAUGHT.

In view of the f. \* that the opponents of Canada's national policy of protection to home industries are at present unusually active in trying to impress upon our people the truth of their assertion, that this country is growing poorer year by year in consequence of unwise tariff legislation, and as they propose to substitute for the present system a tariff for revenue only which will gradually attenuate into free trade, I have thought the time opportune to make some comparisons in order to see how their statements agree with the actual facts of the case.

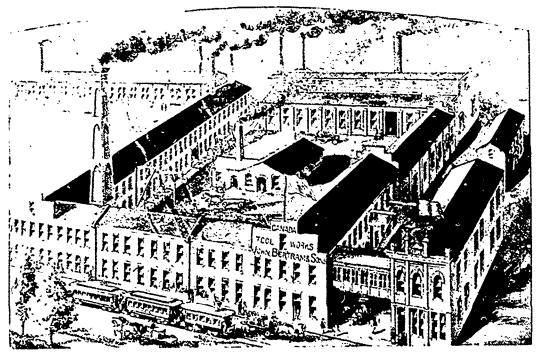
So far as the manufactures of Canada are concerned, it is now generally conceded that they have developed in a wonderful degree since the adoption of our present fiscal

policy. Even the opponents of protection admit this, although they qualify the admission by asserting that they have been built up at the expense of the rest of the country. The following table, showing the development of our manufacturing industries from 1881 to 1891, although far less favorable than if made from the inception of the present policy in 1879, is still sufficiently accurate to prove beyond a peradventure how completely this important department of our national life has been revolutionized by our present protective policy.

CANADA'S MANUFACTURING INDUSTRIES, UNDER A REVENUE TARREST AND PROTECTION.

	1881,	1891.	Variat Increase	ion PerCent.
No. of Est'ments Capital Invested No. of Employees Wages Paid Cost Raw Mat'als Value of Products	\$165,302,623 254,935 \$59,429,002 \$179,918,593	\$99,762,441 \$255,983,219	\$188,534,194 112,930 \$40,333,439 \$76,064,626	114. 44.43 67.86 42.1

From this statement it is evident that not only has the enormous sum of \$188,534,194 been invested in Canadian manufacturing industries between the years 1881 and 1891 as a direct result of the present tariff policy, but that the national pay roll has also been increased by \$40,333,439 per annum. This being the case it is not surprising to learn that the present output is far in excess of that of revenue tariff times, the actual figures being \$475,455,705



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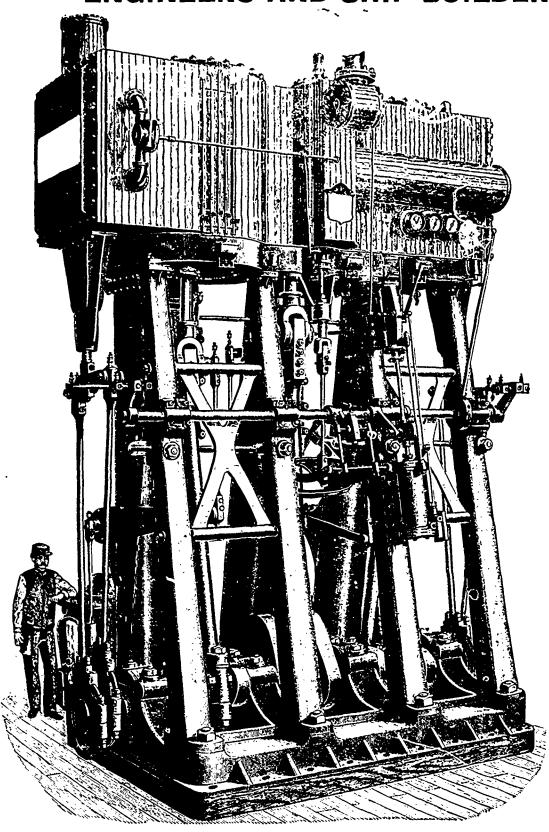
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in 1891 as against \$309,676,068 in 1881, an annual increase of \$165,-769,637 or over 53 per cent. These figures tell their own story so plainly as to call for no further com-

FOREIGN TRADE NOT AN INFALLIBLE BAROMETER OF PROSPERITY.

But, say the opponents of protection, Canada is suffering from commercial congestion, and the only remedy is to have the duties lowered to a revenue tariff basis in order to promote trade with foreign countries. While I am not of those who desire to purchase the products of foreign artisans in preference to those of our own Canadian fellowcitizens, I am free to admit that viewed simply from a theoretic standpoint it certainly looks reasonable that lower duties would bring increased foreign commerce, because, naturally, in a great many lines, the surplus goods of foreign manufacturers would be forced into this market at slaughter prices low enough to make them take theplace of goods now manufactured by Canadian artisans. While it is problematical

whether the substitution of goods of foreign for those of domestic manufacture would be of any real benefit even to the farmer, there can be no doubt whatever as to the injurious effect that such a state of affairs would have upon the manufacturer whose capital would be jeopardized by such unfair competition, or the artisans who found that they would either have to throw aside their handicraft and turn farmers, or else be content to have their wages lowered to the level of the European competitors whose products were supplanting their own in this market. If, as is generally conceded, diversity of employment is absolutely necessary for the building up of this country, then the effect of such a policy would be disastrous in the extreme.

I am no believer in the theory that the foreign trade of every country must of necessity be the true barometer of its prosperity. Under certain conditions this would be the case, but it is also possible that a country might be the most prosperous in the world and have ab-

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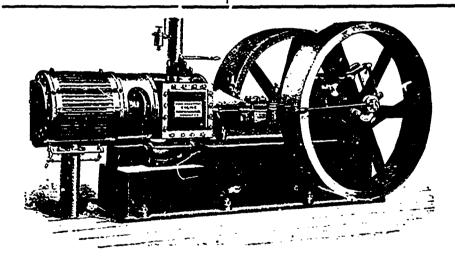
solutely no foreign trade whatever. In spite of these theories it is, nevertheless true, that the prosperity of Canada depends in some measure upon its foreign trade, simply because we have a surplus of products which our own people cannot consume, which have to be disposit must be remembered, however, that our toreign trade forms but a small portion of our entire trade. In other words the largest customers that the farmers and manufacturers of Canada have are the Canadian people themselves, because they consume about nine-tenths of everything the country produces, as against one-tenth which they dispose of to outsiders. But this is a digression.

As I said before, our free coaders insist (for the present as least) that the only possible salvation for Canada is a low revenue tariff, which they assert will not only make this a cheap country to live in, but will so stimulate our foreign commerce as to make every Canadian industry prosperous. On the face of it, it seems reasonable to sup-

pose that a revenue tariff would mean increased Greign trade, but, like many another pretty theory, this one has been completely shattered by the actual experience of this country.

