C. ISBELL & E. C. TAYLOR.

WOODEN COVERS FOR VESSELS.

No. 195,012. Patented Sept. 11, 1877.

Fig. 1.

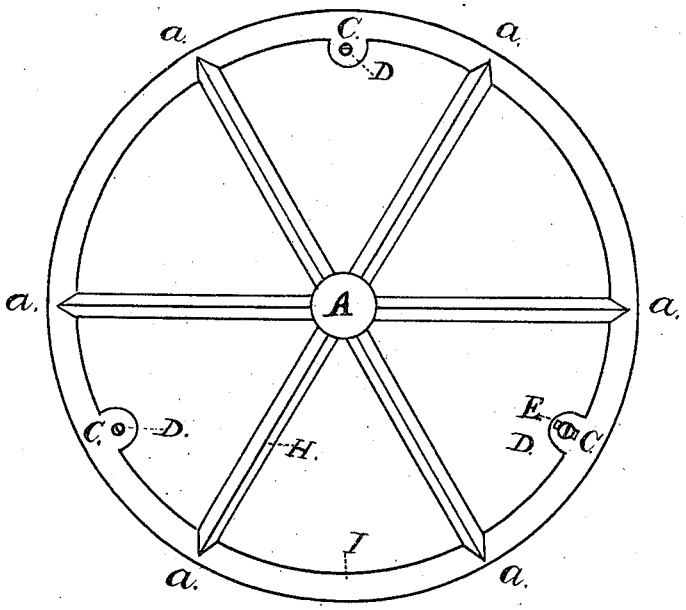
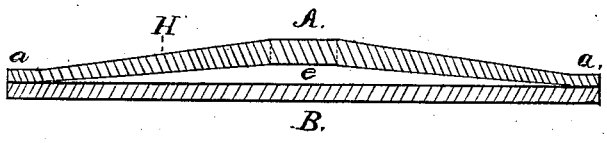


Fig. 2.



Attest
Dorr L. Smith
Joseph E. Eggleston.

Inventors.
Ceylon Isbell
Ellamum C. Taylor
per Jno. W. Suggett
atty

UNITED STATES PATENT OFFICE.

CEYLON ISBELL AND ELHANAN C. TAYLOR, OF LITTLE YORK, NEW YORK.

IMPROVEMENT IN WOODEN COVERS FOR VESSELS.

Specification forming part of Letters Patent No. **195,012**, dated September 11, 1877; application filed July 19, 1877.

To all whom it may concern:

Be it known that we, CEYLON ISBELL and ELHANAN C. TAYLOR, of Little York, in the county of Cortland and State of New York, have invented a new and useful Improvement on Ordinary Wooden Covers for Vessels, which improvement is fully set forth in the following specification, reference being always had to the accompanying drawings and letters of reference marked thereon.

The object of our invention is to make the ordinary wooden covers or lids of vessels retain their original shape and form, so as to make and maintain a tight connection between the cover and the vessel, thereby preventing all leakage.

Our invention consists in attaching to an ordinary wooden cover or lid for vessels a metallic frame-work so made as to permit and allow for the expansion and contraction of the wood of the said cover, and at the same time keep the said cover in its proper form, so that it will fit tightly on the vessel.

Our invention relates to all classes and forms of wooden covers, as covers for churns, butter-pails, and packages, oyster-pails, and all other vessels where a wooden cover is preferred or desired.

In the drawings like letters on the two figures indicate similar parts.

Figure 1 is a plain top view of the metallic frame-work and wooden cover combined. Fig. 2 is a side view of a section taken through the center of the metallic and wooden cover.

The said metallic frame-work is made and constructed as follows:

In Fig. 1, I is the rim of the metallic frame-work, which is in the form of a wheel, or may be in any other form to suit a different-shaped cover. A is the hub or center, from which the metallic spokes radiate, one being shown at H. The number of the spokes may be increased or decreased according to the strength required. These spokes terminate in and are substantially fastened to the rim I, as shown at *a a a*, &c.

On the inner side of the rim I project, at equal distances from each other, three ears, C, C, and C, as shown in Fig. 1. In one of these ears is made an oblong slot, E, so that the screw D can slide therein. The said screw D and the other similar screws, D and D, in the other ears, are for the purpose of fastening the wooden part B, Fig. 2, to the said metallic frame-work.

The object of the slot E is to allow for the swelling and shrinking of the wooden part. The said metallic frame is so placed on the wooden part of the cover that the said slot runs crosswise of the grain of the wood. It will thus be seen that the said slot E, by permitting the screw D to slide therein, prevents the cover from warping, and keeps the said cover in its proper form.

The under side of the hub A, said spokes, and said ears of the said metallic frame-work are not made in the same plane as the under side of the rim I, as shown in Fig. 2, but are raised a little distance above the same, as shown at *e*, Fig. 2, so that the rim I only rests on the wooden part of the cover. The object of this construction is to bring the pressure applied on the hub A to bear equally on the said rim I, thus producing a perfectly-tight joint all around the under side near the edge of the said wooden cover.

This metallic frame-work we usually make of cast-iron, (although any other metallic substance strong enough is as good as cast-iron,) the whole of the same being cast in one piece.

In the old form of wooden cover the cover was kept from warping by a piece of wood or metal being placed crosswise of the grain of the wood; but in this form the pressure applied to keep the cover down and on was not brought to bear directly on the rim or edges of the cover only, and consequently the cover would not fit tight; but with the said metallic frame-work the pressure is brought to bear directly on the rim or edges where desired, and thus a tight joint is made.

Having thus described our invention, what we claim, and desire to secure by Letters Patent, is—

The herein-described metallic frame-work composed of the rim I, hub A, spokes, as shown and described, ears C, C, and C, one or more of them having slot E, attached to an ordinary wooden cover for vessels, substantially in the manner and for the purpose herein described, shown, and specified.

CEYLON ISBELL.
ELHANAN C. TAYLOR.

Witnesses:
JOHN W. SUGGETT,
WM. D. TUTTLE.