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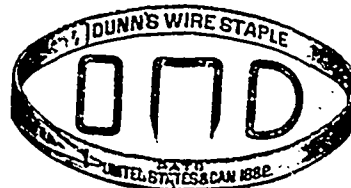
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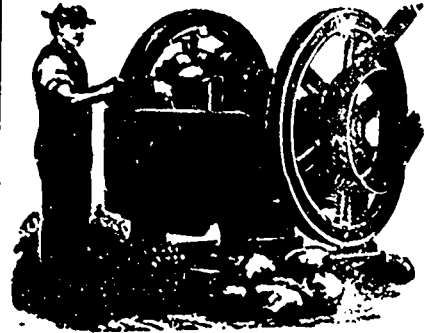
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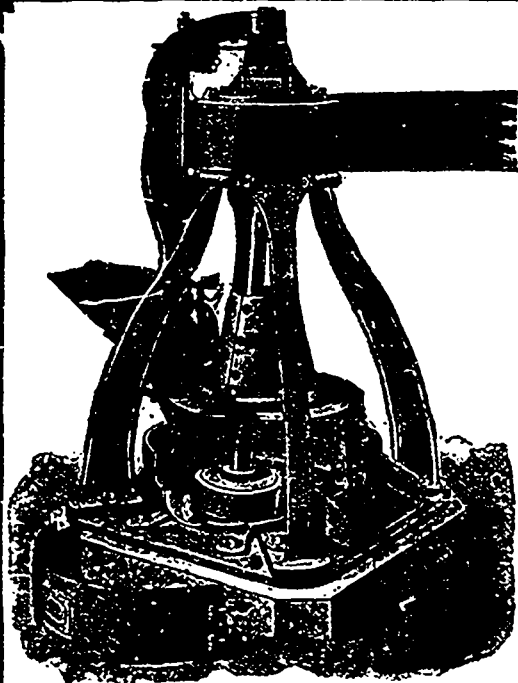
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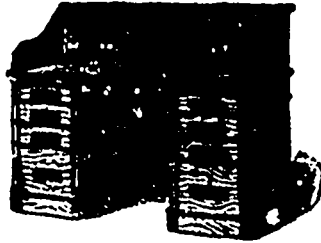
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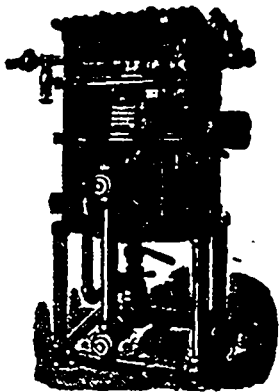
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Manufacturers and Capitalist's Patent Acts of 1872, and Amendments, Section 22.

NOTICE is hereby given to all persons desirous of practicing the invention in the manufacture of Aluminum and Alloys thereof, for which certain letters patent of the Dominion of Canada were granted on June 7th, 1883, to Chas. Martin Hall, assignor to the Pittsburg Reduction Co., to wit: Nos. 31, 512, 31, 513, 31, 514, 31, 515, 31, 516, 31, 517; and also the invention in aluminum alloys and manufacture thereof, for which certain letters patent of the Dominion of Canada were granted on July 20th, 1892, to John W. Langley, assignor to the Pittsburg Reduction Company, to wit, No. 33,492, that the undersigned is prepared to grant licenses upon reasonable terms under each and all of same letters patent, and otherwise place the patent inventions in possession of the public in accordance with the provisions of the above recited act.

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THE TORONTO FAIR.

The Toronto Globe a few days previous to the recent Toronto Industrial Exhibition and alluding to those who are interested in its success and who have drawn upon their experience and invention for new attractions to be shown there, says:—

One suggestion which is in line with the distinctive name "Industrial" is the extension of the feature of processes of manufacture. The Fair has come to take the form not only of a show but of a mart, and manufacturers

look forward to it as an opportunity for greatly increasing their fall sales. There is no reason why an exhibit which answers this purpose should not be also an attractive feature of the exhibition; but there is one mode of exhibiting manufactures which is decidedly lacking in interest; we mean a pile of boots and shoes, furniture, groceries, clothing or carpets, such as may be seen any day in the window of a Yonge street shop. To a powerful imagination a table or chair may produce on the mind images of the workshop, the sawmill, the stream down which the logs were floated and the great snow-bound woods where the trees were felled. But the ordinary mind must be stimulated by the actual seeing of these processes. Some of them could be shown in a small space, and certainly a common kitchen in the making would draw more sightseers than the finest array of the finished product.

Though Canada does not rank as a great manufacturing country, it possesses many industries which would lend themselves to a display of this kind without necessitating great expense or space. It would not do to lay down a cast-iron rule that every exhibitor must show some part of the manufacturing process, but to those who are willing to increase the attractiveness of the Fair in this respect some additional inducement in the way of space, location, etc., might be offered. If steps were taken to educate exhibitors up to this idea in the present year, a further advance might be made in 1895, when it is proposed to give the fair the character of a Dominion Exhibition.

It is pleasurable to know that, as regards those features of the Toronto Fair where displays of manufactures are most notable, the management are displaying very commendable zeal in lifting the concern out of the ruts into which it has been sticking, and, as the Globe suggests, bringing it into greater harmony with its distinctive name "Industrial." We suppose, however, that the Globe has reference to the exhibits heretofore displayed in the Main Building, which have always presented the appearance of a bazaar for the sale of merchandise rather than a display of Canadian manufactured products. The management seem to think that the Fair should include this bazaar feature, for obvious reasons: but the difficulty has heretofore been to separate the two features and not have both of them present in the same building. The presence of both these features in close proximity to each other in the same building have proved objectionable to exhibitors in both classes, and have frequently produced situations that require much good judgment and forbearance to prevent becoming very embarrassing. Thus where an exhibitor had paid money for the privilege of displaying and selling goods, and finding his business interfered with by the noise and clatter of machines in operation in his immediate vicinity, he naturally felt aggrieved, and desired that what he deemed a nuisance be abated. So, too, where a manufacturer had been put to much trouble and expense to bring machinery from his factory, being assigned space wherein to set it up in the vicinity of the other party, bringing in materials and operatives whereby he might show a most interesting and instructive process of manufacture, and where people seeking information regarding the industry there illustrated might desire to witness the same, it is not conducive to the amiability of the exhibiting manufacturer to find his spectators annoyed by the pushing, surging and rushing of crowds of idle people, whose great object might be to obtain a picture advertising card, a bit of chewing gum or a half ounce sample of soap of sup-

posed miraculous merit. It is annoying to a manufacturer to exhibit under such circumstances, but exceedingly more so when the bazaar party complains against him; the natural tendency being for the manufacturer to conclude that if he is not to be allowed to operate the machinery he was so urgently invited to exhibit, even if a noise and clatter is made, he had better save himself his time, trouble and expense by remaining away. Admitting the necessity for the bazaar feature of the Fair, it would be well if that character of displays should be confined to some particular building or buildings, and on no account be allowed to become a feature in any building where machinery is shown.

We are aware, however, that the management of the Fair quite fully appreciate the force of the objectionable features here alluded to, and that they are steadily moving in a direction to where the arrangement will be more satisfactory than it now is. It was impossible that all the changes, alterations and improvements aimed at and intended to be accomplished, could be effected at one time; and to the management these features of improvement which they deemed of most pressing importance were the ones which they have accomplished. The growing importance of the Fair and the large attendance of visitors, becoming larger and larger each year, demanded that the old Grand Stand, that was quite sufficient for its purpose when it was built, but which had been found to be entirely too small for the purpose of late years, should give way to a better and more commodious structure, and now, at large expense, we have a Grand Stand capable of comfortably accommodating many thousand spectators, facing a race track than which, there is none better on the continent. So, too, the old stables, cattle sheds, swine and sheep pens, etc., were found entirely too small and antiquated for present purposes, and at large expense the grounds are now equipped with buildings and accommodations of this description which are unsurpassed, and among which it is a delight for visitors to meander and observe the high character of the live stock products of the country. All these improvements were absolutely essential to the continued success of the Fair, and the management have shown much energy and judgment in making them.

In the meantime but little change or alteration has been made in those buildings devoted to exhibits of manufactured products, to machinery, and to methods of manufacture. None of these old buildings have been replaced with new, and none of them are entirely suitable now for the purposes for which they are used; and this fact is more apparent probably in Machinery Hall than in any other building. A badly arranged building in the first place, it is entirely inadequate for the proper display of machinery, and without capacity to accommodate half of what would otherwise be exhibited there. In fact neither Machinery Hall nor any other building on the grounds has capacity, or is in condition to hold such displays as carpet looms, cloth looms, spinning frames, shoe making machinery, broom making machinery, etc., in full operation and turning out their respective products. It is displays of this character that afford the most valuable instruction and entertainment to spectators; and it would be well for the management of the Fair to encourage manufacturers in making them.

We are informed that, now that the other improvements alluded to have been completed, energetic attention is to

be directed to making the buildings devoted to manufactures what they should be, the probability being that the first move will be to either remodel the present Machinery Hall or to erect a new one. Some who understand the matter say that no alteration in the present structure can make it conform to the requirements of such a building: that the present one might be made to answer the purpose of an annex to what ought to be a large building with heavy foundations for machinery and to support a second floor upon which lighter machinery might be located, while heavy displays, such as iron working machinery, steam engines, heavy dynamos, power pumps, stamping machinery, etc., might be placed on the ground floor. It is to be hoped that whenever the Exhibition management are ready to proceed with any such improvement they will considerately consult the manufacturers of such machinery, and thus learn what the size and shape such building should be, and how it should be equipped. The manufacturers are in full sympathy and accord with the Fair Association, and will in the future, as in the past, do all in their power to make the Toronto Fair a grand success.

EDITORIAL NOTES.

Re the Convention in Montreal of the Canadian Electrical Association on Wednesday, Thursday and Friday of this week, lack of space prevents our giving more than a brief notice. After the opening of the Convention on Wednesday, and the transaction of general business, the following papers were read:—The Application of Electricity for Medical and Kindred Purposes, from Light and Power Circuits, by W. B. Shaw, Montreal; Electrolysis, by J. A. Baylis, Toronto, and Alternating Motors, by L. M. Pinolet, Montreal, of the staff of the CANADIAN MANUFACTURER. On Thursday, Electric Brakes, by E. A. Sperry, Cleveland, Ohio; A Method of Distribution with Equalization of Potential Difference, by D. H. Keeley, Ottawa; The Possibility of Securing Better Regulation at Central Light and Power Stations by Means of Fly Wheel Accumulators of Improved Construction, by John Galt, Toronto, and also a paper by John Langton, Toronto. On Friday, Municipal Electric Lighting, by E. C. Breithaupt, Berlin, Ont.; Telephone Cables, their Construction and Maintenance, by F. J. Schwartz, Montreal, and also a paper by T. R. Rosebrugh, of Toronto. The following officers were elected for the ensuing year:—

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An inspection of the pages of this journal will disclose the fact that about all our available space for reading matter has been devoted to brief mentions of exhibits of machines, machinery and manufactures at the recent Toronto Fair. Without doubt these exhibits were more numerous than on any previous occasion; and the hundreds of them herein alluded to afford some idea of the extent and diversity of the manufacturing industries of Canada. And although we have given so much space to notices of these exhibits, we find that we are unable to even briefly allude to all of them, it being necessary to hold over for our next succeeding issue notices of a large number of some of the most interesting and important displays made at the Fair.—we refer to the stoves, ranges, furnaces, radiators, and other heating and cooking apparatus displayed in the Stove Building and elsewhere, and the pianos, organs, and musical instruments in Music Building and other places.

The Industrial Exhibition.

The Toronto Industrial Exhibition which came to a close last week after the most prosperous season ever enjoyed by it, will long be remembered by all whose pleasure it was to attend it. The importance of this institution increases year by year, and it has long since outgrown its local or even provincial character, and it may now be fairly claimed for it that it is of national character. In support of this claim it is shown that every province and section of Canada, from the Atlantic to the Pacific—from Nova Scotia to British Columbia, had displays of some character upon the grounds, all going to show the importance of the particular industries represented by them. The displays of manufactures and of machinery were fully up to the standard of any previous year, in fact better than ever before; and herewith is given brief descriptions of the most important of them.

No charge made for these notices.

JOHN BERTRAM & SONS,

Proprietors of the Canada Tool Works, Dundas, Ont., showed in Machinery Hall quite a number of the iron-working machines manufactured by them, included in which were two iron planers, the dimensions of which were each 8 feet by 30 inches by 30 inches. These planers represent the style of the Bertram improved machine with patent drive and feed motion, and of which all sizes are made. The first motion is by a worm and tangent gear; the racks and all wheels being machine cut. The loose pulleys run on bronze sleeve instead of the shaft. A 16-inch engine lathe was also shown; also two 24-inch lathes, two milling machines, two acme bolt-cutters, one double table shaper, and a 20-inch lever drilling machine.

Messrs. Bertram & Sons made a fine display of iron working machinery at the Chicago World's Fair, the award signed by the judges being as follows:

The Iron Planing Machine is so constructed that it can be placed in line with the driving shaft, thus economizing room in the shop. The machine is driven by a worm gearing, with high belt velocity, the return of the table being four times the speed of the cutting. The arrangement of the mechanism for the positive feed motion is very ingenious. The motion is transmitted from pawl and Ratchet-wheel by a pinion quadrant and bell crank to feed rack; power being only required at either end of the stroke, and when the machine is not cutting. The cross and vertical feeds are operated by interchangeable ratchet box.

The large engine lathe is similar in construction to the general forms. The leading screw is placed at the rear of the machine and the feed rod in front. Each is driven separately or together as desired. The nut for engaging the leading screw is operated from the front of the saddle, and all the feeds have separate binders. The saddle has an eccentric lock for use in operating the cross feed.

The iron shaping machine is new in form, the construction being such as to admit of a long shaft being splined on at any point by passing the shaft through the frame. The ram can be set at any cutting point while in motion.

The drilling machine is of general type. The column and frame are cast in one piece with strong and firm backing, giving great rigidity to the machine.

These machines represent advanced and progressive development in design, construction and the arrangement of details. The workmanship is superior, and the planing and shaping machines show improvement.

HEESON GRATE BAR CO.,

Toronto, displayed a specimen of their Heeson improved rocking furnace grate in Machinery Hall. The construction of this grate may be made to conform to all kinds of heating furnaces, a great advantage of its use being that fully ten per cent. of fuel is saved, or its equivalent in increased steaming capacity of boilers. Some of the largest steam plants in the country are equipped with the Heeson grate. Mr. H. A. Massey, of the Massey-Harris Company, Toronto, gives his opinion of this grate as follows:—I am asked my opinion as to the benefits of The Heeson grate bars over others that I have used and have had the opportunity of investigating. I have much pleasure in stating that as far as I have been able to judge, I consider this grate bar superior to any other that I know of. Having one in use I am confident that there is a saving of at least 15 per cent. in fuel over and above the ordinary grates, and I have no hesitation in recommending it.

ROBIN & SADLER.

Robin & Sadler, manufacturers of leather belts, lace leather locomotive straps, etc., whose head office is at 258 Notre Dame St., Montreal, and branch office at 129 Bay St., Toronto, made a fine exhibit in Machinery Hall, showing specimens of dynamo belting, of which they make a specialty. They tan their own leather and have increased their trade very much during the last few years.

No charge made for these notices.

LANCASTER MACHINE WORKS,

Lancaster, Ont., had on exhibition in Machinery Hall one of their improved hydraulic lifting jacks which excited much attention, and which seemed to do all that was claimed for it.

SMALL & FISHER,

Woodstock, N. B., had one of their new patent shingle cutting machines on exhibition in Machinery Hall. This machine embodies some new applications of motion to effect the purpose desired, the simplicity of them being a strong recommendation. It is automatic in its action and can be controlled without difficulty.

STEVENS, HAMILTON & CO.,

Galt, Ont., exhibited a number of their iron working machines in Machinery Hall, the most noticeable of which was their new 90-inch radial drill.

The principal advantage of a radial drilling machine is in being able to move the drill to the work. This makes a great saving of time on heavy and large pieces. This machine having a round column enables the arm to be swung entirely around it, permitting an extra wing on base, on which to support the table, leaving the main part of base always clear for the bolting of work. This is a great advantage over radial drills which will only swing about half a circle, and on which the table has to be lifted on and off the base as required. The arm is raised and lowered by power, the spindle is counter-balanced, and has a quick return movement, is provided with back gears, hand and power feed, all in easy reach of the operator. The head is moved rapidly along the arm by rack and pinion. The spindle is driven by an endless belt in such a manner that no matter where the head is the belt is the same tension. There is also provision for taking up the usual stretch of the belt instead of re-lacing. The spindle, which is always in two bearings, has a socket the outside of which is the same diameter. This can be taken out, enabling the drill to go up into the head, thereby increasing the capacity of the machine. This machine is particularly adapted for tapping holes, which is accomplished by friction pulleys on the counter-shaft, one running in the opposite direction to the other. The cap on top of column which carries the weight of arm has anti-friction rollers inside and turns very easy. This arrangement enables the column to be made flat to the base which makes a stiffer machine than if column turned.

Other machines shown by this concern were an iron lathe, five upright drilling machines, and a shaper with back gear, self-feeding with tapping attachment.

THE DODGE WOOD SPLIT PULLEY CO.,

Toronto, made a very fine display of their patent wood split pulleys in Machinery Hall, also numerous special pulleys of different designs. Their exhibit was very tastefully arranged. Several pyramids of pulleys ranging in size from many feet down to a few inches were to be seen showing the extensiveness of the stock carried by this Company. There were also several pulleys of large diameter and narrow face, such as are in much demand for electrical purposes, shown running at a high speed demonstrating their perfect balance. Some very handsome, cone pulleys, tight and loose pulleys, paper pulleys, special dynamo pulleys, heavy wood pulleys for saw mills, light iron centre pulleys for cotton mills, in fact belt pulleys suitable for all purposes were plentifully shown. The motion supplied for the running of pulleys was a very neat illustration of the company's patent system of rope transmission of power, driving a shaft at right angles to the main shaft.

The Dodge Company have made very rapid strides in their business, their works having now a capacity of 200 pulleys per day. They have many of the leading mills in the country as patrons, and have been particularly successful among the large saw mills where the Dodge belt pulley and Dodge system of rope driving has become almost a necessity. In addition to the Company's large Canadian trade they have a very extensive foreign export trade, and when it is known that complete stocks of the Dodge patent pulleys are carried in over 60 cities in Europe an idea of their progress may be had.

