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THE CANADA LUMBERMAN


Wood-Workers', Manufacturers' and Millers' Gazette

VOLUME XXII.
NUMBER 9.

TORONTO, CANADA, SEPTEMBER, 1902

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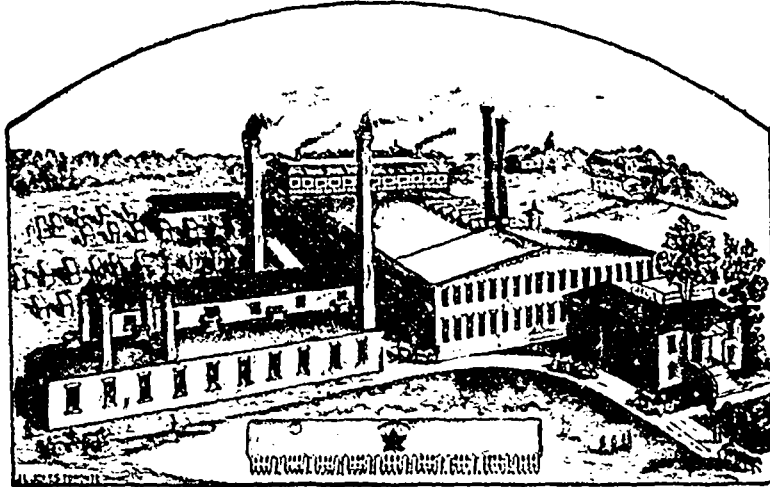
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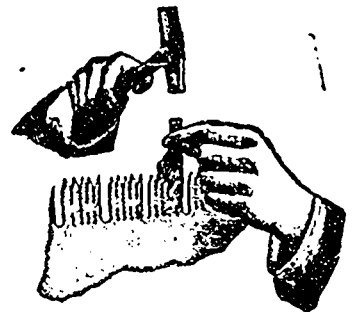
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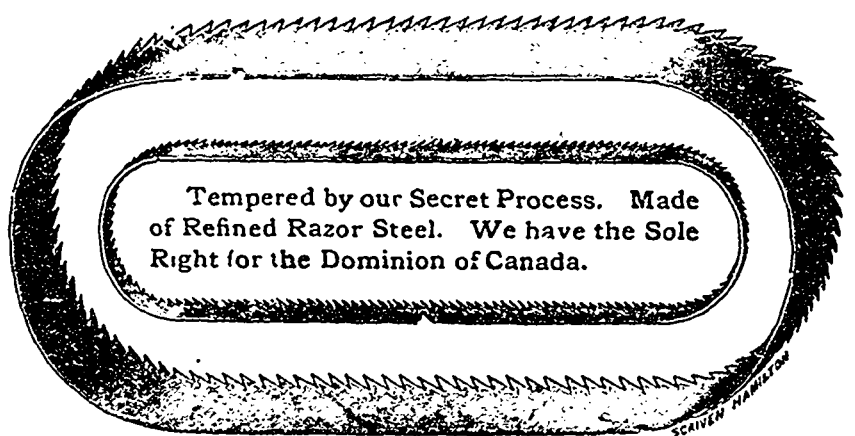
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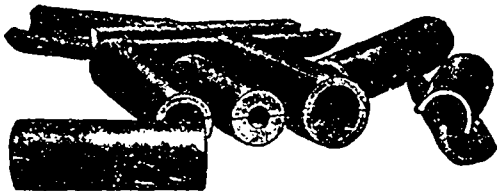
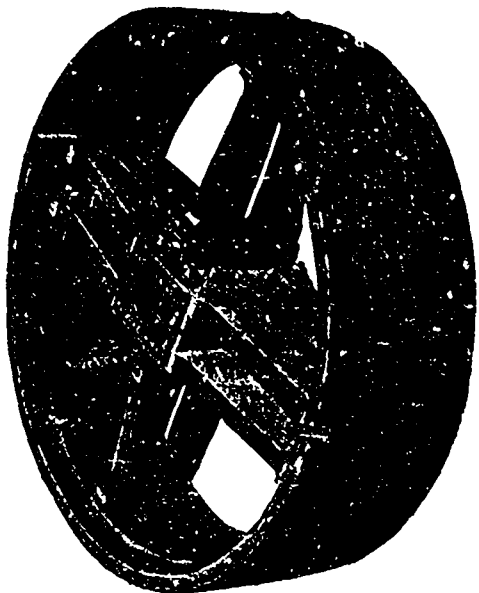
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THE WOLVERHAMPTON ART AND INDUSTRIAL EXHIBITION.

At the Art and Industrial Exhibition now in progress at Wolverhampton, England, the Dominion of Canada is the only Colony that is represented. Through the efforts of Mr. W. D. Scott, the Canadian Commissioner, a creditable display of the products of Canada is made. The Canadian pavilion, shown on the following page, is one of the most notable features of the Exhibition. It is classical in design, rectangular in plan, surmounted by a lofty gilded dome, and covers an area of 8,000 square feet.

A large portion of the space is devoted to a display of forestry products. Specimens both in the log and square are shown, also polished and unpolished sections. Amongst these are cedar and blue oak from Manitoba, red oak from Western Ontario, black ash, white oak, black walnut, rock elm, white pine, white birch, red birch, soft maple, cherry, spruce, western cedar, balsam poplar, tamarac, etc. Splendid samples of hardwoods are shown by Messrs. John Harrison & Sons, Owen Sound, J. H. Grant & Company, The Sutherland-Innes Company, of Chatham, and others. Gilmour & Company, of Trenton, show two specimens of their patent doors.

Photographs of many varieties of Canadian trees are displayed in frames made from the wood which they represent. This method of display is highly commendable, as it enables visitors to recognize more easily the many species of timber which are displayed. A few pieces of furniture are also shown illustrating the manufactured products, such as tables, chairs, desks, etc.

The forestry section includes splendid specimens of some of the noble animals in which sportsmen take great interest and in which Canadian forests abound.

E. H. Matthias has opened out in the lumber business at Morningside, Alta.

The Manitoba Free Press last month issued a special supplement dealing with the crop prospects in Manitoba and the North-West Territories. Illustrations were shown of the actual crops, which this year promise to give a yield larger than any in the history of the country.

HOW TO KEEP LUMBER FROM STAINING.

During the warm months of the summer, and especially of those summers when there is a considerable amount of moisture in the air and lumber does not dry quickly, the manufacturers of pine have a considerable amount of difficulty drying their upper grades of lumber so that they will not stain. By the regular methods of piling and drying in the open air it is practically impossible to keep out all traces of stain. The sap will show, if not at other places, at least where the cross pieces come in the pile and wherever else the green stock comes in contact with other lumber. As every evidence of stain means a lowering of the value of the lumber, it can readily be seen that any method of getting the sap out without a resultant stain will be of great value to the manufacturer.

Care in piling will do a great deal. By using narrow strips between the courses;

hold from fifteen hundred to two thousand feet of lumber. In this the stock is piled with thin strips between the courses. The tank is then filled with water and the exhaust steam turned into it. The sap is literally boiled out. The first lot of lumber that came out of the tank was covered with a green substance, and at first sight it appeared that the lumber was spoiled. However, it was found that the green coating brushed off readily, leaving the lumber perfectly white. After the water dried out, it was free from stain. The experiment has proved so successful that the Yawkey Company expect to enlarge their capacity for removing the staining sap from their upper grades of stock.

Along this same line the experiments of a western manufacturer of Washington pine may be of interest. Most of the western mills have as a part of their equipment modern dry kilns, and the larger part of the upper grade lumber that comes from that section of the country has been through the kiln. Steam or hot air are the usual methods, but a concern at Chewelah has recently made experiments with smoke. According to the man who has made the experiment, the lumber takes on a brightness that the steam kilns do not impart. By actual estimates he also claims that



VIEW OF PORTION OF FORESTRY EXHIBIT, WOLVERHAMPTON EXHIBITION.

piling the boards so they do not touch at the edges, and leaving a vacant place or chimney up through the center of the pile where the air can circulate freely, much can be accomplished along the desired line. But in the most favorable drying weather and with the greatest possible care in piling stain will still show to some extent, and the lumber will be just that much less in value. Other processes have been tried. A favorite one over in Michigan for a number of years has been sprinkling the lumber with salt. At a great many points in that state, salt blocks and lumber mills make up the same plant. Here the various courses of lumber in pile have been covered with a thin sprinkling of salt, and the effect is said to be good, though too much salt, or too little, have been found to have a harmful effect rather than otherwise.

The Yawkey Lumber Company, of Hazelhurst, Wis., have recently been experimenting with a system that appears to be the most successful yet tried. They have built a tank that will

the lumber that comes from the smoke kilns is much lighter even than the air dried stock. He does not know how they would work with other lumber, but believes they are the best thing for Washington pine.—Mississippi Valley Lumberman.

TO PRESERVE THE FORESTS OF SWEDEN.

It has been discovered by the Royal Commission appointed to examine into the condition of the national forests that about 5,500,000 cubic metres of wood is annually wasted in Sweden, while the timber export is only 6,500,000 cubic metres. Finding that the recuperative power of the forests is thus too severely taxed, parliament has pointed out that private enterprise has failed to use the forests economically, and has requested the government to formulate a scheme for their regulation.

An eastern firm wishes to find a market for nail keg staves and heading.

TIMBER LICENSES IN BRITISH COLUMBIA.

In view of the increased interest which has recently been aroused in the timber lands of British Columbia, we give below extracts from the Land Act governing the granting of timber licenses :

(1) Leases of surveyed, unpre-empted Crown timber lands, which have been previously offered to public competition, may be granted by the Lieutenant-Governor in Council for a period not to exceed twenty-one years to any person, for the purpose of cutting spars, timber, or lumber, who has rendered the highest cash bonus, subject to the payment of a royalty of fifty cents per thousand feet on the scale measurement of the logs cut on the leased premises, and to the payment in advance of an annual rental of fifteen cents per acre; arrears of rental to bear interest at the rate of five per centum per annum: Subject also to the condition that, when the royalty so chargeable, together with the said rent, amounts to less than fifty cents per acre of the leased lands in any one year, the lessee shall pay such additional amount as will make up the revenue from such leased lands, including the said rent of fifteen cents per acre, to the total amount of fifty cents per acre: Provided, further, that the holder of any such leased lands shall have a properly equipped saw-mill appurtenant to such leasehold, capable of cutting not less than one thousand feet of lumber, in inch boards, per day of twelve hours for each and every four hundred acres of land included in such lease. And such saw-mill shall be kept running for at least six months in every year, cutting not less than the said capacity, unless the Lieutenant-Governor in Council, on account of poor markets or other good reasons to be specified, excuse the said lessee from running the said mill for the whole or any part of the said period of six months in each year. If this proviso is not complied with, it shall be lawful for the Lieutenant-Governor in Council to cancel such lease, but such cancellation shall not affect the right of the Crown to collect all royalties and rent payable up to the time of such cancellation.

(2) It shall be lawful for the Lieutenant-Governor in Council to provide that any specified unsurveyed lands may be leased in the same manner as is in this section provided with regard to surveyed lands, and the Lieutenant-Governor in Council may make such regulations with regard to the staking of such unsurveyed lands, and the giving notice thereof, and having the same surveyed, as may be thought advisable.

(3) All leases of unsurveyed and unpre-empted Crown timber lands, which have been granted for a period of

surrendered within one year from the date of the enactment of this section :

And it is further enacted that such leases may be renewed for the unexpired portion of the term mentioned in the leases to be surrendered, on the same terms, conditions, rents and royalties as so specified in the said leases to be surrendered; the remainder of the term of twenty-one years for which the said leases shall be renewed on surrender shall be subject to such terms, conditions, royalties and ground rents as may be in force by Statute at the same time the existing leases, surrendered under the conditions of this section, would expire :

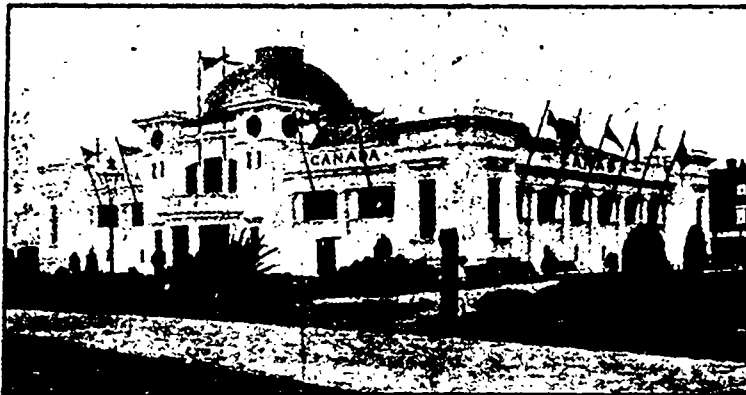
All timber cut from Provincial lands must be manufactured within the confines of the Province of British Columbia, otherwise the timber so cut may be seized and forfeited to the Crown and the lease cancelled.

Section 43. It shall be lawful for the Lieutenant-Governor in Council to grant leases of unpre-empted Crown lands for a term not to exceed thirty years, for the purpose of stripping hemlock trees of bark, subject to such rent and conditions as the Lieutenant-Governor in Council may see fit to impose.

Section 48. It shall be unlawful for any person, without a license in that behalf, to be granted as hereinafter mentioned, to cut, fell, or carry away any trees or timber upon or from any of the Crown or patented lands of this Province.

Section 50. The Chief Commissioner of Lands and Works may grant licenses, to be called special licenses, to cut timber on Crown Lands and patented lands at the rates by this Act imposed, and subject to such conditions, regulations and restrictions as may from time to time be established by the Lieutenant-Governor in Council, and of which notice may be given in the British Columbia Gazette.

