

## A TIMBER PRESERVATIVE.

REMARKABLE success is said to be attained with a new process of preserving timber lately introduced in England. The agent employed is melted naphthaline, contained in a tank, in which the timber is immersed. The temperature of the bath is about 200 degrees Fahrenheit, or a little below, and is evenly maintained, the heat being derived from steam pipes passing through the tank. The timber is soaked from two to twelve hours according to the size of the piece. It is believed that wood which is thoroughly impregnated with naphthaline, which takes the place of the sap and water it expels, will have peculiar advantages in its susceptibility to polish, for which merely rubbing with a cloth will be sufficient. In India where, owing to climate and other influences, not only wood but other products are prone to sudden changes and decay, an experiment like the above is worth adopting.

## ECONOMY OF GAS ENGINES.

AN electrical paper says that "the waste involved by the intervention of the steam engine, with the clumsy modes of raising steam and the clumsier ways of utilizing it, is apparent to any one who looks into the calorific value of fuel." That is a sort of preface to the statement that gas engines are "beating the steam engine, both in fuel consumption and in general economy." Then it proceeds, "It is to be hoped that some central station in this country may be induced, at all events, to try a supplementary gas plant or two for day loads or for emergency use." If the gas engine is so very economical, why use it merely for emergency purposes? The position of the gas engine is well understood, and users of steam are quite aware that they do not get the full value of the fuel; but no "electrician" has yet attempted to improve on the "clumsy method of raising steam" except the man who was going to use electricity to raise the steam that produced the electricity. He is still "going to."—English Mechanic.

## PAINT AND SHINGLES.

THE Timberman remarks that it has always seemed that in the use of paint to preserve wood exposed to the weather, the fact that a shingle roof was omitted from the catalogue was invariably the rule. This idea or oversight was one of the things in which custom becomes habit, and because every one else did so, all the rest followed suit. It is safe to presume that the custom of leaving the shingle roof unpainted originated in its angular form being less exposed to the after effects of rain and snow. A little thought will show the folly of such a conclusion when remembering the frail nature of a shingle and the slight fastening it has. If paint would be useful to any weather exposed surface it would certainly be so on a roof. The fact goes without telling, and in the present style of suburban residences the roof receives its share of paint along with the rest of the building, thus at once combining the useful with the beautiful. It is certainly singular that painting of roofs has not always prevailed, and it adds much to the finish and character of the building to see the roof painted. When the thin, slender nature of the shingle is taken into consideration, it will be plain to every one that sun cracks will easily go through the shingles, and to that extent render it worthless. The only way to overcome this is to paint, and always keep the shingles painted.

## NEW HARDWOOD MACHINERY.

SOME ingenious mechanisms for the working of hardwood have recently been introduced. One of these is a boring machine adapted to making holes for blind nailing in hardwood floors, which works automatically, and accomplishes the object in view most perfectly; that is, the stock is carried forward by a fluted roll,

and is stopped by a cam at proper distances from the boring of the hole by the bit which operates horizontally, the board being carried on an angle. Another efficient mechanism in this field is a hardwood flooring apparatus, which takes the rough stock, planes it on both sides and matches it, and has five cutting cylinders, the first having a flexible bar, which allows of the free passage of irregularities in stock and insures the presentation to the second cylinder of a uniform surface, and this followed by top, side and bottom finishing cylinders; the side finishing cylinders are equipped with a weighted chip-breaking bar, which prevents splintering the stock; the six feed rolls are nine and a half inches in diameter, being all geared, and the back rolls are placed beyond the last cylinder, thus carrying all stock clear through the machine—the largest size taking stock of some eighteen inches width by six inches thickness.