The Dodge wood split pulley is carried in stock in all the principal towns and cities of Canada; and users of power should have no difficulty in promptly procuring a good pulley when desired.

They now have recently completed for the Gilmour Company piece of work which, they say, eclipses anything of the kind, yet attempted in America. The transmission of some 400 horse power across a half mile of rough country.

They have recently supplied for the Montreal Cotton Company's mill at Valleyfield, Que., some very large pulleys, the largest of which are 168x38 inches, 14x20 inches, 110x38 inches, 96x20 inches. These are made with heavy iron split centres, and maple rims, and are probably the largest pulleys of this kind yet produced in Canada. They have also made for the same Company a very large rope drive for conveying power to their new mill just completed.

No charge made for these notices.

DOBSON EUREKA FLOUR DRESSER.

Alex. Dobson, Beaverton, Ont., exhibited this dresser in Machinery Hall, attracting much attention from flour millers. It embodies three inside agitators giving large capacity. No inside brushes are used. The dimensions of the frame of this machine are: height, 3 ft. 10 in.; width, 2 ft. 10 in.; length, 9 ft. 6 in.; length of driving shaft, 11 ft.

THE F.E. DIXON BELTING CO.,

Toronto, had specimens of their belts in use on machines in operation, in Machinery Hall and elsewhere about the grounds, the transmission of power from some of the largest steam engines in use there being by the well-known Dixon belts. This fact was also very noticeable in the driving of dynamos, and the conveying of power from electric motors. The concern also displayed a belt stretcher that was quite fully appreciated by machinery users.

CANADIAN MINERAL WOOL CO.,

Toronto, displayed a full line of their products in Machinery Hall, including pipe covering, loose wool for deadening walls and ceilings, covering for furnaces, etc., also specimens of the blast furnace slag from which these goods are made.

This Company have but recently completed the construction of works in Toronto for the manufacture of mineral wool, which is, we are informed, the only works of the kind in operation in Canada.

LAIDLAW'S BARLEY CLEANER,

Shown in Machinery Hall by A. Laidlaw & Co., Toronto, is specially adapted for use of brewers, malsters and grain dealers, and seems to embody all the requirements necessary for the thorough cleaning of barley. It scours and brightens the berry, increases the weight, removes the impurities that would be detrimental to the appearance and quality of the grain. The scouring process is effective, yet gentle, and does not injure the germ, but leaves the berry in a much improved condition for sprouting when malted.

RONALD FIRE ENGINE WORKS,

Brussels, Ont., of which John D. Ronald is proprietor and manager, made a fine display of fire apparatus in Machinery Hall, the chief features of which were the large city steam fire engine, with capacity to deliver 1,000 gallons of water per minute, and which took first prize at the Chicago World's Fair; a smaller engine of similar construction, suitable for use in towns and villages; a chemical fire extinguisher and a hook and ladder truck. Mr. Ronald has supplied a large number of these machines to Canadian cities, towns and villages, where they are very fully appreciated.

HAMILTON BRIDGE CO.

One of the most interesting exhibits shown at the Fair was that made by the Hamilton Bridge Co. of an exact model of the Stoney Creek arch bridge recently built by them for the Canadian Pacific Railway and now in use in the Rocky Mountains. The bridge spans a gorge through which the mountain torrent rushes, and is some 300 ft. above the water. The railway people consider this one of the best exhibitions of engineering skill to be seen anywhere in the world; and it illustrates the high perfection to which this representative Canadian concern have arrived in their business. This model was exhibited in the Annex Building.

GOLDIE & McCULLOCH CO.,

Galt, Ont., made their usual fine display, in Machinery Hall, of wood-working and other machinery, wood split pulleys, friction clutch pulleys, etc. Included in this display was a beautiful Wheelock steam engine, used for driving the main shaft of the building, and a new upright compound engine for driving a dynamo for electric lighting purposes.

Referring more particularly to this Wheelock engine, Mr. Walker, the manager of the exhibit, states that it has taken the place of a large number of other engines which had been used for driving electric machinery. In its construction it is exceedingly simple and economical, the general arrangement of it being closely upon the original American model. The main bed is of trunk girder pattern so arranged that the chief bulk of metal lies in the direct line of strain between the cylinder and the shaft bearings. The Wheelock engine is specially adapted to high periphery speed. The valves are perfectly tight, with no necessity for balancing. By the peculiar arrangement of the valve movement the cut-off is very effective and positive in its action, as the cut-off valve has but slight movement after closing, while the knuckle joint allows of continuous movement of the mechanism without moving the valve.

No charge made for these notices.

JOHNSON ELECTRIC CO.,

Toronto, had a comprehensive exhibit in Machinery Hall, consisting of motors, dynamos, generators, alternators, transformers, arc and incandescent lamps, insulators, wires, flexible cords, switches, etc. This display in the evening, under the electric lights, was very fine and excited much admiration.

DOUBLE TRUSS CORNICIE BRAKE.

Robert U. Irwin, Shelburne, Ont., exhibited this brake in Machinery Hall. It is built of maple, thoroughly seasoned; the leaves are all double trussed and faced with steel plates, the clamping device, hinges, quadrant gauge, etc., are all made of malleable iron, and all parts are adjustable; it takes in sheets 8 ft. 2 in. long and forms 24-gauge iron or lighter, without springing; it splits the sheets and forms the iron on the same principle and with the same speed as iron brakes; makes mouldings of all kinds, ridging, valleys, gutters, eave-trough, square pipe, etc. The James Robertson Co., Toronto, are sole agents for this article.

EXACT ARC LAMP CO.

This concern, through the Gurney-Tilden Co., Hamilton, Ont., made a brilliant display of their goods in Machinery Hall. The Exact arc lamp is non-magnetic, adaptable for any circuit, either alternating, polyphase or direct continuous current; high or low potential, constant potential or constant current, series or parallel system. This lamp while burning maintains a maximum arc and gives a maximum light for a given amount of energy without flare or flicker, or perceptible variation of candle power. It burns almost noiselessly on alternating circuits and free from hiss on direct circuits with a soft, steady light. It is sure in its pick-up, reaching its nominal candle power within thirty seconds, and burns perfectly from start to finish without over feeding.

KAY ELECTRIC CO.,

Hamilton, Ont., had their usual fine display of electrical machinery in Machinery Hall. This company have placed a large number of their motors in business establishments in Toronto and many other places, where they are giving excellent satisfaction. Their constant potential dynamos and motors are made in all sizes and voltages for both lighting and power, the advantages claimed for them being substantial construction; smooth running and durable; well protected from external injury; parts easily removed for attention or repairs; automatic self-lubricating journal, wastes no oil; current generated with least sparking—consequently small wear of commutator and brushes; perfectly self-regulating and so simple any man of ordinary ability can run them. A beautiful little machine exhibited by this company is used mainly by silver and nickel platers, and is suitable for small shops that require but a little electrical energy. Weight, 90 pounds. Requires about 1/4 h.p. Will operate a nickel solution of sixty gallons or deposit about five ounces of silver per hour. Size of pulley, 2x2. Speed, 1,400 revolutions per minute. Constructed of best material and substantial.

CHRISTIE, BROWN & CO.

One of the finest exhibits in the Main Building was that of Christie, Brown & Co., Toronto, who were the pioneer biscuit manufacturers of Canada, established when trade in Canada was in its infancy, but who were but a short time in making a provincial reputation for fine biscuits. This firm in a few years made a reputation for themselves all over the Dominion and now take a high rank among the best biscuit manufacturers of the world. The exhibit consisted of some 400 varieties of biscuits, displayed to excellent advantage in attractive tin boxes with glass fronts. Thousands of visitors gazed and admired this unique exhibit, but they count as nothing to the thousands of people all over the world who have for years used the delicious biscuits manufactured by this firm. This firm have introduced into their factory the chain or traveling oven, with the idea of competing with any manufacturer. They now find that they can compete with goods turned out by English factories which have been established over a century. This chain oven has been for some time in use by all the high-class bakers in Europe. It gives a uniformity of baking superior to any other kind. This exhibit is identical with that made by them at the World's Fair at Chicago, and their success there was remarkable, for they took second place to neither American nor European manufacturers. The exhibit at the Toronto Exhibition while as perfect in every respect as it could well be, gives but a moderate conception of the style and quality of the work done on their premises. As early as in 1858 this firm carried off the red ticket for high class biscuits, and almost annually since then they have not failed to secure it at all large fairs held in Canada.

No charge made for these notices.

CANT BROS. CO.,

Galt, Ont., occupied their usual space in Machinery Hall, displaying interesting lines of their wood-working machinery. A machine which excited much interest was their automatic hollow square chisel mortising machine. This machine has proved itself to be exceedingly useful for mortising hard woods, thus being especially valuable in car, carriage, wagon, furniture, and blind, sash and door factories.

AUGUSTUS NEWELL & CO.,

Toronto, had an attractive exhibit in Machinery Hall. Mr. F. H. Wright, the manager of the works, has had years of experience in making fine machinery, and realizing the need of a first-class shop, with first-class tools, in Toronto, where those in want of fine work can be assured of a first-class job, has equipped his works with such tools as Pratt & Whitney planer, shaper lathe, etc., and Brown & Sharpe milling machines and grinders. They pay special attention to the development of new ideas where machinery is intended to be patented, the greatest accuracy and efficiency always being guaranteed.

RICE LEWIS & SON,

Toronto, made a display in Machinery Hall of full lines of machinists' tools and supplies. A portion of this exhibit was devoted to bicycle goods, every part and portion of the bicycle as it is when complete being shown. Any person of ordinary mechanical genius could build a first-class bike with the parts shown in this display. This enterprising concern have a large and beautiful Kiost fronting on the main avenue of the Fair Grounds where they displayed most attractive lines of house furnishing goods, including mantels, tiles, etc. For years this beautiful place has been specially attractive to ladies and the lovers of fine things of this character.

OTTO OIL ENGINES.

Messrs. Joseph Baker & Sons, 58 City Road, London, England, through one of the firm whose address is at Brantford, Ont., displayed in Machinery Hall one of their beautiful $\frac{1}{2}$ h.p. Cycle oil engines that attracted much attention. This engine is specially adapted for light work, and the ease with which it is managed, and the remarkably small cost at which it is operated, commended it to all who saw it, and which resulted in the sale of it, to be delivered immediately upon the close of the Fair. The fuel to operate it costs less than one cent per h.p. per hour, common coal oil is used, and the services of a specially educated engineer is not required. It is made in all sizes from one to 50 h.p.

NORTHEY MANUFACTURING CO.,

Toronto, had an interesting exhibit in Machinery Hall of power pumps and pumping machinery—some in use. This company have what is probably the largest steam pump and hydraulic works in Canada, amply provided with tools specially designed for building steam pumping machinery, and are in a position to produce the very highest class of work in that line. They invite and challenge a fair comparison of their pumps with those of other makers, both as to design, adaptability to the work to be performed, and excellence of material and workmanship.

Some of the pumps on exhibition were marked "Sold" as follows:—One to Rosamond Woolen Co., Almonte, Ont.; two to Goldie & McCulloch Co., Galt., Ont., and two to Bertram Engine Works Co., Toronto.

THE REEVES WOOD SPLIT PULLEY.

The Reeves Pulleys Co., Toronto, made an attractive display in Machinery Hall of the wood split pulleys manufactured by them. In directing the attention of the trade to their specialty, the Company says:—Subjected to the most severe tests under every atmospheric extreme from the freezing regions of Northern Canada to the moist climate of Florida, South America and Seattle, and having been run on everything from a sewing machine to a 700 horse-power engine, we have no hesitancy in asserting that "it has been tried and not found wanting." We do not claim it to be the "Acme of Perfection;" improvements are ever necessary no difference to what degree of success an article may have been pushed, yet we assert, and our claims have been corroborated by numerous mechanical experts that we have one of the most practical wood split pulleys on the market. A pulley embodying strength and symmetry, lightness and durability. One that can be safely run at high speed or where great strength is necessary. A pulley which gives satisfaction in places where others have failed. A pulley which has no enemies, but which can count friends by the score wherever tried. Give it a trial and be convinced that we speak the truth.

No charge made for these notices.

ELECTRIC DAMPER REGULATOR.

A. J. McDonough, Toronto, exhibited in Machinery Hall two of his electric damper regulators, intended for regulating the draft in furnaces of boilers and other heating apparatus. The arrangement is very ingenious and seems to accomplish the purpose for which it was intended, the simplicity of it being an important feature. These dampers were made for Mr. McDonough by Messrs. Aug. Newell & Co., Toronto.

SOHO MACHINE WORKS,

Toronto, of which A. R. Williams is proprietor, made a comprehensive display in Machinery Hall of iron and wood working machinery, largely the product of the London, Ont., Machine Tool Co., with which he is intimately connected. These exhibits included iron planers, shaping machines, engine lathes, screw cutting machines, milling machines, brass workers' machinery, combination shearing and punching machines, etc.

THE WM. HAMILTON MFG. CO.,

Peterborough, Ont., exhibited in Machinery Hall one of their Boss turbine water wheels. Regarding this machine it is described as giving the highest percentage of useful effect for every cubic foot of water used. There are no swinging gates, arms, or rods. Six castings comprise the entire wheel. Can be mounted on horizontal or vertical shafts; revolves on steel balls, therefore without friction. Easily controlled by governor. Can be shut off instantly in case of accident. Gates not easily choked or clogged. By taking out bolts, wheel can be immediately removed from case.

BARBER & WATSON,

Meaford, Ont., displayed one of their very excellent Barber Canadian turbine water wheels. This wheel is specially adapted for use in woolen mills, as will be seen from the testimony of James Randle, proprietor of the Meaford Woolen Mills, who says:—Regarding the 36-inch water wheel you put in for me two years ago, it has given me perfect satisfaction. I have a complete set woolen mill with all the necessary machinery, and my head varies from 4 to 7 feet. Our best running head is 5 feet, which gives all the power we want, and our machines run like clock work. I cannot speak too highly of what this wheel has done in this very trying situation—with the mills above shutting down for hours and then letting down a flood of water. We have been very busy, and only a thoroughly good wheel could have handled my mill during this dry season.

COWAN & CO.,

Galt, Ont., proprietors of the Galt Foundry, Engine and Machine Works, showed quite a large number of specimens of their products in Machinery Hall. They make a specialty of the celebrated Corliss steam engines, the regular sizes which they construct being from 8-in. diameter of cylinder and 24-in. stroke up to 20-inch diameter and 48-inch stroke. They also manufacture all sizes of boiler up to 72 inch diameter, having one of the best equipped boiler shops in the Dominion. They also build all kinds of wood-working machinery, including double surface planer and matcher; band saw machines; pedestal tenoning machines; revolving bed moulder, to work on three or four sides; pedestal shaper; combination saw bench, etc.

One of the most noticeable exhibits in Machinery Hall was a Moffatt feed water heater and purifier, manufactured by Cowan & Co. for the inventor, H. E. Moffatt, of Woodstock, Ont.

DEAN'S STEAM TRAP.

James Dean & Co., Detroit, Mich., and Windsor, Ont., exhibited in Machinery Hall their patent Little Grant automatic steam return trap and boiler feeder, for returning condensation directly to the boiler against any pressure, and for removing the water of condensation from steam heaters, radiators, etc. It is simple in construction, all the machinery being on the outside. The tank is made of steam pipe so that any pressure may be carried.

One of these machines was recently placed in the Detroit White Lead Works, and Messrs. Dean are in receipt of the following letter from the superintendent thereof regarding it:—This is to certify that I have been using one of Dean's Little Giant Traps in the Detroit White Lead Works for six months to our entire satisfaction. The factory consists of cellar, first, second and third floors. In cellar and each floor are radiators, whose united capacity is about 7,000 feet of one inch pipe. Trap return the condensed water into our boiler. Our boiler is from 80 lbs to 100 lbs highest pressure and I think that Trap could do the work of double our capacity. Should an engineer's pump or injector get out of order the Little Giant trap as boiler feeder will do the work, and put the cold or hot water into the boiler, and I cheerfully recommend it as second to none in the market.

No charge made for these notices.

E. LEONARD & SONS,

London, Ont., manufacturers of engines, boilers, heaters, pumps, etc., displayed lines of their goods in Machinery Hall. Noticeable in this exhibit were two of their Leonard-Ball automatic high speed engines, one of 65 h. p. and the other 100 h. p., which were employed in driving four of the Royal Electric Co.'s dynamos for illuminating the Fair Grounds and buildings.

A. W. SPOONER,

Port Hope, Ont., made a good display in Machinery Hall of his Copperine anti-friction metal, so well known throughout Canada; his new fibrous metallic packing, which he is now introducing in this country after having achieved a large and well-deserved reputation in the United States, and his disinfectant Phenyle. Spooner says that Port Hope is the most beautiful town on the continent, and the opinion of everybody else is that Spooner ought to know.

HART EMERY WHEEL CO.,

Hamilton, Ont., made an attractive exhibit in Machinery Hall, noticeable in which was their Rogers' automatic band saw filing machine. This machine is simple and easily operated, the pawl moving the saw at the rate of about 45 teeth per minute, the emery wheel moving in and out upon each tooth as it passes, grinding either front, throat or back, or all, as may be necessary. This company's line of wood workers' emery grinding machines include planing mill grinder; automatic circular saw filer; planer knife grinder, etc.

THE ROYAL ELECTRIC CO.

Montreal, presented a most attractive display in Machinery Hall, consisting of alternating and direct current dynamos, direct and alternating motors, automatic arc dynamos, also fan and small power motors; also a line of domestic utensils consisting of sad irons, polishing and hatters' irons, tailors' goose irons, tea kettles, tea pots, coffee pots, stew pans, broilers and toasters, pancake griddle, skillet or spider, sealing wax heater, curling tongs, office and residence radiators, all operated by electricity. They also made a special show of all kinds and qualities of rubber covered wires and special wire for high frequency currents, and a full line of flexible cable, also lamps, shades and fixtures of all kinds, special among which were a line of portable or stand lamps. They also showed a line of testing and measuring apparatus for electrical currents and machinery. All the dynamos and machines were in running order and used to light their own as well as some of the other exhibits.

TORONTO STEEL CLAD BATH AND METAL CO.

