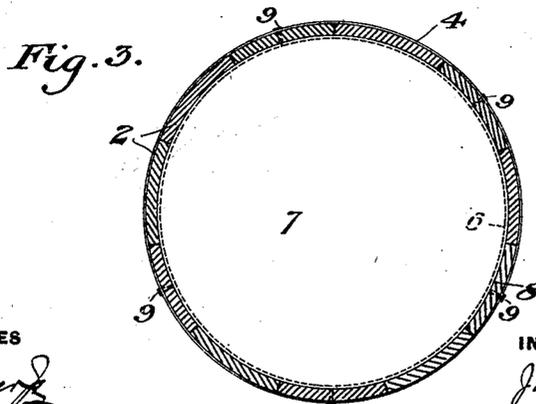
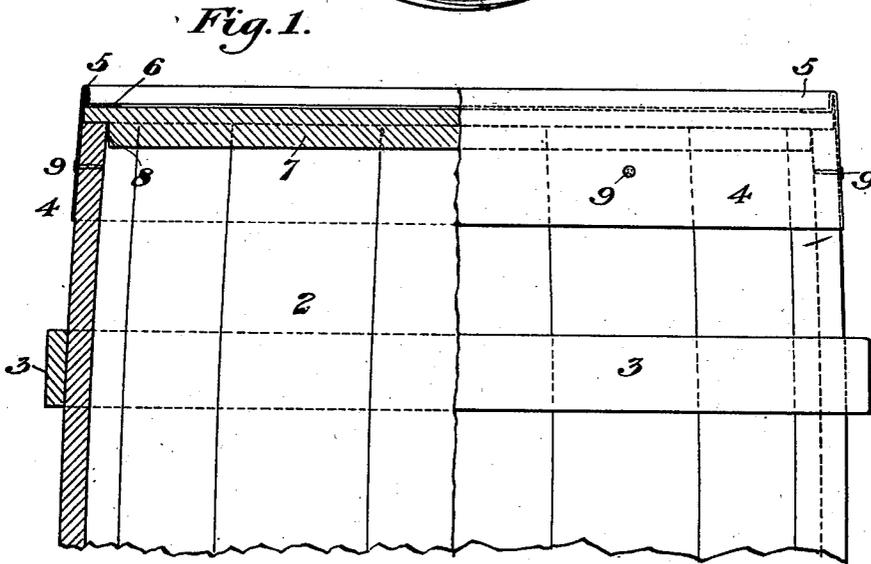
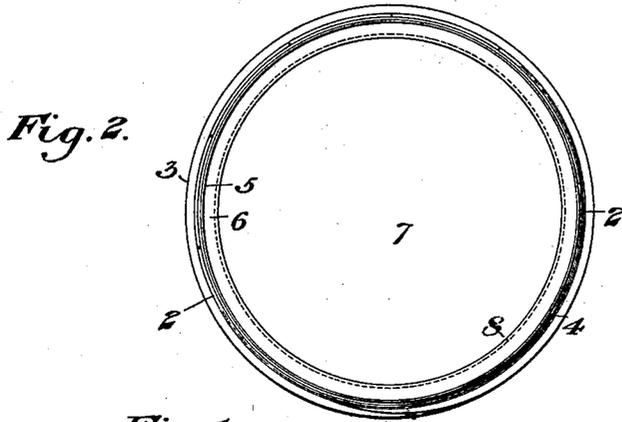


No. 673,309.

Patented Apr. 30, 1901.

J. V. WALSH.
CLOSURE FOR BARRELS.
(Application filed Jan. 2, 1901.)

(No Model.)



WITNESSES
A. Comer
J. M. Corium

INVENTOR
James V. Walsh
by Baker & Baker
attys.

UNITED STATES PATENT OFFICE.

JAMES V. WALSH, OF PITTSBURG, PENNSYLVANIA.

CLOSURE FOR BARRELS.

SPECIFICATION forming part of Letters Patent No. 673,309, dated April 30, 1901.

Application filed January 2, 1901. Serial No. 41,775. (No model.)

To all whom it may concern:

Be it known that I, JAMES V. WALSH, of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Closures for Barrels, Kegs, &c., of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a side elevation, partly in section, showing the end portion of a barrel provided with my improved end closure; and Figs. 2 and 3 are respectively an end elevation and a cross-section of the same on a smaller scale.

My invention relates to the closing of the ends of barrels, kegs, &c., and is designed to provide an improved header and end hoop therefor, together with an improved construction of head to coact with the header.

In the drawings I show a barrel as formed of the usual staves 2, having intermediate wooden hoops 3 surrounding them. At the end of the barrel in place of the usual wooden end hoop I provide a metallic band 4, having a reversely-bent portion 5 and an inwardly-projecting annular flange 6. The head 7 of the barrel is rabbeted to form an annular groove 8, which extends around the lower portion of the edge of the head and which is entered by the ends of the staves, as shown in Fig. 1.

In closing up the barrel or keg end the head is slipped into place, and the metallic band being then pushed on is secured by nails 9 or other suitable securing devices.

The advantages of my invention result from the use of the band with the inwardly-projecting portion, which bears upon the outer face of the head and secures it in place, and, further, from the rabbeted head in giving an inner shoulder, against which the stave ends rest, thus preventing their being bent inwardly. The chamfering and crozing of the

barrel are done away with, as well as the head-lining and batting. The breaking of the usual wooden end hoops and the consequent deterioration of the barrel are avoided, while the end of the barrel is strengthened and stiffened.

The metallic-band portion may be used with an ordinary head, though I prefer to use the head shown, and many other changes may be made in the form and arrangement of the parts without departing from my invention.

I claim—

1. A barrel or keg having a head fitting upon the end of the staves, and a continuous end hoop extending outwardly beyond the head and having an inward extension bearing upon said head; substantially as described.

2. A barrel or keg having a head resting upon the ends of the staves, and a continuous end hoop extending beyond the head to provide a projecting lip and having an inward lateral extension bearing upon said head; substantially as described.

3. A barrel or keg having a head resting on the ends of the staves, and an end hoop with a two-ply reversely-bent extension projecting beyond the head, and having an intermediate inwardly-projecting flange bearing upon the head around substantially its entire circumference; substantially as described.

4. A barrel or keg having a rabbeted head fitting upon the ends of its staves, and arranged to prevent the staves from bending inwardly, and an end hoop extending outwardly beyond the plane of the head and having an inwardly-projecting flange bearing upon it; substantially as described.

In testimony whereof I have hereunto set my hand.

JAMES V. WALSH.

Witnesses:

C. P. BYRNES,
H. M. CORWIN.