(No Model.)

E. M. REESE.

WOODEN VESSEL.

No. 486,737. Patented Nov. 22, 1892.

Fig. 1.

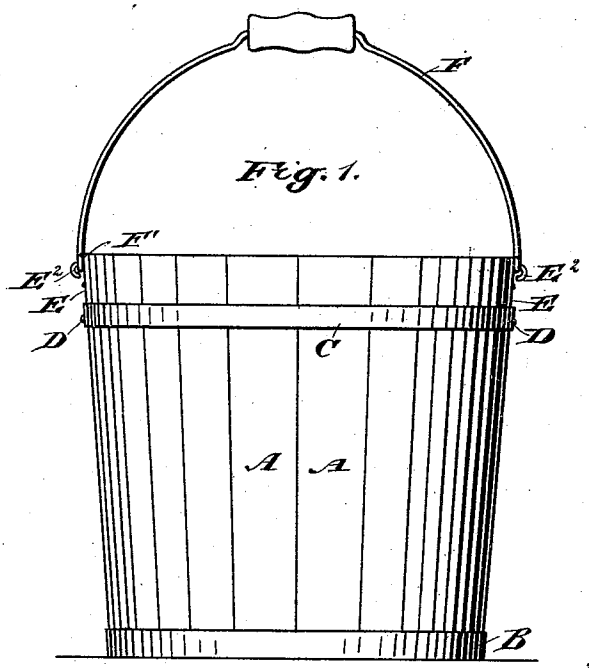


Fig. 4

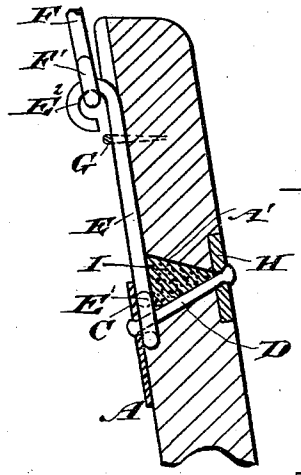


Fig. 5

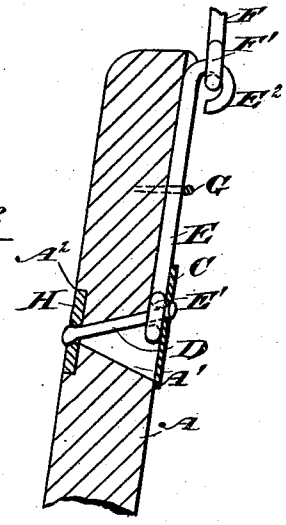


Fig. 2

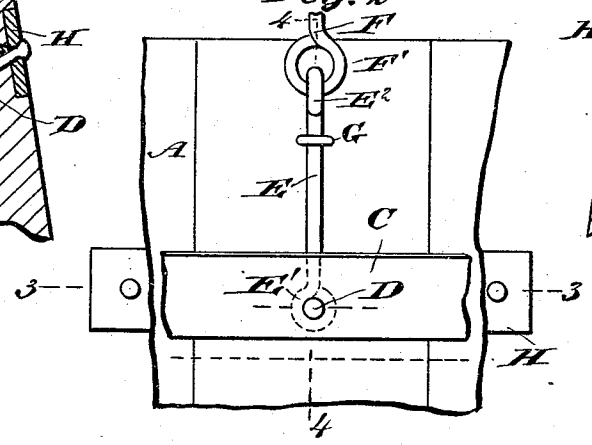
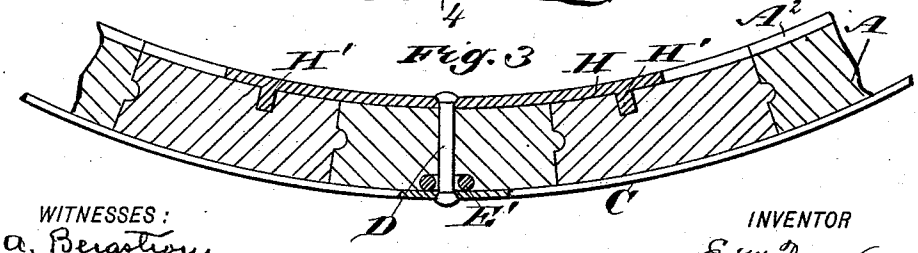


Fig. 3



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UNITED STATES PATENT OFFICE.

EDWIN M. REESE, OF SANTA PAULA, CALIFORNIA.

WOODEN VESSEL.

SPECIFICATION forming part of Letters Patent No. 486,737, dated November 22, 1892.

Application filed March 31, 1892. Serial No. 427,194. (No model.)