One of the most attractive exhibits in the Main Building was that of this company. It consisted of a very elegantly appointed bath room appliances in which the latest sanitary plumbing is shown, the most important feature being the Booth patent steel bath tub. This tub is strictly sanitary, being entirely open and devoid of encasement of any kind, having no hidden corners or receptacles for disease germs or particles. It is all metal, and therefore impervious to decay, warp or shrinkage, to which wooden or composition baths are subject. It is thoroughly constructed, is handsome in appearance, and capable of unlimited possibilities in the way of decoration. It combines all the advantages and has none of the disadvantages of baths four times its price, the figure at which the steel-clad is placed bringing it within the reach of everyone.

These baths are covered by letters patent in Canada, England, United States and Australia, and factories are located in Toronto, Detroit, New York and London, England.

TORONTO ELECTRIC MOTOR CO.

This concern made an attractive display of electric motors, etc., in Machinery Hall, where they hung out a sign to the effect that "If you want a motor or a dynamo to run your factory, or to light it," to purchase from them. This advice seemed to have been accepted by quite a large number of persons, judging from the signs placed upon the machines indicating that they had been sold to the parties thereon named. Among these sales were observed a machine to the Monetary Times, Toronto; Massey Music Hall, Toronto; John Fensom Elevator Works, Toronto; for Sanderson, Percy & Co.; Jones & More Electric Co., Toronto; John Read, Stratford, Ont.; D. Graham & Son, for woolen mill at Inglewood, Ont., and others. During the progress of the Fair this concern also obtained orders for dynamos and electric machinery as follows:—McDonald Bros., Winnipeg, Man.; George Knaggs, Toronto; Toronto Ice Cream Co.; Wilson & Wilson, Lindsay, Ont.; Klein & Hearn, Guelph, Ont.; R.W. Conroy, Duschene Mills, Que., and Victoria Electric Light Co., Lindsay, Ont.

No charge made for these notices.

EUREKA REFRIGERATOR COMPANY.

Toronto, W. Hooey, proprietor, showed a handsome line of Eureka refrigerators for families, butchers, grocers, etc. The principal point of excellence claimed for this article is the dryness of the cooling-room under all circumstances, and the ease with which it can be regulated.

J. S. HAMILTON & CO.,

Brantford, Ont., occupied a space in the Main Building, showing specimens of the wines, etc., manufactured by them. They are sole agents for Canada for the Vin Villa vineyards of Pelee Island, the West View vineyard of the Pelee Island Wine and Vineyard Co., also of that island and others. The products which this company handle, especially their Catawba, Isabella, St. Augustine and clarets compare most favorably with foreign wines.

WILLIAM C. WILSON,

Toronto, made a display of machinery supplies in Machinery Hall, including steamboat, railway, electric and mill supplies, lubricating oils, engine packing, cotton waste, arc light carbons, magnesia boiler covering, rubber gaskets, etc. A special feature of this exhibit was the Thistle brand square flax engine packing, put up in boxes of 5 and 10 pounds each, and in reels of 50 pounds in all the usual sizes.

COLD PIPE AND METAL BENDER.

The Universal Cold Pipe and Metal Bending Co., Toronto, exhibited in Machinery Hall their Seaton bending machine, in charge of Mr. Thomas Seaton, the inventor. This pipe bending machine, invented more especially for the use of plumbers, gas and steam fitters, etc., will bend thin lead pipe for brake syphons, offsets right or left, without sand, springs or filling of any kind. It will bend cold iron or brass pipe, without kink or wrinkle, of any reasonable size and thickness, just the same. Average time it takes is about two minutes a bend, and is so simple that any boy can use it. Can be carried round to the work just the same as a pipe vise. It will also bend cold steel pipe, without filling, for bicycle handles, band iron, etc. The machine was on view on a perfect plumbers' and fitters' bench.

THE PLANSIFTER CO.,

Stratford, Ont., had one of their unique plansifter machines in operation in Machinery Hall, which attracted much attention, a peculiarity of it consisting in the gyrating motion it possesses. The claims made for it are that it makes clean breaks, dry middlings, pure flour saves power, requires only about 1½ horse power to drive it, runs smooth and easy and saves fuel. Requires little room, as it has a much greater working capacity than other machines. Notwithstanding its great capacity it has only about one hundred and fifty square feet of bolting surface. Moves similar to a hand sieve. It brings the dark branny particles of the stock to the top and keeps them floating at the surface, while the pure white particles of flour fall easily through the sieves. The sieves are always kept clean without the use of brushes and without attendance. Makes coarse or fine flour at the miller's convenience. Does away with a number of spouts and elevators. Is equally valuable for hard and soft wheat, rye, corn, oatmeal, and is also used to great advantage in breweries, distilleries, and wherever grading and separating of material are wanted.

BELL TELEPHONE CO. OF CANADA,

With head offices at Montreal, occupied a prominent place in the Main Building where they exhibited comprehensive lines of telephone and electrical apparatus and supplies. By the system of this company all the rooms in a building may be connected so that private communications can be carried on simultaneously between any two of them. The company sell telephonic instruments at prices ranging from \$6.00 to \$50.00 per set. These instruments are under the protection of the company's patents, and purchasers are therefore entirely free from risk of litigation.

The Company manufacture fire alarm telegraph apparatus of all descriptions, and is prepared to furnish estimates to cities, towns and villages for the construction of fire alarm systems. For sale or lease. Having its own poles in all the principal towns and villages in Canada, it is in a position to do this work where others are not. Its fire alarm apparatus is in successful operation in Montreal, Lachine, Cornwall, Gananoque, Napanee, Stratford, and other places. It has for sale, or will manufacture to order, various sizes of electro-mechanical gongs, tappers, bells, and tower strikers.

The Company maintain branch offices and salesrooms at Montreal, Toronto, Quebec, Ottawa, Hamilton, Winnipeg and Vancouver.

No charge made for these notices.

JOLIFFE & CO.,

Toronto, manufacturers of fine furniture, made a beautiful exhibit of their products in the Main Building.

E. D. TILLSON,

Tilsonburg, Ont., made an interesting display of the cereal food products manufactured by him. These include specialties in wheat, buckwheat, barley, corn, peas and oats.

MESSRS. GANONG BROTHERS,

St. Stephen, N.B., occupied a beautiful kiosk in the Main Building, enclosed with plate glass, containing samples of the large varieties of fine candies, chocolates, creams and confectioneries manufactured by them. This is the largest concern, we believe, in the Maritime Provinces, and one of the largest in Canada. They have established a depot in Toronto, under the management of Mr. H. A. Lyle.

W. B. MALCOLM,

Toronto, occupied a beautifully fitted up space in the Main Building in which he showed lines of his plumbers' goods and house furnishing supplies. One of the most noticeable features is his patent tank and wash-out water closets. These closets are of different designs, furnished with a 3-inch supply and after-flush chamber, and so constructed as to receive the entire contents of the tank in less than half the time required by the ordinary over-head tank, at the same time securing a perfect wash to every part of the basin, and are comparatively noiseless.

WITHROW & HILLOCK,

Toronto, showed in the Main Building a number of their refrigerators with plate glass fronts through which were to be seen a variety of butcher meats, fruits, vegetables, etc. A feature of these refrigerators is the open bottom in the ice chamber. A portable combination hotel refrigerator is shown, made especially for hotel use, similar ones in smaller sizes being made for families. They are constructed with patent covers; an arrangement for the admission of cold air at the bottom of the provision chamber, and the ice chamber either at the side or top of provision chamber.

TORONTO CARPET MANUFACTURING CO.,

Occupied a conspicuous location on the ground floor of the Main Building in which was displayed full and comprehensive lines of the carpets, rugs, etc., manufactured by them in their works in Toronto. Included in this display were the Imperial, an all wool 3-ply; Maple Leaf, an all wool 2-ply; Standard, a first-class union carpet; Victor, a heavy carpet; Beaver, an all wool at low price; Challenge, a very cheap article; Oriental, a new 3-ply, strong and cheap, and Imperatrix Axminster, the new popular article which possesses the beauty of a Wilton at the price of tapestry, and which is made in bodies, borders, stairs, mats and rugs. A beautiful line of chenille curtains, made by this concern was also shown in widths of 38 inches, 44 inches and 48 inches. Some of these goods won awards at the Chicago World's Fair.

This company is composed of shrewd business men who have abundant capital to carry on their enterprise under the management of Mr. James F. Murray, president, and Mr. F. B. Hayes, secretary.

DON VALLEY PRESSED BRICK WORKS,

Of which Messrs. Taylor Bros., Toronto, are proprietors, made a most interesting exhibit in the Main Building. The display was most artistically arranged, and consisted of terra cotta in all colors, enamelled bricks in an endless variety of shades, and, in addition to these, the ordinary white and buff bricks. Both the terra cotta and enamelled bricks are fully equal to those produced by the most celebrated manufacturers in England. The most noticeable features of the exhibit was a large Faience terra cotta vase, valued at \$1,000 claimed to be the finest piece of terra cotta ever seen in Canada. Some of the brick shown were from the lot shipped to Salt Lake City, Utah, for the building of the great Mormon temple.

Messrs. Taylor operate at their works what they say is the only arch brick grinding machine in Canada, and they can supply arches ground to order at a few days' notice. This is a great saving to builders, as it avoids all breakage in cutting, and also makes a perfect job when built. They ship them in boxes, each brick numbered, so that no time is wasted in building them in.

The Don Valley red pressed bricks, as tested at the School of Practical Science, showed a crushing strain of 15,000 pounds to the square inch.

No charge made for these notices

MACLAREN'S IMPERIAL CHEESE.

Messrs. A. F. Maclaren & Co., Windsor, Ont., made a fine display in the Main Building of their Imperial cheese, put up in jars and pots of convenient size for family and hotel use. All epicures know what Maclaren's cheese is - it is delicious, healthful and digestible.

TORONTO LITHOGRAPHING CO.

This company did not have any particular space assigned to them at the exhibition, neither did they make any collected display, but their work was ubiquitous, for there were but few exhibitors on the grounds who did not have and distribute specimens of their work.

BRUSH & CO.,

Toronto, manufacturers of the Ball corsets, had their usual fine exhibits in the Main Building. This exhibit attracted much attention; the corsets shown being exceedingly beautiful in design and finish. These goods are all made on scientific principles, and are faultlessly correct as to shape, workmanship and style. They are made in styles and finish to meet all demands of the trade, the prices for which place them readily within the ability of those who are not wealthy, and the elegance of other specimens being all that can be desired by those who require a more expensive article. This is an important Toronto industry, which gives constant employment to several hundred hands.

TORONTO SILVER PLATE CO.

Made their usual beautiful display of artistic silver plate in a very handsome plate glass showcase in the Main Building. This display included about everything in that line desirable for domestic use. This important manufacturing establishment gives employment to a large number of expert artists and workmen. All of their products are as artistic in design and attractive in workmanship as any made in even the most celebrated establishments of London, Paris, Berlin or New York. In another part of the building was exhibited what is said to be the largest trophy of the kind ever constructed. It was made as a prize for the American Dunlop Tire Co., Toronto. It excited much admiration.

SAMUEL MAY & CO.,

Toronto, the well known manufacturers of billiard tables and similar sporting goods are offering something new, which they claim will lighten the burdens of all owners of billiard tables. For years makers have been striving to secure a composition ball with somewhere near the elasticity of ivory, and which could be substituted for billiards without any noticeable difference to the players, and a saving to the owner. Messrs. May & Co. by their searches have at last been rewarded, and that they are now in a position to supply the public with a "chemical ivory" billiard and pool balls, at comparatively a trifling cost. The chemical ivory balls are superior in many respects to ivory; they will not break, crack or shrink, they are precisely the same weight as ivory, they are not affected by temperature, they have no "heavy sides," the centre of gravity and centre of density being equal in every ball. The colors cannot wear off, being through the entire ball in all cases, so that turning and recoloring is dispensed with.

BOOTH COPPER CO.,

Toronto, had an attractive exhibit in the Main Building. This is a new firm, the business having been carried on for the last forty years under the name of George Booth and later Booth & Son. Mr. George Booth, head of the establishment, is also president of the Steel Clad Bath and Metal Company, with manufactories at Detroit, New York and London, England. Mr. Booth is treasurer of the Canadian Manufacturers' Association, and a director of the Industrial Exhibition. The Booth Copper Company are confining themselves to the manufacture of heavy copper work used in distilleries, breweries, sugar manufactories and other establishments. They have recently filled a large number of contracts in this line. They make a specialty of copper range boilers, and have succeeded in turning out an article which they claim is the cheapest and best in the market. The strength and durability of these boilers have been tested time and again and their popularity among customers is evinced by their constantly increasing sales. They have recently placed a new boiler on the market which has several important improvements for which letters patent have been secured.

This Company are also manufacturers of varnish makers' and marine copper work. They also supply confectioners' kettles and boilers.

The exhibit includes a number of range boilers, confectioners' steam jacket kettles and cider kettles. All these articles are of the finest quality.

No charge made for these notices.

MEYER BROTHERS,

Toronto, manufacturers of laundry machinery, displayed a good line of their products in the Main Building. They are prepared to supply all wants of the trade.

OWEN ELECTRIC BELT CO.,

Toronto, presented a fine display in the Main Building of the electric belts and other electric appliances made by them. The exhibit was prepared by Mr. G. C. Patterson, the manager of the company.

CREELMAM BROS.,

Georgetown, Ont., manufacturers of knitting machines, etc., have extended their business and are manufacturing the Bleckensderfer typewriting machine, specimens of which were shown in the Main Building.

LONDON ELECTRIC MOTOR CO.,

London, Ont., displayed a quantity of their electrical machinery in Machinery Hall, a very handsome article being a 4 h. p. motor for light work. This machinery is well and substantially built, and tastefully ornamented.

CHARLES CLUTHE,

Toronto, occupied a prominent space in the Main Building in which he made an interesting exhibit of orthopedical appliances. Mr. Cluthe has devoted a life-time to the study of surgical mechanism and has achieved an enviable reputation for such work.

IRELAND NATIONAL FOOD CO.,

Toronto, exhibited a large and complete assortment of breakfast cereals in the Main Building which attracted a great deal of attention. They showed grain in the sheaf, the selected grain from which their products are made, the manufactured goods, and then in packages as offered to the public. Out of some twenty-five varieties were noticed, particularly, the dessicated wheat, both rolled and granulated; dessicated rolled oats, snowflake barley, buckwheat flour, self-rising; farinose or germ meal, farina, etc., and gluten flour.

CROMPTON CORSET CO.,

Toronto, made a fine display in the Main Building, which included more than a dozen styles of corsets, some of which are very beautifully ornamented with lace and needle work, the prices ranging from twenty-five cents to as many dollars. The Lewis magnetic corset, shown by this company, is described as being mechanically constructed upon scientific principles, symmetrical in shape and unique in design. Each section of the corset is so formed as to maintain the vertical lines of the body, and readily conforms to the figure of the wearer. It is stayed with strips of highly tempered spring ribbon steel, which is superior to other boning material, owing to its flexibility, smoothness and durability. Each steel (or stay) is nickel-plated, highly polished and metal tipped to prevent the ends from cutting through the fabric. The steels are encased in separate pockets and can be removed or replaced at pleasure, and are so distributed as to afford the necessary support to the spine, chest and abdomen, while at the same time so pliable that they yield readily to every movement of the body, thus assuring constant comfort to the wearer.

TRURO CONDENSED MILK AND CANNING CO.,

Truro, N.S., exhibited a pyramid of their goods in the Main Building, consisting of their Reindeer brand of condensed milk, tea, coffee and cocoa, and attendants who served to visitors cups of piping hot samples of these goods, showing the readiness with which they can be adapted for domestic use, and the excellence of them. The condensed milk prepared by this company has a long established reputation, and is used extensively in the British army, and on sea-going vessels. The other articles, coffee, tea and cocoa, are of more recent introduction, but long since past the experimental stage—they are standard goods.

To prepare condensed coffee, cocoa, or tea, for use: In each cup required place a teaspoonful of the condensed article being used. Add a small quantity of boiling water and stir until contents are thoroughly dissolved. Then fill the cup with boiling water. No waste of time or material. Flavor delicious. For home use, lunch rooms, picnics, holiday parties, church festivals, sportsmen, etc., these are ideal and indispensable preparation.

No charge made for these notices.

J. O. PARKER & CO.,

Toronto, successors to Booth & Son, presented a very attractive display of brass goods in the Main Building, including kettles and stands, plumbers' trimmings, and household furnishings.

D. RITCHIE & CO.,

Montreal, made an exhibit of their goods in Main Building, including Old Chum, fine cut, Derby plug, etc., tobaccos, besides cigarettes, cigars, pipes, etc. This concern have branch houses in China, Japan, South America, India, Australia, and in Europe.

N. K. FAIRBANK & CO.,

Montreal, had an attractive booth in the Main Building in which was displayed their popular Cottolene. There was a cooking arrangement where popular and ordinary household products, such as biscuit, buns, cookies, etc., prepared with Cottolene were cooked and distributed to visitors. Cottolene is a first-class health food which is supplanting lard and butter as a cooking fat.

WORSTED & BRAID CO.,

Toronto Junction, Ont., made a fine display of the braids, laces, webs, etc., manufactured by them, in the space in Main Building occupied by the Toronto Carpet Manufacturing Co. These goods included about every line usually produced in such factory, and demonstrated the fact that all requirements for such articles can be met by this enterprising Canadian concern.

THOS. DAVIDSON & CO.

The exhibit of this enterprising Montreal concern in the Main Building never failed to attract the attention of sight seers with its many lines of glittering tinware, colored Japanned, lithographed ware and stove boards.

The stove board being introduced this year by this company surpasses anything they have heretofore put out, its special advantage being that it is made in one piece and without corner clips, giving a smooth surface with no parts to pull off.

Lithographed tea caddies, tin boxes and signs in every conceivable shape and design contributed their share to this attractive exhibit the production of these goods necessitating the addition to the present plant of one of the largest lithographing presses in America.

Cheese factory cans are another important branch of manufacture, and to the improvements of last year's can, several new and desirable features will be added this coming season.

Galvanized oil cans, wash tubs, and pails, Japanned and retinned goods, cinder sifters, steel creamer taps and other similar lines were favorably commented upon.