DIFFERENCE BETWEEN A REVENUE AND PROTECTIVE TARIFF.

The Cartwright revenue tariff which obtained during the administration of the Hon. Alex. Mackenzie was originally 15 per cent. ad valorem, but was afterwards (on account of the increase in the expenditure of the Government from \$19,174,647 in 1873 to \$24,455,381 in 1879) raised to 171; per cent. ad valorem. Although by this tariff, duty was levied upon the luxuries imported for the wealthy at the very low rate of 15 and 1712 per cent, ad valorem, the necessities of our artisans and farmers were unjustly discriminated against by levving duty on them as follows:--Sugar, 43 per cent.; rice, 35 per cent.; molasses, 25 per cent.; tea, 23 per cent.; coffee, 101/2 per cent. As these are necessities which cannot be produced in Canada, it is evident that the consumers had to



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pay the entire duties, amounting to nearly \$3,500,000 per annum, which were levied upon these articles. These, however, are only samples of the way in which a revenue tariff discriminates against the interests of the masses and in favor of the classes.

On the other hand our protective tariff aims to admit free (or nearly free) all raw materials and articles of necessity which cannot be produced in this country, and to protect the Canadian manufacturer and farmer by levying duties upon such products as can be profitably made or grown in the country. Thus the necessities of life, such as tea, coffee, sugar, rice and molasses, which under the Cartwright revenue tariff were heavily taxed, are under the present protective policy practically free, and the consumers are saved at least \$5,000,000 of duty each year which they have to pay on the amount of these articles at present imported into Canada, were the Cartwright revenue tariff in force. Since the present protective policy came in force over 113 articles have been placed upon the free list, which were dutiable under a revenue tariff. the other hand luxuries of all kinds, such as are imported for the use of the wealthy and which were taxed under the Cartwright revenue tariff at the low rate of from 15 to 17½ per cent., are at present under our protective tariff taxed at from 30 to 50 per cent., or more than double the old rate. Although far more money is collected under the present tariff system, the lion's share of it is levied upon the luxuries imported for the wealthy, while our farmers and artisans practically escaped it by using Canadian

made goods upon which no duty is paid whatever, and which, quality considered, are as low in price as similar articles of foreign manufacture are abroad.

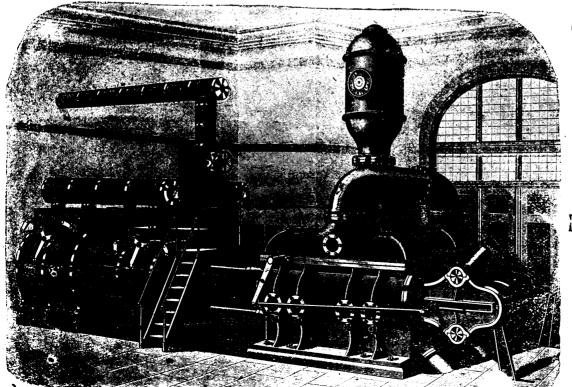
A FAIR COMPARISON OF THE TWO SYSTEMS.

Fortunately for the decision of this question, Canada has had a pretty thorough trial of both of these fiscal systems, and a comparison of the results of each forms an object lesson so plain that the man must be wilfully blind who cannot draw the true inference therefrom. The periods I have selected for comparison are (1) from 1874 to 1879 inclusive, being the last six years of Canada's revenue tariff of 15 per cent. and 171/2 ad valorem as administered by Sir Richard Cartwright, and (2) the last six years of our present protective tariff, from 1889 to 1894 inclusive, 3 period when, according to our free traders, this country has been brought to the very verge of national bankruptcy by our iniquitous system of tariff legislation. I have selected the last six years of Canada's revenue tariff period, because during the first six years after Confederation (1868 to 1874), the United States was but slowly recuperating from the effects of a terrible civil war, and on account of a deprecated currency and the abnormally high price of labour, her manufacturers could not be considered in any sense as dangerous competitors. However, after war prices had settled down to values founded upon a gold basis, and her manufacturers had developed their enormous resources, the effect of United States competition at once became apparent. This is the only period, therefore, in the twelve years of our revenue tariff system when the same relative commercial conditions obtained between Canada

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and the United States as have been in force during the past six years. The figures are as follows:--

IMPORTS INTO CANADA FOR HOME CONSUMPTION UNDER THE REVENUE TARIFF.

Fisca' Yea	From Great Britain	From United States	From Other Countries	Total Imports
1 774 875 1876 1877 1878 1879	\$63,076,437 60,347,067 40,734,260 39,572,239 37,431,350 30,993,130	\$54,283,072 50,805,820 46,070,033 51,312,669 48,031,739 43,7,9,219	\$10,044,660 8,465,770 7.928,925 5.415,575 5,136,658 5,609,259	\$127,404,169 119,618,657 94,733,218 90,300,483 91,199,577 80,341,608
Totals	\$272,154,313	\$294,842,552	\$42,600,847	\$609,597,712

IMPORTS INTO CANADA FOR HOME CONSUMPTION UNDER THE PROTECTIVE POLICY.

1890 1890 1891 1892 1893 1894	\$42,317,389 43,390,241 42,047,526 41,348,435 43,148,413 38,717,267	\$50.537.440 52,291.973 53.685.657 53.137.572 58.221.976 53.034.100	\$16,'0-,018 17,083,370 17,611,941 22,492,936 20,334,641 21,342,616	\$109,673,447 112,765,584 113,345,124 116,978,943 121,705,030 113,093,983
Totals	\$250,909,271	\$320,905,718	\$115,684,122	\$687,562,111
Total increase or de-	Decrease	Increase	Increase	Increase
crease in prot r period	821,185,042	\$26,066,166	\$73,083,275	\$77,964,399

CANADA'S IMPORTS FROM GREAT BRITAIN.