Section 53. A special timber license shall not be granted for a larger area than six hundred and forty acres (640) of land, which shall be in one block, of rectangular form bounded by straight lines drawn to the cardinal points and measuring either 80 chains by 80 chains or 40 chains by 160 chains, nor shall the license be granted for a longer period than one year. The license shall not be transferable, and may be surrendered at any time. No person shall be entitled to more than two special licenses at the same time. The licensee shall pay to the Commissioner, for the use of His Majesty, the sum of one hundred dollars for each license, payment to be made upon the granting of the license. In default of payment, the license shall not issue. Such license may be granted or renewed at the discretion of the Chief Commissioner of Lands and Works.



CANADIAN PAVILION, WOLVERHAMPTON EXHIBITION OF ARTS AND INDUSTRIES.

twenty-one years, may be renewed for consecutive and successive periods of twenty-one years, subject to such terms, conditions, royalties and ground rents as may be in force by Statute at the time of the expiration of such respective leases: Provided that such renewal is applied for within one year previous to the expiration of the then existing lease; and provided that all arrears of royalties, ground rents and other charges are first fully paid :

All existing leases of Crown timber limits which have been granted previous to the passage of this section of the "Land Act," and now in force, may be renewed for consecutive and successive periods of twenty-one years, provided that such existing leases shall be

Section 54. The special license shall vest in the holder thereof all rights of property whatsoever in all trees, timber, and lumber cut within the limits of the license during the term thereof, whether the trees, timber and lumber are cut by authority of the licensee, or by any other person with or without his consent, and such license shall entitle the holder thereof to seize, in re-vindication or otherwise, such trees, timber, or lumber, where the same are found in the possession of any unauthorized person, and also to institute any action against any wrongful possessor or trespasser, and to prosecute all trespassers and other offenders to punishment, and to recover damages, if any; and all proceedings pending at the expiration of any license may be continued

to final termination, as if the license had not expired. Section 55. In addition to the special license authorized by section 50 of this Act, the Chief Commissioner may, upon payment of the sum of ten dollars therefor, grant a general license to any person to cut timber upon Crown lands, not being timber limits, without any reservation as to area; but such license shall be personal, and shall only grant authority to the person named therein to cut timber as a hand logger, and such license shall be in force for one year from the date thereof and no longer.

Section 57. In addition to the royalty hereinafter reserved on all timber cut on timber leaseholds, there



MR. D. McNAUGHT,
Retail Lumber Dealer, Rapid City, Man.

shall be paid annually, as ground rent, the sum of five cents per acre for each acre included in any timber lease which has been granted since the 31st day of December, 1879, and prior to the 28th day of April, 1888.

Section 58. There is reserved to and for the use of Her Majesty, Her heirs and successors, a royalty of fifty cents for every thousand feet, board measure, upon and in respect of all timber suitable for spars, piles, saw logs, or railroad ties, props for mining purposes, shingle or other bolts of cedar, fir or spruce, and a royalty of twenty-five cents for every cord of other wood, cut upon Crown lands, patented lands, timber leaseholds, or timber limits, and upon any lands hereafter granted. Piles shall be measured by the running foot, and railway ties and props shall be measured by the cord; and for the purposes of this Act two hundred running feet of piles, or one cord of ties or props, shall be taken respectively as equal to one thousand feet board measure.

Section 70. The Lieutenant-Governor in Council may allow, on the exportation beyond the limits of the Province of any piles and spars, or of any timber manufactured at any mill in British Columbia upon which the royalty of this Act imposed has been paid, a drawback or rebate equal to one-half of the royalty paid upon such timber.

In addition to the provisions contained in the Land Act, an Order-in-Council was passed in July of this year providing that "all timber cut under authority of special licenses heretofore issued, or which may hereafter be issued, shall be manufactured within the confines of the Province of British Columbia; otherwise the timber so cut shall be seized and forfeited to the Crown and the license cancelled."

It is rumored that the Sheppard & Morse Lumber Company have purchased the Mason saw-mill at Hintonburg, Ont.

The sales of the Pembroke Lumber Company for the month of July last amounted to \$26,000. Lumber was shipped to Great Britain, United States and elsewhere.

Cuts or engravings should be used freely in advertising tools and machinery, always bearing in mind that a poor cut is like a caricature, and the best engravings are none too good and are the cheapest in the end.—Printers' Ink.

MAKING VENEERED DOORS.

The subject of veneered doors has often been touched upon in these columns, and yet it will not suffer, it repeated, inasmuch as the various factories have particular ways of their own of producing this rapidly-growing popularity in the door line. Instead of trying to lay down any fixed rule, saying thus and so shall they be made, let us consider some of the essential points which may be adapted to suit each condition as the manufacturer finds it.

I.—EQUIPMENT.—Aside from the usual door-making machinery, this consists of larger facilities for preparing and applying glue, veneer press, resaw for veneers and panels (unless they are purchased from a dealer in veneers), a warm room where the glue may be applied and material gotten ready for the press. Unless the factory is already supplied with a large kettle for preparing glue, it will be found of advantage to make a large copper kettle that will fit the holes in the heater, but large enough to hold three or four ordinary-sized kettles of liquid glue. This can be done by making it higher and wider about the flange, as shown in Fig. 1. In this way sufficient glue may be made ready for a good-sized batch of doors without fear of running out.

Of course, these remarks do not apply to the factory having modern glue-spreaders, hand or power-fed, which are very essential in strictly veneer establishments. Our remarks apply only to the shop where veneered doors are one

There are various other purposes to which this room may be put, but to make a veneered door properly, without waste material or loss of time, a warming room is very essential. First, the parts of wood to be glued must be thoroughly warm, also the temperature of the room where the work is to be done must be such as not to chill the glue and hinder its spreading and making good joints.

II.—MATERIALS.—Dry coring is the first thing that is required to make good doors. It is usual to cut up the material and put it in the dry (or warm) room referred to above, or in a dry-kiln, properly stacked, and leave it there as long as possible to drive out every particle of dampness. All waste material of suitable size and too poor to be used for any other purpose may be used for coring. It is preferable to have the strips wide enough so that when glued up they may be split through the center to make two stiles or rails—see Fig. 6—thereby saving much labor in gluing, which item cuts quite a figure in veneered door work. The stock sawyer can lay aside such material from time to time and have it stored as mentioned, so that there is a supply of dry stuff to draw on when a batch of doors is wanted.

The glue for coring need not be of high grade, and where quick preparation is desired, a ground or pulverized bone glue will answer the purpose admirably. The men soon become accustomed to handling the glue and it needs no soaking, as the flake or noodle glue does. For veneering a medium grade of hide-stock

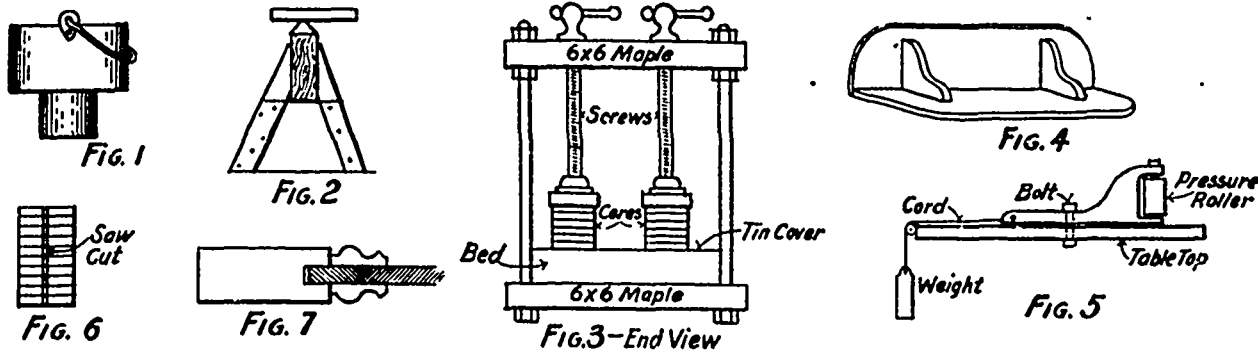
tended to make, and the number and both the sawing and finished size of veneers and panels.

After the sawyer has the material cut, and it is thoroughly dry, the one who does the gluing assembles the cores, puts them on the heating coil and prepares his core glue, the pieces are spread on the horses and given a coating of glue, assembled in batches, and put in the press, the surplus glue being squeezed out by this process, which includes putting the edge strips on each stile requiring one.

After they have been allowed to set sufficiently, they are taken to the jointer and the straightest side trued up. If they are built-up for making two pieces, they are re-sawed and again jointed and thickened to desired size on the pony planer.

They are now ready for veneering. They are again put in the warm room, over the coils; when warm, they are put on the horses as before, and spread with glue on both sides; a bottom board is first laid and then the veneers and cores stacked in regular order. The veneers must previously be carefully looked over, poor ones culled out, and any pin holes, porous spots or checks covered by gluing a piece of paper over, to prevent two stiles from being stuck together by glue oozing through such spots. They are again pressed out, and when dry, trued and sized to width. They are now ready to be laid out, same as any blind-tenon door.

The framing must be done in a first-class manner, with true joints and tight tenons. In



APPLIANCES FOR MAKING VENEERED DOORS.

of the many by-products, so to speak, which accompany the usual line of mill work.

For spreading the glue by hand, procure a 4-inch flat wall brush and prepare it by pouring alcohol gum-shellac into the roots of the bristles, and driving blind staples into the butt end, as close together as possible, thus preventing the bristles from coming out. Have a pair of "horses" about 3 feet high, strongly made, and having an angular piece on the top, to prevent waste of the glue, and squeezing it off the work at the bearing point—see Fig. 2.

Make the veneer press wide enough between the upright to permit of veneering a table top or wide panel if needed, and have two rows of screws, so that two stacks of cores may be pressed at one time. A strong press can be made with 6x6-inch maple crosspieces and 7/8-inch round iron rods, with jambnuts to hold the upper piece in place, having regular veneer press screws at least 1 3/8 inches diameter. The bed-piece should be lagged up and trued, so that it will be straight and out of wind. To prevent the work from sticking to the bed, it should be covered on the top with zinc or tin—see fig. 3.

For resawing veneers and panels, where there is no band resaw, a gage (fig. 4.) and pressure roller (fig. 5.) used on the band saw table, and 1/2-inch saw in proper trim, with right management, should turn three or four veneers out of each stock, which may be applied direct to the coring without dressing, as described later on.

To do a good job of gluing to advantage it is necessary to have a warm room, so that a large batch of material may be worked at one time.

glue is to be preferred; one that is free from acid, clear in color, and not too quick-setting. It will pay to follow up the glue question more closely than we usually have done to obtain good results with economy. The glue for veneering does not want to be too thick. Practice in the work makes the workman proficient in its preparation. It should flow freely from the brush without being "tacky," as the painter would say.

The veneers and panels should be cut up and resawed before they are kiln-dried. The ends should be glue-sized, and they should be stacked straight and even in the kiln. Those who have tried resawing kiln-dried hardwoods, are aware of what a sorry job it makes; and how the veneers buckle, spring out of shape, pinch the saw or make it run crooked. When the saw has not too much set, the veneers may be glued onto the cores without planing, provided the sawing is a good, smooth job. Care must be taken in dressing veneers or panels not to chip them out, as that is ruinous in this work.

III.—CONSTRUCTION.—The man who is doing this work needs to be familiar with the work and its methods to do it well and economically. Filling the doors is the first work towards the desired end. A list of the size, style, thickness of doors and kinds of wood should be on each working bill, and follow the material in its progress out of chaos into stiles, rails, panels, and finally the finished product. This bill should include the edge strips, the width, length and thickness of each bundle of cores, the finished size of the parts they are in-

fact, all machine work on veneered doors must be carefully done to have true work and tight joints.

Instead of putting the panels in when the doors are put in the clamps, the frame work is glued together with open panels, the stiles and rails being grooved, and after the doors are polished and put on the finishing bench, a panel strip is put in all around the edge of each panel, to which the panel mold is glued and nailed. The molding is put in one side first, panels laid in, and molded the other side, as shown in Fig. 7. This arrangement prevents the molding from pulling away from the stiles, should the panels shrink, and allows enough play for the panels to keep straight with natural working of the wood in the changes of the atmosphere. There is advantage, too, in gluing up the frame work without the panels. This cannot be done in the case of solid molded doors.

The finish of a veneered door should be first-class; the panels, molds and frame work well sandpapered, and flat surfaces scraped smooth, as every defect seems magnified when the filler and varnish are applied.

Special care should be taken not to scrape, scratch or mar the face of the doors in shipping. Many a good door has been injured by careless packing or handling in shipping, after the cabinetmaker has finished his job. They should be crated, if shipped on a railroad or by boat, or they will not be worth much on arrival at their destination.—H. T. Gates, in the Wood-Worker.

A VISITOR FROM NEW SOUTH WALES.

Mr. G. W. Hudson, of the firm of G. Hudson & Son, timber merchants and lumbermen, Sydney, Australia, has been visiting in Canada, looking into the lumber market for Australian hardwoods and also with a view of placing orders with the mills on the Pacific Coast for the export to Australia of some British Columbia pine, fir and cedar.

Speaking of his visit, Mr. Hudson stated that in some respects the Canadian lumbermen appeared to be ahead of the Australian millmen in the style and efficiency of their machinery.