Another new and important branch of manufacture is at present occupying the attention of this firm, viz.:—their white and grey enamelling plant, which is fast approaching completion, and a full line will soon be offered to the trade.

KERR & CO., N.M.T.

There was no more interesting and attractive exhibit in Main Building than that of Kerr & Co., Toronto, a branch of the well-known sewing thread manufacturers, Kerr & Co., of Paisley, Scotland. This exhibit consisted of a spooling machine similar to those in use in the different factories of the company, where the thread as it comes in hanks from the Paisley factory is wound upon spools. This exhibit showed only the process of winding upon small spools, of 200 yards of thread for domestic purposes, but it imparted a good idea of the manner in which the larger spools are filled, such as those in demand in clothing factories, some of which contain thousands of yards of thread. As compared with these spools containing as much as a mile of thread—1760 yards—appear quite small. The exhibit was crowded at all times by the curious sight seers.

The establishment of this spooling factory in Toronto was a direct result of the National Policy which imposes a higher duty upon thread already spooled than it does upon thread in hanks. The manager of this Toronto enterprise, Mr. James Wylie, is a large shareholder in the head concern of Kerr & Co., at Paisley, and it is to his energy, perseverance and patience that the Canadian concern has assumed such large importance.

Another interesting feature of this exhibit was the process of manufacturing spools, as shown in specimens beginning with the wood as felled in the Canadian forest, showing all the processes of manufacture therefrom up to the completed spool. All the spools consumed by this Toronto factory are made, we learn, in New Brunswick and Nova Scotia, and the vast quantity of them used constitutes a considerable item in the bill of costs; but the spools can be produced much cheaper in Canada than in Scotland.

No charge made for these notices.

MENZIE, TURNER & CO.,

Toronto, manufacturers of window shades, window fixtures, etc., made a fine display in Main Building.

WILKINSON TRUSS CO.,

Toronto, showed comprehensive lines of the trusses, etc., manufactured by them. Their exhibit was in Main Building.

E. WESTMAN,

Manufacturer of butchers' tools, Toronto, displayed full lines of his goods in Main Building. These articles, we are told, are all made of the best qualities of steel.

ONTARIO GALVANIZED IRON WORKS,

Toronto, A. B. Ormsby & Co., proprietors, displayed in Main Building attractive specimens of galvanized iron and copper sky lights, cornices, roofing, metal ceiling, hot air furnaces, etc.

J. H. ROGERS,

Toronto, manufacturer of furs, hats, etc., made a fine exhibit in Main Building of their products, including fine furs—caps, hoods, capes, coats, jackets, etc., and silk and other hats for gentlemen, ladies, misses and children.

J. & J. LUGSDIN,

Toronto, manufacturers of ladies' and gentlemen's fine furs, had a most beautiful plate glass case in Main Building filled with their goods. They were all of the best and most fashionable materials and styles, and excited much attention.

EDWARDSBURG STARCH CO.,

Whose extensive works are at Cardinal, Ont., had a fine cabinet in Main Building in which was displayed specimens of the many lines of goods manufactured by them. The lines of laundry starches displayed were Benson's Satin Starch, Edwardsburg Silver Gloss, Edwardsburg No. 1 White, and Edwardsburg rice. These were supplemented by a large display of Benson's prepared corn for cooking purposes.

W. E. SANFORD MFG. CO.,

Hamilton, Ont., had an immense show case in Main Building, the same that they had at the Chicago World's Columbian Exhibition, in which was contained full lines of the mens' and boys' clothing manufactured by them. The exhibit at Chicago attracted much attention, not only because of the beauty and excellence of the garments shown, but also because to each article was attached tickets showing the prices at which it was offered for sale in Canada, and with which no American manufacturer could possibly compete.

MORSE SOAP WORKS.

One of the most attractive exhibits in the Main Building was that of the Morse Soap Works, Toronto, of which Messrs. John Taylor & Co. are proprietors. The arrangement was in the style of a Pompeii court, in the midst of which was a large lion, the whole being made of different kinds and colors of soaps manufactured by this concern. The lion was most artistically carved out of a single block of soap which weighed some 2000 pounds.

Messrs. Taylor & Co. are, perhaps, the largest soap makers in Canada, and their lines embrace every variety from common laundry to the finest toilet soaps, also soaps for woolen manufacturers' use.

E. MAHONY,

Toronto, manufacturer of Swiss embroidery, etc., had a Swiss embroidering machine in operation in Main Building which excited much interest. Mr. Mahony has but recently embarked in this business and he states that he is meeting with most gratifying success. He manufactures edgings, insertions, etc., in both white and colors, and also makes a specialty of embroidering and ornamenting cloaks, capes, etc. Spectators were afforded the opportunity of witnessing a machine in operation upon which more than a hundred designs were being embroidered at the same time, in various colors. Some of these were handkerchiefs and badges giving a view of the Main Building and which were in great demand as souvenirs of the occasion.

No charge made for these notices.

COMET CYCLE CO.

Toronto, exhibited lines of their well known Comet bicycles, including some very attractive wheels for ladies.

THE COWAN CO.,

Toronto, manufacturers of cocoas, chocolates, etc., made an attractive exhibit of their goods in Main Building.

THOMAS MOUNCE,

Toronto, exhibited in Main Building specimens of a new patent hasp lock manufactured by him. The article possesses much merit.

J. H. WETHEY,

St. Catharines, Ont., is a manufacturer of condensed mince meat, a display of which he made. It is put up in convenient packages for family use.

O. T. SPRINGER,

Burlington, Ont., exhibited his patent rolling and folding partition by which the whole width and height of a room may be opened and the partition completely concealed from observation, no track or guide being required.

PAYNE & THOMPSON,

Orillia, Ont., have recently patented a hammock bed which they displayed in Main Building. It consists in an arrangement which can be placed over any bed, affording great comfort to the sick and to those suffering with broken bones.

J. H. BANES,

Toronto, is the inventor and patentee of a new arrangement for impelling bicycles, and this he illustrated in his display in Main Building. The device consists in levers operated by the feet of the rider, which supplants the chain now usually used.

FEE & MACKEY,

North Bay, Ont., exhibited in Main Building several specimens of their patent tubular refrigerators. They are made to meet the demands of all classes requiring such articles—butchers, grocers, saloons, hotels, and for domestic use. The article seems to possess all the merits claimed for it.

DUNLOP'S CYCLES.

There was a fine display in Main Building of Dunlop's bicycles, and all the men and boys, and the women and girls, too, who take to bikes like ducks do to water, were interested. The great Dunlop trophy, an immense silver ornament valued at \$1,000, manufactured for Dunlop by the Toronto Silver Plate Co., was on exhibition in the Picture Gallery.

DOMINON COTTON MILL CO.,

Whose headquarters are at Montreal, made a remarkably fine display of plain and printed cotton cloths, the products of their several factories. It was somewhat of a revelation to many to learn that the beautiful prints there shown and the same as are being exhibited in the stores and ticketed as American goods were not of foreign manufacture at all, but made in the mills at Magog, Que.

TORONTO FENCE AND ORNAMENTAL IRON WORKS,

Joseph Lea, proprietor, made an exceedingly interesting exhibit in Main Building of specimens of wrought and hammered iron work, an artistic porch lantern being particularly noticeable. Mr. Lea made the iron ornaments to be seen in and upon the new Parliament Buildings, Toronto, in the new power house of the Toronto Railway Co., the residence of Mr. George Gooderham, Toronto, Hon. W. E. Sanford's residence, Hamilton and many others.

No charge made for these notices.

McLEAN & BULLEY,

Toronto, who manufacture the Planet bicycle, exhibited several of their wheels.

REAL BROS.,

Toronto, tanners and manufacturers of harness and sole leathers, etc., made a good display of their goods in Main Building.

CLARK DENTAL MFG. CO.,

Toronto, are the manufacturers in Canada of the Columbia dental chair, specimens of which were exhibited in Main Building.

SMITH MFG. CO.,

Galt, Ont., exhibited their American silver truss for the cure of hernia. They also manufacture umbilical and other trusses.

STANDARD MILK CO.,

Toronto, possess the right of valuable patent for straining, aerating, chilling and bottling milk. This system was fully explained in their exhibit in Main Building.

HEWSON BROS.,

Toronto, manufacturers of the Mirror harness dressing, exhibited and explained the merits of their product. This article is valuable not only on harness, carriage tops, etc., but also for leather covered furniture, boots and shoes.

J. E. ELLIS CO.,

Toronto, manufacturers of tower clocks, etc., had a specimen of these clocks placed in the east front of Main Building. Many who were not familiar with the mechanism of such clocks were much interested in that of this one which was in plain view.

No charge made for these notices.

ST. CROIX SOAP MFG. CO.,

St. Stephen, N.B., made a good display in Main Building of Surprise soap.

C. WILSON & SON.,

Toronto, made a good display in Main Building of weight refrigerators, butchers' tools, etc.

JOHN H. POOL,

Newcastle, Ont., made a beautiful display in Main Building of dling canoes varying in length from 13 to 16 feet.

CLAUSS SHEAR CO.,

Whose Canadian head office is at Toronto, made a good display in Main Building, of fine shears, scissors, razors, cake and paring knives, etc.

VACUUM OIL CO.

Whose Canadian works are at Toronto, had an exhibit including engine and machine oils, also specimens of leather preserved with vacuum oil.

THE COPP-CLARK CO.,

Toronto, manufacturers of parlor games, etc., made quite a display of their products in Main Building, which was very attractive to the young people.

W. M. WATSON,

Brantford, Ont., exhibited his patent automatic reclining chair. It is adjustable to any desired position, and should be invaluable in a sick room or hospital.

.. J. S. MAYO ..

100 Nazareth Street, :- MONTREAL.

Importer and Manufacturer of High Grade

Lubricating Oils

ALL OILS GUARANTEED TO GIVE SATISFACTION.

SAMPLES AND PRICES ON APPLICATION

Correspondence Solicited.

No charge made for these notices.

H. McLAREN & SONS,

Toronto, had an interesting exhibit in Main Building of the Denison electric dental motor outfit and dental operation chairs made by them. They manufacture all kinds of dental appliances.

TORONTO GAS STOVE SUPPLY CO.,

Displayed a handsome variety of gas cooking ranges, heaters, gas fires, etc. At the present price of gas many families find it cheaper and decidedly more cleanly and convenient to use gas as fuel than either coal or wood; and the apparatus manufactured by this company fills the requirement.

BROWN BROS.,

Manufacturing Stationers, Toronto, presented a most elegant display of account books, caligraph typewriters, Edison mimeographs, etc. The specialties of this company are account books manufactured by them under the Workman patent and the Kinnard patent. These books open flat, and free from any strain on the sewing, and are very strong and durable. Some of the exhibits of these books were made for some of the largest mercantile and banking concerns in Canada. They also showed lines of various kinds of binding, stationary and office supplies, leather goods—bill cases, etc.

SHURLY & DEITRICH,

Galt, Ont., had on display in Main Building the show case and magnificent equipment of saws, etc., that had excited so much admiration at the Chicago Exhibition. Shurly & Dietrich are the largest manufacturers of saws in Canada, and one of the best known and most celebrated in the world. For years they have found a good market for their goods in the United States.

They also showed the Adam Dunn patent lawn rake, manufactured by them, which, it is claimed, is the only rake made that will remove dandelion heads, or any other weeds of like nature, and by preventing them from maturing and reseeding will in a season or two completely eradicate them from the lawn. The blade is made of the finest quality of steel, and is light and durable.

No charge made for these notices.

LYON, SILVERMAN & CO.,

Montreal, through their Toronto agents, McNichol, Hooley & McGreath, exhibited lines of druggists' and grocers' sundries, flavoring extracts, perfumery, etc., manufactured by them.

HARVARD CHAIR CO.,

Toronto, displayed in the Main Building a finely finished specimen of the physician's and surgeon's chair manufactured by them. It is simple in its appearance, and little suggestive of its various uses. It is readily adapted to any position in which the human body can be placed. The principle upon which the chair is made to turn upon its base, and capable of either a lateral or backward motion, will be recognized by the profession as most important. All parts are made to work in harmony or separately.

TORSION BRAIDED WIRE SPRINGS.

D. W. Thompson & Co., Toronto, made a display in Main Building of torsion braided wire springs manufactured by The Weston & Wells Mfg. Co., Philadelphia. These springs are now used by nearly all the large carriage manufacturers in the United States, and are rapidly gaining popularity in Canada. They make a perfectly level surface to support the upholstery, and are easily and quickly applied.

THE CANADIAN RUBBER CO.,

The head office and factory of this concern are at Montreal, the office of the Western Branch being in Toronto, under the management of Mr. J. H. Walker. They had a characteristic display in Main Building which included the Forsyth seamless rubber belting, seamless tube hose, rubber packing, valves, gaskets, etc., also full lines of rubber boots and shoes. This company gives special attention to the manufacture of rubber belting for elevators, mills, factories, workshops, etc., and are selling large quantities of it for such use. The standard of these goods is exceedingly high, this belting being fully equal to any manufactured in America. The factory of this company in Montreal gives employment to about 1,000 hands, the yearly output being valued at about \$2,000,000.

ROE & GRAHAM

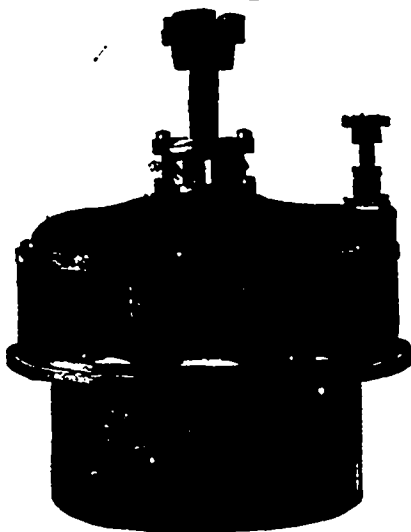
(Successors to W. H. Baldwin & Co.)

Iron Founders and Machinists

WATER WHEELS, ENGINES AND MILL MACHINERY A SPECIALTY . . .

OTTAWA,

ONT.



The . . .
Standard
Water..
Wheel



Made in sizes from 6 inches to 24 inches diameter. Wheel One Solid Casting. 94 per cent of power guaranteed. In Five Pieces. Includes whole of case, either register or cylinder gate.

Water put on full gate or shut completely off with half-turn of hand wheel, and as easily governed as any engine.

Write for Estimates, References and Catalogues of the STANDARD WATER WHEEL, also Milled and Rough Gearing of every size and description; Engines, Mill Machinery and Electric Power Plants; Latest Improved Band Saw Brazing Tables; Shears and Gummers, also Surface Grinder for Shingle Saws.

No charge made for these notices.

THE KEITH & FITZSIMONS CO.,

Toronto, made a beautiful exhibit in Main Building of gas fixtures and artistic brass work manufactured by them. Some of their electric light fixtures were exceedingly handsome.

CHAS. BOECKH & SONS,

Toronto, are probably the largest manufacturers of brushes, brooms and house furnishing goods, machine brushes, paint brushes, etc., in the Dominion. This concern made two very excellent and attractive exhibits at the Exhibition—one in Main Building where full lines of brooms, brushes and household utensils were shown—the other in Dairy Building which included churns, butter working machines, butter moulds, etc.

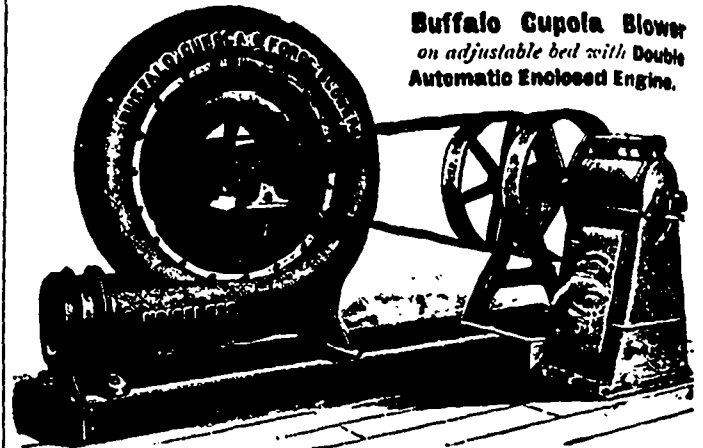
WINDSOR SALT WORKS,

Windsor, Ont., a concern with a capacity to manufacture a thousand barrels of salt per day, had an exhibit in Main Building which displayed a large variety of packages of their salt put up specially for family use; and in Dairy Building where not only their extra fine and fine table salt was shown, but also dairy salt and cheese salt. This salt is manufactured by vacuum process and consists of finely sifted natural crystals which will not cake in damp weather.

AMERICAN RATTAN CO.

The American Rattan Co., Toronto, exhibited in the Main Building one of the most beautiful lines of rattan goods ever shown in Canada, the display occupying a liberal space. The management of this company is in the hands of Mr. C. G. Pease. The company is connected with two similar concerns in the United States, who employ the best artists to be found anywhere in the production of new designs in rattan work, of which the Toronto factory has the instant and full advantage. These goods are on sale in all the best house furnishing establishments in the country.

This company have recently gone into the bicycle business, and included in their display were a large number of elegant and serviceable wheels. They are convinced that high grade wheels are always cheapest in the end, and this is the character of the wheels that this company handle.



Buffalo Cupola Blower
on adjustable bed with Double
Automatic Enclosed Engine.

**Buffalo Dry-Kilns, Shaving Fans, Forges,
Blowers, Exhausters, Black-
smith Drills, Etc.**

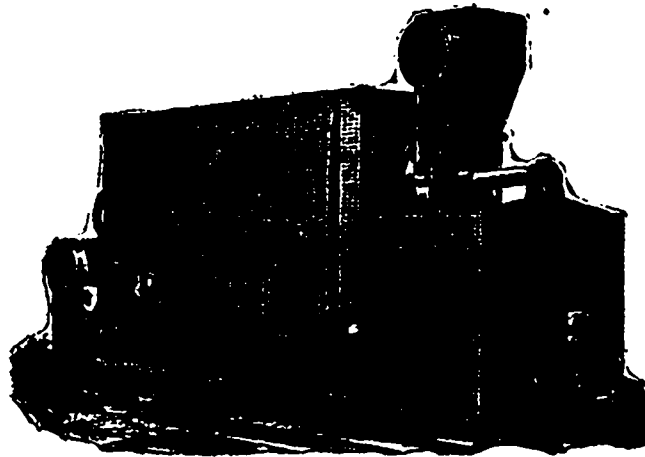
Are described in Sectional Catalogues FREE on application.