In examining the returns of Canada's imports, it is well to bear in mind that our imports from Great Britain and foreign countries, other than the United States, consist at present, as they have always consisted, principally of manufactured goods, so that a simple comparison of the figures in the two periods is all that is nesessary to furnish a true test of this department of our national commerce. A glance at thereturns will show that during this revenue tariff perlod our imports from Great Britain gradually decreased year by year so that in 1879 they were \$32,083,307 less than they were in 1874, a shrinkage of over 50 per cent. in six years. It is true that in 1872, 73, 74 and 75, our imports from Great Britain mounted up to over \$60,000,000 each year, but these four years are so exceptional as to indicate a commercial boom for which the country had apparently to pay dearly for later on. It will also be noticed that the aggregate imports from Great Britain during the Revenue Tariff period, shown in these tables, exceeded the aggregate during the past six years by \$21,185,042; this, however, is easily accounted for by the abnormal mports in the boom years of 1874 and 75 noticed. above, and the further fact that under our present tariff policy Canadian manufactures have in many lines taken the place of the British. It is worthy of remark, however, that this is the only instance of a decrease in all of the trade tables given herein, as all the other comparisons show a decided increase in favor of the protective policy

Apart from the years 1874-75 it will be noticed that the

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CANADA'S IMPORTS FROM OTHER COUNTRIES.

Canada's imports from Other Countries, as these records show, gradually declined during the six years of a revenue tariff from \$10,044,660 to \$5,609,259, a shrinkage of \$4,435,401 per annum or 44 per cent. Under protection they gradually revived until they not only reached the highest figure recorded under a revenue tariff (that of 1874) but continued to advance year by year until they reached their zenith in 1892 of \$22,492,936. Even 1894, depressed as business was, shows an increase over 1879 of \$15,733,357 or nearly 300 per cent.

CANADA'S IMPORTS FROM THE UNITED STATES.

Canada's imports from the United States differ somewhat from those of other countries, inasmuch as they have changed so much in their character as to materially affect the comparison of the two periods. In the first or revenue tariff period our imports from the United States consisted principal'y of manufactured goods, a state of affairs which was becoming more accentuated every year owing to the depression in that country at that time and the necessity the manufacturers were then under as now and during the past year ot slaughtering their surplus goods in order to raise money. Since Canada adopted a protective policy

our imports from the United States have undergone an almost complete change. The bulk of these imports now consist of raw materials for use in our factories and the conversion of these raw products into manufactured goods, instead of being done as formerly by American artisans in the United States, is now performed by Canadian artisans in our own country. That this is so is readily apparent from the comparative table of factories, workmen, wages, output, etc., given in the earlier part of this paper.

Even with this great advantage it is interesting to note how imports from the United States gradually shrunk during the revenue tariff period, the year 1879 showing a de-

crease of \$10,543,853 over that of 1874.

Under protection, however, they like the others, began gradually to revive and a comparison shows that the American imports during the year 1894 exceed those of the last year of the revenue tariff period, 1879, by \$9,294,881; while the aggregate for the six years of the protected period shows an increase of \$26,066,166 in its favor over the revenue tariff period.

CANADA'S TOTAL IMPORTS.

Taking the total of Canada's imports from all countries, it will be seen that during the revenue tariff period they steadily declined from \$127,404,169 in 1874 to \$80,341,608 in 1879, a shrinkage of \$47,062,561.

Under protection they gradually increased until they reached the high water mark in 1893. Even 1894 showed that we imported \$32,752,375 more than we did during 1879, the last revenue tariff year, and for the entire period of six years, the protection period shows a gain of \$77,964,399 over the revenue tariff period.

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EXPORTS FROM CANADA. UNDER THE REVENUE TARIFF.

Liscal	To Gt. Britain	To Umted	To Other	Total
Year		States	Countries	Exports
1874	\$ 45,003,882	\$ 36,244,311	\$ 8,103,735	\$ 89,351,928
1875	40,032,902	29,911,983	7,942,094	77,886,979
1876	40,723,477	31,933,459	8,309,499	80,966,435
1877	41,567,469	25,775,545	8,532,079	75,875,393
1878	45,041,539	25,244,898	8,137,230	70,323,667
1879	30,295,718	27,105,501	8,030,030	71,491,255
Totals	\$249,564,987	\$176,275,397	\$ 49.055,273	\$474,895 657

EXPORTS FROM CANADA UNDER OUR PROTECTIVE POLICY.

_		- ·		, –
1890 1891 1891 1892 1893	\$38,105,126 48,353,694 49,280,858 64,966,549 64,080,493	\$ 43,522,404 40,522,810 41,138,695 38,988,027 43,923,010	\$ 7,561,637 7,872,645 7,997,743 10,068,799 10,560,849	\$ 59,189,167 96,749,149 98,417,296 113,963,375 118,564,352
1894	68,538,856	35,809.940	17,176,153	117,524,949
Totals	\$333,265,576	\$243,904,886	\$ 57,237,826	\$634.408,285
Total increase	Increase	Increase	Increase	Increase
or de- crease	\$ 83,700,580	\$ 67,629,489	\$ 8,182,553	\$159,512,631
in prot'n				

CANADA'S EXPORT TRADE ANALYZED.

Canadian exports consist principally of the produc's of forest, farm, mines and fisheries, and are practically of the

same general character in both the revenue and protective tariff periods.

I glance at the figures given above will show, however, that under a revenue tariff our exports to Great Britain gradually decreased, so that in 1879 they were \$8,708,104 less than they were in 1874.

Under a protective policy they have gradually risen until in 1894 they touched high water mark \$68,538,856 or \$32,243,138 more than in 1879. For the entire six years the protective tariff period shows an increase of \$83,700,-589 over the revenue tariff period.

Our exports to the United States during the revenue tariff period, although unhampered by the hostile legislation of a McKinley tariff, gradually shrunk in volume and was \$9,078,810 less in 1879 than in 1874.

Under a protective policy they gradually increased and 1894 showed increased exports to the United States of \$8,644,439 over 1879. The aggregate for the six years shows a total increase of \$67,629,489 in favor of the protective as against the revenue tariff period.

Canada's exports to "other countries" practically remained stationary during the revenue tariff period, while under our protective policy (which is always on the qui vive to exploit new markets as well as build up the old) they have increased so that the year 1894 shows an increase of \$5,030,036 over 1879.

As the figures show our total export trade gradually decreased during the revenue tariff period until the last year 1879 showed a shrinkage of \$17,860,673 over 1874.

Under our protective policy they have gone in exactly

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the opposite direction, 1894 showing an increase over 1879 of no less than \$46,033,694. For the entire period of six years, the protective period shows a total increase over the revenue tariff period of the enormous sum of \$159,-512,631.

This brings us to the comparison of Canada's total for eight trade during the periods under consideration, and heragain it is apparent that the period covered by a protective tariff does not suffer in any way by the comparison. Here are the figures:—

TOTAL FOREIGN TRADE OF CANADA. IMPORTS AND EXPORTS UNDER THE REVENUE TARIFFE.