The different conditions ruling in the two countries necessitate different methods of handling logs, and whereas in Canada the logs are cut on the limits and floated down, often a hundred miles or more to a mill, in Australia the mill itself is usually located right in the limit, and it is the sawn lumber and finished product mainly that is shipped out of the woods. Again, the skid road in the timber limits or woods is almost unknown in Australia, as is also the portable engine and cable for this purpose. The method of hauling logs most generally in operation there is on a "junkie," which is a two-wheeled vehicle, very strongly built, and consisting only of an axle and long tongue or pole in addition to the two wheels. To the tongue a pair of bullocks are harnessed, and often from 14 to 24 head of oxen constitute a logging team. The average Australian log being shorter, enables this method of haulage to be adopted, the log being rested upon the wheels, and but a very slight portion upon the trailing end. The weight of the logs necessitates, apparently, an excessively numerous number of bullocks to handle them. It also necessitates this method, and transportation and the establishment of the timber mill either in the limits or in close proximity thereto.

Although rivers are not lacking in the timber districts, booms of logs cannot be made up in the Australian forest and floated down to the mill, as is done here; the weight of the wood prohibits this, as the majority of the Australian hardwoods sink very quickly after being submerged in water. Water transportation is, however, used where the mills are situated at some distance from the standing timber. In this case steam punts are used. These are stern-wheel steamers with all their machinery, etc., placed well aft, the tow being built with almost a flat bottom. The weight of the machinery being aft, causes the bow to be raised up out of water, consequently when reaching the place where the logs are to be loaded, the nose of the punt is easily run ashore; two sticks are then run out from the bank on the side of the boat, and the logs are rolled on board, and it does not matter if the logs project on either side 8 or 10 feet. Logs from 25 to 35 or 40 feet are easily carried by these craft. As a rule, however, the logs are sawn up at mills in or near the limits, and the planks, flooring and other classes of manufactured lumber only shipped out according to order. The finished lumber is shipped in ketches or sailing vessels capable of handling from 20,000 to 90,000 feet of lumber each trip.

A few small steamers are also employed in the trade.

Speaking of the Australian hardwoods, some of which, Mr. Hudson thinks, should find a ready market throughout Canada, he remarked that Vancouver business men would very probably have an excellent opportunity of judging their quality shortly, as Messrs. C. Woodward and W. Murgatroyd had secured some thirteen or sixteen samples, which arrived on the Moana. They included the sample of the noted turpentine wood which is used extensively for wharf and dock piles, being teredo proof and very strong. Only a few months ago a turpentine wood pile was removed from the old Piermont Bridge, Sydney, which had been in the water for 55 years, and was yet found to be as good as new. There are also pieces of iron bark, blackbutt, tallow wood, box, mahogany, blue gum, spotted gum, grey gum and ti-tree. The iron bark wood is used extensively in New Zealand for the planking of wharves and also for piling, and for the spokes of wheels; it is also regarded as one of the most serviceable woods in existence.

The ti-tree wood is used very largely in boat and ship-building, for knees or ribs of boats, etc., and Mr. Hudson's firm supply large quantities of this wood to the Fitzroy dock, Sydney, for Government boat-building purposes. The spotted gum is also used extensively in coach and boat building, as it will bend readily when steamed, and is a very strong wood. The tallow wood is used largely for flooring, especially of dancing rooms, etc., the boards being slippery and tallowy as the name indicates.

A wood of which no sample was apparently sent over is the Australian rosewood, which is hard and very prettily grained, and is much in demand for furniture and similar class of work.

GRADING OF LATH.

There are no recognized rules either in the United States or Canada for the grading of lath, this branch of the lumber business being unique in this respect. None of the large lumber associations have considered the subject, although the lumber section of the Toronto Board of Trade, in 1890, adopted two lath grades, as follows:

No. 1 lath shall be 4 feet long and shall be when cut 1 1-8, 1 3/8 and 1 5/8 inches in width, cut out of good, sound, live timber, free from wane, rot or knots, well manufactured and trimmed square at the ends.

No. 2 lath shall be of the same width and length as No. 1 lath and shall admit of a small portion of wane and also will admit of lath sap stained, and of small, sound knots; must otherwise be well manufactured.

It is claimed that lumber seasons much better when piled each width by itself, and that the difference in results pays for the expense of careful sorting. This also applies to piling in kilns. The ideal method of drying hardwoods is on end, the next best, for hard or soft woods, to give the piles as much pitch as they will stand.

PLANS FOR THE HOUSE OF HOO-HOO.

So much has been said and written about the House of Hoo-Hoo, the lumbermen's club building to be erected on the grounds of the Louisiana Purchase Exposition, St. Louis, that it has brought out a perfect volume of inquiry as to what this building will look like, the size of it, what will be attempted in the way of privileges for the members, and the general scheme of the exterior and interior arrangement and decorations. The illustrations on opposite page will partially answer these questions and will give a clearer idea of the intentions of the Board of Governors than anything that could be written.

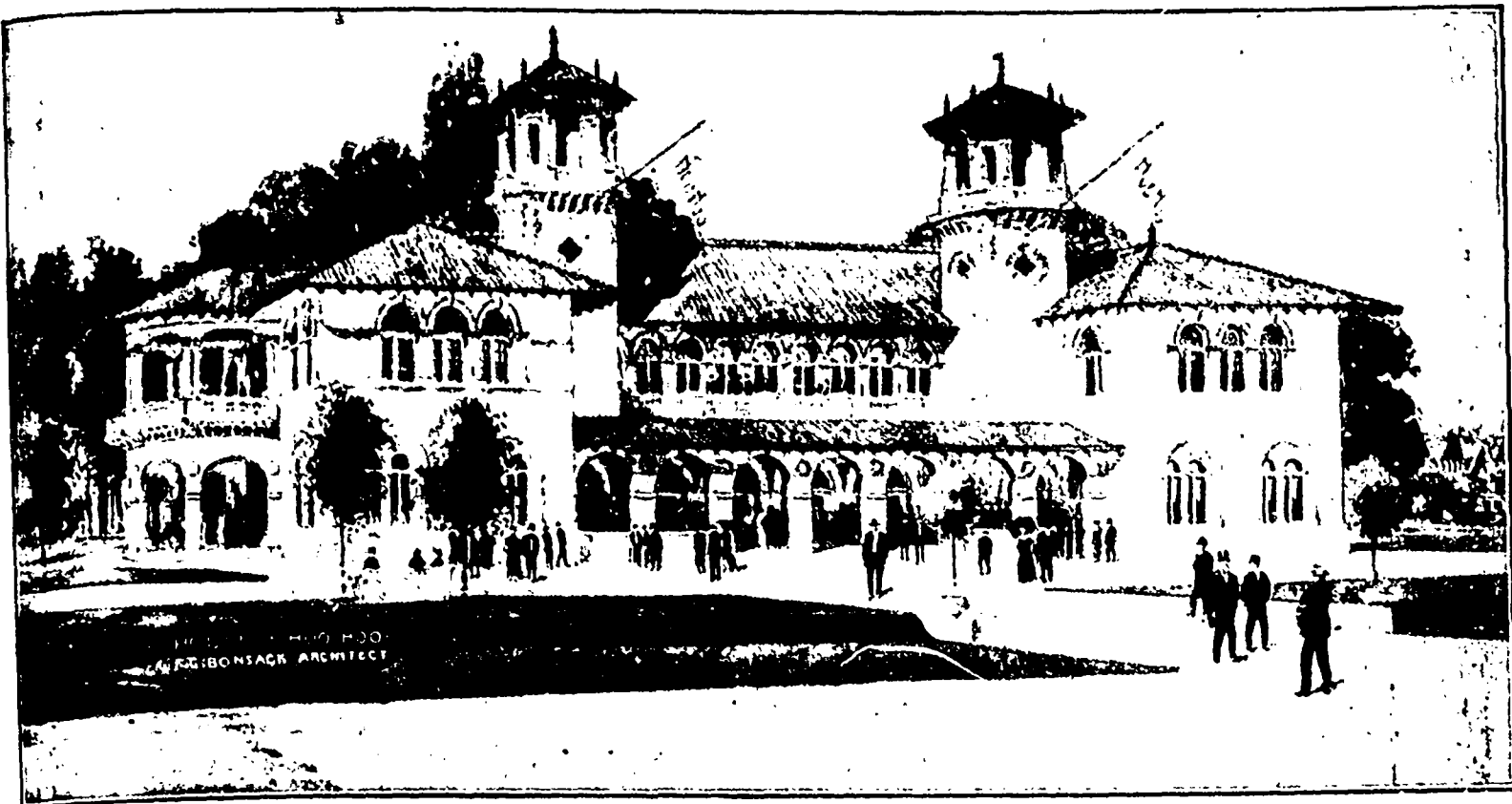
The selection of these plans involved considerable time and labor on the part of the Board of Governors. Architectural competition was invited about three months ago, and from the plans submitted the board selected the design of F. C. Bensink, the well-known St. Louis architect, which, with the slight changes that have been made, is deemed perfect for a building of this character.

The general plan, in form, is that of the letter 'H,' the central court on the front forming the principal entrances, veranda and approaches to the terraces, while that of the rear is surrounded by a peristyle connecting the different parts of the main building with the service building, which, because of the heat of the kitchen, will be detached. Within this peristyle will be arranged a cozy flower garden, with space for tables and chairs, affording a quiet, cool and private place for refreshments.

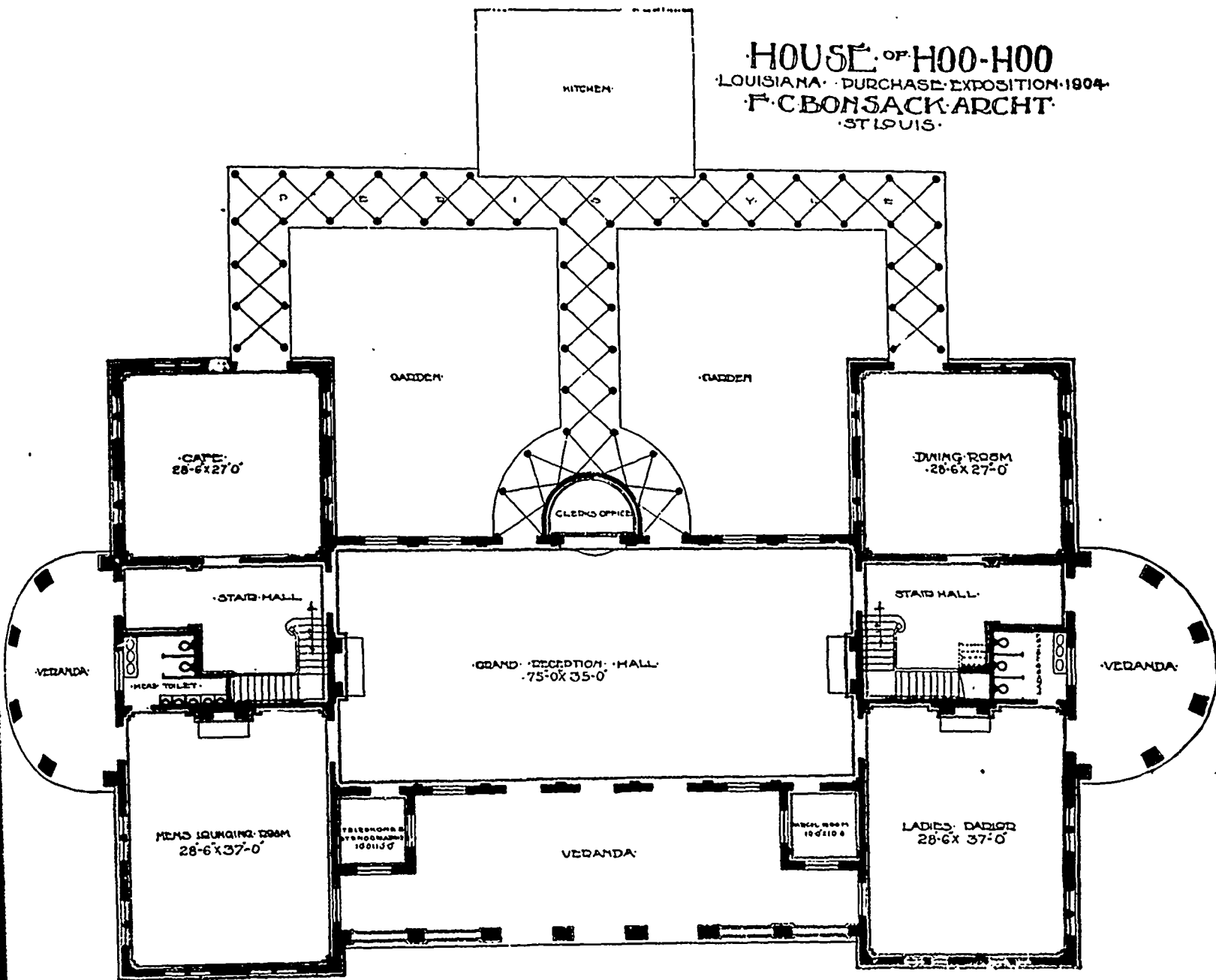
The various lumber associations throughout the country will each take a room to finish in each of the special lumber commodities, the whole being made to harmonize and comply with the general design of the architect. In this way the building will show the results and effects obtained by a proper handling of its various woods and will be a beautiful exploitation of the commercial woods of the United States. It will be noticed that the ladies are taken care of in the plans practically the whole of one wing of the building having been reserved for their use. The assembly hall on the second floor will have a seating capacity of 700 and will be used for all special occasions such as lumber conventions, receptions of various sorts, lectures on forestry and lumber topics, Hoo-Hoo concatenations, the Hoo-Hoo annual and various other events which will be a feature of the Exposition and this club. It is intended that the members may receive and handle their mail at the building and every convenience of the sort that will be beneficial will be adopted.