**Their Efficiency, Smooth Running, and
Durability are Unsurpassed**

BUFFALO FORCE CO., Buffalo, N.Y., U.S.A.

H. W. PETRIE, Toronto Representative, Toronto, Ont.
CANADIAN MACHINERY & SUPPLY CO., Brantford,
Brantford representatives.
Chicago Office:—22 & 24 West Randolph St.

Labor Dispensed With: Very Little Fuel Used: No Break Downs: Superior Product Obtained: Clay Dried Summer and Winter Rain or Shine, Are a Few of the Special Advantages Obtained by using the



**CUMMER
CLAY
DRYER..**

....SIX SIZES MADE....

Prepares from 3 to 20 Tons of Clay per hour for dry pan or pulverizer. The clay is handled mechanically (without men from bank to press or other machines. Dryers and Hot Air Apparatus can be seen in Daily operation in largest manufactories in Canada.

NEW METHODS.

DRIES.....

Phosphate, Sand, Earths, Paint Stocks, Peat, Lignite, Coal, Salt, Marl and Clay for Cement making, Chalk, Cereals of all kinds, Tankage, Night Soils, Animal Manure, etc., etc.

CALCINING AND ROASTING MACHINERY

for Gypsum, Ores. of all kinds, Phosphate, Paint Stocks, etc., etc.

THE F. D. CUMMER & SON CO.,

613-616 Arcade,

CLEVELAND, OHIO, U. S. A.

Send for our
New Catalogue.

CHARLES ERITH & CO., No. 70 Gracechurch St. London, E. C.

No charge made for these notices.

GOULD BICYCLE CO.,

Brantford, Ont., exhibited full lines in Main Building of their Brantford bicycles, supplies, etc. These wheels are well known and possess excellent merit.

J. B. SNIDER,

Successors to the Graybill Mfg. Co. Waterloo, Ont., made a good display of office desks, etc. An automatic school desk and seat was shown that is very popular. It is an excellent article.

THE YANKEE SIGN CO.,

Niagara Falls, Ont., displayed attractive lines of signs manufactured by them, including signs for offices, hotels, streets, factories and general advertising purposes, made in aluminum, brass, bronze, etc., finished in metallic and enameled colors.

COULTER'S VAPORIZER.

Dr. C. L. Coulter, Toronto, made an exhibit in Main Building which attracted much attention, consisting of his patent combined medical vaporizer and inhaler. In medical practice the article is valuable in converting medicines to a vaporous condition and therefore easy of introduction into the lungs; and it can also be used for deodorizing and disinfecting sick rooms, hospitals, public buildings, railway carriages, etc.

CHEELMAN BROS.,

Georgetown, Ont., showed in operation in the Main Building the hand and power knitting machines manufactured by them. There was a full variety of machines for hosiery manufacturing, among which were automatic rib-top and automatic plain machines. They also exhibited a full line of ribbing machines for seamless hosiery and with both transfer cone dile rivers and flat dile rivers. They supply full equipment for hosiery manufacturing, such as steam winders, steam presses, glove and mit machines, etc.

No charge made for these notices.

COLIN McARTHUR & CO.

Montreal, manufacturers of wall paper, made a very handsome exhibit of their products in Main Building. These papers were of new and stylish patterns and in great variety.

THE WILSON FIRE EXTINGUISHER CO.,

Toronto, made a display in Main Building of the portable chemical fire extinguishers made by them, and most successful exhibitions of which were made each day in front of the Grand Stand where temporary structures had been erected, saturated with coal oil, which, when set on fire, was very quickly extinguished by these machines. They should be invaluable in factories and warehouses, as well as in residences.

IMPORTANT NOTICE

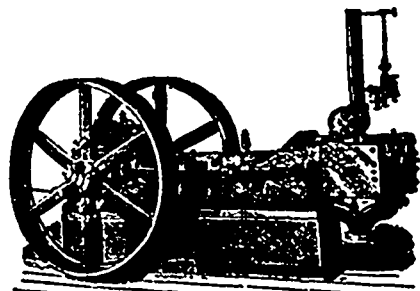
MONTREAL, SEPT. 21st, 1894.

- ✍ It having come to my knowledge that other firms in Canada are manufacturing a stick fast belt dressing, and saying it is the same as RIDOUT'S STICK FAST BELT DRESSING, in fact, go so far as to say they are manufacturing it for us, I beg leave to say there is no one in Canada making my Belt Dressing, and the other article is put on the market to try and injure the reputation I have secured, and is in no way equal to mine. I am the Sole Manufacturer in Canada of Stick Fast Belt Dressing, protected by my trade mark, which is on every tin, and I beg to warn my customers and the public that any Stick Fast Belt Dressing, which is sold without my trade mark, is a worthless imitation of mine.

HORACE R. RIDOUT, 22 John Street, MONTREAL.

Armington & Sims

AUTOMATIC HIGH SPEED ENGINES

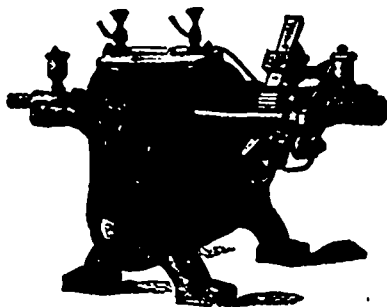


—FOR—
ELECTRIC LIGHTING
—AND—
GENERAL FACTORY PURPOSES
Perfect Regulation and Highest Economy.
—AND—
Steam Pumps
SHAFTING, PULLEYS
—AND—
General Machinery

Nie & Whitfield - HAMILTON, ONT.

Kay Electric Co'y

MANUFACTURERS OF



DYNAMOS
FOR
ARC AND INCANDESCENT LIGHTING,
Plating Machines,
Medical Batteries
AND ALL KINDS OF
ELECTRIC APPLIANCES

HAMILTON, ONTARIO



THE WEBBER PATENT
Straitway Valve

FOR
STEAM, WATER OR GAS
EVERY VALVE TESTED

THE KERR ENGINE CO. (LTD.)
WALKERVILLE, ONT.

Solo Manufacturers for Canada
Send for Price List

THE PETERBOROUGH

CARBON & PORCELAIN CO.

LIMITED

MANUFACTURERS OF

Carbon Points for All
Systems of Arc Lights

BATTERY PLATES, CARBON BRUSHES, and all kinds of PORCELAIN
for Electrical and Hardware Lines.

All goods guaranteed equal in quality to the best manufacturers in the world.

PETERBOROUGH, - - ONTARIO

No charge made for these notices.

KNECHTEL FURNITURE CO.,

Hanover, Ont., exhibited their patent Peerless extension dining table which embodies some unique features.

ONTARIO GLOVE WORKS,

Brockville, Ont., presented an attractive exhibit in Main Building of a large variety of gloves, mitts, etc., manufactured by them. They also exhibited their new Chester suspender. These are all first-class goods.

NOVELTY MFG. CO.,

Newmarket, Ont., showed in the Main Building extensive lines of toy novelties, including sleds, clippers, sleighs, doll cabs, boys' bicycles, girls' tricycles, etc. They also manufacture an extensive line of children's carriages.

ACME WHITE LEAD & COLOR WORKS,

Windsor, Ont., and Detroit, Mich., made a good display of their high grade prepared paints. These goods are put up in convenient size packages, ready for use, and are especially adapted for painting houses, barns, etc., and for all inside work.

CHARLES RAYMOND,

Guelph, Ont., who is, we believe, the largest manufacturer in Canada of sewing machines, made a fine display of his New Raymond in the Main Building. These machines are perfect in operation, beautiful in appearance, and possess all the latest novelties.

No charge made for these notices.

LEE & SEAMAN,

Toronto, exhibited specimens of their Willer patent sliding and folding blinds, Perfection sliding window and door screens, etc.

MENZIE, TURNER & CO.,

Toronto, manufacturers of Imperial window shades, laces, fringes, tassels, poles, drapery, etc., had a nice exhibit in Main Building.

***DOWSWELL BROS.,**

Hamilton, Ont., manufacturers of clothes wringers, washing machines, churns, and household novelties, showed full lines of their products.

EUREKA REFRIGERATOR CO.,

Toronto, displayed specimens of their Eureka refrigerators. They have cleanable flues, are attractive in appearance, and the interior well arranged.

WHITMAN & BARNES, MFG. CO.,

St. Catharines, Ont. One of the most characteristic exhibits at the Fair was that in Main Building of this enterprising concern. Upon a large upright cabinet case with black background was very tastefully arranged specimens of many of the goods made by them, including mower, reaper, and binder knives; sickles, sections, guards and complete cutting apparatus; spring keys and cotters; twist drill, wrenches, thresher teeth; light drop forgings, etc.

EAGLE FOUNDRY † Established 1820.

...GEORGE BRUSH...

14 to 34 King and Queen Streets, - Montreal

.. Maker of ..

STEAM ENGINES, STEAM BOILERS,
HOISTING ENGINES, STEAM PUMPS,

Circular Saw Mills, Bark Mills, Shingle Mills, Ore Crushers, Mill Gearing, Shafting Hangers and Pulleys.

Safety Elevators and Hoists for Warehouses, Etc.

HEINE SAFETY STEAM BOILERS....
Blake "Challenge" Stone Breaker.

E. LEONARD & SONS

LONDON - - - CANADA

MANUFACTURERS OF

ENGINES AND BOILERS

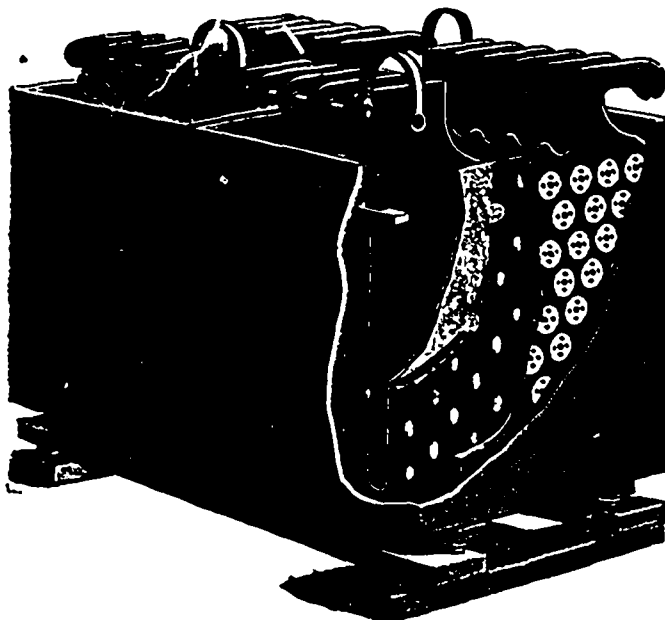
(NEW DESIGNS)

STEAM PLANTS EQUIPPED FOR ALL PURPOSES

Highest Economy, Regulation Perfect. Send for Circular. Interviews Desired.

THOS NOPPER, - - - Sales Agent

79 YORK STREET, TORONTO, ONT.



THE CHLORIDE ACCUMULATOR

The Electric Storage Battery Co.
SOLE AMERICAN MANUFACTURERS OF

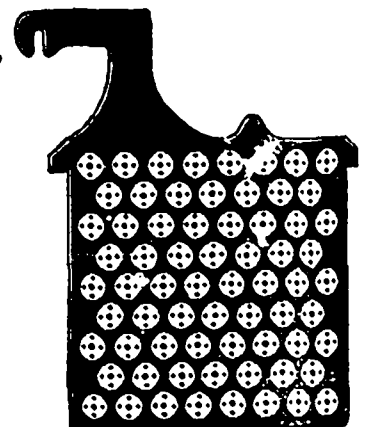
The Chloride Accumulator

Elements of all sizes, from 100 to 1,000 Watt-hours capacity each.

Traction Cells a Specialty

Electric Launch Equipment, Telegraph Phonograph, Surgical and all Special Cells.

Drexel Building - Philadelphia



No charge made for these notices.

JAMES LOCHRIE,

Toronto, manufacturer of the Antelope bicycle, displayed a number of these attractive wheels in Main Building.

THE BARBER & ELLIS CO.,

Toronto, made an attractive display in Main Building of specimens of book-binding, etc., done by them; also of lines of celluloid and other fancy boxes, cases, etc.

THE NEW LIGHTING CO.

Toronto, made a brilliant display of their new light in Main Building which attracted much attention. The production of this light is on scientific principles, giving good results at small expense.

TORONTO FEATHER & DOWN CO.,

Presented a nice display of beds, pillows, cushions and quilts made of feathers and down prepared by them. Their system of renovating feathers makes them clean and wholesome.

CHARLES GURD & CO.,

Montreal, manufacturers of aerated waters, etc., made a good show in Main Building, which included Regal seltzer, lime juice cordial, Caledonia water, Belfast ginger ale, etc. McNichol, Hooley & Greatrex, are Toronto agents.

WROUGHT IRON RANGE CO.,

Manufacturers of Home Comfort wrought steel hotel and family cooking ranges and kitchen outfits, made a beautiful display of their goods in Main Building, the articles shown being of identical character with those displayed at the Chicago World's Fair. The general offices of this concern are at St. Louis, Mo., the Canadian branch factory being at Toronto.

No charge made for these notices.

TORONTO WIRE AND IRON WORKS,

George B. Meadows, proprietor, made a display of his products in Main Building, including artistic iron and brass bank and office railing, store and window fittings, etc.

ALASKA FEATHER & DOWN CO.,

Montreal, made a very attractive display of the beds, pillows, cushions and quilts manufactured by them. The colder the weather the greater the esteem in which these goods are held.

COULTER & CAMPBELL,

Toronto, manufacturers of distillers', brewers' and confectioners' brass and copper work, copper range boilers, wash boilers, etc. made a fine show of their products in Main Building.

CANADIAN OFFICE & SCHOOL FURNITURE CO.,

Preston, Ont., had a handsome exhibit in the Main Building, where specimens of office desks of most approved designs, office furniture, school desks, church furnishings, etc., were shown.

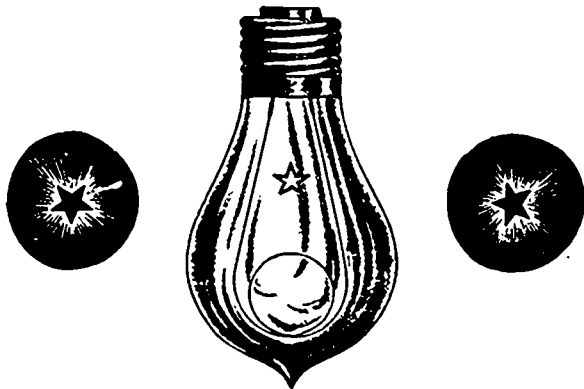
W. MILLICHAMP, SONS & CO.

Toronto, made an excellent display of bank stoves and office interior fittings; also of mantels, over mantels, tiles and grates, which were very beautiful. They are large manufacturers of these goods.

RAMSAY & AITKEN,

Toronto, displayed lines of Nonpareil ratchet wrenches and combinations which did not fail to attract the attention of engineers and machinists. These goods were the product of the Keystone Mfg. Co.

"STARR" Incandescent Lamps..



Full Candle Power. Long Life. Low Price.

Made of any Candle-Power and Voltage, and with bases to suit the different sockets in use.

Unrivaled Quality. High Efficiency.

Write for Quotations, stating Voltage and Base used.

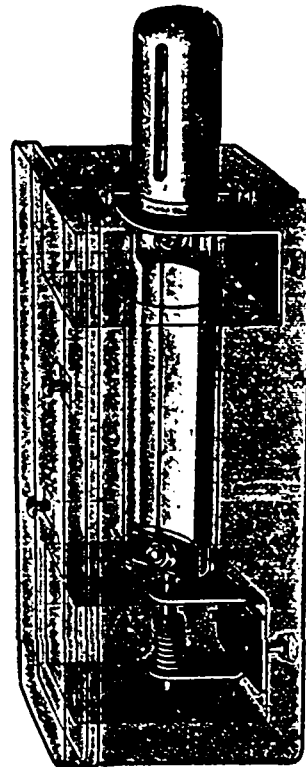
JOHN STARR, SON & CO. (LIMITED)

... Halifax, N. S. ...

Illustrated Catalogue of Electrical Supplies on Application.

The Packard Transformer

The Transformer can be cut out of circuit and a burned out fuse replaced without the use of any tool whatever.



Packard Transformer Fuse Box Complete (3 SIZE)

Packard Lamp Co., Ltd. Montreal

Makers of Packard Lamp and Transformers.

No charge made for these notices.

SNOWBALL WAGON CO.,

St. George, Ont., had four of their fine wagons on exhibition in the Wagon Building, one of which was shown in the natural wood. The Snowball wagon is made in all styles to meet demands, and is first class in every respect.

ADAMS & SON,

Proprietors of the Paris Wagon Works, Paris, Ont., presented in the Wagon Building several fine specimens of their Adams patent truss skein farm wagons which excited much favorable notice. These wagons are made in all the different styles necessary to meet the demands of users. They also make wagons, lorries, etc., for heavy city traffic, low-wheeled farm trucks and logging trucks, Manitoba sleighs, bob sleighs, etc.

THE CANADA CARRIAGE CO.,

Late the Gananoque Carriage Co., whose extensive factories are at Brockville, Ont., and Gananoque, Ont., are manufacturers of some of the most elegant vehicles to be seen in Canada, and some beautiful specimens of these were to be seen on exhibition in the Carriage Building. The company have a fine wareroom on Bay Street, Toronto, under the management of Mr. John N. Lee, where these carriages are kept for sale.

NEWLANDS & CO.,

Galt, Ont., show a number of specimens of their Saskatchewan buffalo robes in the Carriage Building. When the buffalos disappeared a few years ago from their haunts on the Western prairies it was believed that no substitute could ever be found to take the place of its pelt or skin, which had proved so valuable for general purposes as a robe in our northern climate, where warmth and durability are great necessities. Fur robes are too expensive and cannot be obtained in large numbers. Goatskin robes have not the warmth nor yet the durability, and in addition their smell is objectionable. Many substitutes for the almost invaluable buffalo robe have been tried, but all failed to fill the want until Newlands & Co., of Galt, invented their now well-known Saskatchewan buffalo robe. It took three years to develop and perfect this article so as to give the many good qualities which are essential in a good robe. The invention has had five years' trial, and has been tested in all kinds of weather, and the verdict is, that five years of rough, general usage does not injure them any more than it would have done the old buffalo skin. The Saskatchewan buffalo robe has the following good qualities: It is as strong as any leather, it is handsome, soft and pliable; it is warmer, with lambskin lining, than a buffalo robe; it is impervious to wind, also to moths; it is easily dried after having been wet. It is made in three sizes, lined with a handsome durable and warm lambskin lining, either in scarlet or black, and is suitably trimmed. In addition to the manufacture of buffalo robes Messrs. Newlands & Co. make a specialty of buffalo coats, and also black astrachan coats.