## A MILL WHERE BELTS ARE NOT USED.

A NEW Belgium factory uses electricity to transmit its power instead of belting. The dynamo is of 500 horse-power, and forms the fly-wheel of the compound Corliss engine. The shop is supplied with sixteen motors, among them ten 16 horse-power, one 21 horse-power, and one 37 horse-power motors. Their average efficiency is 87.2 per cent. On some of these motors the load is very variable, and several are exposed to dust and dirt, so that with 90 per cent. efficiency of the dynamos, 98 per cent. of the conductors, 87 per cent. of the motors, the net result is 76.6 per cent. power delivered. As the lost work in belt driving is practically a constant quantity for all loads, or at least is usually considered to be, the power required to turn the shafting, pulleys, etc., at the normal speed when no work is being done on the machines, it follows that taking 79.4 per cent. as the final output in two cases, one of electrical and the other of mechanical transmission, we find that at a load of 20 per cent. the electrical system would still give 47.2 per cent. useful effect and the mechanical nothing at all. From careful experiments which have been made in actual practice, it has been clearly proven that to drive all the machines idle needs more power than to drive the shops in the ordinary course of work; whereas eleven electrical horse-power is required when driving all the tools idle, only about seven electrical horse-power is needed in ordinary work, of which four electrical horse-power is used to drive the shafts, belts, etc., alone; this clearly shows how small a part of the power produced by the engine is actually used in useful work at the tools.

Such satisfactory results of the application of electricity to factory driving must attract attention, and will doubtless lead to great changes in transmission. Whether in the case of large machine tools it would not be better to discard shafting and belts altogether and supply a special motor to each tool, is a question which must be settled for each individual case which may arise: the current could be switched on or off just as easily as the belt is now thrown from the loose to the fast pulley, and vice versa.

## NEWS AND NOTES.

Fred. W. Bonness, a Minneapolis lumberman, is in New Brunswick, spending a few weeks with his brother, J. D. Bonness, of St. Stephen. Fred has been absent from the province for about 25 years.

It is stated that the property of the late John A. Morrison, of Fredericton, N.B., will not realize sufficient to liquidate the debts. For this reason his son, John A. Morrison, jr., has declined to accept the bequest of the will, which gave him the mill property contingent on his paying the debts. The mill property has been bought by James Murchie & Sons, of Calais, and Ned Murchie will move to Fredericton to take charge of the business.

## WANTED AND FOR SALE

Advertisements will be inserted in this department at the rate of 15 cents per line each insertion. When four or more consecutive insertions are ordered a discount of 25 per cent. will be allowed. This notice shows the width of the line and is set in Nonpareil type. Advertisements must be received not later than the 27th of each month to insure insertion in the following issue.

WE WANT ALL KINDS OF HARDWOODS. Will pay cash. ROBERT THOMSON & CO., 103 Bay Street, Toronto.

FOR HEMLOCK, DIMENSION LUMBER, hardwood flooring, cedar shingles, piles, sawdust, etc., write J. E. MURPHY, lumberman, Hepworth station, Ont.

WANTED: A SITUATION AS FILER IN A sawmill. Have had nine years' experience with gang and round saws. Address "H," 3 Maitland St., Halifax, N.S.

WANTED—BY YOUNG MAN—SITUATION as book-keeper, cashier or correspondent; rapid worker; energetic, and thoroughly reliable and experienced; competent to take charge of manufacturer's office. Address: "Accountant," care CANADA LUMBERMAN, Toronto.

## LUMBERMEN

EXPERIENCED SHIPPER OPEN FOR ENGAGEMENT middle of May. Good bookkeeper and correspondent. Competent to take charge of mill. References furnished. Address: "Inspector," care CANADA LUMBERMAN, Toronto.

## RAILS FOR TRAMWAYS

NEW AND SECOND-HAND STEEL AND iron rails for tramways and logging lines, from 12 lbs. per yard and upwards; estimates given for complete outfit.

JOHN J. GARTSHORE, 49 Front St. West, Toronto.

## TO EASTERN STATES LUMBERMEN.

AN EXTENSIVE HANDLER OF PULP wood, fir, spruce, maple birch and poplar, is desirous of finding a market for same in the Eastern States. New York or Boston preferred. Is prepared to ship any size required per schooner from Quebec. Parties handling same should communicate with I.C.L., care CANADA LUMBERMAN, Toronto.

## WANTED FOR CASH.

ASH AND SOFT ELM DIMENSION STOCK cut to exact sizes. Apply for specification, prices, etc., to

P.O. Box 2144,

NEW YORK.

## WANTED FOR CASH

## Ash and Soft Elm

MOSTLY ONE-INCH, SOME ONE-AND-A-QUARTER and one-and-a-half inch, strictly first and second; also common. Furthermore, Ash and Oak squares from one-and-a-half to four inches thick. Red Birch Lumber, 1 and 1 1/2, all thickness; also Red Birch Squares 5 x 5 and 6 x 6, ten feet and over long. Address all particulars as to dryness, quality, quantity on hand and price, to P.O. Box 2144, New York, N.Y.

