

tinguished from saw logs. For logs intended to be sawn into lumber the length and small end diameter are recorded, but in the case of logs cut for pulp wood the diameters at both ends of the logs are recorded as well as the length. The several records taken are used for converting the contents of the logs into the standard units. The unit by which pulp wood is measured differs from that employed in the case of saw logs, although there is a definite relation between them.

Logs intended for lumber are calculated in terms of a "foot board measure." The standard for the pulp wood logs is the "cord." We may now consider the meaning of these terms and the relation between them. A foot board measure is simply the amount of wood contained in a piece of timber or board 1 ft. long, 1 in. thick, and 12 inches wide. Thus, for example, a stick of timber which measures 16 ft. long, 12 in. wide, and 1 in. in thickness contains 16 ft. board measure. If the stick is 3 in. thick it contains 48 ft. board measure.

Hence the following rule obtains for converting any piece of timber into the number of feet board measure: Multiply the length (in feet) by the width (in inches) by the thickness (in inches); divide the result by twelve.

The general formula may be written thus

$$\text{Feet B. M.} = \frac{P \times L \times W \times T}{12}$$

in which P is the number of pieces of timber,
L is the length of one piece in feet,
W is the width in inches,
T is the thickness in inches.

Example:—How many feet, board measure, are contained in 120 pieces of 8 in. x 8 in. timber 24 feet long?

Total feet B. M. is $120 \times 8 \times 8 \times 24 \div 12$ is 15,360 feet.

In this way the contents of any piece of timber can readily be determined in terms of the usual nomenclature, viz., feet board measure.

By the use of special formula the contents of the round log can be similarly expressed, and calculated into the same units. Several such rules and formulae are known, and the results differ somewhat, the number of feet in a log of given dimensions not being alike by the various methods.

One of the most common rules is known as Doyle's

Rule, largely used by contractors and lumbermen in the measurement of logs intended either for lumber or for pulp wood. With large pulp wood logs some contractors prefer to measure the logs by this rule, which they are accustomed to, rather than by a system of calculating the logs into a number of cords.

In the province of Quebec pulp wood is often measured by the contents in feet board measure, and the determination of the number of cords in the quantity so found, arrived at by a simple computation.

The existence of several rules for converting round timber into board measure is of course rather perplexing, and the acceptance of a general formula to be applied in all cases would be a great convenience, but custom and habit are difficulties not easily overcome, and things remain as they are. The Quebec Government has avoided the errors due to any divergence in the results of such formulae by setting out in authorized tables the contents of round logs in feet board measure, the figures having been obtained from observations in saw mills as to the actual lumber sawn from the logs put through the mill. As the tables are compiled from figures which cover a long period, and are based on the practical working of many saw mills, they should be pretty accurate. In considering the Doyle's rule, and any precautions necessary in its application, we may well compare the two systems.

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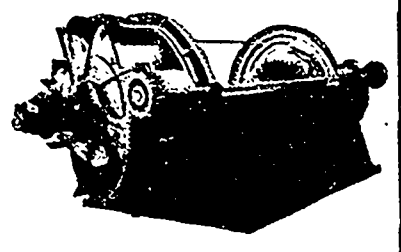
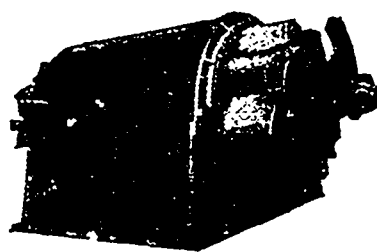
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