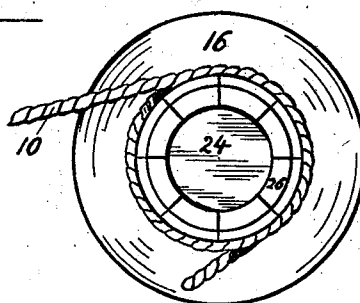
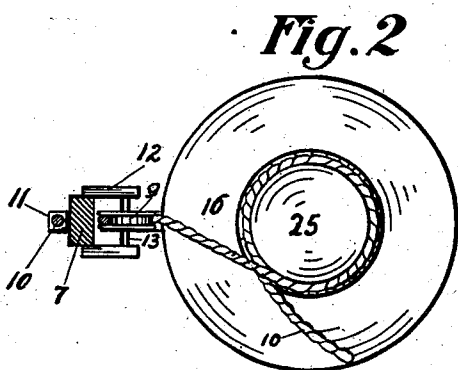
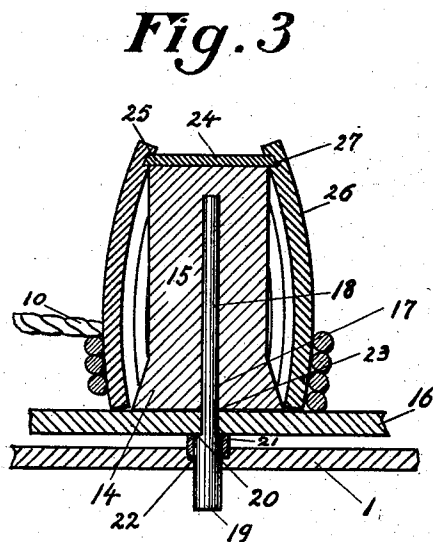
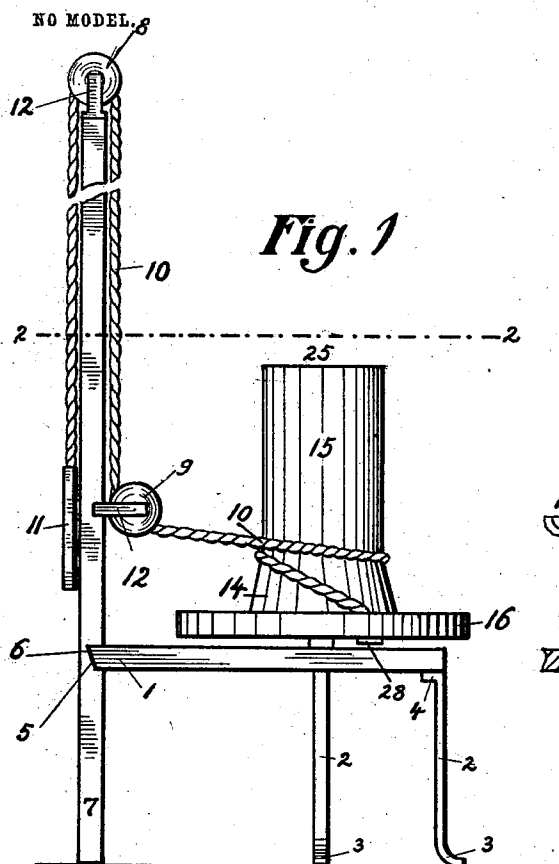


No. 718,355.

PATENTED JAN. 13, 1903.

J. W. JONES.
STAVE SETTER.

APPLICATION FILED JULY 19, 1902.



WITNESSES:

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UNITED STATES PATENT OFFICE.

JOHN WARREN JONES, OF ST. LOUIS, MISSOURI.

STAVE-SETTER.

SPECIFICATION forming part of Letters Patent No. 718,355, dated January 13, 1903.

Application filed July 19, 1902. Serial No. 116,188. (No model.)

To all whom it may concern:

Be it known that I, JOHN WARREN JONES, a citizen of the United States, residing at the city of St. Louis, State of Missouri, have invented certain new and useful Improvements in Stave-Setters, of which the following is a specification.

This invention relates to new, useful, and convenient means for setting the staves of barrels or kegs with relation to the head of the same prior to the barrel or keg being hooped and for the sake of greater convenience in hooping the same.

