J. Merrill,

Cask.

No. 55,137. Patented May 29, 1866.

Fig: 1.

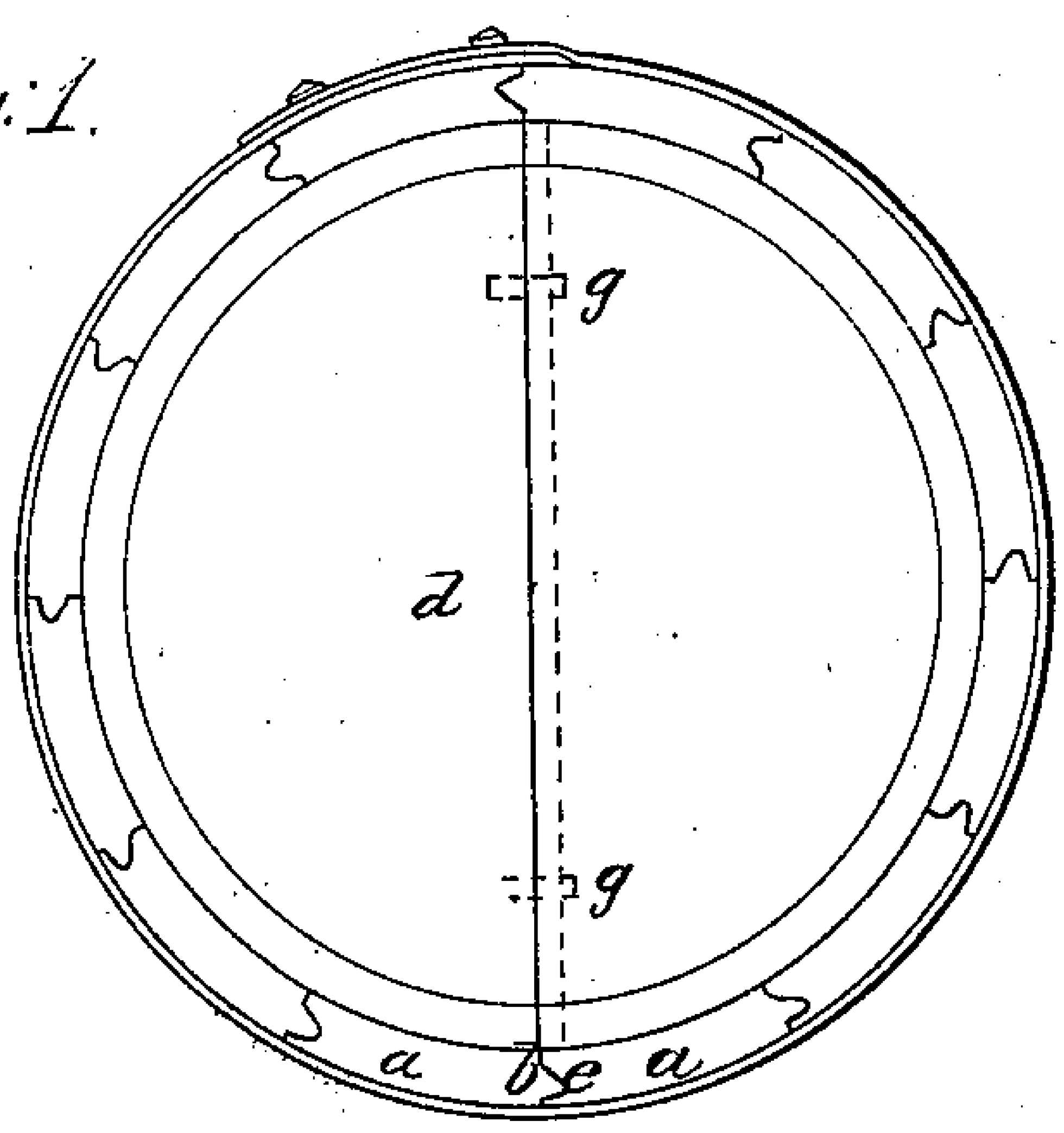


Fig: 2.

