W. J. TAIT.

Gaging Rod.

No. 54,229. Patented April 24, 1866.

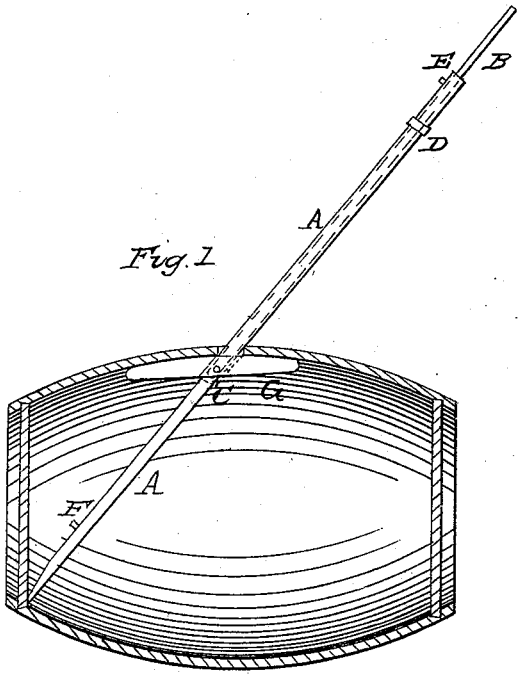

Fig. 1

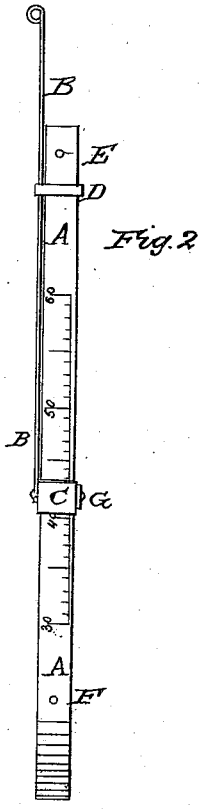

Fig. 2

WITNESSES

M. M. Livingston

J. W. Livingston

INVENTOR

Wm J. Tait

UNITED STATES PATENT OFFICE.

WM. J. TAIT, OF BERGEN, NEW JERSEY.

IMPROVEMENT IN GAGING-RODS.

Specification forming part of Letters Patent No. **54,229**, dated April 24, 1866.

To all whom it may concern:

Be it known that I, W. J. TAIT, of Bergen, Hudson county, State of New Jersey, have invented a new and useful Improvement in Gaging-Rods; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a vertical longitudinal section of a barrel through the bung-hole, showing my improved rod in position for reading the scale. Fig. 2 is a side view of my improved rod.

Similar letters of reference indicate like parts.

My invention has for its object to furnish a gaging-rod which shall indicate to the gager the exact point at which to read off the scale; and it consists in combining with the ordinary gaging-rod a slide-rod and stop, as hereinafter more fully described.

A represents an ordinary gaging-rod, constructed with a scale in the usual manner.

In using the old gaging-rod, after putting it into the cask in the manner represented in Fig. 1, it was necessary to determine with the eye the diagonal line across the rod where the plane of the lower surface of the stave at the bung-hole would cross the rod. The position of this line is difficult to be determined with exactness in this way, and so great is this difficulty that experienced and skillful gagers will frequently find a difference of a gallon or more between the results of two successive admeasurements of the same cask.

To the edge of the rod A, I attach a sliding rod, B, by bands C and D, so that it may slide freely up and down the rod A. This rod is kept from sliding so far in either direction that the bands C and D would slip from the ends of the rod A by the pins or stops E and F. The band C is made with one of its sides higher than the other, so that its upper edge may cross the edge of the rod A obliquely, as represented by dotted lines in Fig. 1, in about the line in which the plane of the lower surface of the stave of the cask at the bung-hole would cross the rod, so as not to interfere with reading the scale when using the rod.

To the opposite side of the rod A from the rod B there is pivoted a stop, G, having arms of unequal length. The upper edge of this stop should be curved to about the curve of the staves of the ordinary cask, in gaging which the rod is to be used.

In using my improved rod it is inserted in the cask in the ordinary manner, as represented in Fig. 1. The slide-rod B is then drawn up, care being taken to guide the stop G so that it may take the position represented in Fig. 1 and the result read from the scale. The rod is then turned and the other end of the cask gaged in the same way. One arm of the stop G may be made heavier than the other or weighted, so as to take the required position automatically; but I prefer to make it uniform and guide it into position, as before described.

I claim as new and desire to secure by Letters Patent—

An improved gaging-rod formed by combining the slide-rod B and stop G with the ordinary gaging-rod, substantially as described, and for the purpose set forth.

WM. J. TAIT.

Witnesses:

M. M. LIVINGSTON,

JAMES T. GRAHAM.