As has been stated in the foregoing, the House of Hoo-Hoo is a club for lumbermen which will have its doors open during the World's Fair to be held in St. Louis in 1904. Broader than this, it is a club for lumbermen, lumber newspaper men, saw mill suppliers and railroad traffic officials. Although it derives its name from the Concatenated Order of Hoo-Hoo, a man need not be a member of that order to be a member of this club. The membership fee is \$9.99, payable with the application, and this includes all dues to the club so long as it may exist, which will be until the close of the exposition. The benefits to be derived by members need not be explained to those who have visited other World's Fairs and been at a loss for some home-like place where they could rest, be comfortably taken care of, eat their meals away from the crowded restaurants and meet their friends. Even broader plans than these are gradually being evolved and will make the club wonderfully complete and attractive.

From the office of the secretary of the club, in the Fullerton Building, St. Louis, comes the information that the lumbermen throughout the country are taking to the idea with great enthusiasm. While the membership books have been open but a short time, there are already members in 26 states and territories and the daily additions to the roll are very gratifying. The point is also brought out by him that the fact that the fair has been postponed until 1904 does not in the least lessen the necessity for prompt action in securing the full quota of members, 9,999, as the detailed plans and construction of the building will take a year and it is important to have the work completed several months before the opening of the fair because of the labor troubles and rush which will exist during the beginning of 1904.



HOUSE OF HOO-HOO, LOUISIANA PURCHASE EXPOSITION, ST. LOUIS, MO.



HOUSE OF HOO-HOO
 LOUISIANA PURCHASE EXPOSITION 1904
 F. C. BONSAACK ARCHT.
 ST. LOUIS.

FIRST FLOOR, HOUSE OF HOO-HOO.

THE Canada Lumberman

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ADVERTISING RATES ON APPLICATION.

THE CANADA LUMBERMAN is published in the interests of the lumber trade and allied industries throughout the Dominion, being the only representative in Canada of this foremost branch of the commerce of this country. It aims at giving full and timely information on all subjects touching these interests, discussing these topics editorially and inviting free discussion by others.

Special pains are taken to secure the latest and most trustworthy market quotations from various points throughout the world, so as to afford to the trade in Canada information in which it can rely in its operations.

Advertisers will receive careful attention and liberal treatment. We need not point out that for many the CANADA LUMBERMAN, with its special class of readers, is not only an exceptionally good medium for securing publicity, but is indispensable for those who would bring themselves before the notice of that class. Special attention is directed to "WANTED" and "FOR SALE" advertisements, which will be inserted in a conspicuous position at the uniform price of 15 cents per line for each insertion. Announcements of this character will be subject to a discount of 25 per cent. if ordered for four successive issues or longer.

Subscribers will find the small amount they pay for the CANADA LUMBERMAN quite insignificant as compared with its value to them. There is not an individual in the trade, or specially interested in it, who should not be on our list, thus obtaining the present benefit and aiding and encouraging us to render it even more complete.

RETALIATION AGAINST DIFFERENTIAL STUMPAGE TAX.

About one year ago the Quebec Government passed a law allowing a rebate of 25 cents a cord on pulp wood taken from Crown lands and manufactured into pulp in Canada. According to report, the Assistant Secretary of the United States Treasury has decided to increase the duty on Canadian pulp to the amount of this rebate. The increased duty is 25 cents per ton of 2,240 pounds of ground wood pulp and 40 cents per ton of 2,240 pounds of sulphite pulp. The above amounts are equal to 25 cents per cord of wood, as a cord of wood will make about a ton of ground wood pulp or 1,400 pounds of sulphite pulp. This countervailing duty went into force on July 25th, since which time Canadian manufacturers have been obliged to pay the extra charge upon shipments to the United States.

Section 393 of the Dingley tariff provides as follows: "That if any country or dependency shall impose an export duty on wood pulp exported to the United States, the amount of such export duty shall be added as an additional duty to the duties herein imposed upon wood pulp, when imported from such country or dependency."

We fail to see how the differential stumpage tax can be construed as an export duty; indeed, it is not within the power of the Provincial Governments to impose an export duty. Such power rests with the Dominion Government alone. But even if the provincial bounty on home manufacture called for the retaliation provided for by the Dingley bill, the increased duty should not apply to pulp shipped from other provinces of the Dominion.

It is understood that the question is receiving consideration at Washington, and we feel cer-

tain that the authorities will decide to abolish the duty and refund the amounts collected. Should the duty be allowed to stand, however, it will not seriously affect the export of pulp from Canada to the United States.

The circumstances above referred to prove one point very clearly, namely, that the Quebec Government, instead of imposing differential dues, should have followed the example of Ontario and British Columbia and absolutely prohibited the export of all kinds of timber and pulp wood from the Province. This would have settled the matter at once and for all time.

EMBARGO ON HEMLOCK.

THE Ontario Government is gradually perfecting its timber policy. At a meeting of the Cabinet on July 29th, an Order-in-Council was passed prohibiting the export of hemlock logs from the province after April 30th next, the end of the license year. Thus hemlock is placed in the same category as pine, spruce and pulp wood.

Owing to the greater value of hemlock the export has greatly increased within the past year or two. According to the figures given in the Statistical Year Book, the quantity exported from Canada last year was over 20,000,000 feet, as compared with less than 2,000,000 feet in the previous year. The figures in detail for the last five years are as follows:

1897	1,956,000 feet.
1898	1,121,000 feet.
1899	961,000 feet.
1900	1,824,000 feet.
1901	20,217,000 feet.

This remarkable expansion in the export of hemlock timber is doubtless largely the result of the law prohibiting the export of pine. The value of hemlock has gradually increased of late, until to-day its selling price is within a few dollars of that of pine. The Ontario Government has wisely recognized the changed conditions and taken measures to confine the manufacture of the timber to the province.

It is a question what effect the legislation will have upon the tanning industry. It may result in curtailing the cut of hemlock timber and consequently the supply of hemlock bark for export. On the other hand, it may stimulate the hemlock trade, as was the case when the legislation affecting white pine was put into force.

Statistics show that while there was a large increase in the export of hemlock timber last year, a corresponding increase was not made in the export of tan-bark, as will be seen by the figures for the past five years as given below:

1897	22,888 cords.
1898	26,493 cords.
1899	13,879 cords.
1900	16,124 cords.
1901	17,037 cords.

For the past ten years there has been a gradual decline in the export of tan-bark. It might be supposed that the use of tan-bark is on the decrease owing to the various substitutes that are now employed to some extent for tanning purposes. Notwithstanding these discoveries, however, hemlock and oak bark still furnish the great bulk of the material upon which the manufacturers of leather rely for their tannin. In the United States there were

used for tanning purposes in the year 1900, 1,170,131 cords of hemlock bark, of a value of \$7,347,242, and 445,934 cords of oak bark, of a value of \$3,174,995. This was in addition to other extracts. For sole leather hemlock bark is used very largely.

THE TIMBER SITUATION IN BRITISH COLUMBIA.

A GREAT deal has been heard of late regarding the lumber industry of British Columbia, the reason being the putting into effect of legislation prohibiting the export of the timber from the province. It is quite evident, however, from the number of questions propounded and the statements—or rather misstatements—which appear in the press, that the exact situation is not understood even by the inhabitants of British Columbia. On another page we publish extracts from the British Columbia Land Act as amended to the end of last year, and shall endeavor to make an explanation which, in conjunction with this act, will assist to a better understanding of the law.

The first misapprehension in the minds of some, and one which we ourselves must confess, was that the law passed last year prohibiting the export of timber applied to cedar only. This was not the case, as it included all varieties of timber.

It was supposed that the law in the first instance covered all the lands in the province over which the Government has supervision. This was doubtless the intention of the Government, but it was found that timber taken from certain Crown lands could still be exported legally. Three methods for the disposal of timber are adopted in British Columbia, namely, first, by lease; second, special license; and third, hand-loggers' license. It is claimed that nearly one-half of the logging operations are carried on under lease, and one-half under special permit, the operations of hand-loggers being of small account and chiefly by Indians. The law as first passed prohibited the exportation of timber taken off lands held under lease, not making any reference to timber cut from licensed lands. The clause reads as follows:

"All timber cut from Provincial lands may be manufactured within the confines of the Province of British Columbia, otherwise the timber so cut may be seized and forfeited to the Crown and the lease cancelled."

Therefore, parties cutting under authority on special licenses could, according to law, export their timber. When the Government saw this omission it was considered necessary to pass an Order-in-Council prohibiting the export of logs cut under license. This was done in July last and is intended to cover what the previous law did not provide for.

This recent Order-in-Council seems to have confused not only the public but the lumbermen also, as it was understood that the law in the first instance covered all the lands in the province.

The order, we understand, has no reference to hand-loggers' licenses, presumably for the reason that the Government considered it too primitive a method of taking out logs to demand any consideration.

The statement has frequently been made

that the Government is considering the repeal of the export law. This is not the case. After thoroughly investigating the conditions prevailing in logging and lumbering operations since the enactment of the legislation, Hon. Mr. Wells, Chief Commissioner of Lands and Works, stated that the most satisfactory conditions existed throughout the province as a result of the law, and in the absence of any pronounced injustice to the loggers it would be unwise to interfere with the operation of the act as it stands. He promised, however, to provide relief if possible where apparent injustice was inflicted in individual cases.

EDITORIAL NOTES.

SINCE the publication of the special Western Canada Number of THE LUMBERMAN, we have received a large number of new subscribers from the Northwest and British Columbia, which may be taken as conclusive evidence of the appreciation of this number by manufacturers and dealers in the West in whose interest it was specially prepared.

"Be sure you are right, then go ahead," is evidently the motto of Mr. L. H. Maxwell, who recently visited THE LUMBERMAN sanctum. Mr. Maxwell is the inventor of a boot calk, and had come from Eureka, California, to obtain the opinion of Canadian lumbermen as to the merits of his invention. The opinion of the American lumbermen had been favorable, but to this he wished to add the assurance of a favorable reception by the Canadian woodsmen.

ACCORDING to the laws of the United States, a rebate of duty is given on imported materials used in the manufacture of goods exported from the country. This provision is particularly applicable to lumber, a percentage of the imports of which is used in the manufacture of boxes, doors and other goods for export. The regulations to be followed in order to secure the rebate are of interest. In the case of a recent shipment of doors the instructions were as follows:

"The preliminary entry must show the marks and numbers of the shipping packages and the number of doors of each size and grade contained therein respectively. When shipped in these quantities, the edge of each door must be stenciled to show its size and its identifying mark and number, which also must appear in the preliminary entry. The drawback entry must show the number of doors of each size and grade exported and the quantities of lumber of the several sizes and thicknesses, board measure, contained therein, separately and in the aggregate. The said entry must further show, in addition to the usual averments, that the exported doors of the several sizes and grades were manufactured of materials and in the manner set forth in the manufacturer's sworn statement dated June 18, 1902, now on file in the office of the collector. In the liquidation of entries, the quantities of lumber, board measure, in condition as imported, which may be taken as basis for allowance of drawback, may equal the quantities declared in the drawback entry, after official verification of exported quantities and measurements, provided that in no case shall they exceed the quantities for each size and grade of door, as figured for the corresponding size and grade in a tabulated statement attached to the manufacturer's sworn statement, and provided fur-

ther that 9.6 per cent. of such quantities may be added thereto to compensate for loss incurred in manufacture."

The execution of the above details called for a rebate of about eight cents a door, a small item in comparison with the amount of red tape.

CANADIAN lumbermen might extend their trade in partially manufactured timber products. The British consumer is willing to buy, and the Canadian manufacturer wants to sell. Of this we are convinced by numerous requests from parties to be placed in communication with business firms. One just to hand reads: "We have on our limits a large quantity of small wood, both spruce and hardwood, for which we are anxious to find a market. We think there must surely be some more profitable way of manufacturing this wood than simply selling it in the rough for pulp wood; for example, we thought the hardwood might be worked up into such small articles as circular covers for bottle corks provided a market could be found for them. There must also be numerous other small articles that might be profitably manufactured from both the spruce and hardwood." The same mail brings a letter from a British importer who wishes to buy chair and broom handle stock, mouldings, etc. The manufacture of wooden specialties is a branch of the lumber industry as yet little developed in this country, but which offers excellent opportunities. Some of the lines for which there is a demand in Great Britain are pine and spruce box shooks, mouldings, wagon and furniture stock, spruce sheathing, birch squares, tool handles, mangle rollers, veneers, wooden chimney pieces, flooring blocks, wooden screws, birch and maple dowels, panels for piano key makers, etc.

A MAHOGANY LOG.

The London Timber Trades Journal tells of a remarkable Cuban mahogany log recently purchased in the London market by an American buyer, who in turn is said to have dispensed of it to a Cincinnati, O., veneer factory. The log is practically 20 feet long and 31 inches deep by 29 inches broad. It is perfectly straight from end to end and of the most beautiful texture and color. It may be said to be a perfect piece in all respects, there being practically no faults of any kind on either of the four sides or two ends. The log contains about 1,670 superficial feet of extreme measurement and weighs 3 tons 10 cwt. It is beautifully figured in every part and is unique in the fact that the figure is apparently as strong on one side as it is on the other—highly figured wood being strongest on one side of the tree. This log is an exception, as it appears to be equally fine in every part. This mahogany tree will become a much-traveled one, for it grew in Cuba, was shipped to Liverpool and then conveyed to London. It will now be carried back to the western hemisphere for conversion, and will thus have been conveyed between 8,000 and 9,000 miles over land and water since it was felled. It is also quite within the range of probability that some of the veneers manufactured from it will eventually find their way back to Europe.

OUR BRITISH OFFICE.

Owing to increased British business, the publishers of the CANADA LUMBERMAN have established a branch office at 22 Great St. Helen's, London, E.C. Persons interested in Canadian lumber are requested to avail themselves of the facilities thus afforded for securing information regarding the lumber industry of Canada. Our representative will be pleased to call personally upon timber merchants in response to a request. Address, The C. H. Mortimer Publishing Company, 22 Great St. Helen's, London, E.C.

