

(No Model.)

A. M. HILL.
GAGING ROD.

No. 423,154.

Patented Mar. 11, 1890.

Fig. 1

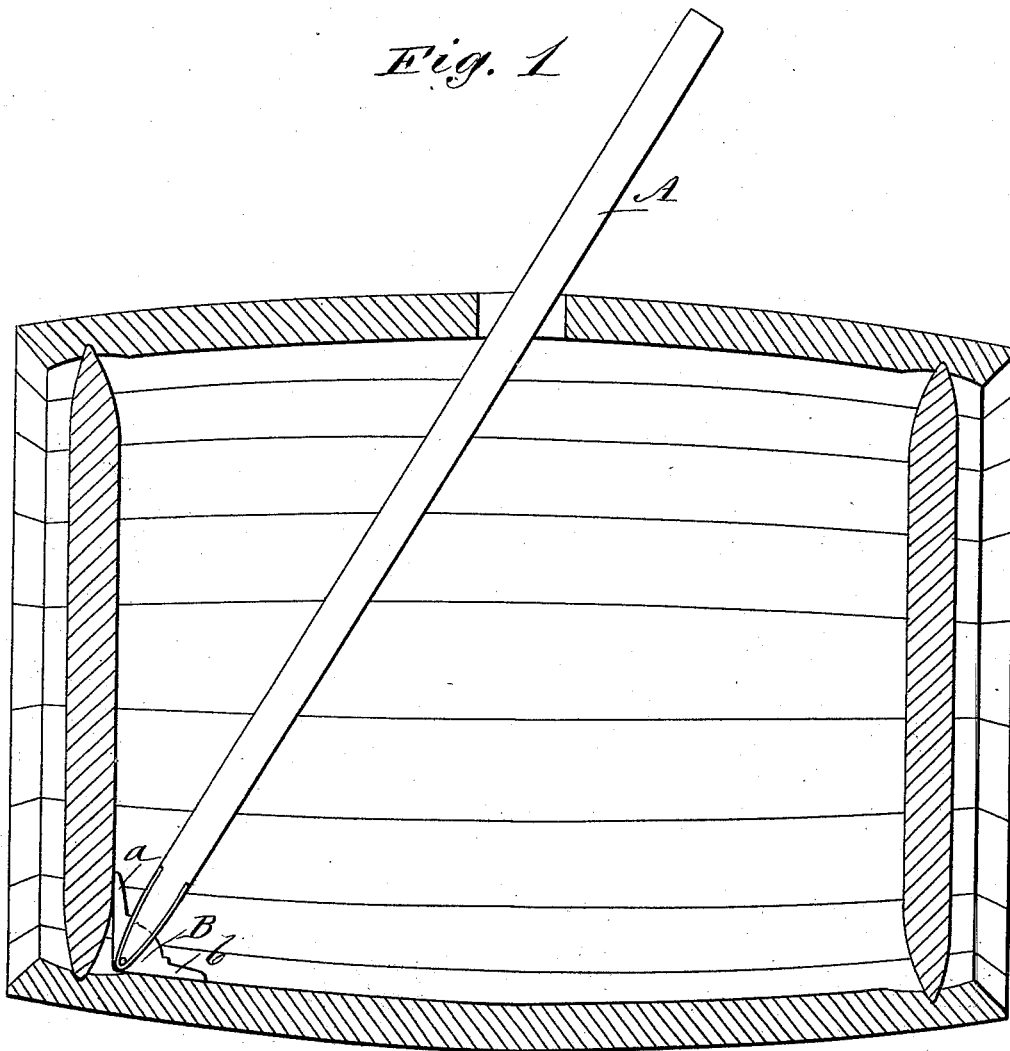
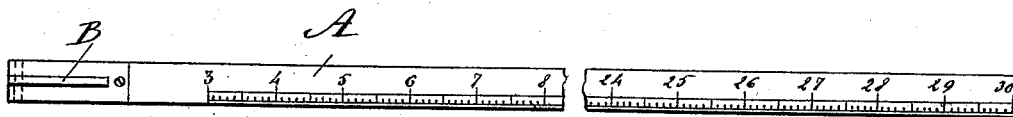


Fig. 2



WITNESSES:

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ARTHUR MARCUS HILL, OF ST. STEPHEN, NEW BRUNSWICK, CANADA.

GAGING-ROD.

SPECIFICATION forming part of Letters Patent No. 423,154, dated March 11, 1890.

Application filed November 10, 1887. Serial No. 254,749. (No model.)

To all whom it may concern:

Be it known that I, ARTHUR MARCUS HILL, of St. Stephen, in the Province of New Brunswick, Canada, have invented a new and Improved Gaging-Rod, of which the following is a full, clear, and exact description.

The object of my invention is to provide a new and improved gaging-rod for measuring with great accuracy the cubic contents of kegs, casks, barrels, &c.

The invention consists of certain parts and details and combinations of the same, as will be fully described hereinafter, and then pointed out in the claim.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in both figures.

Figure 1 is a side elevation of my improvement as applied. Fig. 2 is a plan view of the same.

My improved gaging-rod consists of two parts—the rod A, provided with the usual graduation, and the dart B, pivotally secured to one end of the rod A. The dart B is provided with a straight edge *a* and a slightly-curved edge *b*, standing nearly at right angles to the edge *a*. The pivotal point of the rod A and the dart B is nearly the corner of the intersection of the edges *a* and *b*, so that the pointed end of the rod is held at the angle of intersection of the head and staves of the barrel being gaged.

The gaging-rod is used as follows: In measuring kegs, casks, &c., and computing their contents it is only necessary to know the length of the diagonal line from the middle

of the bung-hole to the intersecting point of one head with the stave opposite the bung-hole. Now, it has been frequently found that casks, kegs, &c., are marked in excess of their actual contents by reason of the slot or recess at the intersection of the head and stave being included as part of the diagonal when measured with the common rod now in use. With my improved gaging-rod this inaccuracy is avoided, as the dart B, when introduced into the barrel by its rod A, as shown in Fig. 1, rests with the straight edge *a* against the head of the barrel, while the other curved edge rests on the stave opposite the bung-hole, so that the rod A indicates by its graduation the actual length of the diagonal at the bung-hole of the barrel.

The dart B, on account of being pivoted at the end of the rod A, adapts itself to the various sizes and forms of casks, kegs, &c.

It will be seen that with my improvement I am enabled to measure with great accuracy the diagonal of the cask, and hence can compute the correct cubic contents.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

A gaging-rod consisting of the graduated rod A and the dart B, provided with the straight edge *a* and the slightly-curved edge *b*, nearly at right angles to the edge *a* and pivoted to the end of the said rod, substantially as herein shown and described.

ARTHUR MARCUS HILL.

Witnesses:

GILBERT W. GANOREG,
WILLIS Y. PATCH.