## AUCTION SALE

OF

CANADA

## PINE TIMBER LIMITS

IN ORDER TO WIND UP THE AFFAIRS OF "The Georgian Bay Consolidated Lumber Company," the following Timber Berths will be sold by public auction in the City of Toronto, during the early part of August next.

Berths Nos. 41, 45, 60 and 61, each containing 35 square miles, more or less, tributary to the Wabigoon River.

Berths (south halves of 41 and 49), each containing 18 square miles, more or less, situated on Lake Wabigoon.

These Limits are in the District of Nipissing, on the North Shore of the Georgian Bay. The waters of Lake and River Wabigoon empty south into the French River, thence into the Georgian Bay. The licensees give the right to cut all kinds of timber. The ground rent is \$1.00 per square mile, and the Crown dues are \$1.00 per thousand feet b.m. for pine saw logs.

Notice will be given later on of the time of sale, and the terms and conditions will be made known on the day of sale.

THE GEORGIAN BAY CONSOLIDATED LUMBER CO.,

74 King Street West,

Toronto, April 2nd, 1893.

Toronto, Canada.

## VALUABLE

## Timber Lands

—AND—

## Saw Mills

## FOR SALE

## AT PARRY SOUND

THE MILL IS SITUATED ON THE WATERS of Parry Sound, and has good shipping facilities. The largest vessels or steamers on the lakes can load at the lumber docks. The mill will cut about twenty thousand feet of lumber and twenty-five thousand shingles in ten hours.

There are about seven thousand five hundred acres of timber pine, hemlock, birch, ash, oak, spruce, larch, wood, etc.

The timber is free of dues.

Parry Sound is the terminus of the Ottawa, Arnprior and Parry Sound Railway, now in process of construction.

Price: Twenty-five thousand dollars.

Terms may be agreed upon.

WM. BEATTY,

Parry Sound.

## CANADA

(PROVINCE OF NEW BRUNSWICK)

## SALE OF TIMBER LICENSES

Covering a large portion of the Crown Lands of the Province.

THE RIGHT OF LICENSE TO CUT AND carry away all classes of timber or lumber from the principal timber lands of New Brunswick, will be offered for sale at the Crown Land Office, Fredericton, N.B., on

Tuesday, August 29th, 1893

and following days.

The timber licenses to be sold will cover an area of about 4,000 square miles (or 2,500,000 acres) of Crown Lands.

These licenses will be for one year, with the right of renewal for a term of 25 years from the 1st day of August, 1893, on fulfilment of all conditions of license.

Licenses will be offered at an upset price of \$2.00 per square mile, and conditions being complied with, may be renewed from year to year during the term, on payment of \$4.00 per square mile; this mileage being in addition to stumpage dues.

The stumpage payable on lumber to be cut has been fixed for the present at the following rates:

|  |                 |
|--|-----------------|
| On Spruce, Pine and Hardwood Saw Logs..... | per M. sup. ft. |
| Cedar Logs.....                            | \$1.00          |
| Hemlocks.....                              | 20              |

Other lumber as per regulations.

Copies of the regulations to govern this sale, and any further information required, may be had on application to

L. J. TWEEDIE,

Surveyor General,

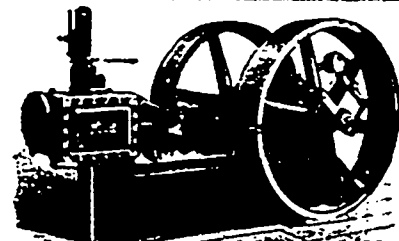
or

W. P. FLEWELLING,

Lumber Agent,

Crown Land Office, Fredericton, New Brunswick,

14th July, 1893.



## ROBB-ARMSTRONG ENGINES

All parts interchangeable, Governor either Automatic or Throttling.

## Monarch Economic Boilers

Economical Portable Durable

MILL MACHINERY AND SUPPLIES, WOODWORKING MACHINERY, ETC.

ROBB ENGINEERING CO. LTD.

AMHERST - - NOVA SCOTIA