THE LATE GEORGE J. COOK.

After scarcely two week's illness, Mr. George J. Cook, president of the Cook & Bros. Lumber Company of Ontario, passed away at his late residence, "Englefield," 208 Spadina avenue, Toronto, on August 21st. Up till a fortnight before his death he had been in excellent health. At that time he was stricken with an affection of the heart, to which he succumbed.

Mr. Cook was one of the oldest and most respected business men of Toronto, and was widely known throughout the Dominion. He was born on August 22nd, 1824, in the Township of Williamsburg, Dundas County. His father was the late George Cook, of Dundas county. From the time of his youth he was actively engaged in the lumber business. His first operations, early in the forties, were on the Nation river. He then removed to Belleville and subsequently went further west. He was one of the first lumbermen to take out board pine between Toronto and Barrie.

The Cook & Bros. Lumber Company, of which he was president, has a capital stock of \$1,200,000, all paid up. The mills are located at Spragge, in the Algoma district. Extensive timber limits are owned by the company, and Mr. Cook was at the time of his death very wealthy. He was also president of the Cook Land Company, owners of large mining lands in Marmora township.

Kindness and generosity were two of Mr. Cook's most striking characteristics. Owing to his reserved disposition, few of his many generous acts ever became public knowledge. He took an active interest in church work and for years had been a prominent member of St. Philip's church.

Mr. Cook leaves one brother, Mr. H. H. Cook, of the Ontario Lumber Company, and two nephews, Mr. George W. Cook, vice-president of the Cook & Bros. Lumber Company, and Dr. G. E. Cook, of Chicago. Mr. George W. Cook will doubtless succeed him as president of the company, and the business will be continued as heretofore.

The funeral was the occasion of many tokens of respect, one of which was a beautiful wreath from the employees of the mills at Spragge.

A maker of loose pulleys recently received an order for one pulley 9 inches diameter with a face 10½ inches, 9 inches of the face being for the belt to travel on, and the other 1½ inches to be 10 inches in diameter, to be run next to the tight pulley, for the belt to shift on. While the idea is by no means a new one, the width of the shifting edge of the pulley is rather unusual. It is said to be very successful in practice, however, and to materially reduce the trouble of shifting the belt, which is one of the faults of this method of construction of loose pulleys.

CORRESPONDENCE

THE BRITISH COLUMBIA LAW.

VANCOUVER, B. C., 15th August, 1902.

Editor CANADA LUMBERMAN

Dear Sir, —Allow me to correct the second item under the heading "Editorial Notes" on page 10 of the August number. The legal opinion referred to was to the effect that the change in the law did not prevent the export of timber cut on special licenses. To rectify this, an order-in-council was passed in July last.

Although the loggers were aware of this defect in the law, they saw that it was clearly the intention of the government that it should refer to licenses as well as to leases, and made no attempt to make any shipments to the American side, which they might have done.

Thanking you for inserting this correction, I remain,
Yours truly,

H. G. Ross,

Secretary B. C. Lumberman's Association.

THE OTTAWA VALLEY.

[Correspondence of the CANADA LUMBERMAN.]

Letters patent have just been issued for a new lumber company to be known as the Read Lumber Company. It will have headquarters at Ottawa. The members are Charles Edwin Read, George Habsley Perley, Frederick Wells Avery and James Adam Laing, of Ottawa, and Walter Gillespie White, of New York City. The total capital stock is \$500,000.

The company asks the usual extensive privileges covering the purchase of limits, operation of mills, building of roads, wharves, movement of boats, etc. The letters patent cover sawmill, furniture, planing mill and pulp wood branches.

The personnel of the firm is practically that of the Hull Lumber Company, which is now operating the Mason mill in the suburbs of Ottawa, and which before the fire of April, 1900, operated the Hurdman mill at the Chaudiere. Mr. Perley was accepted in partnership a year ago. He operates under his own name a mill at Calumet, Que., at the juncture of the Rouge and Ottawa Rivers, formerly operated by the Ottawa Lumber Company. It is understood the company will engage in the manufacture of California sugar pine.

Ald. Desmarais, of Hull, recently secured an order for 1500 telegraph poles from an electric company in Sydney, Cape Breton, which is establishing a new line.

In all probability the Upper Ottawa Improvement Company, which has charge of the movement of all saw logs on the Ottawa River between Des Joachims above Pembroke and Ottawa City, will extend its sphere of operations and erect booms and place tugs on Lake Temiscamungue and the upper reaches of the Ottawa River in that district. Mr. Alex. Lumden, Ex. M. L. A., has at present full charge of the business on that section of the far reaching river. He works in conjunction with the above company.

VENEER-CUT STAVES.

I do not believe there is a machine made that will inspire as much enthusiasm and cause a man to see such enormous profits as a veneer machine when cutting 3/8-inch stock and geared up to full capacity, says a correspondent of Packages.

If a back roller is employed to cut the staves to random widths, and an apron conveyor carries the staves from the machine, 50,000 staves can be cut in ten hours. The way the staves roll off the end of the conveyor reminds one of the way straw is discharged from the elevator of a thresher. You will at once commence to figure on the output and the sight of the cost of finishing the staves, which is the most expensive part of the process.

After seven years experimenting in cutting veneer staves, the writer has learned that the following facts cannot be ignored if one succeeds:

First. The stave must be bone dry before it

is jointed. Well air-dried will not do. Staves that have been air-dried until they weighed only 700 pounds per thousand changed after being jointed so much that they could not be used. They would swell and shrink like a sponge, and seemed never to settle to any one bilge, the change ranging from 7/16 to 1 inch, the bilge originally put on the staves being 11/16. After numerous tests we came to the conclusion that on account of the position of the grain of the wood, it was impossible, at any stage of air-drying, to secure a joint that could be relied upon to remain unchanged, and abandoned it as a failure.

Second. If the staves were jointed as soon as they were cut and put through the kiln green, the joint was so bad the staves were ruined. One experiment was ample to settle the matter.

Third. We next air-dried the staves thirty days, put them through the kiln and jointed them after being dried. This was a great improvement, and we felt encouraged, but the nice circle the staves had when cut was destroyed, and they were flat boards instead of staves. We supposed, as they were cut in random widths, varying but a little above and under 4 inches, they would make just as good barrels. We were led into this error by the argument that the more uniform the stave the better the barrel, but the report we got from the cooper who tried them did not warrant us in continuing this method, nor were they a howling success. It would take too much valuable space to enumerate the defects that the cooper heaped on those staves.

Fourth. We now decided to cut the veneer in sheets wide enough to make four staves when dry. This was done by putting one knite in the back roller which cut the sheets 20 1/2 inches wide. The sheets were passed through the kiln and ripped at random widths by a gang edger. Here we encountered another serious obstacle. In cutting in sheets, we lost all the circle in the stave. They were simply slats, flat and stiff. In fact, they were so stiff the cooper could not work them, and both sides of the stave looked so near alike that no one but an expert veneer cutter could tell which was the outside, and, if jointed on the wrong side they would cup in and cause the barrel to fall.

Fifth. Our faith was still strong and we continued to experiment. We were informed that if the slats could be steamed after they were bone dry they could be jointed and rolled to proper circle and bent to any desired curvature, and that they would dry out afterward, without changing the joint. We did this and secured the most perfect stave that has ever been produced; but the moisture did not leave the stave and they were a failure also. If we dried the stave in the kiln again it spoiled the joint, and we decided to let some other fellow solve the problem.

It will be observed that we come out just where we started—simply that the veneer staves will not remain as they are jointed. They will, on account of the way they are cut, take up moisture more easily than the ordinary stave, and it is impossible to get them dry without ruining the joint. That staves can be cut smoother, more solid, more even in

thickness, length and width, than by the old method, is a fact that cannot be disputed, but when the enormous amount of waste, the extra cost of drying and jointing, the uncertainty of the stock being right, are considered, they so greatly overbalance the advantages that the old method still remains the better process.

If the output of the veneer machine could be passed through the complete process as perfectly in every detail as it comes from the machine, there would be no question about it being much the better method, but to finish the stave after it is cut is where all the trouble is encountered. If the stock is cut to width by the back roller and dried before being jointed, there will be a loss of fully 50 per cent. of stock that cannot be jointed, and those that are jointed will be so stiff that the cooper cannot work them. If the staves are jointed before they are dried, the joint will be ruined.

This is equally true with veneer staves cut in sheets and clipped to random widths. The shrinkage of veneer while drying is over 50 per cent. If the sheet is dried before it is clipped to widths, it becomes so warped and buckled that good staves cannot be made from it. It makes no difference how successfully the kiln does its work; the shrinkage will be even, on account of the laps drying slower than the balance of the sheet or stave.

What we have stated above are facts secured from experience, and these results must be expected by every one who attempts it. On the other hand, if a system of drying is employed that will dry the veneer flat and smooth, and free from checks, without making the sheets as hard as a bone, the process will be a success, because more staves can be made from same amount of timber by the veneer process, and they can be made much cheaper.

WHAT BECOMES OF TIMBER.

Some interesting figures are quoted in a contemporary on the subject of the consumption of timber by various industries. For 4,000,000,000 feet of pine are used annually for matches, the equivalent of the production of 400 acres of virgin forest. On American railways about 620,000,000 cross ties are used and 90,000,000 new ties for renewals required annually. The amount of timber used every year for ties is equal to 3,000,000,000 feet. There are now standing in America 7,500,000 telegraph poles. The average life of a pole is ten years, so that about 750,000,000 are required every year for renewals. These figures do not include telephone poles and railway telegraph poles. The amount of timber consumed annually for poles and ties is equivalent to the timber grown on 1,000,000 acres of virgin forest. For making shoe pegs every year the amount of timber used is equal to the second growth on 1,000,000 acres of hardwood land. Lasts and boots require about 500,000 cords of wood. Although the making of paper from wood pulp is a comparatively new process, the annual consumption of wood for this purpose is equal to over 800,000,000 board feet of timber. If these figures, which it would be necessary to get the trees growing together, to cut about 80,000 acres of forests. America is now using for lumber and paper trade about 40,000,000,000 feet of lumber a year, which is equivalent to about 4,000,000 acres of virgin forest—area equal to Rhode Island and Connecticut. These figures do not include the wood used for fuel, which is four and one-half times as much. With these statistics in view, it is easy to appreciate the need for scientific forestry.

THE NEWS

—McMillan Bros. are building a saw mill adjacent to Fort Francis, Ont.
 —C. L. Vicary has purchased a new engine for his mill at Port Perry, Ont.
 —J. W. Hughes has purchased the lumber business of D. E. Fraser at Methven, Man.
 —James Yorke, of Chesterville, will start a sash and door factory at Thornloe, in New Ontario.
 —G. H. Knowling, lumber dealer Frobyshire, N.W.T., has sold out to Riddell & Company.
 —J. H. Marshall is offering for sale his planing mill and sash and door factory at North Bay, Ont.
 —The new saw mill of the Firstbrook Box Company at Penetanguishene, Ont., has been completed.
 —F. H. Ringwood has purchased the retail lumber business of Ringwood & Wilson, Lenore, Manitoba.
 —M. Brennan & Sons, of Hamilton, Ont., have not yet decided to rebuild their planing mill, destroyed by fire recently.
 —Cushing Bros. have recently made extensive improvements to their sash and door factory at Edmonton, N.W.T.
 —The new electric light plant in Moore's saw mill at Pleasant Point, near St. John, N.B., was put into operation last month.
 —The Cleveland-Sarnia Saw Mills Company, of Sarnia, Ont., recently completed their mill No. 2 for sawing long timber.
 —The Hazelmere Mills Company, Limited, has been incorporated, with head office at Blaine, Wash., and branch office at Hazelmere, B.C.
 —The Read Lumber Company, which was recently organized in Ottawa, with a capital of \$500,000, will operate in the state of California.
 —Gibbs & Liscum, sash and door manufacturers, Winnipeg, Man., have dissolved partnership, and the business will be continued by C. Liscum.
 —The dissolution is announced of Smith & McDonald, sawmillers, Langley Prairie, B.C. The business will be continued by William McDonald.
 —The Shuswap Shingle and Lumber Company, of Kamourou, B.C., has been incorporated, with a capital of \$5,000, to take over the lumber business of J. C. Fields.
 —While engaged in oiling some machinery in the saw mill at Parry Sound, Ont., Colin McDonald, aged sixteen years, was caught by a shaft and drawn to the machinery, receiving such injuries as to cause death.