No charge made for these notices.

J. CRUICKSHANK & SONS,

Weston, Ont., exhibited specimens of their detachable spring farm wagons in the Wagon Building. They are well built of good materials. This concern also build fine business wagons of all kinds, buggies, etc.

WESTERN WHEELED SCRAPER CO.

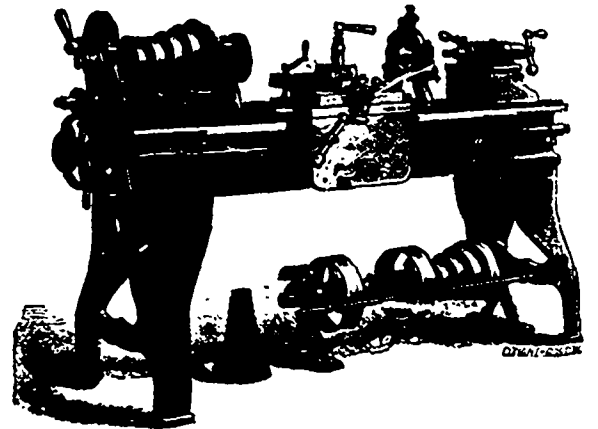
One of the most interesting exhibits shown on the lawn was that of the rock crusher manufactured by the Western Wheeled Scraper Co., Aurora, Ill., for whom H.A. Brownell, London, Ont., is general Canadian agent. Judging from the manner in which this machine crushed the rock and small boulders fed to it, it would be of great value in making macadam for road building and similar purposes.

ESTABLISHED 1850

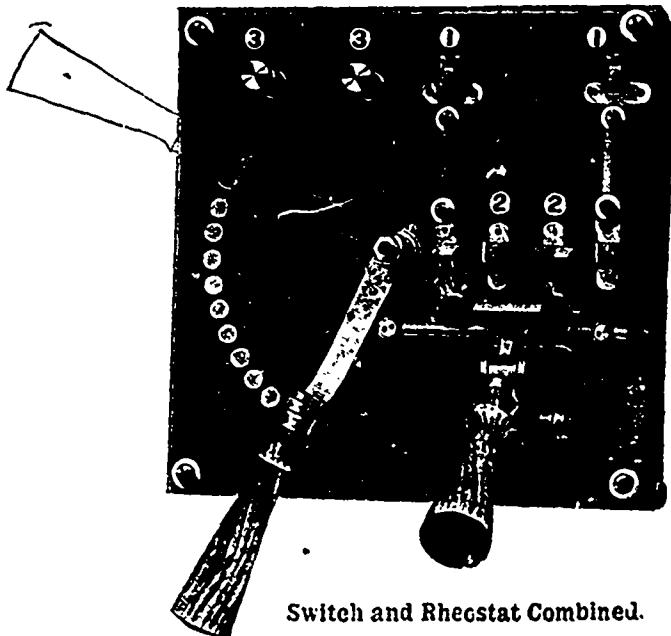
Robert Gardner & Son,

MANUFACTURERS OF

**Fine Tools, Lathes, Planers, etc.
Shafting, Hangers & Pulleys, etc.**



Nazareth, Brennan & Dalhousie Sts., MONTREAL.



Switch and Rheostat Combined.

PROTECT YOUR MOTORS

....By using the....

HILL PATENT

Self-Locking Starting Switch

No possible chance for an accident as the Switch cannot be closed until the resistance is all in.

CHEAP • COMPACT • DURABLE

....Made only by the....

W. S. HILL ELECTRIC CO.

133 Oliver St., Boston, Mass.

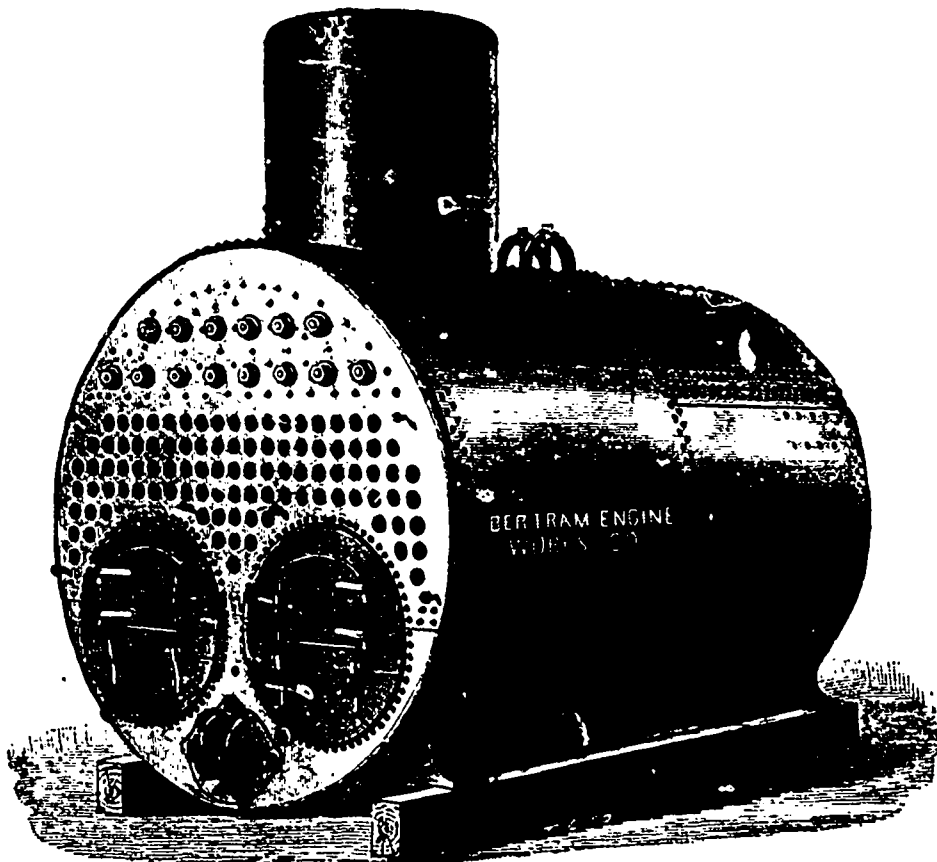
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NEW YORK
Eaton & Brewster, 143 Liberty St.

CHICAGO
Central Electric Co

The Bertram Engine Works Co., Ltd.

- - - ENGINEERS AND BOILER MAKERS. - - -



.BEST EQUIPPED PLANT IN THE DOMINION.

....FOR THE CONSTRUCTION OF....

Marine Engines and Boilers,

Corliss and Vertical Engines,

Steel and Composite Yachts & Steamships.

CASTINGS & GENERAL MACHINERY.

The Bertram Engine Works Co., Ltd.

Bathurst and Niagara Sts. TORONTO, CANADA.

No charge made for these notices.

THE BAIN WAGON CO.,

Woodstock, Ont., are manufacturers of first class farm and business wagons, and specimens of these were shown in the Wagon Building. Their "Woodstock Bain" wagon received much favorable comment.

CHATHAM MANUFACTURING CO.,

Chatham, Ont., D.R. Van Allen, manager. A Toronto Fair without the presence of Mr. Van Allen and his display of Chatham wagons would be like the play of Hamlet with that celebrated character omitted. The display in the Wagon Building this year comprised eight specimen vehicles, two very fine ones finished in natural wood, without paint; one heavy dray, built for the Royal Oil Co., Toronto; one coal cart; one combination wagon including wagon box, hay rack and stock rack, and two of the wagons shown by this concern at the World's Fair at Chicago, and which were awarded a gold medal and diploma. The following letter written by O'Brien Bros., St. Mary's, Ont., explains the merits of one of the wagons made by this concern:—

DEAR SIR:—In reply to yours of the 11th inst., re the wagon test here, we beg leave to state that the wagon on which the wager was laid was a No. 3 Chataqua Giant, one of your make, which we showed at the Spring Fair. Five tons and a half was the stipulated load; and the load of pig iron as weighed on the town scales was 11,060 lbs., drawn for a distance of a mile up hill and down, over cobble stone paved streets, high stone street and two R.R. crossings. Preachers, lawyers, doctors, bankers and farmers followed, and shoved when the four horses felt weary. The excitement was high and the roads heavy, as it rained the night before. Barnum's circus wasn't in it for drawing the crowd that followed us. The wagon stood the test, and came out all right. It is the best advertisement you ever had in this locality. We are pleased that the wagon stood the trial, as it was prophesied that it would collapse within one hundred and fifty yards of the starting point. It did not do it, and the local wagon makers are not as pleased as we are for some reason or other; why we can't say. The wagon was sold at once to Edward Mills, Devizes P.O., Middlesex Co., who is using it daily and is well pleased with it. Hoping that we may always get as good wagons as that Chataqua Giant and that we may meet many men desirous of laying wagers on their strength, we are, Yours truly, O'BRIEN BROS.

No charge made for these notices.

E. C. DANIELS,

Orangeville, Ont., had his patent folding hay and stock rack on exhibition on the lawn. It can be quickly changed from hay to stock rack, and vice versa, and can be folded up like a book when not in use.

CANADA FENCE CO.,

London, Ont., manufacture the Casey Diamond Grip, and the double lock wire fences, specimens of which they displayed on the lawn. These fences are well adapted for farm, railroad, cemetery, garden and lawn.

GEORGE DICKIE & SON,

Hyde Park, Ont., exhibited their I.X.L. wire adjuster, for tightening the strands of wire fencing whenever it may be necessary. It is a convenient contrivance, and its efficiency as well as cheapness are its strong recommendations.

GOULD, SHAPLEY & MUIR CO.,

Brantford, Ont., made a fine exhibit on the lawn of their steel wind mills and towers, pumping wind mills, four post and three angle steel towers, round and square, water tanks, feed grinders, root pulpers, straw cutters, iron pumps, etc.

ONTARIO PUMP CO.,

Toronto, manufacturers of the Halladay Standard pumping and general wind mills, etc., made a good display on the lawn of their specialties. These wind engines are made in all popular styles and to meet all demands for such machinery.

HAMILTON & TORONTO SEWER PIPE CO.,

Whose head offices are at Hamilton, Ont., made a comprehensive exhibit of sewer pipe, chimney tops, and similar goods on the lawn near the Agricultural Implement Building. These are standard goods and in use in about every city and town in Ontario.

Second-Hand **ENGINES**

In Good Condition, for sale low.

- 50 H.P. Corliss.
- 50 H.P. Automatic Ball (American.)
- 60 H.P. Automatic Leonard-Ball.
- 50 H.P. Automatic Armington & Sims.
- 25 H.P. Automatic Westinghouse.

Replaced by Robb-Armstrong Engines

Robb Engineering Co., Ltd., Amherst, N. S.

....DON'T MISS SEEING....

The J. B. ARMSTRONG

—SPECIALTIES IN—

Fine Buggies, Carriages and Cutters,

....AT....

TORONTO, LONDON, QUEBEC AND OTTAWA
EXHIBITIONS.

J. B. ARMSTRONG MFG. CO. LTD.

GUELPH, CANADA.

Suspender Buckles

AND....

Wire Shapes ^{OF} All Kinds.

We have put in a complete plant of AUTOMATIC MACHINERY for making above articles. . . .

Write for Quotations

McKinnon Dash & Hardware Company

St. Catharines, Ont.

The Largest Factory of the kind in the Dominion

Lion Brand

PURE GOODS

HONEST GOODS

REGISTERED
TRADE
MARKL. J. J. Dealers from Ocean to
Ocean Handle These Goods.Pure Vinegars, Mixed Pickles
Jams, Jellies and Preserves.Michel Lefebvre & Co.
Man'rs, MONTREAL, QUE.Also BEET SUGAR Manufacturers
at Berthierville, Que.
ESTABLISHED 1849.. . . 20 First Prizes,
Gold, Silver and Bronze Medals.

Lion "L" Brand.

No charge made for these notices.

CHAMPION IRON FENCE CO.,

Toronto, had a portion of the lawn decorated with different styles of iron fencing, gates, etc., manufactured by them.

R. & W. LONGSTAFF,

Weston, Ont., made a conspicuous display on the lawn of the pumps, wind engines, etc., manufactured by them. These articles are specially intended for use on farms, in stock yards, etc.

D. PLEWS & CO.,

Toronto, manufacturers of wind engines, pumps, etc., exhibited specimens of their products on the lawn. Among other machinery they make geared mills from one man to 40 horse-power, operated by their wind engines for grinding, chopping, sawing, pumping, etc.

No charge made for these notices.

EMERSON & CAMPBELL,

Tweed, Ont., exhibited on the lawn their patent hay-carrier and slings, also a swivel hay fork carrier, for handling hay, etc.

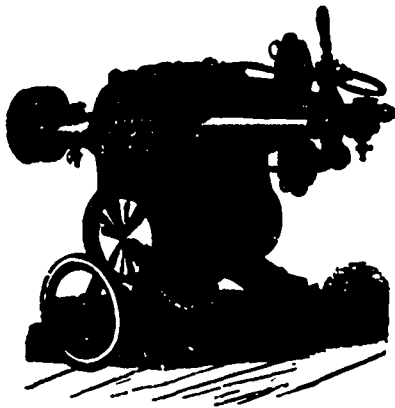
THE WOODSTOCK WIND MOTOR CO.,

Woodstock, Ont., exhibited specimens of their wind power machinery on the lawn. The power was applied for pumping water, grinding grain, cutting feed, sawing wood, etc.

ONTARIO LEAD AND BARB WIRE CO.,

Toronto, manufacture a barbless truss cable fencing which was exhibited on the lawn, and which commended itself very strongly because of its neat and durable appearance. It is well adapted for farm purposes, and is exceedingly ornamental when used on city lawns, yards, gardens, etc.

No Equal or No Sale



If you require a Motor to drive your works, or a Dynamo to light your factory, we can supply the best and simplest in the market, satisfaction guaranteed. Our record is not equalled by any firm, large or small, in Canada.

Call or Write for particulars.

Toronto Electric Motor Co., 107 Adelaide St. West Toronto, Ont.

VALVES and - Pipe :: Fittings

Write for Latest Prices.

RICE LEWIS & SON (LIMITED)

Cor. King and Victoria Sts. - TORONTO.

Black Sheet Iron, all sizes. Sheet Steel, Ordinary & Dead Flat. Russia Iron, Genuine and Imitation.

M. & L. SAMUEL, BENJAMIN AND CO.

30 Front Street West, Toronto

ENGLISH HOUSE: SAMUEL, SONS & BENJAMIN 164 FENCHURCH ST., LONDON. E.C.

SHIPPING OFFICE 1 RUMFORD PLACE, LIVERPOOL L.

.....THE.....

Goldie & McCulloch Co., Ltd., Galt, Ont.

.....MANUFACTURERS OF.....

STEAM ENGINES - BOILERS - WATER WHEELS,

Steam Engines, Boilers.

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THE PEDLAR METAL ROOFING CO.,

Oshawa, Ont., occupied their own building on the main avenue, where they made an interesting display of their sheet metal goods. These consisted chiefly of the Pedlar patent metallic shingle, patent metallic ceilings in 15 styles, corrugated iron siding for elevators, barns, warehouses, factories, etc., ornamented and plain ridging, eave-troughs in many styles and sizes, 8-foot lengths, corrugated conductor pipe in 8-foot lengths, etc. This display was very attractive.

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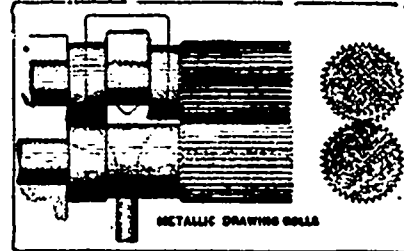
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Aylmer, Ont., is patentee and manufacturer of an excellent double acting hand force pump which he exhibited on the lawn.

PAGE WIRE FENCE CO.,

Walkerville, Ont., manufacturers of the Page coiled spring woven wire fencing, made a splendid exhibit on the lawn. This is a smooth fence that will turn any kind of stock. It is made from the best hard steel wire. Some of its points of excellence are: It is neat, tidy, efficient, cheap. It needs but few posts. It does not burn up. It does not blow down. It does not bank snow. It does not break in winter. It does not sag in summer. It does not injure stock. It is durable. It is pig tight, bull strong, horse high. It is just the fence for railroads or for farmers and land owners, who like to feel that their stock and crops are both secure.

METALLIC ROOFING CO.,

Toronto, occupied a handsome little building on the main avenue of the Fair Grounds, constructed chiefly of the Eastlake metallic shingles and metallic fire proof building materials manufactured by them; and in this building they exhibited specimens of these goods, affording

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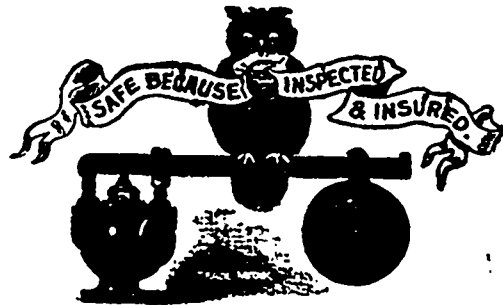
No charge made for these notices.

those who desired to do so close inspection of them. But the display was not confined to this small building, for upon the grounds were acres and acres of buildings all covered with the Eastlake shingles made by this company. In fact there are more than fifty different buildings on the Fair Grounds covered with them, including the Grand Stand, which is 700 feet long, and capable of seating some 15,000 people. These buildings would not have been covered with these shingles if those in authority had not believed that they were the very best covering made. Mr. Mark Hall, the architect in the regular employ of the Toronto Industrial Exhibition Association, and who designed about all the buildings upon the grounds, and who specified how they should be constructed, has certified to the Metallic Roofing Company that the roofs covered with these shingles have given the utmost satisfaction, and that they are the tightest roofs on the Fair Grounds. In corroboration of this Mr. J. J. Withrow, President of the Association, says: "I agree with Mr. Hall's statement as to the character of the roofing material manufactured by the Metallic Roofing Company. They can be used when wood shingles can not be considered, either on the score of appearance or safety against fire. The siding and shingles are ornamental in design, while effective as a fire guard." The company have scores of just such letters, many of them from manufacturers whose factory buildings, warehouses, etc., are protected with this fire proof covering.