Fiscal Year	Value	Fiscal Year	Value
1874 1875 1876 1877 1878 1879	\$217.505.510 200.957.202 174.176.781 175.203.355 172.405.454 153.455.682	1889 1890 1891 1892 1893 1894	\$204,414,098 218,607,390 218,384,934 241,360,443 247,638,620 240,999,889
Total	\$1,003.764,044	Total	\$1,371,414,374
Total in- crease or deer'se in protect'n period			Increase \$277,650,330

From these it is apparent that under a revenue tariff our foreign trade gradually declined until in 1879 it was \$64,-109,828 less than it was in 1874.

That this state of affairs has been entirely changed under

our protective policy no one can dispute, for the returns show that in 1893 our foreign trade reached the highest point ever recorded in Canadian history while the total for 1894 was \$87,544,267 in excess of that of 1879. The aggregate for the periods of six years shows an excess in the protective period of no less than \$277,650,330.

SOME PERTINENT DEDUCTIONS.

Now for the application. It is evident from the toregoing that our National Policy of protection to Canadian industries has not restricted our foreign trade in any way, because as the returns show:

- (1) Our total imports have increased \$77,904,300 during the last six years of protection as compared with the last six years of the revenue tariff policy.
- (2) Our total exports have increased \$159,512,631 during the same period.
- (3) Our total foreign trade has increased \$277,650,330 during the same period.

It also proves that this country must be steadily growing richer year by year, because we are not only importing and paying for more foreign goods than we formerly did under the revenue tariff system, but we are manufacturing more goods in Canada, nearly all of which are consumed in our own country.

CANADA'S RELATIVE POWER OF CONSUMPTION UNDER A REVENUE AND PROTECTIVE TARIFF.

A comparison of the years 1881 and 1891, the only years for which the returns afford an accurate comparison, will illustrate this. In making up this table I take no account of the agricultural products consumed by our people as a

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is an unknown quantity and would not materially affect the matter either way. I also assume that all the goods manufactured in Canada are consumed in this country.

	1881	1891
Value of Canadian manufactured pro- ducts consumed in Canada	1391-7-1	\$475.445.705
Value of foreign goods imported into Canada.	91,611,604	113,345,124
Totals	: 401,287,672	\$588,800,829 401,287,672
Increased consumption of goods in 1891 over 1881		\$187,513,157

THE LOGICAL CONCLUSION.

From the figures given in this article, it is self evident that under our National Policy of pro ection to native industries, both our domestic and foreign trade have increased to an unprecedented degree, and that our home trade has not been increased at the expense of our foreign trade.

It will also be seen that however faulty our present tariff may be from a free trade standpoint, it has proved beyond a peradventure by its practical working, that a fiscal policy which offers adequate protection to Canadian industries is absolutely necessary for the prosperity of this country.

It has given prosperity to our farmers and artisans, stability to our manufacturers and capitalists, buoyancy to our foreign commerce, and has beyond doubt rendered us more independent of the effects of the commercial disasters of foreign countries than we were at any former period of our history. While we may not be as prosperous as we could wish, still when we look around us at the condition of other countries, we ought to be thankful that we are in as sound and healthy a commercial condition as we are. Certainly we have nothing to fear by comparison.

#### CAPTAINS OF INDUSTRY.

This department of the Canadian Manufacturer is considered of is 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.

The Westinghouse Air Brake Co., of Pittsburg, Pa., will establish a branch in Ontario.

It is said that the Toronto Rubber Co., of Toronto, Ont., will remove its factory from Port Dalhousie, Ont., to Hamilton, Ont.

George Cassady & Co., of Vancouver, B. C., are applying for incorporation with a capital stock of \$200,000 to earry on a sash and door factory business, etc.

The Sault Ste. Marie Pulp and Paper Co., of Sault Ste. Marie, Ont., are applying for incorporation with a capital stock of \$2,000,000 to manufacture pulp and paper, etc.

The Kingston Chemical Fire Engine Co., of Kingston, Ont., are applying for incorporation with a capital stock of \$30,000 to manufacture chemical fire engines, etc.

The Laughlin Hough Manufacturing Company, with a paid-up capital stock of \$55,000, has been organized at Guelph for the manufacture of architects' and school supplies.

The British Columbia Auer Light Co., of Vancouver, B. C., are applying for incorporation with a capital stock of \$30,000 to carry on the Auer system of incandescent gas lighting.

The Hame Company has purchased A. Berry's saw mills at Andrewsville, and will begin putting in the machinery at once, so as to have it in operation in the course of a few weeks.

The Stratford Mill Building Co., of Stratford, Ont., are applying for incorporation with a capital stock of \$30,000 to manufacture mill machinery of all sorts and equipments for use in mills, factories, etc.

The Hamilton B.idge Works of Hamilton, Ont., were sold by auction on the 18th inst. to Mr. Tilden for \$49,900. The property and plant were valued at \$80,000. It is understood that Mr. Tilden represents a syndicate headed by Mr. Hendrie and himself, which means that the works will be opened up again.

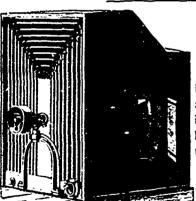
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Galt, Unt.

Clinton, January 24th, 1895.

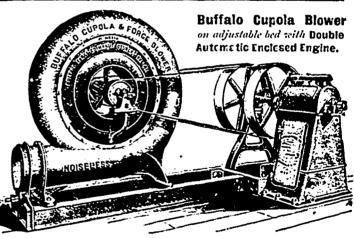
J. D. McEichren, Esq., Galt.

Dear Sir. Alcolving to your enquiry of the 21st lists, we may say the HOT BLAST HEATING SYSTEM we purchased from you about 15 months ago is giving entire satisfaction. Our factories contain about 200,000 cubic feet of space which we heat with exhaust steam, except in very severe weather when we use live steam in one half of the heater in the morning only.

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As regards the DRY KILN, the Henter and 42 inch Fan you supplied us, they are doing excellent work. We dry about Scarloads of weather-seasoned lamber, the fly 1, 13 and 2 inch walnut per week. We use exhaust steam exclusively us the dry kiln and that during working hours only. It does not represent a power to run the fans and they handle a very large quantity of air. We that yours to be a great improvement on the old system of heating with papes around the factory and under the lumber in the dry kiln.

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



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There is talk of a large union depot being built at Nelson, B. C., by the Nelson & Fort Sheppard and Columbia, Kootenay Railway

Messrs. Rogers & Morris, of Ottawa, Ont., are applying for incorporation with a capital stock of \$70,000 to manufacture mineral, vegctable and animal oils, etc.