—W. Cruse, of the firm of Ritchie, Cruse & Company, sawmillers, Emo., Ont., recently had his left hand caught in the knives of a planer and badly mangled.
 —The Savanne Lumber Company, of Savanne, Ont., have just installed a new engine in their planing mill, purchased from the Arbuthnot Machinery Company, of Winnipeg.
 —The saw mill of the Georgian Bay Lumber Company at Wauhaushene, Ont., was damaged by fire recently to the extent of \$5,000. A fire engine from Midland extinguished the flames.
 —F. McGibbon & Sons, of Sarnia, Ont., are making improvements to their mill. They have installed a new planer and matcher, purchased from the Goldie & McCulloch Company, of Galt.
 —A. Haslam, of Nanaimo, B.C., recently suffered the loss of one scow and the lumber carried by two scows while on the way from Nanaimo to Vancouver. The scows were in tow of his tug, the Alert.
 —The Palmerston Woodenware Company, of Saginaw, Mich., are large users of pine and basswood. They will probably make purchases in Ontario next year, as they are now investigating this market.
 —The Lotbiniere Lumber Company was organized recently, to operate a lumber business and the Lotbiniere and Megantic Railway. J. A. Begin, M.P., of Windsor Mills, is secretary-treasurer of the company.
 —The Gilmour & Hughson Lumber Company deny the report that they have disposed of their water power at Chelsea. There have been several proposals for the acquirement of the power, but so far no sale has resulted.
 —M. Hyatt, of Revelstoke, B.C., has recently purchased a steam logger. He is about to take out 3,000,000 feet of logs on the Canoe river, which will be manufactured by the Revelstoke Lumber Company's mill at Big Eddy.
 —The Harrison River Mills, Timber & Trading Company, of Harrison River, B.C., have applied to the Chief Commissioner of Lands and Works for permission to make improvements on Chehalis Creek to facilitate the floating of logs.
 —A syndicate has been formed to erect a saw mill at Slocan, B.C. There is a timber limit in the vicinity containing about 20,000,000 feet. It is owned by local people, principal among whom is Mayor York, and it is proposed to put the timber in the syndicate as their share of the capital.
 —Thomas McCallum, foreman of one of the lumber camps of Vigars & Company, Port Arthur, Ont., holds the record for the longest sojourn among the pines, having put in two years at the camps without coming into civilization. At present he is on a visit to his old home in New Brunswick.
 —Incorporation has been granted to the Canadian

Wood Specialty Company, Limited, with a capital of \$500,000. The head office will be in Toronto and the factory at Bracebridge, Ont. The promoters include J. D. Shier and Angus McLeod, of Bracebridge, and George McCormick, of Orillia.
 —The directors of the Upper Ottawa Improvement Company have decided to extend the territory of their operations from Des Joachims up to the head of Lake Temiscaming. The towing of rafts in this additional territory has heretofore been done by a line of steamers owned by Alexander Lumsden, ex-M.P.
 —It is practically decided that several schooners will be built in one of the ports of British Columbia, most likely Vancouver, for the carrying of lumber. Not only will these vessels require a considerable amount of lumber for their construction, but they will be a valuable addition to the lumber industry in facilitating shipments.
 —British Columbia lumbermen have recently suffered much inconvenience and loss owing to workmen not putting in an appearance after having had money advanced to them. One of these loggers was recently arrested at the instance of W. L. Tait, of Vancouver, and ordered by the court to refund the money or serve a term in jail.
 —J. A. Ansley, of Thessalon, Ont., has constructed a machine for giving lumber a quarter turn after leaving the trimmers for the sorting table. The apparatus was tried this spring in a mill at Spragge and said to have worked admirably. By it the work of handling the lumber is greatly reduced and the expense of labor is lessened about one-half.
 —The old Dickson mill at Peterborough, Ont., was demolished last month, and on the site is to be erected large buildings for the American Cereal Company. This mill was for years a centre of activity, especially in the days when Peterborough was prominent in the lumber trade. It was regarded as one of the best mills in the country and held the record for a large cut.
 —Within a few weeks the Victoria Lumber & Manufacturing Company, of Chemainus, B.C., will have completed the railroad between their logging camp and their saw mill. The company are making extensive improvements, including the erection of two new dry kilns, with a capacity of 50,000 feet of lumber per day, and a shingle mill. It is the intention of the company to enter the Manitoba and eastern trade.
 —J. B. Giroux, of Lefebvre, Ont., was recently arrested in Ottawa charged with defacing, concealing and stealing saw logs. For years saw logs have been stolen from the Hawkesbury Lumber Company, Gilmour & Company and other lumber firms. Joseph Belanger, owner of a saw mill at Lefebvre, was also arrested in connection with the charge, but was released on his own recognizance to appear for trial. He is alleged to have shared the profits of the thefts and to have sawn the stolen logs in his mill.

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WOOD PULP DEPARTMENT

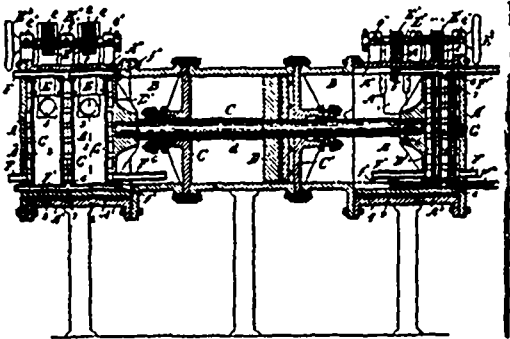
NEW WOOD PULP PRESS.

Mr. Joseph Stuart Hughes, of New Germany, Nova Scotia, has been granted a patent for a wood pulp press, as shown in the accompanying illustration. The claim is as follows:

The object of this invention is a machine having confined spaces into which the fluid pulp can be run intermittently and the water and air pressed out automatically, so as to leave a solid sheet of pulp in each space, a machine that can be handled with ease and facility and will do the work rapidly and with as little hand-labour as possible.

With this object in view the improved machine is made double-ended and double-acting, the pulp is forced under pressure, special facilities are provided for the escape of water and air, and special facilities for loosening the pressed sheets in the press after pressing prior to their removal.

The machine operates as follows: Assuming the



NEW PULP WOOD PRESS.

chamber at the left hand of figure 1 to be empty, the inner bottom A² lifted up tight, the door A⁴ closed, the nozzle A⁵ connected to the delivery pipes of a force pump supplying the fluid pulp, the drain pipes, F, F¹, F², connected with a suction-pipe, and the valves E open, as shown, the spaces 2 are being filled with the fluid pulp under pressure. Immediately upon the entrance of the latter, and owing to the pressure on one side and the suction within the strainers on the other, water and air commence to be abstracted from it at once. When the spaces 2 are full of pulp, the valves E are closed by turning the wheel E³. Pressure is allowed to act on the averted face of the piston D, and it moves, pushing the plunger D¹ in the chamber now under consideration toward the head. The pressure thus exerted upon the pulp within the spaces 2 causes the water and air therein to pass through the strainer sheets G¹ and perforated plates G into the cavities of the strainer, thence through the

drain pipes F, F¹ and F², until the piston D and the plunger D¹ have gone as far as the solid pulp remaining between the strainers will allow, and thus have arrived at the end of their stroke, and all water has been abstracted from the pulp that is capable of being expelled by pressure. During the movement of the plunger, with its strainer, the central strainers, with its drainage pipes F¹, have slid along the chamber until the strainers, with the sheets of pulp between them, have been pushed against the head A¹ and have finally arrived in the position shown on the right hand of Figure 1. While this was taking place the chamber on the right hand gradually assumed the condition shown in the other chamber, the plunger D¹ making part of its return stroke and then engaging the lugs F¹ of the drain pipes F¹ and drawing them along, together with the central strainer. The door of this chamber having been closed, the valves E opened, and the spaces filled with pulp, the piston D and plunger D¹ are caused to commence the stroke toward the right, restoring the left-hand chamber again to the condition shown. In the meantime the door A⁴ on the left was opened, the hinged bottom dropped, the strainers and sheets eased, and the pressed sheets removed. The same operation is then repeated. While pressing is going on in one chamber the other is opened, the hinged bottom dropped, the pressed sheets removed, closed again, the valves opened, and the chamber refilled.

THE OUIATCHOUAN PULP COMPANY.

The new pulp mill of the Ouiatchouan Pulp Company at Ouiatchouan, Lake St. John region, Quebec, was put into operation for the first time on August 17th. Upwards of three hundred persons from Quebec, Roberval, Chicoutimi and other points were present to witness the event. Mr. Etienne Paradis, of Quebec, is president of the company, and Mr. J. R. Lavery, secretary. The company is capitalized at \$150,000. The initial output will be about 50 tons of wood pulp per day, although no doubt this quantity will be increased later.

The mill, which is situated at the foot of the famous Ouiatchouan Falls, consists of one main building about 200x100 feet, and others which contain the barkers, heating apparatus, etc. Among the machines are six grinders and eight wet machines, and all are of the highest grade and the most modern type. The power is derived from a dam on the Ouiatchouan river, situated some 600 to 700 feet from the falls. From a short distance above the top of the cataract to the bottom stretches a steel flume 475 feet long and seven feet in diameter. Its weight is 200,000 lbs., or about

100 tons, and the railroad has been engaged in hauling this and other materials for the mill for about a year. From the top of this flume to the dam runs a canal, with walls five feet in thickness, its diameter being 15x15 feet and its length from 500 to 600 feet. Inside it is a pipe, fed by its water, down which the pulp wood will be carried to the mill, for the company has 150 square miles of pulp wood limits in the vicinity of Lake Bouchette and Lac des Commissaires. This supply, it is calculated, should last for 100 years.

PULP MAKING IN JAPAN.

A correspondent of the Paper Trade Journal recently visited Nagasaki and other important seaport towns of Japan, and relates his impressions of the progress made in pulp manufacture as follows:

"As is well known to the trade, the Japanese have had access to the proper wood fibres for making pulp for many years, but for lack of proper machinery have failed to accomplish very much. Recently, however, both the Chinese and the Japanese manufacturers have adopted American and other patterns of pulp making apparatus, and have accomplished considerable. In Nagasaki I found that there were several concerns representing the pulp making interests of the country. Not only are the poplar and other woods of the Empire used for this work, but there are processes of grinding cotton, linen, woolen, silk and other fibres of rags into a combination for boiling and reducing to pulp form. The logs are cut by the coolies and hauled to the mills. Spruce logs are brought in and the bark removed. I saw no effectual barking machines in use, although there were some of a home made pattern, fitted with revolving radial knives. These knives were not true or well sharpened in most cases, and the work progressed slowly and unsatisfactorily. The Japanese have ingeniously arranged stones for grinding the spruce or other woods. In some places American devices have been purchased for this work. The home made pattern is constructed on the same principle, but is smaller and less effective.

"Sulphite pulp is also manufactured. The timber is cut into suitably sized pieces, and the chips, after a careful sorting, are deposited in digesters, cylindrical in shape, and not at all like those in use in American mills.

"Then there is the cleaning operation, which is done much as in America, and by which foreign particles are removed. Chloride of lime is used in considerable quantities for bleaching. Screening is done on a cord plan. Compressed air or steam forcing devices are not used. In one place they had a sort of a spiral screw-press device, and the pulp was placed beneath the platen in a cylinder, the bottom of the cylinder being fitted with perforated portions through which the pulp was forced by screwing the platen down on the mass. The water in the pulp is evaporated as a rule, although in some places the workmen squeeze the moisture out by passing the pulp through the ordinary cylinders. The pressing into sheets is effected by means of steel rollers.

A large consignment of wood pulp was recently shipped from Canada to Appleton, Wis.

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PULP NOTES.

The Canada Paper Company, of Windsor Mills, Que., have placed an order with the Pusey & Jones Company, of Wilmington, Del., for a 156-inch Fourdrinier paper machine.

The Price-Porritt Pulp & Paper Company has secured a Quebec charter, with a capital of \$250,000. The principal place of business will be Rimouski, Que. Price Bros. and O. A. Porritt, of Quebec, are the promoters.

J. Barber, who is interested in the Nepigon Pulp & Paper Company, recently returned from Nepigon, and states that the site is being cleared for the proposed mills. Three thousand horse-power will be developed at first.

The North Shore Power, Railway & Navigation Company are making rapid progress with the construction of their works at Seven Islands, Que. The Marguente Falls are being harnessed and a railway from Point Moir to the site of proposed pulp mill is

under construction, also a wharf 1,500 feet wide. Cold and wet weather has delayed the work somewhat.

It has been rumored that the International Paper Company were about to build large pulp and paper mills at Three Rivers, Que., to utilize the large tracts of timber which they possess on the St. Maurice river. The report, however, is denied by President H. J. Chisholm.

It is understood that Minneapolis capitalists, including E. W. Backus, lumber operator, F. H. Nutter, civil engineer, and Hon. C. J. Rockwood, have made a proposition to the Ontario Government to establish large pulp and paper mills at Fort Frances, Ont. The erection of a saw-mill is also spoken of.

Mr. M. F. Mooney, manager of the St. John Sulphite Fibre Company, St. John, N.B., recently returned from a visit to England, where he met Captain Partington. The latter would not accept Mr. Mooney's resignation as manager of the Mispec mills, so the latter promised to retain the position at least for the present. Lord Strathcona and Mount Royal, Canadian High

Commissioner in London, recently received a deputation of representatives of firms engaged in the manufacture of paper and wood pulp making machinery, who asked the assistance of the Canadian government in removing the prejudice which exists in Canada in favor of American as against British machinery of this class. The deputation asked that Canada suspend for three years the present duty on British machinery. Lord Strathcona promised to employ his utmost efforts in favor of the British article.

Reference was made in last issue to the successful operations of the ground wood pulp mill of the Belgo-Canadian Pulp Company at Shawinigan Falls, Que. It is since learned that the Waterous Company, of Brantford, Ont., supplied this company with two Butterfield cutting-off saws, twelve 52-inch barkers, two splitters, pulp wood carrier for bringing the pulp wood into the mill, and storage conveyor something over one thousand feet long. For the pulp mill they supplied twenty-four 16-inch grinders, thirteen 72-inch wet machines, with rubber couch rolls, and twenty-six ten-plate screens, all made after the patterns of the celebrated machines of the Friction Pulley & Machine Company, of Sandy Hill, N.Y., whose machinery the Waterous Company build in Canada.