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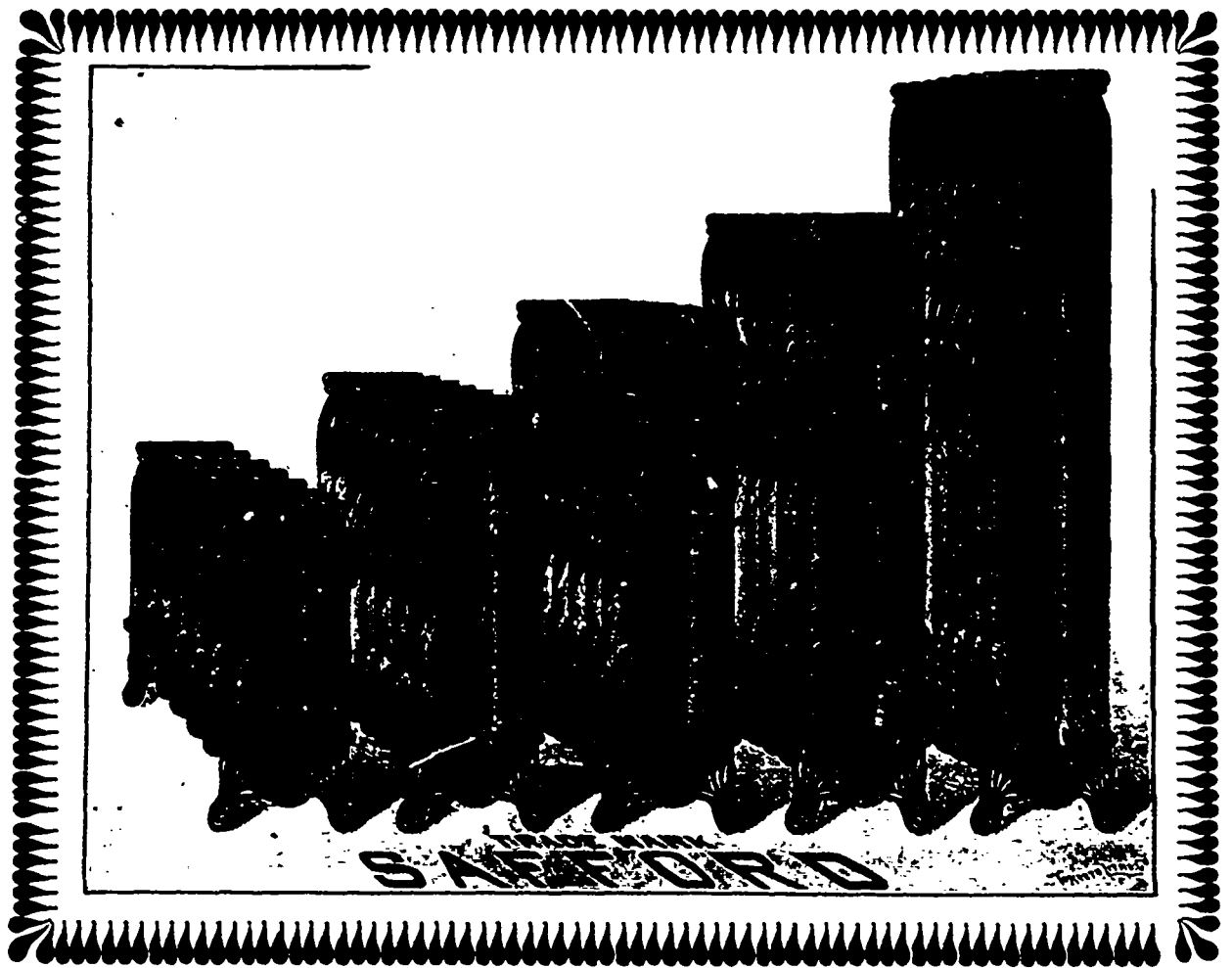
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CANADIAN PATENTS.

The following patents have been issued from the Canadian Patent Office, from June 1 to June 25, 1894, inclusive.

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

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

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

- 46,318 Manufacture of sugar, Jean E. Pelligrini, Barcelona, Spain, June 11.
- 46,319 Pneumatic tire, George Meade and John Gardner, Toronto, Ont., June 11.
- 46,320 Mucilage, size and adhesive compound, Charles M. Higgins, Brooklyn, N.Y., June 11.
- 46,321 Line casting machines, Wilber S. Scudder, Brooklyn, N.Y., June 11.

- 46,322 Mud guard for bicycles, Marius E. Griswold, Chicago, Ill., June 11.
- 46,323 Process of extracting fluids from mosses, Thomas E. Wallace, St. John, N.B., June 11.
- 46,324 Electric motor for street cars, Elihu Thomson Swampscott, and Edwin W. Rice, Lynn, Mass., June 12.
- 46,325 Pyrotechnic railway danger signals, Frank A. Fox, et al, New York, N.Y., June 12.
- 46,326 Childrens' bib, Mariam E. Raine, Vancouver, B.C., June 12.

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- 46,327 Process of tawing hides or skins, William Zahn, Newark, N.J., June 12.
- 46,328 Tire for the wheels of cycles, Josef T. Poplawsky, Bremerhaven, Germany, June 12.
- 46,329 Car coupler, Frederick Knowlson and William Curtis, Lindsay, Ont., June 12.
- 46,330 Centrifugal creamer, Olof Ohlsson, Newark, N.J., June 12.
- 46,331 Blower, George A. Spang, Tonawanda, N.Y., June 12.
- 46,332 Machine for creasing boot and shoe uppers, George Knight, Brocton, Mass., June 12.
- 46,333 Art or process of purification and decoloration of saccharine solutions, Peter H. Vander Weyde and Orazio Lugo, New York, N.Y., June 12.
- 46,334 Safety bicycle stand, Clayton J. Whipple, Waterloo, Ia., June 12.
- 46,335 Manufacture of hygienic garments, Ferdinand Linneborn, Hagen, Germany, June 12.
- 46,336 Trolley arm, Arthur H. Smith, London, Ont., June 12.
- 46,337 Manufacture of hard soap, Natali Osuchowski, Varsovia, Poland, and Alexander S. Zawierzchowski, Paris, France, June 11.
- 46,338 Cover for receptacles for butter and other articles, Henry C. Carter, East Orange, N.J., June 12.
- 46,339 Manufacture of emery wheels, grindstones, hones, millstones, and the like, Olaf Tarp, Forest Hill, Surrey, England, June 12.
- 46,340 Production of artificial crystalline carbonaceous materials, Edward G. Acheson, Monongahela City, Pa., June 12.
- 46,341 Reel carrier, William M. Barger, Webster City, Ia., June 12.
- 46,342 Potato digger, Charles H. Hall, Glidden, Wis., Almond D. Hall, et al, St. Louis, Mo., June 13.
- 46,343 Lamp, The Ross-Atkins Oil Lamp Co., Birmingham, England, June 13.
- 46,344 Gas governor, Silas H. Moore, et al, New York, N.Y., June 13.
- 46,345 Railway tile plate and method of making same, The Q. and C. Company, Chicago, Ill., June 13.
- 46,346 Padlock, Benjamin F. Loughmiller, Aspen, Col., June 13.
- 46,347 Brush making tool, McClintock Young, Frederick, Md., June 13.
- 46,348 Self locking cleat for electric wires, Elias Nashold and Henry W. Baskette, Chicago, Ill., June 14.
- 46,349 Stove back, Fay O. Farwell and The Adams Co., Dubuque, Ia., June 14.
- 46,350 Cigarette machine, Edward P. Pollard, New York, N.Y., June 14.
- 46,351 Sole and heel plate, John T. E. Nelson, Cedar Home, Wash., June 15.
- 46,352 Fruit drier, Mary J. Richmond, Republic, Mo., June 15.
- 46,353 Nut lock, James McCormick, Sudbury, Ont., June 15.
- 46,354 Air brake for railway trains, Andrew Reid, Saginaw, Mich., June 15.
- 46,355 Starching machine, Allen Conkling, Chicago, Ill., June 15.
- 46,356 Hay carrier track, James W. Provan, Oshawa, Ont., June 15.
- 46,357 Fifth wheel, Garland B. St. John, Kalamazoo, Mich., June 15.
- 46,358 Material for applying oil to axle bearings, George J. Churchward, Swindon, Wiltshire, England, June 15.
- 46,359 Rack for holding hats, canes, umbrellas, shawls, etc., George Phillion, Mishawaka, Ind., June 15.
- 46,360 Wood sawing machine, Charles Bilbrough, Markham, Ont., June 16.
- 46,361 Air brake, Moses L. Rothschild, Chicago, Ill., June 16.
- 46,362 Chair, James Mehan, Cartier, Ont., June 16.
- 46,363 Stove and Furnace, etc., Thomas Austin, Brooklyn, N.Y., June 16.
- 46,364 Disinfecting oven, Olaf Baumbach, Copenhagen, Denmark, June 16.
- 46,365 Fence wire tightener, Isaac K. Hollinger, Grenville, O., June 16.
- 46,366 Potato bug sprinkler, John Lashbrook, Stratford, Ont., June 16.
- 46,367 Electric brake, Francis N. Denison, Toronto, Ont., June 16.
- 46,368 Card packet, Percy L. Fison, and Hartley Illingworth, Ripon, York, England, June 16.
- 46,369 Pneumatic carrier, Wilson Phillips and John McCleary, Toronto, Ont., June 16.
- 46,370 Metal scraping tool, John A. Rennie, Bathurst, N. B., June 16.
- 46,371 Vegetable parer, Addison M. Mundell, Paola, Kansas, June 18.
- 46,372 Steam boiler, John Hazlett, Kingston, Ont., June 18.
- 46,373 Ferret and hook for the back of harnesses, Edward J. Harris-Neeppana, Man., June 18.
- 46,374 Combined reel and lawn sprinkler, Wm. L. Van Home and Morton Yount, Norfolk, Neb., June 18.
- 46,375 Lamp, Frederic E. Baldwin, New Brighton, N.Y., June 18.
- 46,376 Land roller, David Smith, Holland, Ont., June 18.
- 46,377 Hernia truss, Charles Cluthe, Toronto, Ont., June 18.
- 46,378 Automatic scale weighing machine, Ernest C. Chard, Chelsea, Middlesex, England, June 19.
- 46,379 Plough, Andreas Mechwart, Budapest, Hungary, June 19.
- 46,380 Apparatus for indexing, Edgar A. Goddin, Stoke Newington, County of London, England, June 19.
- 46,381 Process of vulcanizing wood, Henry L. Rutherford, Montreal, Que., June 19.

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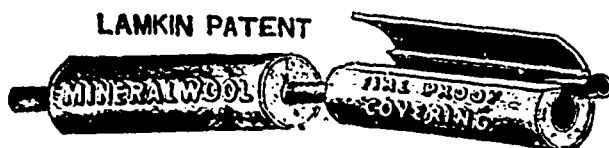
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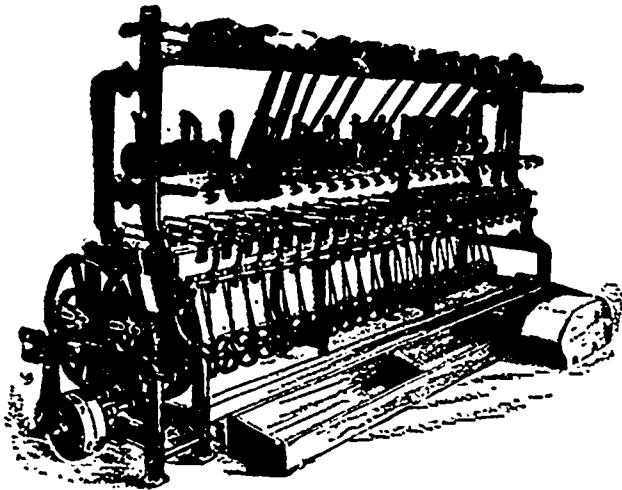
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- 46,382 Water closet, Edward Hammon, Brooklyn, N.Y., June 19.
 46,383 Transfer ticket, Andrew McFarland, Toronto, Ont., June 19.
 46,384 Apparatus for drying clothes, Joseph Lalonde, Winnipeg, Man., June 19.
 46,385 Window sash slat fastener, Joseph W. Crevier and Edouard Leclerc, Montreal, Que., June 19.
 46,386 Dredging machine, Cyrus H. Underwood, Chicago, Ill., June 19.
 46,387 Boiler, Hamline W. Reynolds, Geneva, N.Y., June 19.
 46,388 Hay carrier, William Loudon, Fairfield, Ia., June 19.
 46,389 Microphone, Charles Clamond, Paris, France, June 15.
 46,390 Trolley wheel, Frederick Lepper and William Wighton, Toronto, Ont., June 19.
 46,391 Elevator, Alexander Shepherd and John M. Shepherd, Edinburgh, Scotland, June 19.
 46,392 Salt, George Weddell, Newcastle-on-Tyne, England, June 19.
 46,393 Lime slaking machine, John L. Bowles, Philadelphia, Pa., June 19.
 46,394 Liniment, Joseph Livingston, Lobo, Ont., June 19.
 46,395 Electro mechanical movement, Elisha Gray, Highland Park Ill., June 19.
 46,396 Clover seed attachment for mowers, The Massey-Harris Co., Toronto, Ont., June 20.
 46,397 Machinery for winding thread upon star shaped disc holders, John Keats, Bagnall Hall, Stafford, England, June 20.
 46,398 Process of plating metals with aluminum or its alloys, Edward C. Broadwell, Philadelphia, Pa., June 20.
 46,399 Bicycle tire, Edward S. Beach, Boston, Mass., June 20.
 46,400 Incandescent electric lamp and socket, Charles A. Hussey, New York, N.Y., June 21.
 46,401 Galvanometer, The Whitney Electric Instrument Co., Saco, Me., June 21.
 46,402 Bottle stopper, Charles A. Sullivan, et al, Windsor, Ont., June 21.
 46,403 Railway tie plate, The Q. and C. Company, Chicago, Ill., June 21.
 46,404 Shaft holder, William H. Davis, et al, Neepawa, Man., June 21.
 46,405 Fabric, John F. Palmer, Riverside, Ill., June 21.
 46,406 Galvanometer, The Whitney Electrical Instrument Co., Saco, Me., June 21.
 46,407 Galvanometer, The Whitney Electrical Instrument Co., Saco, Me., June 21.
 46,408 Electric measuring instrument, The Whitney Electrical Instrument Co., Saco, Me., June 21.
 46,409 Automatic switch for electric motors, The Canadian General Electric Co., Toronto, Ont., June 21.
 46,410 Machine for kneading dough, etc., George S. Baker, London, England, June 21.
 46,411 Pneumatic tire, Hans J. Caulfield, Toronto, Ont., June 21.
 46,412 Repetition attachment for pianofortes, Walter Simpkins and Guiliano Ajelto, Camden, London, England, June 21.
 46,413 Kilns for drying kindling wood, Paul H. Knowlton and Thomas A. Knowlton, Boston, Mass., June 22.
 46,414 Method of treating garbage, Hartio B. Arnold, Boston, Mass., June 22.
 46,415 Water alarm for steam boilers, etc., Peter A. Kérchner, Fort Wayne, Ind., June 22.
 46,416 Thill coupler, John B. Pouk and James Brotherton, Spring Valley, Ill., June 22.
 46,417 Barrel press, Thos. Craney, Bay City, Mich., June 22.
 46,418 Curling Iron, Charles F. Stout, and Howard B. Stout, Chicago, Ill., June 22.
 46,419 Telephone Circuit, The Bell Telephone Company of Canada, Montreal, Que., June 22.
 46,420 Telephone transmitter circuit and apparatus, The Bell Telephone Company of Canada, Montreal, Que., June 22.
 46,421 Telephone circuit, The Bell Telephone Company of Canada, Montreal, Que., June 22.
 46,422 Apparatus for suppressing telephone disturbing currents, The Bell Telephone Company of Canada, Montreal, Que., June 22.
 46,423 Locomotive fire kindling apparatus, John S. Leslie, Paterson, N.J., June 22.
 46,424 Steam generating grate, Charles W. Hicks and Carlos W. Evans, Ashburn, Ga., June 22.

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- 46,425 Appliance for disinfecting waterclosets, George T. Orton, Winnipeg, Man., June 22.
 46,426 Device for liberating horses from vehicles while in motion, Isaac Briggs, Middleboro' Mass., June 22.
 46,427 Air filtering stopper for bottles, etc., Johannise, J. Van Hest, Amsterdam, Holland, June 23.
 46,428 Horse detacher, William W. Dickinson, et al, Dundonald, Ont., June 23.
 46,429 Grate, Andrew Scharg and Duncan Dempster, Brantford, Ont., June 23.
 46,430 Fluid discharging apparatus, William T. Messinger, Boston, Mass., June 23.
 46,431 Wire stretcher, John L. Crain and Elbert E. Waller, City of Ava, Ill., June 23.
 46,432 Cloth painting machine, Eugene H. Schofield and Oren Dunham, Ludington, Mich., June 23.
 46,433 Apparatus for reeling fabrics, Eugene H. Schofield and Oren Dunham, Ludington, Mich., June 23.
 46,434 Cloth drying, tentering and trimming machines, Eugene H. Schofield and Oren Dunham, Ludington, Mich., June 23.

- 46,435 Prison cell, safe and other repositories, Paul E. Glafke, Cheyenne, Wyoming, June 23.
 46,436 Internal stay for trunks, etc., John T. Dwyer, Montreal, Que., June 25.
 46,437 Tension rods for fire proof floors, roofs, etc., Thomas A. Lee, New York, June 25.
 46,438 Motor for operating pumps, Louis H. Lloyd, Lincoln, Ill., June 25.
 46,439 Wind mill, John Boisclair, Montreal, Que., June 25.
 46,440 Dental furnace, James H. Downie, Detroit, Mich., June 25.
 46,441 Device for separating the turnings from the finished screws in screw making machines, Jason A. Bidwell, Cleveland, Ohio, June 25.
 46,442 Decorticating, preparing, twisting and winding peat, etc., Gustave A. Cannot, London, England, June 25.
 46,443 Pneumatic tire repairer, Charles E. Buckbee, et al, Hushing, Mich., June 25.

