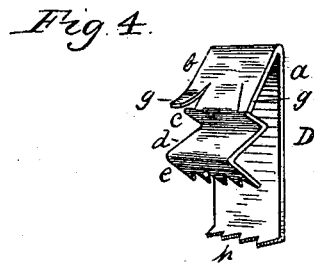
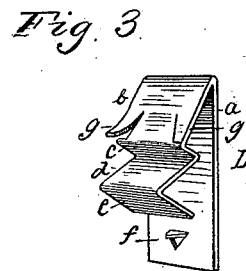
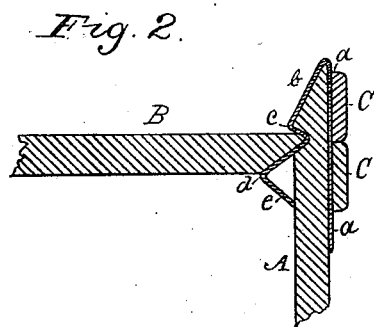
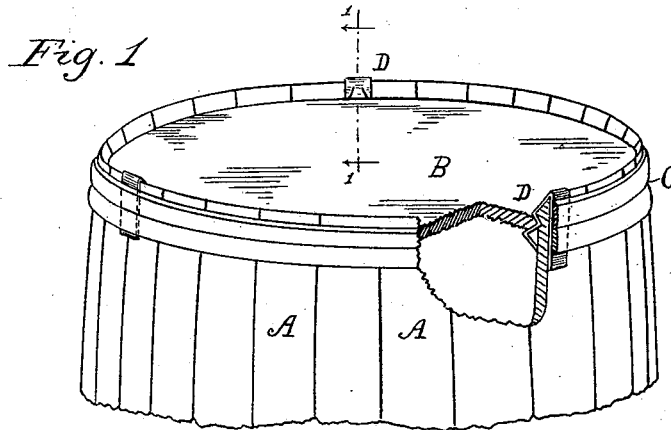


No. 648,012.

Patented Apr. 24, 1900.

J. E. WILTON.
BARREL CHIME CLIP.
(Application filed July 26, 1899.)

(No Model.)



Witnesses
T. L. Daniel.
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Inventor
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UNITED STATES PATENT OFFICE.

JAMES E. WILTON, OF MINNEAPOLIS, MINNESOTA, ASSIGNOR OF ONE-THIRD
TO ALDRICE C. MENARD, OF SAME PLACE.

BARREL-CHIME CLIP.

SPECIFICATION forming part of Letters Patent No. 648,012, dated April 24, 1900.

Application filed July 26, 1899. Serial No. 725,144. (No model.)

To all whom it may concern:

Be it known that I, JAMES E. WILTON, a citizen of the United States, residing at Minneapolis, in the county of Hennepin and State of Minnesota, have invented a new and useful Improvement in Barrel-Chime Clips, of which the following is a specification.

My invention relates to cooperage, and has for its object the production of a device for holding the heads of barrels securely in place; and to this end it consists of a metallic "clip" fashioned as herein designed, adapted to overlap the end of the barrel-staves and to clasp the periphery of the barrel-heads, thereby holding them in place within the grooves formed in the staves for that purpose.

In light barrels designed for packing or shipping cases for dry goods—that is to say, in all barrels not designed to hold liquids—the staves are thin and the grooves therein are shallow and will not hold the heads securely, and the heads are often forced outward and the contents of the barrels are lost or damaged. To obviate this difficulty, a "lining" is tacked to the inner surfaces of the staves outside the heads, which prevents the heads from being forced outward, thereby overcoming the difficulty in part; and it is the purpose of my invention to prevent the barrel-heads from being forced inward as well as outward.

In the accompanying drawings, Figure 1 is a perspective of a section of a barrel, showing the application of my clip. Fig. 2 is a section of Fig. 1, taken on the line 2 2. Fig. 3 is a perspective of my clip detached, and Fig. 4 the same of a modified form.

Similar letters refer to similar parts.

A represents the staves of a barrel; B, the head thereof; C, the hoops, and D the clip. The staves A and the head B are not unlike those commonly used and hence need no description herein.

The clip D consists of a strip of sheet metal (galvanized iron being adapted to the purpose) fashioned substantially as herein shown; having a vertical portion *a*, adapted to rest against the outer surface of the staves A and to be covered and held in place by the hoops C; an inwardly-declined portion *b*, conformable to the configuration of the staves A; an outwardly-declined portion *c*, conformable to

the configuration of the groove of the stave; a second inwardly-declined portion *d*, conformable to the configuration of the periphery of the head B, and a second outwardly-declined portion *e*, extending to and bearing upon the inner surface of the staves A. The first-mentioned vertical portion *a* is clipped to form an inwardly-projecting spur *f*, adapted to pierce the outer surface of the stave A, thereby holding the clip in place. The first-mentioned declined portion *b* is slashed, as shown, thereby forming spurs adapted to pierce the upper surface of the head B, thereby preventing it from being forced outward, and the last-named declined portion *e* may be notched to form the teeth *h*, the purposes of which will hereinafter be set forth.

The application and effect of my device are as follows: The clip is placed in position over the end of the stave, the head put in place and the upper or end hoops driven on, as shown in Fig. 2, and the spurs *g* bent inward, as shown in Figs. 3 and 4, over the edge of the head to hold it in place or to prevent its being forced outward, while the inwardly-declined portion *d* prevents the same from being forced inward by reason of the outwardly-declined portion *e* contacting with and operating as a brace against the inner surface of the staves A, the lower edge or teeth *h* thereon cutting into the wood.

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

1. The combination with a barrel, a barrel-head, and barrel-hoops, of a barrel-chime clip, fashioned substantially as herein shown, embodying a vertical portion adapted to rest between the exterior surface of the said barrel and the interior surface of the said hoops, and a horizontally-corrugated portion adapted to fit into the croze of the said barrel and to underlap and support the circumferential edge of the said barrel-head as shown, and for the purpose specified.

2. As an article of manufacture, a barrel-clip, fashioned substantially as herein shown, having an outer vertical portion adapted to rest between the exterior surface of the stave and the interior surface of the outer or end hoops, and a corrugated portion adapted to

overlap the end and rest between the interior surface of the staves and the circumferential edge of the head, as shown, and for the purposes specified.

5 3. As an article of manufacture, a barrel-clip, fashioned substantially as herein shown having an outer vertical portion adapted to rest between the exterior surface of the stave and the interior surface of the outer or end
10 hoops, and a corrugated portion adapted to overlap the end, and rest between the interior

surface of the staves and the circumferential edge of the head, the upper declined portion of which is provided with the spurs *g* and the lower declined portion of which is provided 15 with the teeth *h*, as shown, and for the purposes specified.

JAMES E. WILTON.

Witnesses:

E. C. MORSE,
JOHN GAINES.