

FOREIGN MARKETS.

BROOM HANDLES.

Department of Trade and Commerce at Ottawa recently received a communication from Mr. Harrison, Canadian Section Imperial Institute, in reply to inquiries from Canadian producers to the possibility of opening up a trade with broom manufacturers of the United Kingdom.

The attention of producers of broom handles is directed to the following extracts from a letter from a manufacturer in Great Britain, touching the trade as regards sizes, quality and price:—

Broom handles.—The standard size is 50 inches by 1 1/2 inches in diameter, and any good, clear wood. We have chiefly handled basswood, but we find that spruce will be the most likely article. The handles must be well finished and sand-papered, and the ends must be turned. Wasters arising will be taken, they must be packed separately. It is customary to pack up in gross bundles covered in sacking or in one gross. For good handles at the moment we realize \$2.50 to \$2.68 per gross delivered to buyers' less 2 1/2 per cent. The cost of delivering same to stores is about 9 cents per gross.

Broom handles are wanted 52 inches long, simply (round), 1 1/2 inches diameter, with one end simply turned. You will thus see they are very easy things to manufacture. They should be made of clear spruce or white-looking wood. We are prepared to buy in large quantities, say, from 100 to 300 gross per lot, and we can pay cost, freight and insurance to the docks, London. First quality quite free from knots and other defects at \$2.43 per gross. Second quality, a few pine knots allowed, \$2.19 per gross. Third quality, a few small knots allowed, \$1.83 per gross. All must be all perfectly and smoothly finished so that the hand over them no splinters are at all likely to get the fingers. They must be packed in rough bags of one gross each, with the quality of the handles clearly marked outside.

Broom handles.—To give you a proper idea as to what is required we are sending you a sample handle. The handles must be clear, smooth and round, and packed up or tied up in half gross bundles. The sizes and present prices are given below. It is noted that the handles have turned tops. Only a few sold with plain tops, and these fetch six-pence per gross less.

Diameter.	Value.
1 1/2 inch.....	\$2.32 per gross, delivered free.
1 1/4 ".....	2.68 " "
1 3/8 ".....	2.92 " "
1 1/2 ".....	3.10 " "

Broom handles.—The following figures give the dimensions, etc., of the broom handles for which we have an outlet:

Diameter.	Value.
1 1/2 inch.....	\$1.87 carriage to Birmingham.
1 1/4 ".....	2.13 " "
1 3/8 ".....	2.31 " "
1 1/2 ".....	2.68 " "

Broom handles in basswood must be clear and sound; they are only paid for at a reduced price. We have an immediate outlet for orders of 200 gross and upwards.

TIMBER REQUIREMENTS OF AUSTRALIA.

Writing to the Department of Trade and Commerce, J. S. Larke, Canadian Commissioner for Australia, of the timber requirements of that colony:

Anticipate a growing trade in timber. Queensland considerable quantities of pine on her coastal ranges has supplied nearly all its requirements out of its own resources. These supplies are by no means exhausted, as the cutting goes on it is becoming increasingly difficult and expensive to get the logs out. A heavy tax has kept out any quantities of foreign timber, but there was an importation of about a million feet of one and half a million feet of staves, mainly from New Zealand, for box and cask making for the meat works. The advantage in getting supplies from New Zealand as they are brought in cargo lots small enough to be handled by one company.

There was a home production of 37,562,327 feet of pine in 1899, which was nearly one and a half millions less than of the previous year. There was a cut of nearly the same quantity of cedar and hardwood. Some of

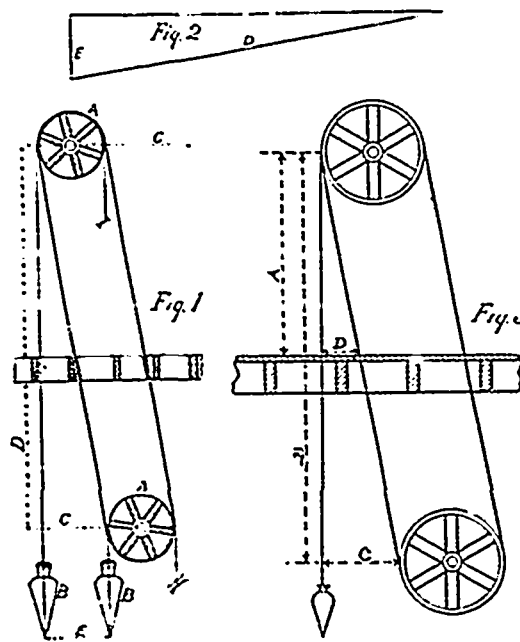
the latter was used where a cheaper imported pine would have done as well, and a market abroad could have been found for the higher priced wood. The average price of pine at the mills last year is given at 8s. 11d. and of hardwood at 10s per hundred feet. This is eight per cent. above the price of the previous year. In northern Queensland it is claimed that the price and demand now justify the importation of cargo lots of Oregon from Canada. A gentleman on his way to Canada promised to call on the export lumber firms and discuss the matter with them. In New South Wales, Oregon staves are used in making tallow casks, but I found objections to the use of this timber for this purpose in Queensland. There will be no large importation of timber for some little time under the present duty, but the demand is sure to come from the cities and towns along the coasts, and there appears to be an opening in the north for some cargo lots even now. Since my return I have interested one of the largest importing firms in the matter, and inquiries are being made preparatory to entering into the trade if the circumstances warrant it.

