

REGARDING SHORTAGE OF LUMBER.

Timber Trades Journal gives the following of a decision of the British Courts of interest to Canadian shippers: Yesterday last, in the King's Bench Division High Court of Justice, the case of the American and New York Steamship Company, which was tried at Liverpool in February before Mr. Justice Bucknill and a special jury again before his lordship for further action.

As an action brought by the plaintiffs, a shipping firm, to recover from the defendant, A. F. & D. Mackay, of 10 Canada Dock, the sum of £175 15s 3d, balance of on a cargo of timber shipped per the "Atlas," from St. John, New Brunswick, to Liverpool. The net freight amounted to £5 3d, towards which the defendant firm claimed £1,750, and they claimed to be entitled to the balance against alleged short delivery of goods. It appeared that the charter provided for the payment of freight on measurement on the quantity of timber, as ascertained at the port of delivery. A special jury at Liverpool found that there was a difference between the quantity shipped, shown by the bills of lading and that shown by the measurement, and the case was adjourned to London for the principle by which the question of shortage should be decided.

The judge, in giving judgment, said he must consider the defendants. There were two questions for his consideration. The first one was a question of freight, and the second was that of counter-claim, and in his opinion the defendants were entitled to judgment upon both. It was his opinion that the real answer to the claim of the shipowner had chosen to sign a bill of lading, the accuracy of which he might, if he had, have ascertained. But the shipowner had verified the bill of lading, which compared the classes of timber. Having signed the bill of lading the shipowner undertook by the bill of lading, that the bill of lading should be evidence as establishing the quantity of timber, and that the quantity of timber was something less than the quantity of timber. The freight was payable on the intake of the quantity delivered as ascertained at the port of discharge. When the vessel was at the port of discharge the consignee was to ascertain what timber of each particular class had been delivered to him. And he found that one of these classes there were 1,215 short, which entitled him to say to the shipowner that the latter had in that class, delivered him something less than the quantity of timber the shipowner had admitted having delivered according to the bill of lading. His lordship thought the proper way to ascertain the amount was to ascertain what was the amount of timber of each particular class of goods delivered, and to calculate the rate of freight on the shortage, on any particular class of the timber, as what had been done here. The exact amount payable to the shipowner for freight could not be ascertained. With regard to the counter-claim, the consignee was entitled to say to the shipowner that he had received so many pieces of timber of a certain sort, valued at a certain amount, but that something short of the proper quantity had been delivered, and the counter-claim was for that amount. It was clear, his lordship thought, for the reasons he had stated, that the defendants were entitled to recover upon their bill of lading and counter-claim.—London Timber Trades Journal

AMERICAN FORESTRY ASSOCIATION.

A special summer meeting of the American Forestry Association will be held at Denver, Colorado, August 14th to 29th, inclusive. There will be two sessions daily, the proceedings of which will be of special interest to all concerned with forestry problems. There will be presented a number of valuable papers, including one by Mr. Pinchot, Government Forester, of Washington, D.C.

PERSEVERANCE BRINGS SUCCESS.

As incessant drops of water,
With persistent, tiny blows,
Beat down the rugged mountains
And dissolve the deepest snows;
As when thread to thread is added,
Larger still the fabric grows,
And the most persistent knitter
Wears the longest warmest hose.
As the dog by dogged gnawing
Tastes the marrow of the bone,
And repeated mallet tapping
Brings the statue from the stone,
As the most untiring printer,
With incessant "click, click, click,"
Marches largest verbal armies
By divisions o'er his stick;
As letters to letters added
Makes complete the longest page,
And minutes oft recounted
Tell the sum of longest age;
As oft-gained bits of wisdom
Make the store of knowledge great,
And man after man enlisted
Fills the armies of the state,
As rivulet after rivulet
Swells the river o'er its banks,
And continued penny savings,
Aggregate the wealth of banks
So the constant advertiser,
By a law of common sense,
Builds his business enterprises
Into volumes most immense.

ELECTRIC POWER FOR SAW MILLS.

