

(No Model.)

G. W. JACKSON.  
TAP AND BUSHING FOR BARRELS.

No. 409,288.

Patented Aug. 20, 1889.

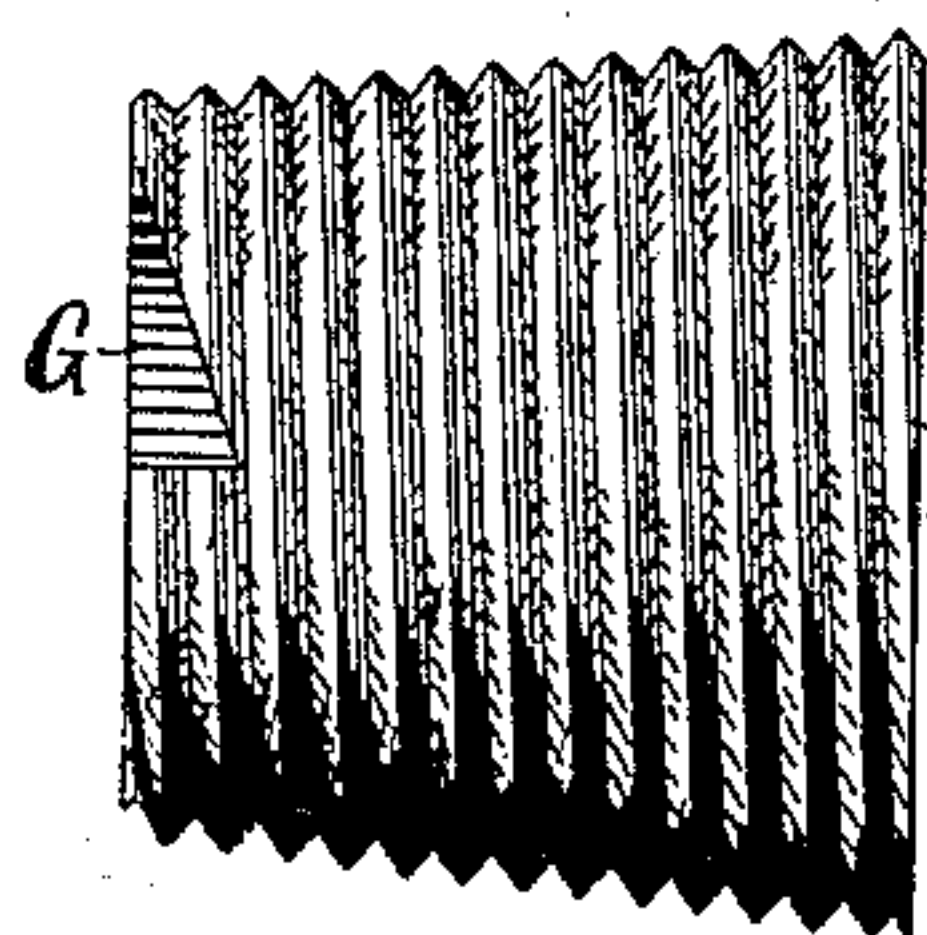
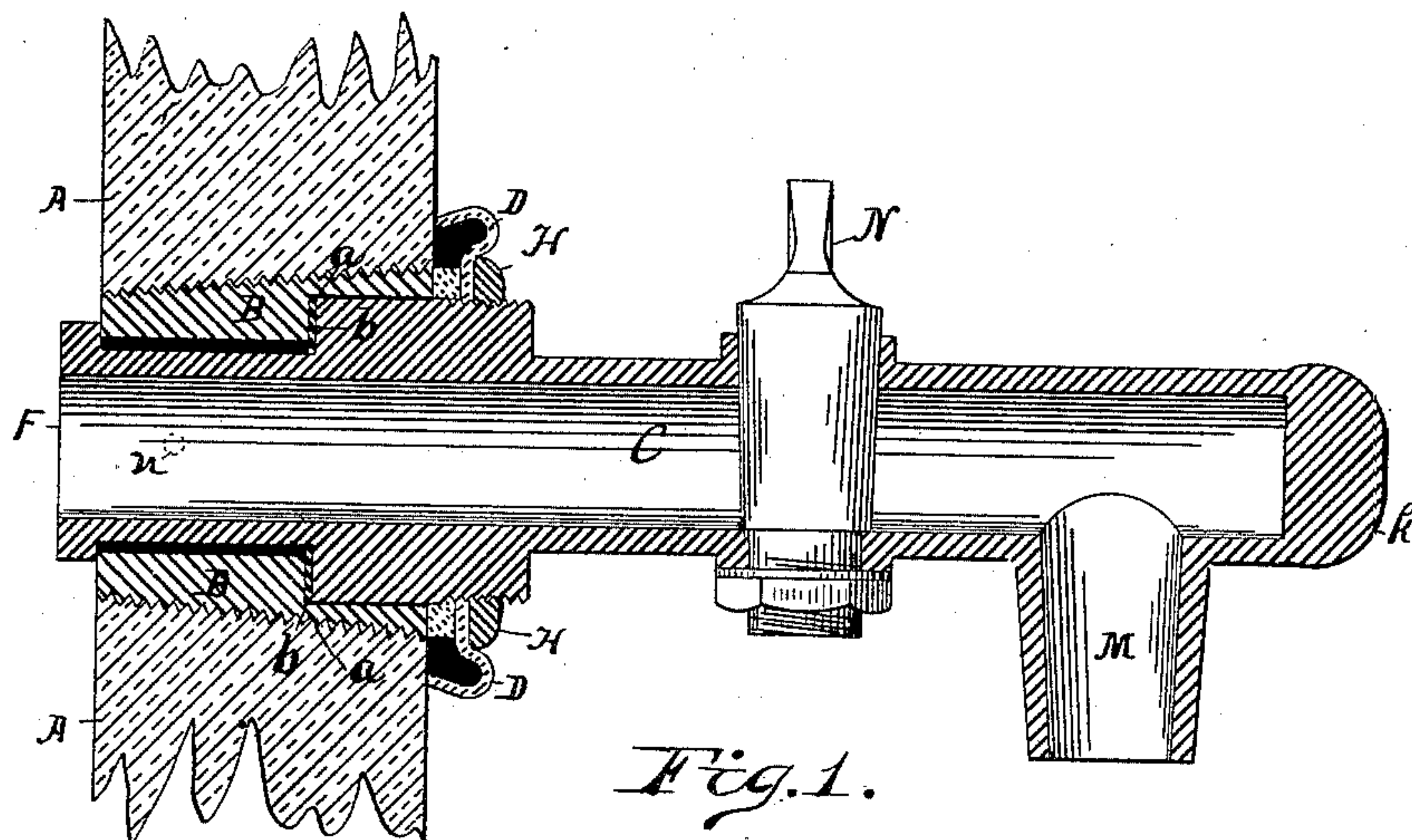


