J. L. THOMSON.

Paper-Barrel.

No. 161,075. Patented March 23, 1875.

Fig. 1.

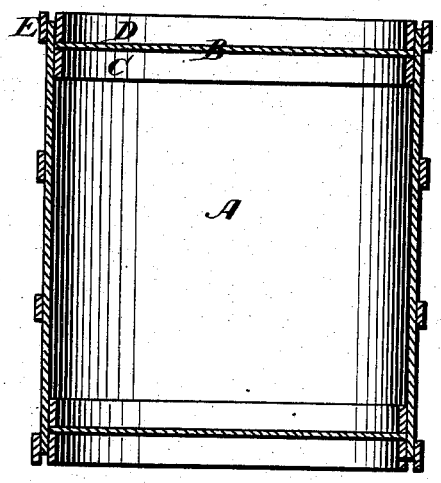
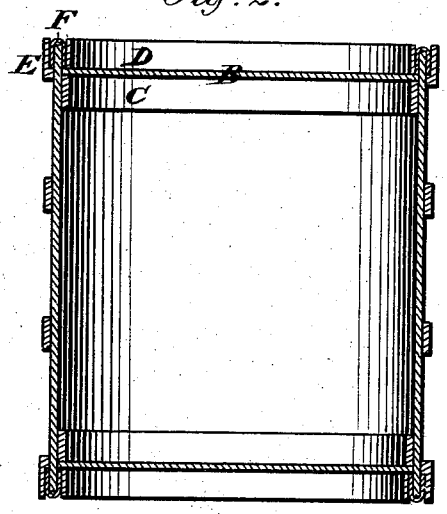


Fig. 2.



Witnesses.

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Inventor
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UNITED STATES PATENT OFFICE.

JUDSON L. THOMSON, OF BELOIT, WISCONSIN, ASSIGNOR OF ONE-HALF HIS RIGHT TO FRANCIS N. DAVIS, OF SAME PLACE.

IMPROVEMENT IN PAPER BARRELS.

Specification forming part of Letters Patent No. **161,075**, dated March 23, 1875; application filed May 8, 1874.

To all whom it may concern:

Be it known that I, JUDSON L. THOMSON, of Beloit, in the county of Rock and State of Wisconsin, have invented certain new and useful Improvements in Paper Barrels; and I do hereby declare the following to be a full and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a vertical section of a barrel, showing the application of my improvements; and Fig. 2 is a modification of the same.

Similar letters of reference in the accompanying drawings denote the same parts.

My invention relates to that class of barrels, casks, kegs, &c., which are formed of paper or heavy paper-board; and has for its object to improve the construction of the same, and to strengthen and protect the chines, as hereinafter more fully set forth.

In the accompanying drawings, A is a barrel, composed of strong paper or compressed paper-board of the requisite thickness; and B is the head, formed of wood.

In Figs. 1 and 2 the heads are let into the ends of the barrel, so as to rest against the interior hoop C. For the purpose of holding the head in place I apply the hoop D to the interior circumference of the chines outside of the head, and secure them to the barrel by nails, screws, or other suitable means; and for the purpose of protecting the outer edges of the chines, I apply the hoops E thereto by similar means. Both of these hoops D and E are made of wood. If both hoops were made of paper or hoop-iron, or if only one hoop composed of either of these materials were employed, a slight blow upon the edge would bend them out of shape and destroy the chine of the barrel, because such chine is composed of paper and is easily abraded.

By using two wooden hoops, however, the chines are protected against this danger, and are materially strengthened and supported.

To prevent the edges of the chines from coming in contact with the surface upon which the barrel rests, I extend the hoops beyond such edges, as shown in Figs. 1 and 2. By this means, if the barrel should stand in a damp place, its fibrous edge, being above the damp surface, would not absorb the moisture by capillary attraction.

As a still further protection to the edges, I sometimes bind them with paper, metal, or cloth F clamped between the hoops D E, as shown in Fig. 2.

For the purpose of strengthening and hardening the paper hoops, I cover them with sand by any suitable means, and sometimes subject them to pressure between rollers, for the purpose of forcing the sand into them.

In order to give the effect of a bilge to the form of barrel shown herein—that is to say, a barrel of uniform diameter—I make the intermediate hoops H H considerably thicker than the end hoops, as shown in Fig. 6.

By this construction the end hoops are protected from injury if the barrel is thrown down or tripped upon its side, because the thick intermediate hoops first strike the ground and receive the force of the blow or shock.

I claim as my invention—

A paper barrel having wooden heads B B let into the barrel and resting on hoops C C, in combination with wooden hoops D E, both of which project beyond the chine, for the double purpose of protecting the latter from abrasion in handling, and to prevent injury from dampness, substantially as described.

J. L. THOMSON.

Witnesses:
F. N. DAVIS,
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