The Small & Fisher Co., of Woodstock, N.B., are applying for incorporation with a capital stock of \$60,000 to acquire and carry on the business now and heretofore carried on by the firms of "Small & Fisher," and "Union Foundry Co." and to carry on general manufacturing and foundry business embracing the manufacture of farm

Mr. James Clarke, who has been for a number of years with John Bertram & Sons, Dundas, Ont., and was mechanical superintendent for the Canadian Government at the World's Fair at Chicago, also at the Colonial Exhibition in London, Eng., has accepted the position of manager for the Ontario Peat Fuel Co., whose head office is at Toronto and works at Welland, Ont. We congratulate the company on securing such a competent gentleman.

The Dodge Wood Split Pulley Co., Toronto, inform us that they are meeting with big success in introducing their new patent split friction clutch pulleys ond cut off couplings, as illustrated in another page. Many of the largest power users of Canada have already adopted them and repeat orders are proof to the Dodge Company that the satisfaction which is in every case guaranteed, has been obtained. Heretofore a split friction clutch or coupling has been looked upon with a certain amount of mistrust, but that the Dodge Company have perfected such an appliance, is apparent to any who will investigate. A handsome illustrated catalogue is mailed free to power users on application.

The Ontario and Western Lumber Company which controls and operates a big lumbering industry on the Lake of the Woods, with mills at Rat Portage, Keewatin and Norman, has decided to branch out in a new line of manufacture. The company is putting in machinery to equip a first-class box factory on a large scale, with the object of shipping boxes and packing cases in the Knock-down. The factory will have all modern machinery, including stamping and printing presses for taking impressions on wood. Heretofore large quantities of box material have been brought in from the East or the United States to supply Winnipeg factories. This will now be unnecessary, as a supply will hereafter be obtainable close at hand, from a home industry.—Winnipeg Commercial.

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The W. A. Freeman Co., of Hamilton, Ont, are applying for inco poration with a capital stock of \$40,000 to manufacture agricultural fertilizers, etc.

The Niagara Falls & Lundy's Lane Electric Street Railway Co., o Niagara Falls, Ont., are applying for incorporation with a capital stock of \$50,000 to construct a street railway or lines of street railway in the municipalities of the town of Niagara Falls, the village of Niagara Falls, and the Township of Stamford, Ont.

The B. Greening Wire Co., Hamilton, Ont., have favored us with their new illustrated descriptive catalogue having reference to the wire goods and perforated metals manufactured by them. The contents of the book embraces about every article manufactured of wire including wire cloth, Brown's patent wire chains, drive chains, wire rope and attachments, woven wire fencing, galvanized wire netting supplies, foundry supplies, ash sifters, etc.; rat traps, clothes lines wire door mats, spark and fire guards, springs, signs, floral designs, barbat and florage that the signs of th basket and flower stands, wire fencing, bank and office railing, wire guards, metallic lathing, etc. The book also contains tables showing the size, weight and length and stretch of iron and steel wire of different gauges in use in the United States and England; weight and size of sheet zinc, weight of rolled sheets of wrought iron and steel, etc. It also contains a telegraphic code by which can of these steel, etc. It also contains a telegraphic code by which any of these lines of goods may be ordered by telegraph. The book contains 176 pages, is well bound, and is convenient for reference; and we understand that it is one of the full telegraphic code by the contains 176 pages, is well bound, and is convenient for reference; and we understand that it is one of the full telegraphic code. stand that it is one of the fullest catalogues of this class of goods that has ever been published. The list of perforated metals is very much enlarged over previous catalogues. The demand for a variety of perforated zinc sheets is such that in many sizes the company have had to drop the fractions for small sizes, and have adopted the micro metergauge. In perforated steelandiron a very much larger list is given than heretofore. The wire cloth section contains a full list of every description of wire cloth likely to be required in grist mills and grain cleaning machinery; for covers for sawdust and sawmill refuse burners, wood and coal spark arresters, cotton and wool dry floors, malt and oat kiln floors, and for other purposes.

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Edward Kendrew's grist mill at Pond Mills, near London, Ont., was destroyed by fire on the 11th inst.; loss about \$2,000.

The Carriage Factory of Robert Blow, and the tin shop of W. Bailey, at South Mountain, Ont., were destroyed by fire on the 13th inst.; loss about \$15,000.

Arrangements are being made for the construction of a dry dock vessels that sail on Georgian Bay. The dock will be 400 ft. long by 50 gr. Midland, will be 400 ft. long by 50 gr. Midland will be 400 ft. long by 50 gr. Midland will be 400 ft. long by 50 gr. Midland will be 400 ft. long by 50 gr. Midland will be 400 ft. by 50 ft. wide, with 16 ft. of water on the mitre sill. Midland will be terminus of the Trent Valley Canal, and the necessity of such a dry dock at that place is quite evident.

The McClary Mfg. Co., London, Ont., have placed in our office a number of specimens of the enamelled granite ware manufactured by them. This is a new enterprise recently gone into by this company, for which for which purposes they have made large additions to their buildings and plant, and they are now prepared to furnish in certain lines, as fine articles. plant, and they are now prepared to turnish in comming articles in enamelled ware as can be produced anywhere. understand that the furnaces necessary in this work were supplied and erected by Mr. W.S. Rockwell, 26 Cortland St., New York. The Speciments of the state of the supplied state of the supplied specimens on view in this office disclose the fact that they are equal to any to any made in the United States, and superior in most respects to any imported from Germany. In fact, American ename reads made been driven from the Canadian market by the cheaper goods made in Game and the Canadian market by the cheaper goods made in Germany, and now that Canadian manufacturers are in a position imports of the latter article will rapidly decrease, being supplanted by those made in Canada. The McClary Co. manufacture enameled goods. they do a large business in that line in connection with their stove and hollow ware works.

The Waterloo, Ont., Woolen Manufacturing Co. have been putting

The Jacob Y. Shantz & Son Co., of Berlin, Ont., has been incorporated with a capital stock of \$140,000 to manufacture buttons, ornaments and novelties for similar purposes.

