

J. I. BARD.

Construction of Metallic Casks.

No. 137,590.

Patented April 8, 1873.

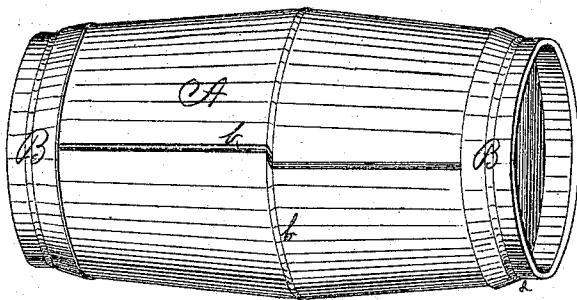


Fig. 1.

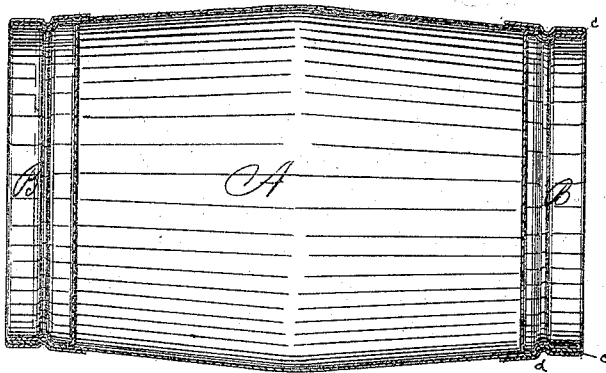


Fig. 2.

WITNESSES.

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# UNITED STATES PATENT OFFICE.

JAMES I. BARD, OF NEW ORLEANS, LOUISIANA.

## IMPROVEMENT IN CONSTRUCTION OF METALLIC CASKS.

Specification forming part of Letters Patent No. **137,590**, dated April 8, 1873; application filed September 17, 1872.

*To all whom it may concern:*

Be it known that I, JAMES I. BARD, of the city of New Orleans, parish of Orleans, and State of Louisiana, have made certain Improvements in the mode of Constructing Metallic Casks or Barrels; and I hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying illustrative drawing constituting a part of this specification.

My improvement relates more especially to a novel and peculiar method of constructing, inserting, and securing the heads within the body of metallic barrels or other similar vessels.

The important object which I accomplish by my improvement is the insertion and securing of the heads to the outer shell of the said metallic barrels, or other equivalent vessels, without the employment of rivets, and therefore without the necessity of perforating either the heads or the shells for the purpose of inserting the said rivets within the said perforations, whereby the said vessels are materially enhanced in cost of production, and are, moreover, weakened by the use of rivets. By dispensing with the rivets which are at the present time universally employed in the construction of metallic barrels, I not only economize in the cost of production but I obtain a barrel of greater uniformity, of better appearance, of greater strength, and with less liability to leakage than those wherein the rivets are employed.

With a view to the better understanding and appreciation of my improvement reference must be made to the drawing whereon the same is shown at—

Figure 1 by a perspective view, and at Fig. 2 by a longitudinal section.

As will be perceived the body or shell of the cask shown at A is constructed with longitudinal and transverse seams *b* in the usual mode of constructing metallic casks. B show the heads, the peculiar construction, mode of insertion, and securing of which constitute the essential features of my improvement. These heads are constructed each of

a single piece of sheet metal cut of the proper circular form and size to make the head desired. The sheet of metal when thus cut is heated and stamped with a die of the proper size to depress that part of the said plate which is to enter within the end of the shell of the vessel to which it is to be fitted. The outer portion of the said plate is then turned down by any proper mechanical appliance so as to fit snugly over and upon the outside of the end of the said barrel-shell. A packing of rubber, felt, or other equivalent material, as shown at *c*, is placed upon the chime or end of the said shell extending downwardly thereon, both upon the inside as well as upon the outside thereof, as far as may in practice be found necessary, whereupon the head already constructed or formed, as above described, is forced over the said packing and upon the shell, as clearly shown in the drawing. A groove or indentation, *d*, is then impressed upon and around the outside end of the barrel so as to form a corresponding ridge upon the opposite side of the chime to the end of bringing into close contact the surfaces of the shell and head, and thereby providing a means of effectually preventing, under any circumstances, the vessel from leaking the fluids therein contained, as well, likewise, as a means of preventing the head from slipping from the shell of the barrel or cask to which it is fitted. For the purposes last mentioned, should it be found essential in the practice of the invention, more grooves than one may be employed, and I wish herewith to reserve the privilege of using one or more, as desired.

Having described my invention, what I desire to secure by Letters Patent is the following:

As an improvement in the construction of metallic casks, barrels, or other similar and equivalent vessels, the metallic head B, when constructed and secured to the shells of said vessels, substantially as described, for the purposes set forth.

Witnesses:

H. N. JENKINS,  
J. C. HUBBELL.

JAS. I. BARD.