Fig. 2.

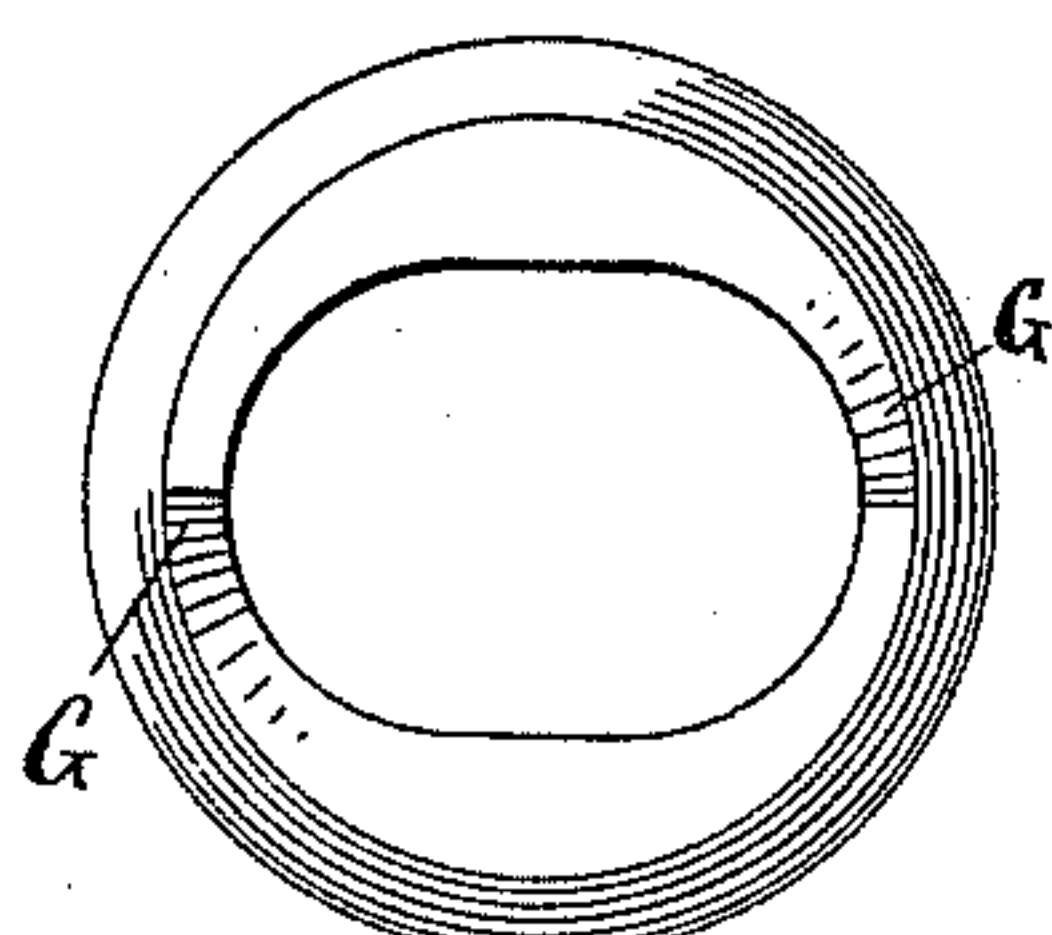