The merchants, manufacturers, and publishers who suffered by the recent disastrous fires in Toronto deserve credit for the energy displayed in getting their respective establishments in operation again. The Toronto Lithographing Company especially have made a phenomenal record—when one considers that their immense plant, machinery, stones, drawings, and engravings were completely wiped out of existence on the 6th of January, and that on the 24th, a little over two weeks, they completed and made a large shipment of colover two weeks, they completed and made a large simplent of colored work, it seems incredible, the drawing and printing being done by their own staff and on their own new presses. It seems all the more wonderful when one considers that all their materials, stones and machinery, had to be shipped from New York. Of course these and machinery, had to be snipped from New York. Of course these were ordered by wire. Fortunately Messrs. Hoe & Company had four of their large presses in stock, which were shipped by fastest route, and men sent on to erect them. The usual time allowed for setting one of these machines up is ten days (they weigh upwards of thirteen tons each); in this case, however, they had presses put up and running on work within ten days after they were shipped from New York. The whole new plant is now in operation, and it is quite a pleasure to watch the beautiful machiny as they turn off the a pleasure to watch the beautiful machiny as they turn off the fine colored plates and work for which the Toronto Lithographing Company is noted. It is safe to say that this company has the most modern and complete establishment in Canada, and it cannot be surpassed in the world. Their new address is 48 Temperance street, west side of Bay street.

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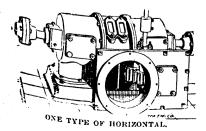
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The Northwest Trading Company, of Calgary, contemplates es-

The Northwest Trading Company, of Calgary, contemplates establishing a pork packing factory.

The Collins Mig. Co., Toronto, will apply for incorporation with a capital stock of \$40,000 to take over the business formerly carried on under the same name to manufacture metal roofing, metal ceilings, corrugated sheet iron, etc., in addition to the wire fence, stamped goods, etc., formerly manufactured by them.

Wm. J. Matheson & Co., New York and Montreal, have sent us a sample eard sto ving the application of their Diamine Violet N. Pat d and which is if a trated by eight different dyeings, with receipts at tached. Regarding this dye they say:—Diamine Violet N. ranks among the fastest to light, acids and washings of the well known Diamine colors, and for this reason as well as owing to its pure, bright shades, it is extensively used both as a self color and in combination with other Diamine colors. bination with other Diamine colors.

The Bridgeport Connecticut Union contains a very interesting acount of some experiments that were made in that city a few days ago with emery wheels manufactured by the Springfield Emery Wheel Co., of that place. The wheels tested were an invention of Mr. Jackman, of that company, who for a long time had been working on a wheel which would to some extent, prevent the loss of life that occurs through the bursting of the ordinary emery wheel. The Union says:—"The wheels were tested, the first without the safety device, the second with it. The first wheel was adjusted and the steam turned on, at first moving with a slow speed but rapidly increasing to the tremendous speed of 4,080 revolutions a minute. The wheel was 14 inches in diameter by two inches in thickness, with a speed of 1,600 revolutions a minute. In most factories the wheels are tested at one and one-half times their given speed; here they are tested at twice that. The wheel tested was run to two and a half times its guarantee before bursting. The safety bond wheel was then put on and allowed to attain the speed of 3,780 revolutions a minute. At this, if the wheel were capable of moving straight ahead, it would move over the ground at the speed of three miles a minute. After running for some time it was taken off, cracked nearly in two, and put back again and with gradually increasing speed reached 3,240 revolutions a min-ute before it separated. This was a very convincing test of the merits of the wheel.—It is by far the best of the many safety wheels on the market.—The use of it cannot but reduce the list of casualties caused by the breaking of the wheels while in use. It should be understood that the centrifugal strain on a wheel which is rated at 1,500 revolutions per minute, which is the standard speed for a 14-inch wheel, and which was the size of the wheel tested, being run up to 4,000 revolutions per minute has been increased 7 times.

The Clarry Carriage Works, at Millbrook, Ont., were destroyed by fire on the 14th inst; loss about \$300.

The Chicory Mills of Mr. Joseph Beaubien, Outremont, Que., were destroyed by fire on the 16th inst.; loss \$8,000.

The Cossitt Bros. Co., Brockville, Ont., has been incorporated with a capital stock of \$400,000 to acquire and carry on the business of manufacturers of agricultural implements now and heretofore carried on by the firm of Cossitt Bros., etc.

The Penberthy Injector Co., Detroit, Mich., have sent us then new catalogue, which contains descriptions of price lists of a number of new water gauges and oil cups which they are just placing on the These goods are all very fully illustrated in the catalogue, which also contains instructions regarding the management of them and how they may be quickly repaired should they become out of order. There are also rules by which to determine the size of mectors required for all purposes. The catalogue furnishes a vast amount of information regarding these goods and also the management of steam boilers in connection therewith. The company will take pleasure in forwarding a copy of this catalogue to anyone interested who will apply for it.

#### Water Pov . Compressors.

The increased uses in compressed air in mining and for mechanical operations has caused a large amount of attention to be turned to the production of compressed air by the use of water power, and the tol-

Rand Drill Company of Sherbrooke, Que., for this service.

The great merit of this design is apparent, so much so as to have caused it to be copied by nearly all the makers of compressors in Canada and the United States. It is to be borne in mind, however, that the Rand Company are the pioneers in this business as in all other improvements and that the design as shown as organization of the property and that the design as shown as organizations. other improvements and that the design as shown is original with

them.

The illustration is of a 12x18 inch Duplex Class D Machine with the well known Pelton Water Wheel mounted directly upon the crank shaft of the compressor. This system is based upon the fact that the power of the Pelton wheel is independent of its diameter, that is, a wheel of enlarged diameter under a given head does not necessarily involve an increased delivery of power, as in the case of the turbine. It therefore becomes possible to adapt the wheel to the power to be developed, the speed of the compressor and the fall of water under which it is to be placed. The number of revolutions of the which is determined by the compressor, where the peripheial speed of the

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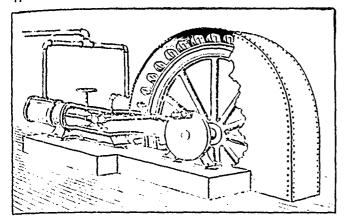
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buckets is determined by the head of water. Hence, it is only necessary to make the wheel of such diameter, that when running at the number of revolutions required by the compressor the buckets shall have the peripheial speed required by the head of water. This construction has a wide range of application, although not a universal

It is impossible to give absolute figures as they depend largely upon the size of the compressors, but speaking broadly the system is applicable to heads of water from about 40 to 500 feet. The efficiency



of these wheels has been tested to be as high as 90-2 to and they can be relied upon to render in practice an efficiency of 85 which is applied directly to the compressor.

For very low heads the water nozzle may be doubled so as to have two streams of water impinging on the wheel buckets.

The advantages of this design are easily perceived; no belong, no gearing, no shaft transmission, therefore no loss of power in transmission, and the liability to accident reduced to a minimum; besides the water wheel being in addition to a motive power a fly wheel is in such a position as to be unlased and examined in a few moments.

#### CANADIAN PATENTS.

The following patents have been issued from the Canadian Patent Office, from December 12 to December 26, 1894, inclusive.