Taking up the question of the advisability of adopting electric power for saw mills, a writer in the Timber Trades Journal says:

There can be no doubt but that the adoption of electric driving of a saw mill effects a considerable economy over steam engine driving through shafting, whether the electric current is obtained from a central supply station or has to be generated on the mill premises. The most recent and weighty report yet issued upon the question as to the relative advantages of steam engine and electric power was that issued by the Master Mechanics' Association of America a few months back. In this report they pointed out that where there are a number of separate shops, the fact that all the shops can be readily supplied with power from one centre and without the intervention of great lengths of shafting, the fuel saving may readily be 33 per cent., and that even when all the machines are collected together in one shop, the individual tool method, i.e., a separate motor for each machine over three horse power, is more economical than shafting transmission.

The gain to be effected by electrical driving depends in a great measure on whether the machines are continuously at work or whether some of them are liable to stand idle for varying lengths of time, for in the latter case the shafting is continuously absorbing the same power, despite the fact that no work is being done. It is a matter of frequent occurrence that the shafting alone absorbs from 30 per cent to 50 per cent., and even up to 70 per cent., occasionally of the total power developed, whereas with electrical transmission, allowing for all losses in the motors, mains and generator, the total losses at full load should not be so great as 20 per cent., and when working at, say, 1/2 to 3/4 load, not more than 25 per cent. If now we take into consideration the fact that the electrical energy consumed is in direct proportion to the work done by the motors, whereas with shaft transmission the energy consumed by the shafting is constant independently of the load, we find that the electrical transmission must of necessity effect a considerable saving.

As regards convenience and shop output it is evident that with shaft transmission the arrangement of the machines in the shop is necessarily such as to allow of the shafting and engine connection being as simple as possible without regard to the best methods of handling the work. Electric transmission, on the other hand, presents no restrictions on the placing of the tools, and consequently the arrangements are planned with a view to the least possible waste of labor. Again, should extensions be required, no account need be taken of the present arrangements, as the new machines may be put down in any convenient position without regard to any line of shafting.

The trouble arising from the use of electric motors is now practically nil, as they can be obtained either perfectly water and airtight, or what is known as the "ventilated enclosed" type, these latter being as reliable as the totally enclosed, and considerably cheaper.

The actual horse-power required to drive the various classes of machines varies very considerably, depending upon whether the wood is dry or damp, on the state of the saws and cutters, etc., and upon the skill of the workman.

The following figures may be taken as approximately correct as the average power required:—

Circular saws	20in. to 37in. dia.	12/15 h.p.
"	36in. by 48in. "	15/20 "
Frame saw	30in. to 48in. "	20/25 "
"	18in. by 6in. "	15/20 "
Planer	12in. by 14in. "	12/15 "
"	12in. yellow pine, top only	10/12 "
"	6in. oak flooring, top and two sides	30/35 "
Daniel 30in. head planer, cutting 3-16ths off		
top		9/10 "
Moulding, 6 1/2in. yellow pine, 4 sides		9/10 "
Tennoning, oak end sills, 3 3/4 in. x 5in. x 10in. cut		7/8 "
Three spindle boring mill, oak 2in. bits		2/3 "

It is advisable always to provide adequate power, indeed, rather to put in motors of rather larger than smaller power than is actually required for this class of work, as frequently much greater horse power than those given above are momentarily demanded by the work, and although a motor is capable for a short period of developing three times its rated power, yet a more constant speed, less frequent interruption of the work, and better regulation of the pressure of supply is obtained if ample power is provided. Contractors under the stress of competition are liable to quote for motors barely capable of doing the work demanded of them, with resulting unsatisfactory working of the plant.

The motors should always be protected by means of automatic circuit breakers, to save them being burnt out in the event of any sudden overload pulling them up, and for cutting them out of circuit should the supply of current be temporarily suspended. If so protected modern motors of good design, and if made by firms of good standing, require no skilled attendance whatever.

SANITARY REGULATIONS.

The Provincial Health Officer, acting under instructions from the Provincial Secretary, has issued in pamphlet form the regulations adopted by the Provincial Board of Health, under the authority of the act passed last session, respecting sanitary regulations in unorganized territories. The owner, manager, agent or foreman of any lumbering or mining camp, saw mill, smelting works or other industry or of any railway construction camp, located in an unorganized district, is made responsible for carrying out the regulations. Provision is made for proper ventilation of dwelling houses occupied by the employees, and for the erection of a hospital building, or, in lieu thereof, a properly equipped double walled tent, with all facilities for heating and ventilation, must be kept on hand in case of necessity. The pamphlet is being sent to all mill owners in unorganized districts and others who come under the regulations.