Fig. 3.

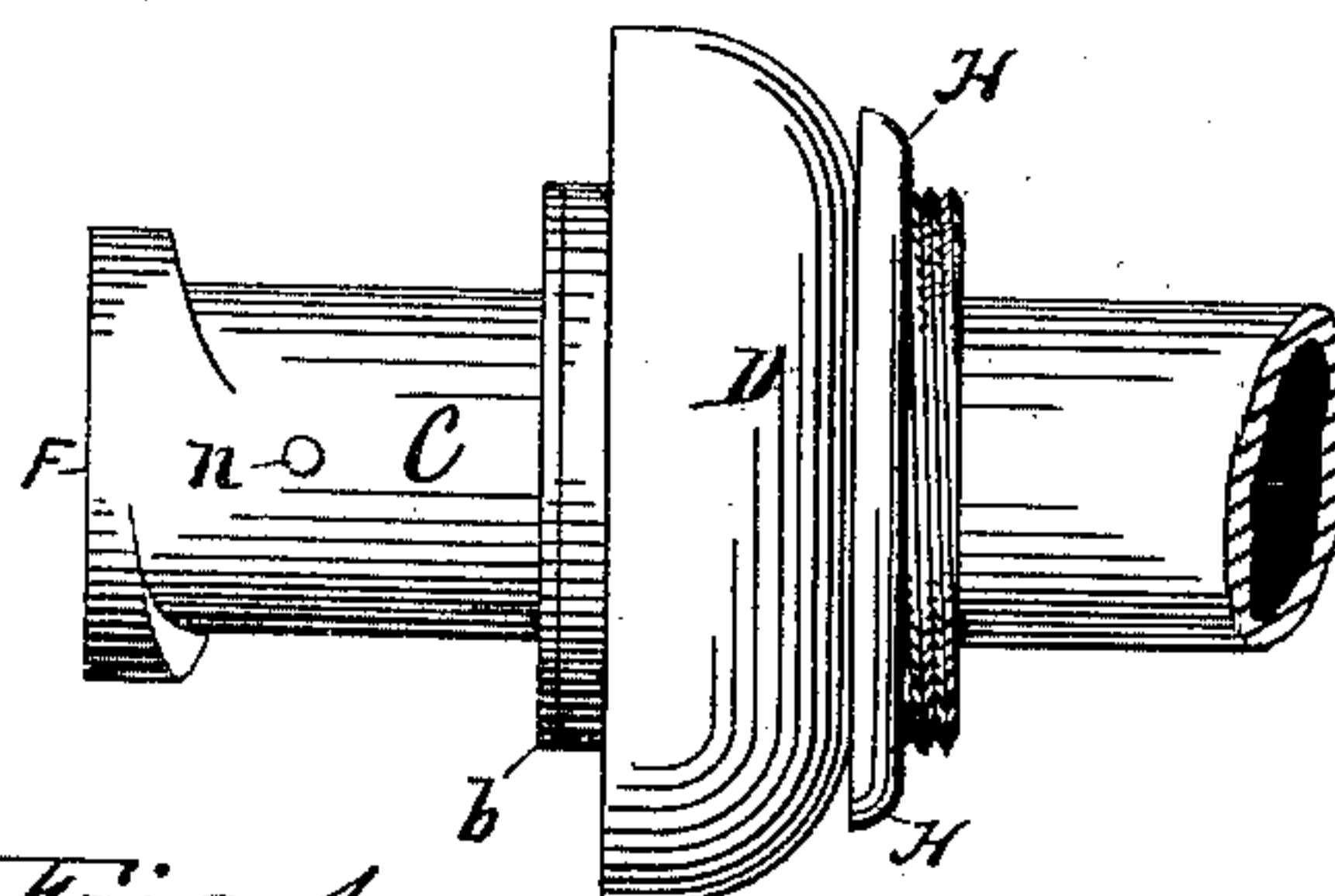


Fig. 4.