One of the problems confronting the trade with northern Queensland is shipping facilities. British Columbia mills suffer in this respect now in comparison with the Puget Sound mills. When there is a scarcity of ships, as there is now, the United States mills owning their own lumber carriers are at a decided advantage and can take orders when the Canadian mills cannot.

With the large trade that exists in timber and fish it is surprising that a Canadian fleet of sailing ships has not been built for it. From the information at hand the Queensland trade could be best done by a steam cargo boat, which would load with timber and merchandise, striking Queensland at Townsville and delivering its cargo of timber, flour and merchandise at the principal ports along the coast. It would get a return freight of sugar and other produce. This cannot be done at present as a suitable vessel cannot be obtained. A shipping company proposed to try the experiment, but owing to the loss of a couple of steamers it had no ship left it could spare for the work.

HOW TO CUT A BELT HOLE.

Correspondents to the American Miller have been telling how to find out just where to cut a belt hole in a floor. Fig. 1 shows one method, the advocate of which says for it: A A represent the two pulleys. We will draw the line, with plumb-bob B attached, over the top pulley, allowing it to dot the floor, where we will bore a hole for the string to go through. We then allow the plumb-bob to swing clear of this hole and below



CUTTING FLOOR HOLES FOR BELTS.

the lower pulley. Then for accuracy we place a line over the face of the lower pulley, with a plumb-bob attached to it also. Now, to find the degree the two pulleys represent, we measure the distance between the points of the two plumb-bobs, on the line marked E. We then measure between lines C C representing the center of each shaft. By reducing these two measurements to quarters of an inch we find the degree of the bevel D, which is shown in

Fig. 2. Set the bevel to this degree, place it on the floor where the hole is to be cut, and rest it on a level, place a straightedge on the face of the pulley, allowing one end of it to rest on the floor, bring it to the same pitch as your bevel and you have the center of the hole.

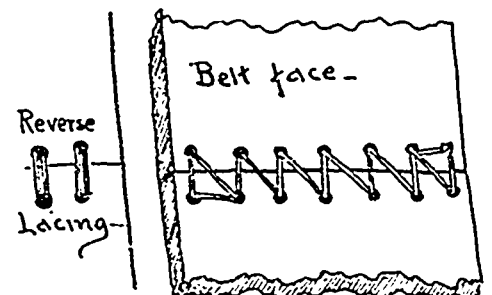
The one contributing the plan shown in Fig. 3 says: All we want is a man with a small auger, a plumb-bob and line, a saw, pencil and measuring tape. Let him plumb down from the face of the upper pulley, dot the floor, bore a hole and pass the plumb line through so it will swing clear from the upper pulley. Measure the distance from center of top pulley to floor, which is shown in the sketch as line A. Then measure from center of top pulley to line C, running through center of bottom pulley. Finally, measure the distance from plumb line to face of lower pulley, which measurement forms the C. Multiply A by C and divide the product by B, which will give the length of D. For example, distance A is 8 feet, distance B 12 feet, and distance C 20 inches. Then 8 times 20 equals 160, divided by 12 equals 13 1/3 inches, which is the distance from plumb line to edge of belt hole. Allowance must be made for belt andacing. If the two pulleys are of the same size the second belt hole will go through the floor at a distance from the first belt hole equal to the diameter of the pulley. If the pulleys are of different sizes, the distance will be about equal to the sum of the diameters divided by 2. Bore small holes and stretch the plumb line over pulley faces to see if measurements are correct, and then saw in whichever direction the holes must go to give the belt plenty of room.

AN IDEA IN BELT LACING.

The yard man who runs a planing mill in connection with his yard is subject to some delays and loss of temper occasionally by the breaking of a belt at just the wrong time.

It takes a little time that is valuable if one has to stop and lace a belt when a rush job is on a machine, and for men who are liable to such inconveniences we give an idea that comes from a subscriber in Wisconsin:

He says: "We enclose you a piece of belt laced with No. 20 annealed iron wire. We have used this lacing for two years, and it is the best thing we have ever bumped up against in lacing. It is almost impossible to break the belt at the joint and it is practically an endless belt going



over the pulley smooth. It has saved us, we estimate, in our factory, \$75 a year in time and belting. We have belts that have been running six months, going over a four-inch pulley at 5,000 revolutions a minute, and the lacing shows no wear yet.

We give the result to your paper and it is the first paper to get it; if you want to use it do so. No. 20 annealed iron wire can be purchased in almost any hardware store and for 25 cents enough wire can be purchased to lace 100 belts four inches wide. We can vouch for the economy and good work of this style of lacing."

Some of the readers of this paper may have been looking for this scheme for several years.—American Lumberman.

The inventor of a patented lubricating compound states that in the course of his experiments he found that castor oil or glycerine, when combined with sulphur, has the property of cooling as well as lubricating hot journals, and the other oils commonly used as lubricants are not suitable for this purpose. Castor oil and glycerine are regarded as equivalents in his compound, and either may be mixed with sulphur in the proportion of about 13 of the former, by weight, to 1 of the latter. The ingredients are placed in a suitable vessel and heated to the boiling point over a slow fire and boiled for thirty minutes, more or less, until froth forms on the surface. The compound is then allowed to cool, when it is ready for use.