In the drawings, Figure 1 is a side elevation of my apparatus. Fig. 2 is a view taken on the line 2 2, Fig. 1. Fig. 3 is a cross-sectional view, and Fig. 4 is a top plan view, of the principal parts of my device with the staves of a barrel in position thereon.

In the drawings, 1 is a frame, stand, or table having the legs 2 with flaring feet 3 and flanges 4. The rear end of this table terminates in a tenon 5, inserted or socketed in a mortise 6 in a post 7. Said post has at its top a wheel or pulley 8 and at its side a pulley 9, a rope 10 passing through or over both said pulleys and having attached to its end a weight 11. Said pulleys 8 and 9 are supported upon the post 7 by the brackets 12, having the cross-pintles 13, said pulley or wheel 9 being located approximately opposite and preferably slightly above the flaring portion 14 of the cylinder 15, hereinafter described.

The cylinder 15 rests upon and preferably revolves with the knee-board 16. Said knee-board 16 has an opening 17 piercing the same, through which passes a spindle 18, having an enlarged portion 19 at its base forming the shoulders 20, which are encircled by the collar 21, fitting into the countersink 22. The knee-board 16 rests upon said shoulders 20 and upon said collar 21 and revolves thereon around the upper portion of said spindle 18. The spindle 18 projects upwardly into the opening 23 in the solid cylinder 15. If said cylinder were formed hollow, however, instead of solid, it would be necessary to add bearings at the top and bottom of said cylinder 15 for said spindle 18.

In using my device the head of the barrel 24 is laid and preferably fastened upon the end

25 of the cylinder 15. The first of the staves 26 is then brought into a position where the head 24 enters the groove 27 in said stave. The rope 10 is fastened to the knee-board 16 by the staple or ring 28, adjacent to the bottom of the flaring portion 14 of the cylinder 15. The workman places the first stave in position upright against the cylinder 15, near the place where the rope 10 is attached to the knee-board 16, and while holding same in position, with the head 24 entering the groove 27 of the stave 26, turns the knee-board 16, bearing the cylinder 15, by his knee, which causes the rope 10 partially to wind around the cylinder 15 at least to the extent necessary to support the lower end of the stave 26 thus placed in position, so that while its top is held by the head 24, fitting into the groove 27 therein, its bottom is held in position by the rope 10 pressing thereagainst and forming in appearance a segment of a circle between the staple or ring 28 and the pulley 9. The weight 11 aids in wrapping the rope around the succession of staves placed around the cylinder 15. When the workman places the next stave in position upright against the cylinder 15 and adjoining the head 24, he gives a further turn to the knee-board, which winds the cord or rope 10 a little farther around the cylinder, so as to hold the second stave. He follows this procedure until the rope is wrapped entirely around the cylinder 15, holding in place a succession of staves, which completely envelop the cylinder 15 and have fitted into their grooves the entire circumference of the head 24. The cylinder 15 is provided with a flaring flange 14 at its bottom in order to form a support or portion against which the lower part of the staves can rest, the tendency of the staves being to spread toward the bottom not only because they are bowed or bent, but also on account of the shape of the grooves in their opposite ends in which the head 24 fits.

After the staves are in position as above described the hoops of the keg or barrel can be forced down from the top in the usual manner, the staves being held firmly in place around the head 24 by the rope 10, which can be easily given as many turns around the assembled staves as is desired.

It is obvious that many minor changes may

be made in the form and arrangement of the several parts without departing from the nature and spirit of my invention.

Having thus described my said invention, 5 what I claim, and desire to secure by Letters Patent, is—

10 In a stave-setter, the combination of a cylinder having a plain top, its diameter at its bottom being larger than at its top, a central socket therein, a knee-board with which said cylinder rotates, a perforation through said knee-board, a spindle passing through said perforation and into said socket, shoulders

upon the lower portion of said spindle, a collar encircling said shoulders, a support for 15 said collar and said spindle containing a countersink for said collar, a post, pulleys on said post, a rope, and a weight on said rope, substantially as described.

In testimony whereof I have affixed my sig- 20 nature, in presence of two witnesses, this 17th day of July, 1902.

JOHN WARREN JONES.

Witnesses:

THOS. H. COBBS,

JOHN E. BISHOP.