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UNITED STATES PATENTS.

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The following patents were issued from the United States Patent Office, from Aug. 14 to Sept. 11, 1894, and reported especially for the CANADIAN MANUFACTURER by Glascock & Co., patent attorneys, Washington, D. C. Printed copies of these patents can be obtained from them for 25 cents each.

- George M. Aylsworth, Collingwood, Ont., buckle.
- Israel S. Carr, Toronto, Ont., portable chemical fire extinguisher.
- Duncan MacPherson, Montreal, Que., railway switch.
- Thomas Robertson, Toronto, Ont., confectionery machine.
- Walter Rolands, Montreal, Que., railway frog.
- Charles F. Burtis, Toronto, Ont., game apparatus.
- Benjamin T. Lawton, London, Ont., combined sofa and bed.
- Bernard McHugh, Ottawa, Ont., device for cutting cards with beveled edges for photograph mounts.

- George Russell, Hamilton, Ont., farm fence.
- Caleb Swayze, Toronto, Ont., antispattering guard.
- Alfred Burkholder, Toronto, Ont., chair.
- William R. Cartledge, Guelph, Ont., knit fabric and method and apparatus for producing same.
- William C. Donaldson, Windsor, Ont., target trap.
- William H. Emerson, Chatham, Ont., lumber register.
- Moore Letson, and F. Burpee, New Westminster, B.C., can washer.
- Alexander McKerlie, Hamilton, Ont., device for preventing accidents on street cars.
- Hervey Tallman, Beamsville, Ont., double disk harrow.
- Alfred E. Trevithick, St. Henri, Que., street clearing apparatus.
- Henry Whiteside, Sussex, N.B., sofa bed.
- James Woods, Newton Brook, Ont., farm gate.
- Frederick H. Kinder, Stratroy, Ont., self-supporting attachment for bicycles.
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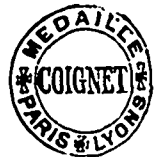
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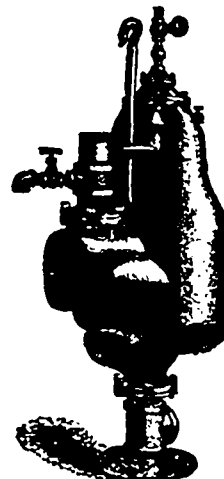
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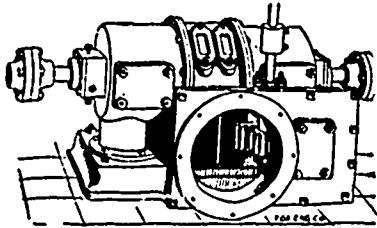
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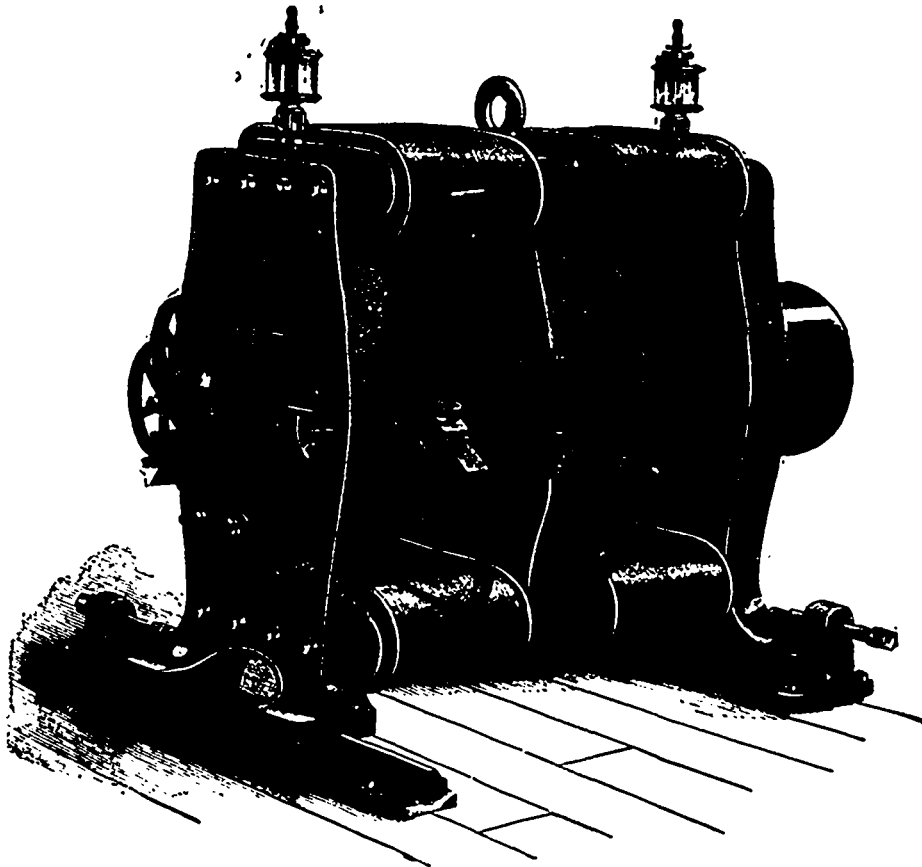
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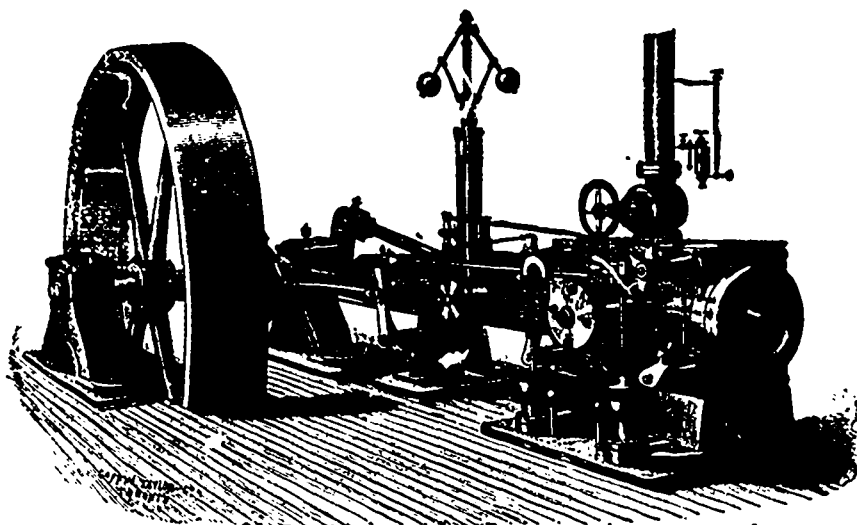
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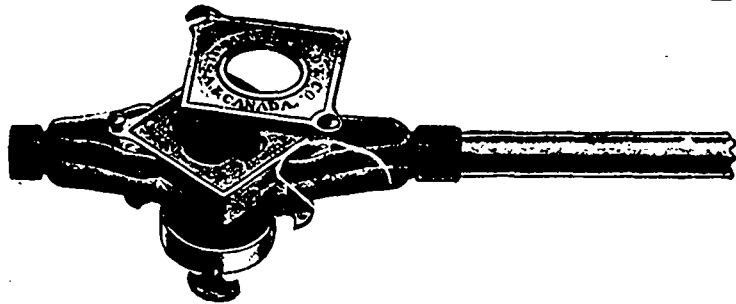
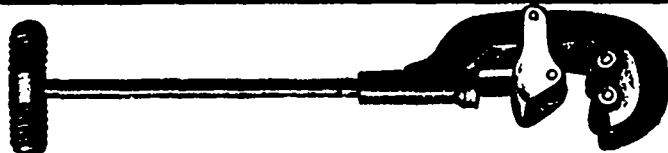
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1 1/2	1 1/2	5.94	"	3 1/4	3 1/4	26.60	"
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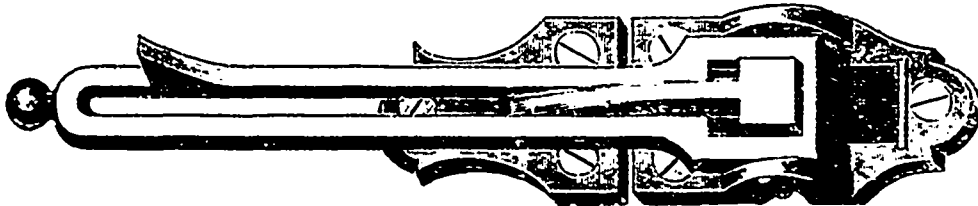
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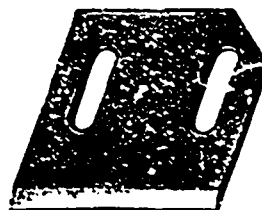
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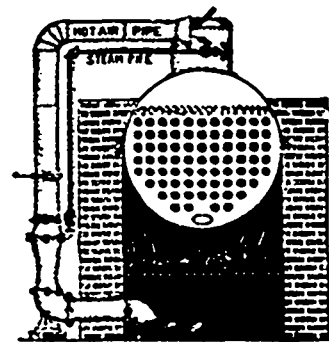
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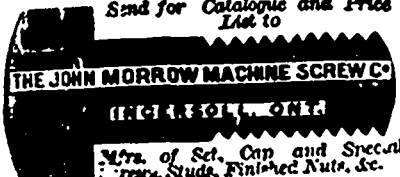
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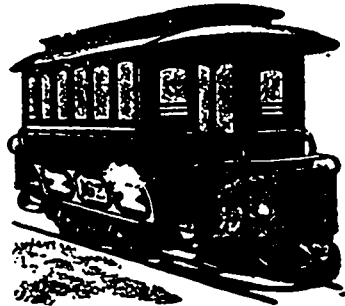
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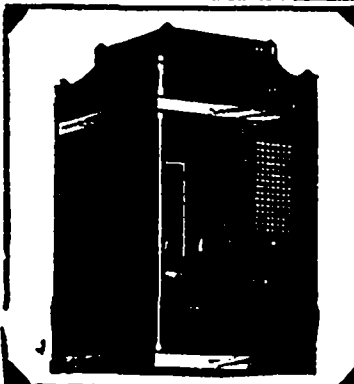
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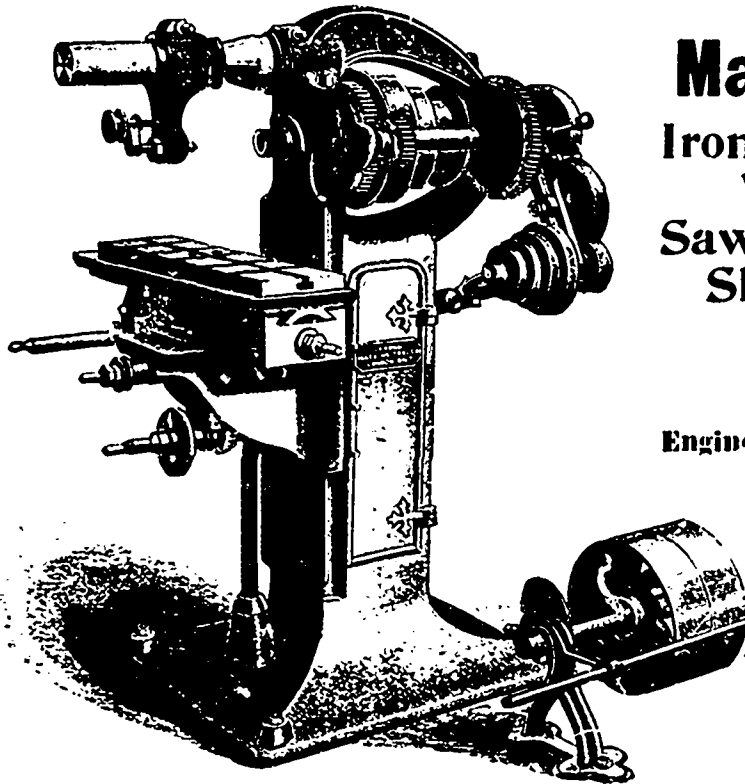
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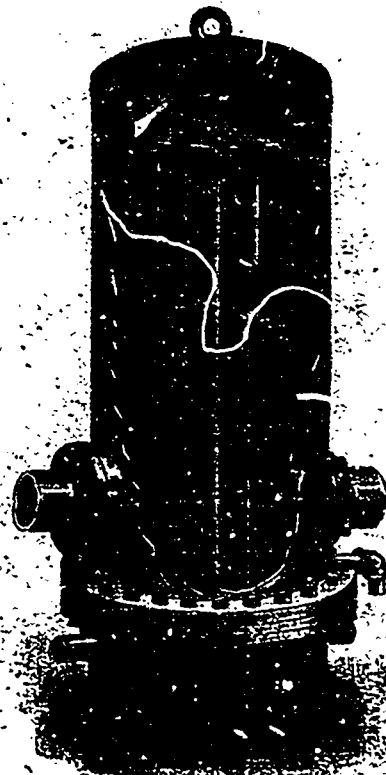
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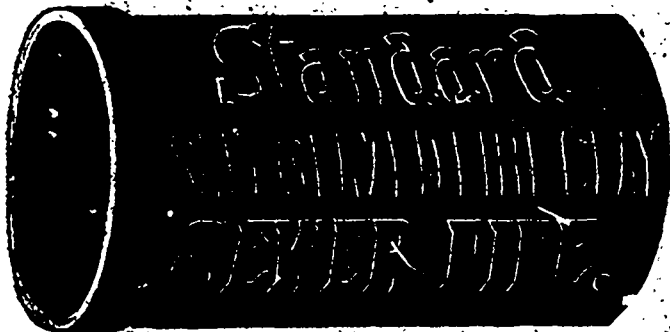
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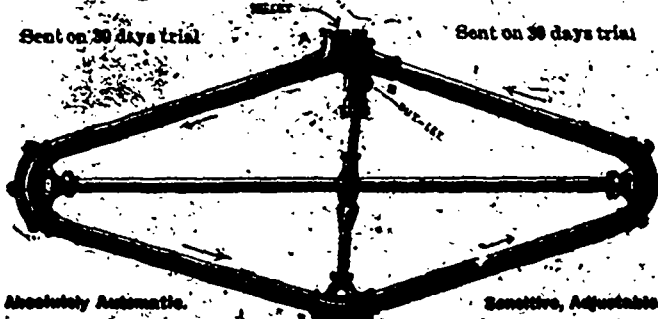
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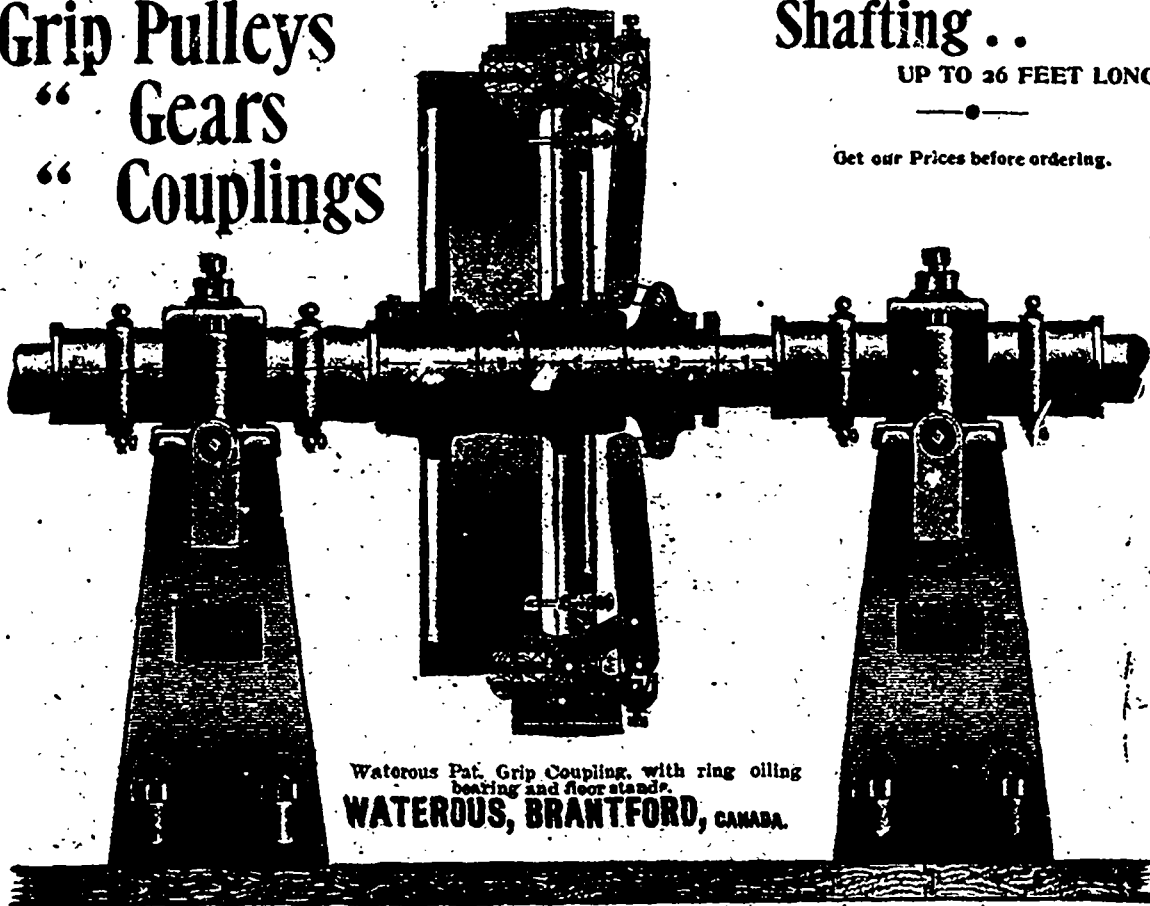
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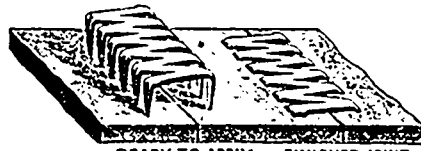
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