WITNESSES:

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# UNITED STATES PATENT OFFICE.

GEORGE W. JACKSON, OF PHILADELPHIA, PENNSYLVANIA.

## TAP AND BUSHING FOR BARRELS.

SPECIFICATION forming part of Letters Patent No. 409,288, dated August 20, 1889.

Application filed March 9, 1887. Serial No. 230,172. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE W. JACKSON, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented a new and useful Tap and Bushing for Barrels, of which the following is a specification.

My invention relates to improvements in taps and bushings for barrels, especially adapted for use in barrels containing beer, ale, and other liquids, in which a bushing is inserted in the barrel and the tap is inserted in this bushing; and the objects of my improvement are, first, to provide an easy means for tapping barrels; second, to prevent leakage or the escape of the liquid while the barrel is tapping; third, to enable a single barrel to be more often refilled without repairing the head or other part where the tap is inserted. I attain these objects by the apparatus illustrated in the accompanying drawings, in which—

Figure 1 is a vertical sectional view of the barrel-head with the tap inserted. Fig. 2 is a side view of the bushing. Fig. 3 is an end view of the bushing, showing the inside end. Fig. 4 is a side view of the tap, showing the inside locking-joint, the cap to prevent escape of the liquid when tapping. Fig. 5 is a vertical sectional view of the tap, showing modifications by which the improved tap and bushing may be used when the liquid is forced out under pressure through a pipe.

Similar letters refer to similar parts throughout the several views.

The bushing B, made of iron or other suitable material and threaded on the outside, is screwed into the head of the barrel A, (which is also threaded,) and is flush, or nearly so, with the surface of the barrel. The interior of the bushing B is elliptical in cross-section, the lower end of said interior being of less cross-section than the upper end, and from a point near the top of said bushing the interior surface is cut away to a greater extent to the top of said bushing, thus forming the projection *a* in the interior of the bushing. When the barrel is filled, a cork or bung of other suitable material is inserted in the

bushing B. A portion of the inner end of the bushing B projects above the other portion, forming a locking-joint G.

The tap C is made of brass, wood, or other suitable material, having, as in Fig. 1, a spigot M and turn-cock N.

The tap C is of such shape that it will pass through and turn in the bushing, and yet, as nearly as such conditions will allow, conform to the interior of the bushing. The end of this tap has a projection F, which is of such shape that it conforms to the locking-joint G of the bushing. The projection F in cross-section is an ellipse, having its major and minor axes of the same length as the major and minor axes of the cross-section of the interior of the bushing B. The tap C, except the projection F, is preferably cylindrical in shape, and therefore a circle in cross-section. The diameter of this circle is equal in length to the minor axis of the ellipse, which is the cross-section of the interior of the bushing B.

When the tap C is inserted in the bushing B, the major and minor axes of the elliptical cross-section of the projection F, respectively, coincide with the major and minor axes of the elliptical cross-section of the interior of the bushing B. When the tap is inserted, the axes of the circular cross-section of cylindrical part of tap C coincide with the major and minor axes of the elliptical cross-section of the interior of the bushing B, the diameters of course being somewhat shorter than the major axis. When the tap C is inserted and turned in order to lock it, the major axis of the elliptical cross-section of the projection F will coincide with the minor axis of the elliptical cross-section of the interior of the bushing B, and vice versa. At the projection *a* is a washer of leather or other suitable material. The collar H may be made with a thread inside, and may be screwed up in order to fix the tap more firmly in the bushing, or may be made rigid with the tap.

In Fig. 1 the end *k* of the tap is solid and the liquid flows out the spigot M, and its flow is regulated by means of the stop-cock N.

The cap D (shown in Fig. 4) is made of rubber or other suitable material, and its use prevents the liquid from leaking or spurting out when the tap is inserted.

5 Having now fully described my invention, what I claim, and desire to protect by Letters Patent, is—

In combination, a bushing B, an internal

shoulder *a* in said bushing, a locking-joint G at the end of said bushing, a tap C, a projec- 10  
tion F on said tap, a collar H, and a cap D.

GEORGE W. JACKSON.

Witnesses:

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