Information regarding any of these patents may be had on application as follows: --

Fetherstouhaugh & Co., Bank of Commerce Building, Toronto. Ridout & Maybee, 103 Bay street. Toronto. 103 Bay street, Central Chambers, Ridout & Maybee, A. Harvey, J. A. Grenier, Imperial Building, Montreal

Copies of American patents corresponding to Canadian patents an be procured from either of these attorneys for the sum of twenty five cents each.

47.675 Car brake, C. W. Carter, Minneapolis, Minn. 47.676 Water wheel, Oxide Parent and Joseph A. Gremer, Montreal,

Que. 47.677 Mowing machine, J. J. Moran, Loretto, Ont. 47.678 Tube boiler, C. D. Jermyn, Hamilton, Ont.

47,679 Self turning and pattern knitting attachment for knitting ma-

chines, T.A. Code, Perth, Ont.
47.680 Ten-pin balls for bowling alleys, C.W. Rodman, Queens, N.Y.
47.681 Machine for applying backing strips to books, A. L. Garver,
Roaring Spring, Pa.
47.682 Potato bug picker, Allan Hunter, Dundas, P.E.I.

47.683 Liquid filter, John Ellis, Lynn, Mass.

47.084 Device for operating switches, Oscar Beaudry and Chas. Le-blane, Ottawa, Ont.

47.685 Horseshoe, J. J. Malone, Birmingham, Eng. 47.686 Horseshoe, I. J. Malone, Birmingham, Eng. 47.687 Horseshoe, J. J. Malone, Birmingham, Eng. 47.688 Self-waiter for dining tables, Wm. H. Thompson and George

Morri , Hamilton, Ont.

47,689 Harness at adment for shafts, P. C. Heath, Talcville, N. Y.

47,690 Neck voke centre, The Safety Neckyoke Co., Malvern, Iowa.

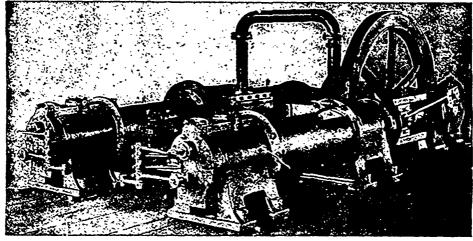
47,691 Neck voke attachment, The Safety Neckyoke Co., Malvern,

lowa.

47.692 Stovepipe damper, Fry O. Farwell and The Adams Co., Dybuque, Iowa

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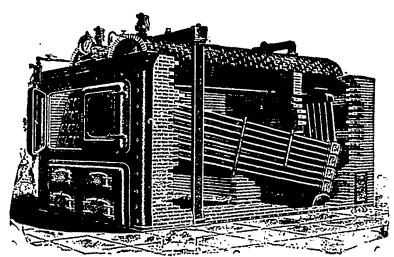
AND FINGERING YARN

Montreal Office 409 Board of Trade Building. Toronto Office, 33 Melinda Street.

- 47.693 Pipe sleeve, Ferdina Dube, Mathias Valiquette, Elie Claude and John Victor Valiquette, Ottawa, Ont.
- 47,694 Driving gear for bicycles, A. D. Lafontaine, Smithville, Ont.
- 47,695 Band saw guide, Wm. A. Howell, M.D., Jarvis, Ont.
- 47,696 Car brake, J. P. Martin, Enoch James and Frank Gormley, Montreal, Que.
- 47,697 Pipe boiler, Jas. Kaine, Chas. H. Boyer and F. W. Boyer, Brooklyn, N.Y.
- 47,698 Windmill governor, E. V. Farley, Waterman, III.
- 47,699 Bicycle, A. S. Weaver, Hamilton, Ont.
- 47,700 Lawn mower, Florence Hermanzohe, Scranton, Pa.
- 47,701 Heating attachment for gas stoves, Jos. Guy, New York N.Y.
- 47,702 Cycles, Ebby Dyer, Toronto, Ont.
- 47,703 Separator, W. W. Gillespie, Stanford, Conn.
- 47,704 Press, V. D. Anderson, Cleveland, O.
- 47.705 Feed steamer boiler, Ed. Foster, Learnington, Ont.
- 47,706 Garment stretcher, Lucilla Mallory, Bridgeport, Conn.
- 47,707 Vehicle wheel, E. C. Ferdinand Becker, Milledgeville, Ga.
- 47,708 Spring, Chas. Scott, Philadelphia, Pa.
- 47,709 Hay press, Jean B. Dore, Laprairie, Que.
- 47,710 Radiator coupling, Martin Nelson, Foronto, Ont.
- 47,711 Sleigh, H. W. Howell, St. George, Ont.
- 47,712 Automatic sash lock, James Seadler, Sacramento, Cal.
- 47,713 Gate, A. W. McLaren, Hennepin, Ill.
- 47,714 Burglar and fire alarm, A. C. Wurtele, Montreal, Que.
- 47,715 Bicycle lock, S. C. Hone, St. Paul, Minn.
- 47,716 Lawn tennis apparatus, W. B. Hopkins, Washington, Colum-
- 47.717 Sewing machine, The Scott Shoe Machinery, Co., New York, N.Y.
- 47,718 Take-up for sewing machine, The Scott Shoe Machinery Co , New York, N.Y.
- 47,719 Furnace, The Howard Furnace Co., Syracuse, N.Y.
- 47,720 Churn, W.H. Monroe and Eddy G. Monroe, Sullivan, Ill-
- 47,721 Purifier, separator and grader, D. J. Davidson, S. Martin and S. G. Martin, Port Huron, Mich.

