Surveying without Board Rule

Lumber

1 in. thick—1-12 the length multiplied by width. 2 in. thick-1-6 the length multiplied by width. 3 in. thick—¼ the length multiplied by width. 4 in. thick-1-3 the length multiplied by width. 5 in. thick—5-12 the length multiplied by width. 6 in. thick—1/2 the length multiplied by width. 7 in. thick-7-12 the length multiplied by width. 8 in. thick—2-3 the length multiplied by width. 9 in. thick-3/4 the length multiplied by width. 10 in. thick-5-6 the length multiplied by width. 11 in. thick-11-12 the length multip'd by width. 12 in. thick - the length multiplied by width.

This gives contents in feet.

length in feet by the height in feet and this by the width in feet. Divide the result by 500. This will give the number of tons.

To Measure Hay in Square or Oblong Stack .-Multiply the length in feet by width in feet and this by one-half the height. Divide result by 300. This will give the number of tons.

To Measure Hay in Round Stacks.-Multiply square of distance around stack in yards by four!

times the height in yards. Point off two figures from the right and divide the remainder by 20. The result is the number of tons in stack.

To Measure Wood.—Multiply the length in feet by the width in feet and this by the height in feet. Divide this product by 128. This will give the number of cords. A common cord of firewood is eight feet long, four feet high and four feet wide. As railway, steamboat and other corporations have demanded more than four feet high for a cord, because of the openings between the sticks, caused by careless piling, it is well always in contracts to specify the height of cord. Some companies ask 8 x 4 x 5 feet for a cord; this is 160 feet instead of 128.

To Measure a Pile of Whant.—In a round heap To Measure Hay in Mow.-Multiply the or pile, multiply the diameter in feet by itself. Then multiply this by the height in feet and divide by four. This will give the number of bushels approx cately.

To Acasure Casks, Barrels, etc.—Add together diameters at head and bung in inches and divide the result by two. Multiply this result by itself, and this product by the height in inches. Multiply this last result by eight and cut off the right

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