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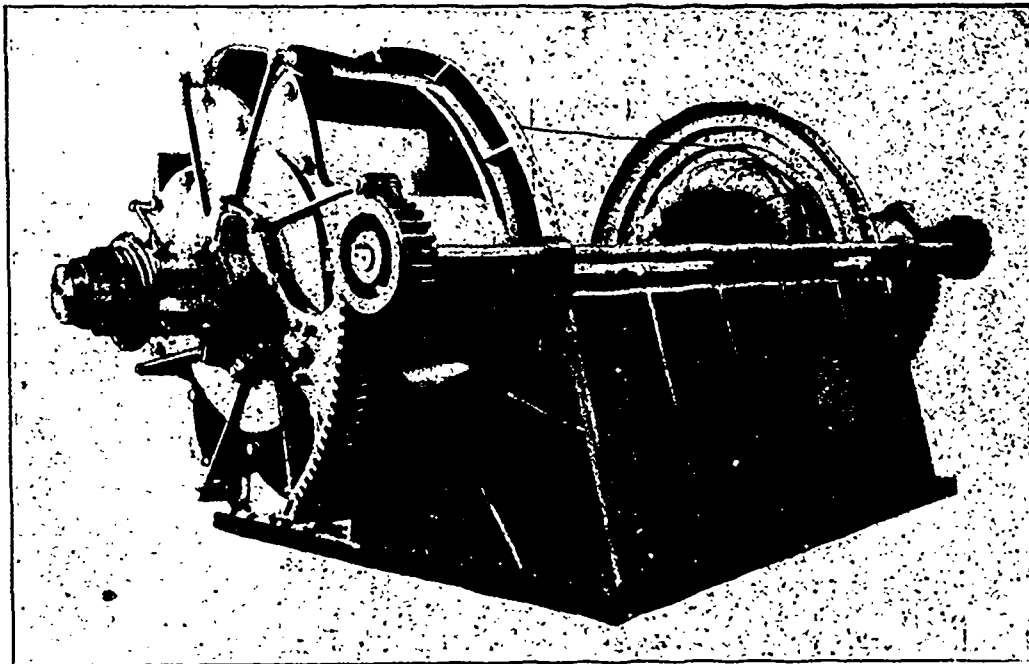
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LEGAL.

SOUTHAMPTON LUMBER CO. v. AUSTIN.—An action in the High Court at Toronto. Judgment in action to recover balance due on a contract for the supply of cedar railway ties and 5 to 6 inch face pole cedar ties, f. o. b. at Pine Tree Harbor, and also 15,000 unburnt posts and pavements. Held, that the defendant had not at any time inspected, accepted or received the ties, nor was there any selection or appropriation of them by him, nor were they at any time unconditionally appropriated to the contract either by plaintiffs with defendant's assent or by defendants with plaintiffs' assent. The contract is for the sale of unascertained or future goods by description, an executory contract, and the rule in such cases is that the property does not pass until goods in a state in which the buyer is bound to accept them are unconditionally appropriated to the contract either by the seller with the assent of the buyer or by the latter with the assent of the former; *Chalmers 4th ed., p. 43, Blackburn 2nd ed., p. 128; Heilbutt v. Hickson, L. R. 7 C. P., at p. 449; Wilson v. Shaver, 3 O.L.R., at pp. 114-5.* The property in the ties never passed. The plaintiffs were always in possession. As to the claim for the posts, however, the plaintiffs should recover. After the posts had been got out the defendant requested the plaintiffs to peel them and agreed to pay one cent per post. The plaintiff peeled 10,000 and the defendant paid \$200 on account, and on these facts there was a plain acceptance and waiver of inspection.

PERSONAL.

The death is announced of Mr. T. B. Follitt, of the firm of Follitt & McMillan, planing mill owners, Sandon, B.C.

Mr. E. Stewart, Dominion Superintendent of Forestry, has recently been on a trip through Manitoba and the North-West Territories.

Mr. O. G. Anderson, formerly head of the Anderson Furniture Company, of Woodstock, Ont., is about to leave Canada to become a director and general manager of the Angus Furniture Company, of London and Glasgow, one of the oldest established companies in England.

We are called upon to record the death, on July 24th, of Mr. Francis D. Mott, vice-president of Denny, Mott & Dickson, Limited, timber merchants, London, England. The late Mr. Mott was for about twenty-five years a partner in the firm of Denny, Mott & Dickson, which a short time ago was changed to a limited liability company.

TRADE NOTES.

The Brandon Machine Works Company, of Brandon, Man., has applied for authority to increase its capital from \$40,000 to \$125,000.

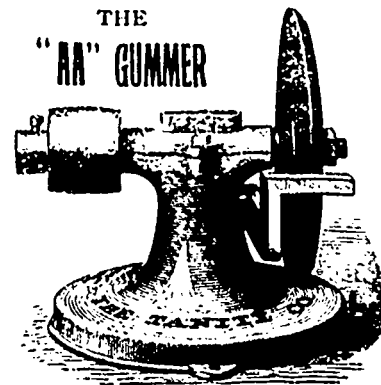
Alexander Dunbar & Sons, of Woodstock, N. B., have shipped about 50 Dunbar shingle machines this year, some of them going to the United States.

The plant of the Meaford Manufacturing Company,

of Meaford, Ont., is being improved by the installation of a new two-room "Standard" moist air dry kiln. After proper investigation of the merits of the best known lumber drying systems, the Meaford Company decided to install the "Standard", owing to its simplicity of construction and ease of operation. The Standard Dry Kiln Company, of Indianapolis, Ind., appears to be steadily increasing the number of its kilns in this country.

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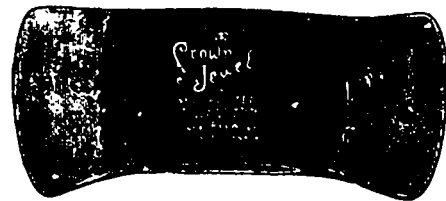
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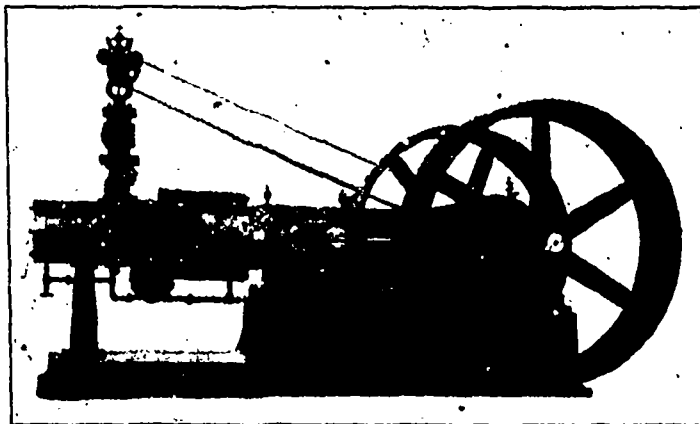
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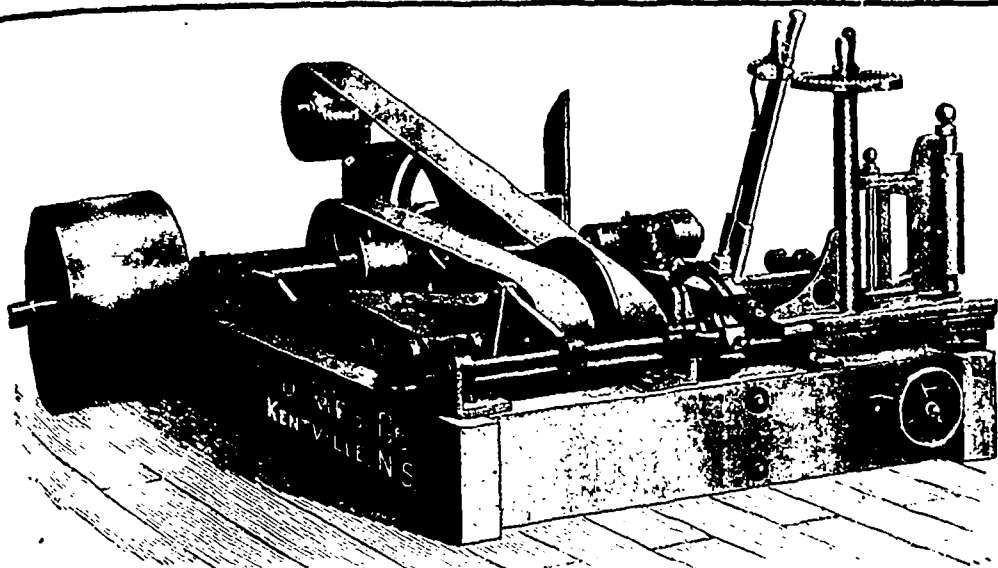
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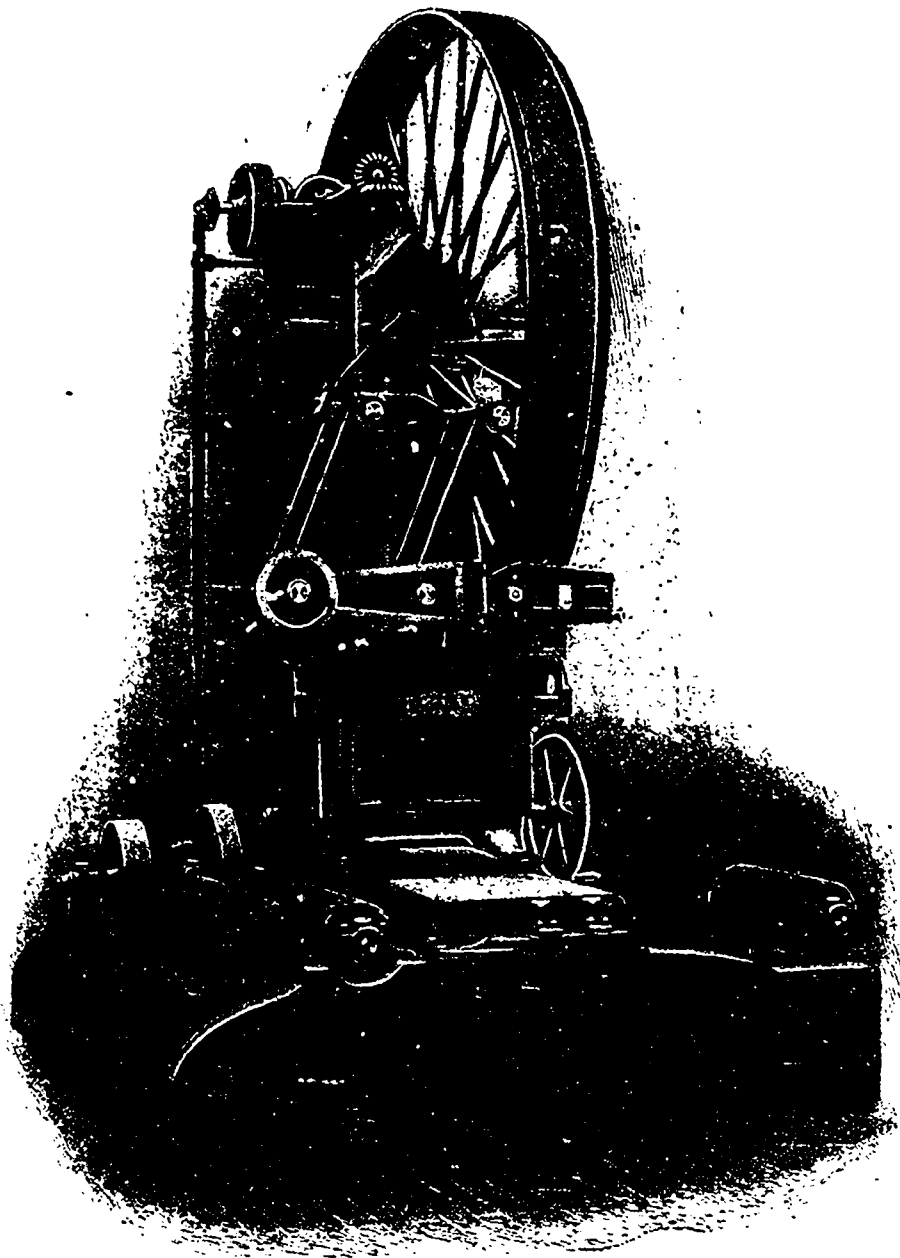