- 47,722 Adjustable cut-off separator and grader, D.J. Davidson, A.S. Martin, S. G. Martin, Port Huron, Mich.
- 47.723 Adjustable cut-off purifier, separator and grader, The Davidson-Martin Mfg. Co., Port Huron, Mich.
- 47,724 Rim tightener, Emil Fisher and James H. Conklin, Hollsville,
- 47.725 Gas water heater, The Stewart Mfg. Co., Newark, N.J.
- 47,726 Tobacco stripping machine, Samuel Reid, Jersey City, N.J.
- 47,727 Merry-go-round, C. L. Barnhardt, Fliet, Mich.
- 47,728 Rolling apparatus, Levi D. York, Portsmouth, O.
- 47,729 Process and apparatus for generating and applying anaesthetics, Samuel J. Hayes. Chicago, Ill.
- 47.730 Solution and separating sulphur, etc., from distilled petroleur, Olof Johnson and Ross Thompson, Port Arthur, Ont.
- 47,731 Automatic fire escape, etc., John Youngson, Hamilton, On.
- 47,732 Combustible vapor engine, R.B. Hain, Grand Rapids, Mich
- 47.733 Machine sheep shears, W. M. Noakes, and Ed. J. Clarks a Sydney, N.S.W. 47.734 Water purifying apparatus, Frank Gilbert, Montreal, Que.
- 47,735 Driving gear for bicycles, etc., James Wm. Duncan, Mont. real, Que.
- 47.736 Moustache curler, W. S. Cooper, Newport, R.I.
- 47.737 Wire chain, F. W. Smith, jr., Bridgeport, Conn.
- 47,738 Lag chain, V. D. Anderson, Cleveland, O.
- 47.739 Cover for manholes, etc., J. P. Roe, Pottstown, Pa.
- 47,740 Horse shoe, C. C. Jerome, Chicago, Ill.
- 47,741 Animal trap, W. C. Hooker, Abingdon, Ill
- 47,742 Apparatus for propelling boats, etc., H. Bancroft, News, Armagh, Ircland.
- 47 743 Machine for covering wire with loose fibre, F. S. Randall, Philadelphia, Pa.
- 47,744 Typewriter attachment, N.W. Hartwell, Louisville, Ky.
- 47.745 Cigar tip, Alex. Macpherson, Montreal, Que.
- 47,746 Process of making porous sulphate of alumina, John Enequist, Brooklyn, N.Y.
  47,747 Velocipede, G. B. H. Austin, Bella Vista, Camberwell, Austin,
- tralia.
- 47,748 Gear chain for velocip de and other machines, J. B. Dunlop, sr., and J. B. Du dop, jr., Blackrock, Dublin, Ireland.

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- 47,752 Apparatus for blending powdered materials, John S. Detwiler, Philadelphia, Pa
- 47.753 Apparatus for treating powdered materials, J. S. Detwiler, Philadelphia, Pa.
- 47.754 Apparatus for breaking horses, W. H. Sanborn, Rutland, Vt.
- 47.755 Pulp beating engine, J. D. Pickles, Buckland, Manchester,
- 47/756 Trace fastener, Elliot Saint Clair, Andrus Willard, New York, N.Y.
- 47.757 Process of making a substitute for coffee, Rheinhardt Rahr,
  Manitowoc, Wis.
  47.758 Sewing machine, J.T. Hogan, Jersey City, N.J.
- 47,759 Fence wire stay, D.H. Royer, Greenville, O.
- 47,760 Nut lock, Sylvanus Stevens, Holgate, O.
- 47,761 Churn, Lee Sturges, Chicago, Ill.
- 47762 Bake pan, G. F. Blockberger, Pasadena, Cal.
- 47.703 Nat lock, etc., Albert Edwin Trentowsky, St. John, N. B.
- 47,704 Water wheel, Callixte Ethier, Montreal, Que.
- 47,765 Edger, John Cox, Victoria, 3.C.
- 47,765 Stump extractor, M. A. Kennedy, Pembroke, Ont.
- 47,767 Spinning machine, E.K. Baker, Springfield, Mass.
- 47.768 Machine for making wire ties for bales and the like, Ovide Lamothe, St. Guillaume, Que.

- 47,769 Pasteurizing apparatus, Wilhelm Paasch, Horsens, Denmark.
- 47,770 Brick machine, S. E. Haskin, Avoca, N.Y.
- 47,771 Pneumatic tire, C. K. Welch, Coventry, Eng.
- 47,772 Pneumatic tire, C K. Welch, Coventry, Eng.
- 47.773 Floor, etc., T. A. Lee, New York, N.Y.
- 47,774 Ball bearing, J. P. Jeusen and Andreas J. L. Trebbin, Copenhagen, Denmark.
- 47,775 Cuff-holder, J. V. Smith, Hayes, Ill.
- 47,776 Self sealing bottle, M. J. Tiffany, Detroit, Mich.
- 47,777 Wood cutting machine, Wm. Merrill, Saginaw, Mich.
- 47,778 Safety lamp, Robt. Hay, Hugh Toal, and Thos. Lowther, Mt. Pleasant, Pa.
- 47,779 Shirt, A. E. Fish, Belleville, Ont.
- 47,780 Nut lock, B. F. Sweet, Fond du lac, Wis.
- 47,781 Apparatus for separating and utilizing gas for heating purposes, M. J. Woodward, Petrolia, Ont.
- 47,782 Apparatus for manufacturing white lead, J. W. H. James. Westminster, Eng.
- 47,783 Salt evaporator, Thos. Craney, Bay City, Mich.
- 47,784 Draft regulator for brick kilns, C. F. Kaul, Madison, Neb.
- 47,785 Attachment for lathes, E. S. Rechtsteiner, Dayton, O.
- 47,786 Sink, Jos. Moses, Toronto, Ont.
- 47,787 Cess pool cleaner, Lazare Page, Montreal, Que.
- 47.788 Apparatus for the treatment of chemical compounds by electricity, Paul Corbin, Lancey, France.
- 47,789 Method of and apparatus for subaqueous mining, Alex. Me Dougall, Duluth, Minn.

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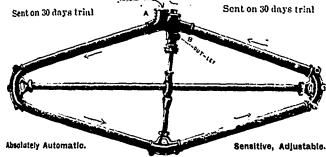
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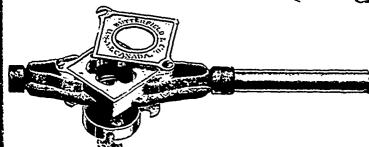
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138	135	5.01	••	3	2 ;	22.59	• • •
1.15	134	5.94	44	314	31%	26.60	"
134	1 14	7.46	"	31/2	31'0	50.94	"
2	113	9.83	4 cts.	4	4	42.33	<sup>1</sup> β cts.
24	213	12.53	••	4/4	4.15	53-57	••
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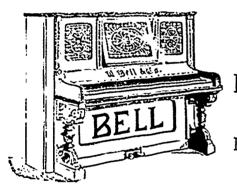
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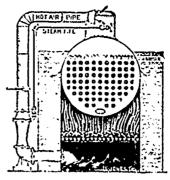
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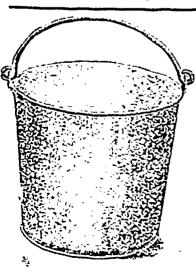
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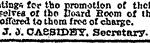
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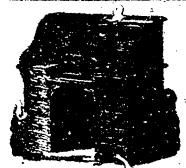
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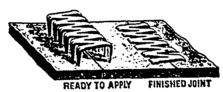
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