To all whom it may concern:

Be it known that I, EDWIN M. REESE, of Santa Paula, in the county of Ventura and State of California, have invented a new and Improved Wooden Vessel, of which the following is a full, clear, and exact description.

The invention relates to wooden buckets, tubs, pails, and other similar household vessels; and its object is to provide certain new and useful improvements whereby the staves of the vessel are prevented from warping in dry seasons and the staves are securely held in place and tightened when carrying a heavy load in the vessel.

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

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 all the figures.

Figure 1 is a side elevation of the improvement. Fig. 2 is an enlarged side elevation of part of the improvement. Fig. 3 is a sectional plan view of the same on the line 3 3 of Fig. 2. Fig. 4 is a transverse section of the same on the line 4 4 of Fig. 2, and Fig. 5 is a similar view of the same in a different position.

The improved vessel is provided with the usual staves A, held in place on the bottom by the lower hoop B and near their upper ends by the hoop C. On the latter are held transversely-extending movable rivets or bolts D, usually two in number and located diametrically opposite each other. Each of the rivets D is engaged at the inside of the hoop C by an eye E′ of an arm E, formed at its upper end with a hook E^2, engaged by the eye F′ of the bail F. Thus the ends of the latter engage the two hooks E^2 of the two rods E, connected with the two rivets D, above described, and shown in Fig. 1.

Each rod E is mounted to slide vertically in a suitable groove arranged in the respective stave A, and is held in place therein by a staple G, which also forms part of the bearing for the said rod E. The rivet D extends through an opening A′, formed in a stave A, and engages at its inner end a brace or segmental hoop H, fitted into a recess A^2, formed on the inside of several adjoining staves A, as is plainly shown in Fig. 3.

Each of the braces or segmental hoops H is formed with outwardly-extending pins H′, arranged near their ends and engaging corresponding recesses in the staves adjacent to the one through which passes the rivet D, as is plainly understood by reference to Fig. 3. When the wooden vessel is manufactured, the upper hoop C is located somewhat below the inner braces H, as plainly shown in Fig. 4, the connecting-rivet D then extending in an inclined position—that is, from the upper hoop C inward and upward, as illustrated in the said figure.

Now, in order to temporarily close up the opening A′, through which passes the rivet D, the said opening is filled with asphaltum, putty, or other suitable material I. Instead of using braces or segmental hoops H to connect with the two rivets D, a complete hoop may be employed located in the circular recess A^2 on the inside of the staves and carrying the two rivets D. When the staves A dry up or the operator fills the wooden vessel with a heavy load and takes hold of the bail F, then the pull exerted by the bail F on the arms E causes the latter to slide upward, thus imparting an upward swinging motion to the rivets or pins D, thereby moving the hoop C in an upward direction, thus closing the upper ends of the staves, thereby tightening the same to take up any shrinkage that may have been in the staves. Thus when the load is very heavy and the wooden vessel is carried by the bail the latter causes an upward moving of the hoop C, as above described, thereby holding the several staves securely together. When all the shrinkage has finally been taken up, then the rivets D extend from the braces H upward and outward, as plainly illustrated in Fig. 5, the hoop C then being located above the braces, as illustrated in the said figure.

A wooden vessel constructed in this manner is very durable, and by the inside braces or hoops H binds, in connection with the outer hoop C, the several staves securely in place.

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

1. A wooden vessel provided with trans-

verse openings through its sides, widening toward their outer ends in the direction of the depth of the vessel, a hoop or band encircling the vessel adjacent to said openings, and movable rivets or pins headed at their inner ends within the vessel and engaging at their outer ends, said hoop or band preventing it from dropping off of the vessel and permitting it to be drawn thereon as the vessel shrinks, substantially as set forth.

2. A wooden vessel having opposite transverse openings through it, the outer ends of the openings widening in the direction of the depth of the vessel, movable headed pins or rivets extending through the said openings and engaging at their outer ends one of the vessel hoops or bands, and bail connections for said pins, substantially as set forth.

3. A wooden vessel having opposite transverse openings widening at their outer ends in the direction of the depth of the vessel, braces within the vessel and apertured in register with said openings, a band or hoop encircling the vessel and having apertures registering with the wide ends of the openings, and the movable pins or rivets extending through the braces and hoop and headed at their ends, substantially as set forth.

4. A wooden vessel having opposite transverse openings widened vertically toward their outer ends, braces within the vessel having apertures registering with said openings, a band or hoop encircling the vessel and having apertures registering with the wide ends of the openings, movable rivets or pins extending through said braces and hoops and headed at their ends, the vertically-movable bail-arms having eyes at their lower ends receiving the said rivets or pins behind the hoop or band, substantially as set forth.

EDWIN M. REESE.

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