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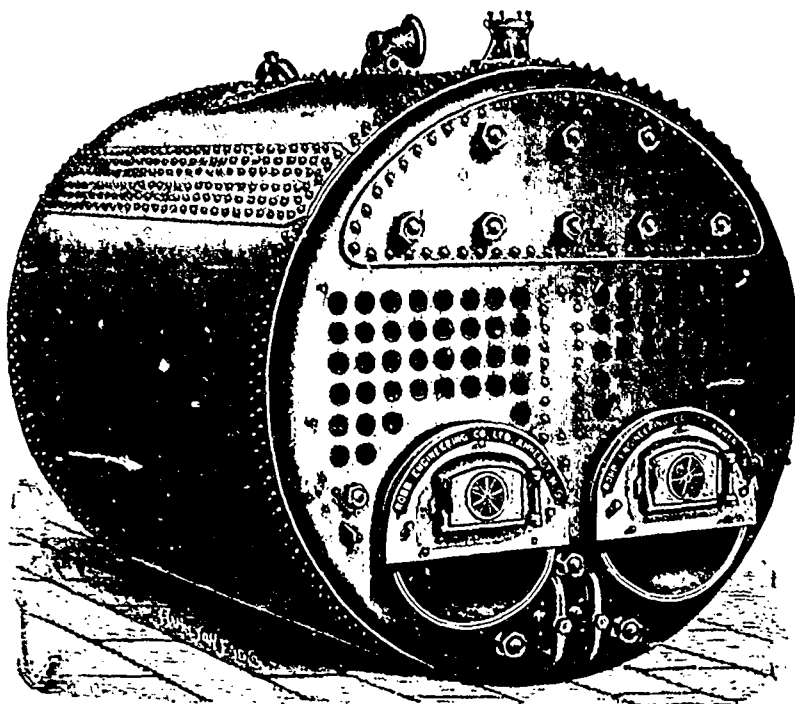
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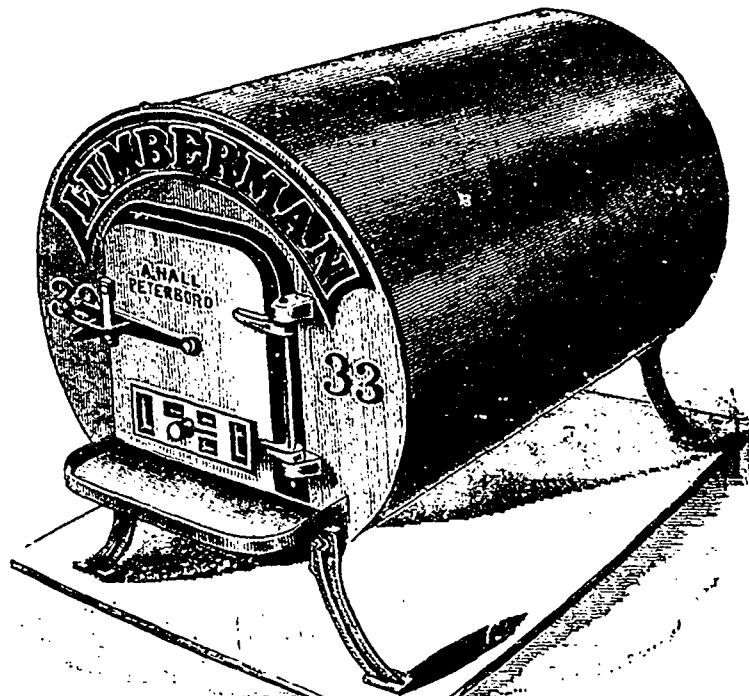
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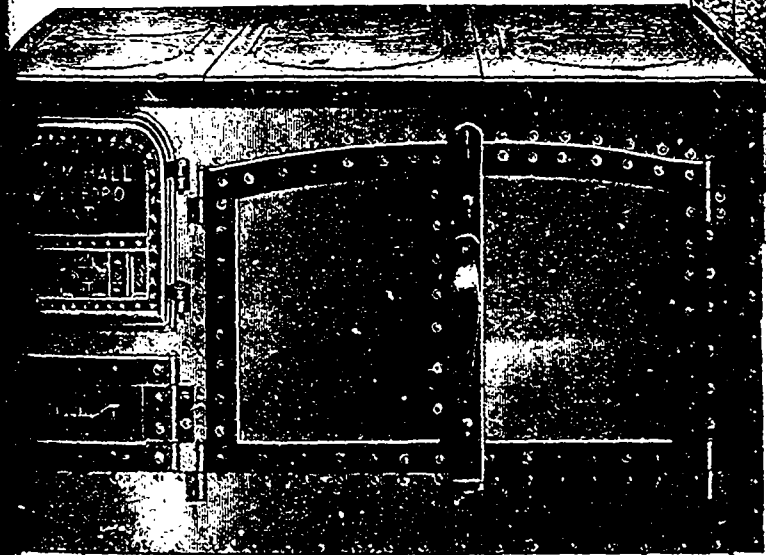
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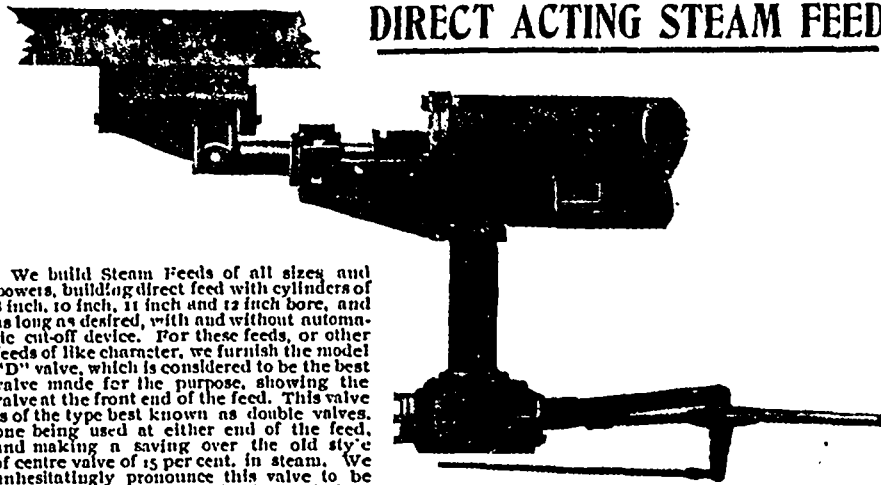
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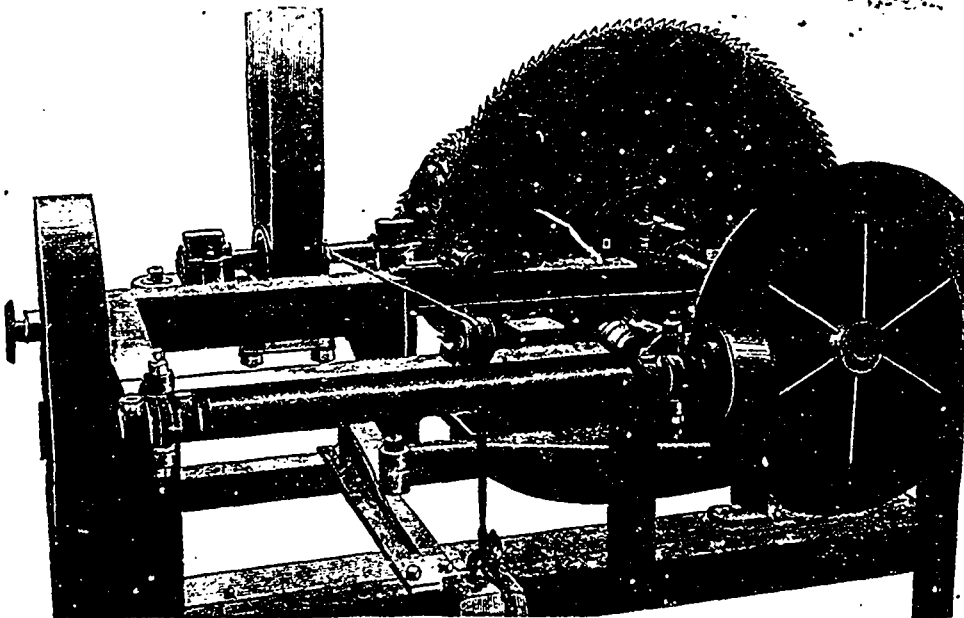
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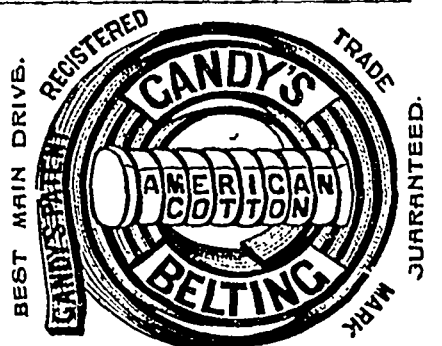
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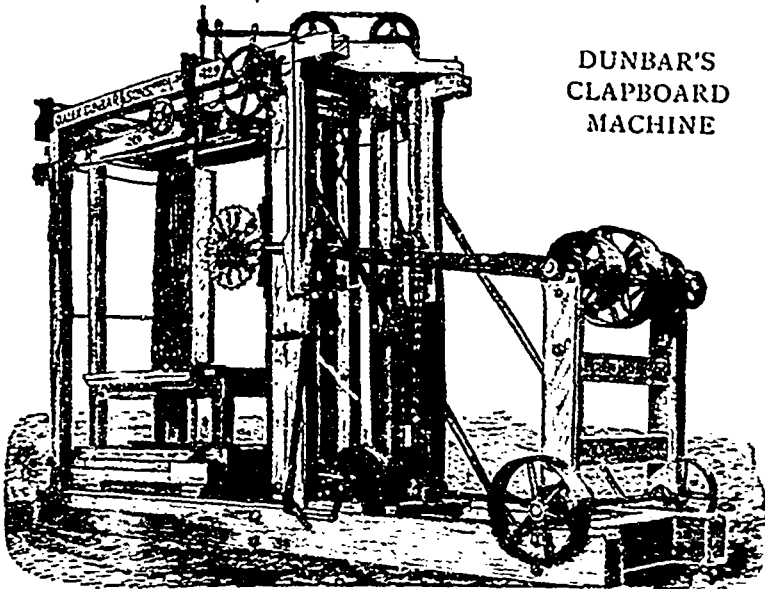
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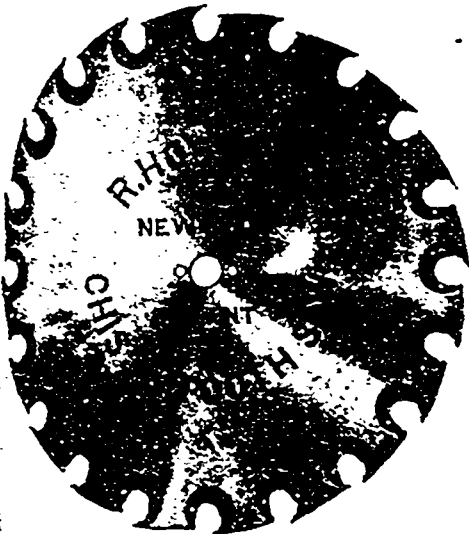
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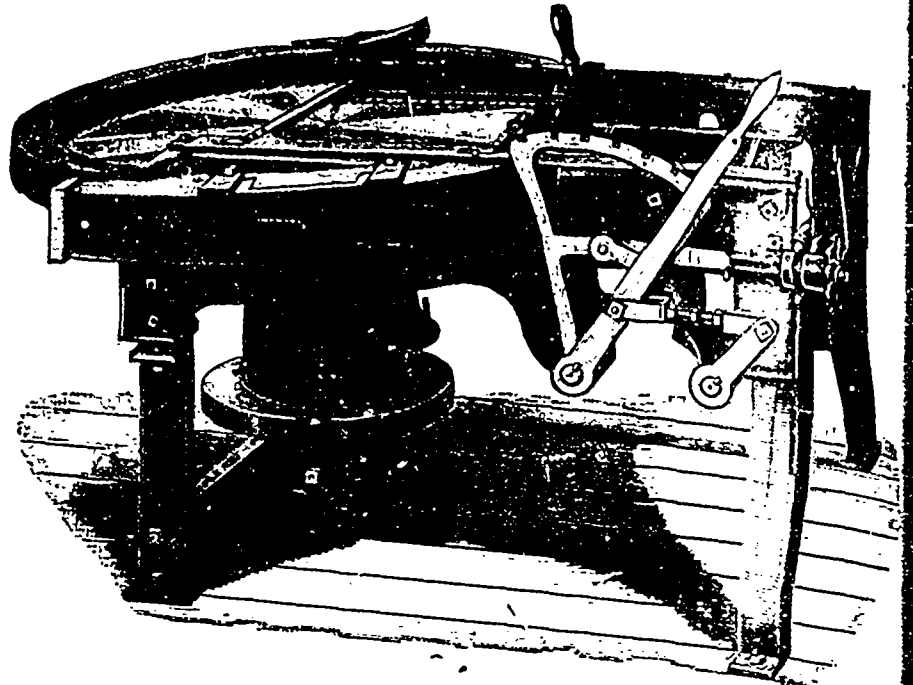
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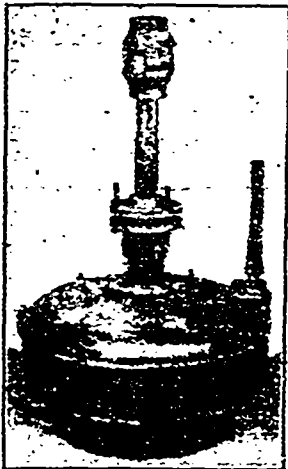
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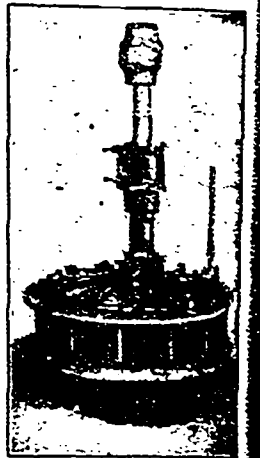
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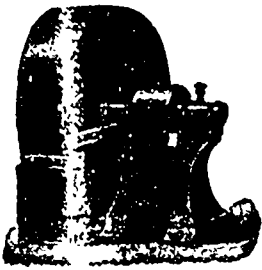
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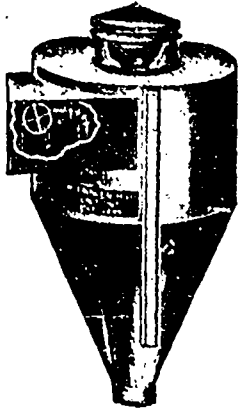
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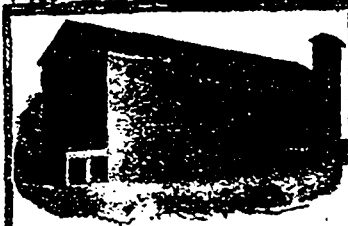
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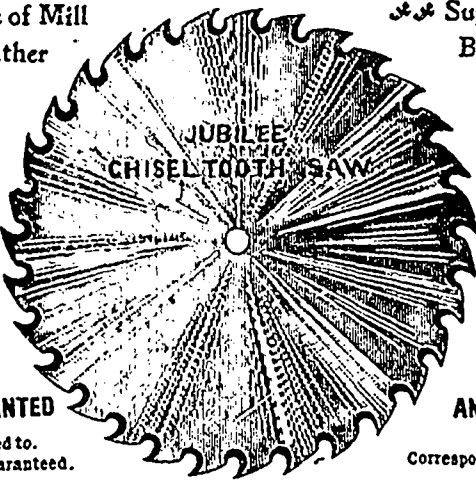


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