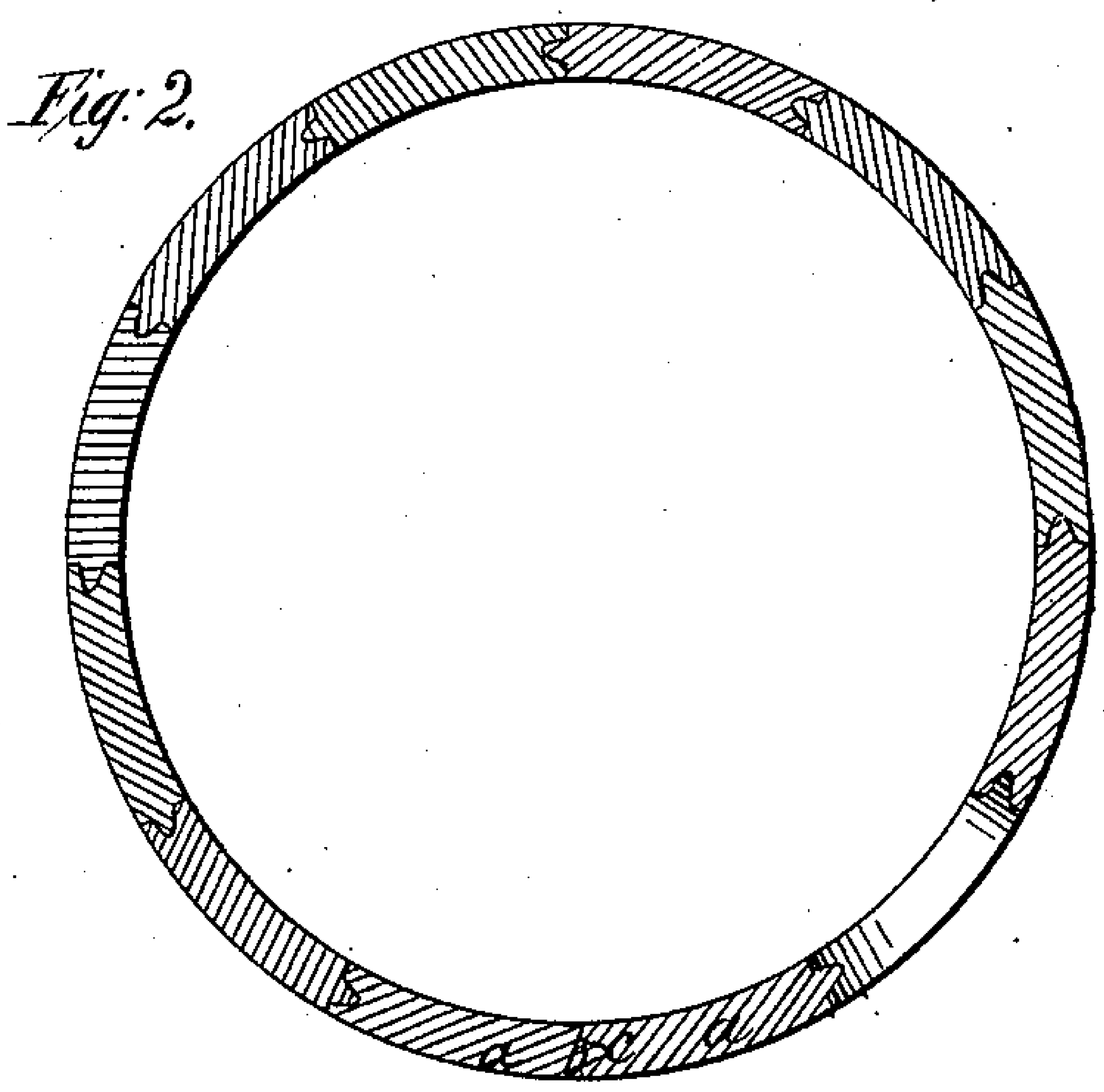
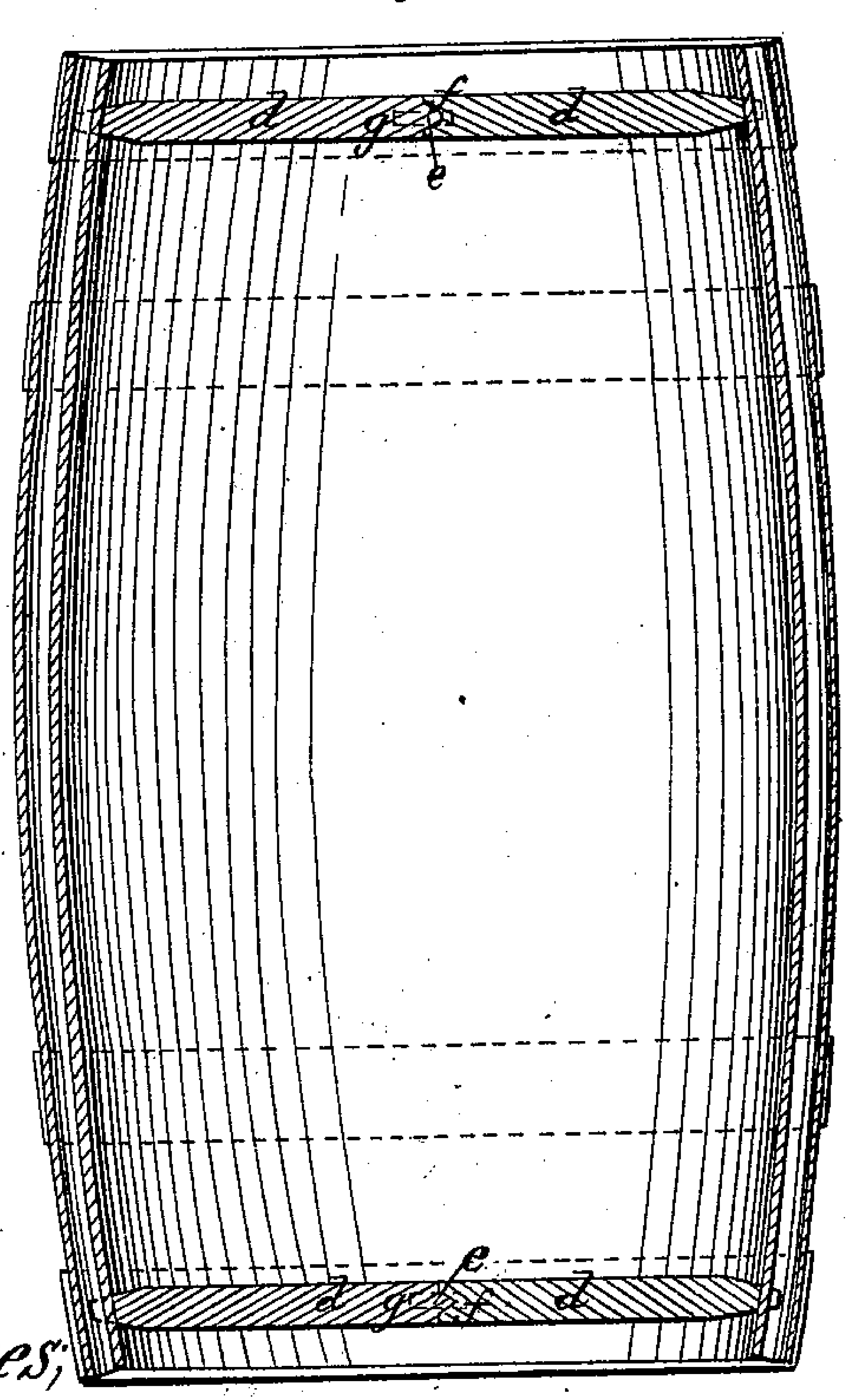


Fig: 3.



Witnesses;

Chas H Crampton

Edw. Scudder

Fig: 4

Inventor,

Joshua Merrill

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UNITED STATES PATENT OFFICE.

JOSHUA MERRILL, OF BOSTON, MASSACHUSETTS.

IMPROVEMENT IN THE MANUFACTURE OF CASKS, BARRELS, AND KEGS.

Specification forming part of Letters Patent No. **55,137**, dated May 29, 1866.

To all whom it may concern:

Be it known that I, JOSHUA MERRILL, of the city of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Casks, Barrels, and Kegs; and I do hereby declare that the following is a full and correct description thereof, reference being had to the annexed drawings, making part of this specification, and to the letters of reference thereon.

My invention relates more particularly to casks, barrels, and kegs used for the transportation of crude and refined petroleum and similar fluids.

Casks used for this purpose have been subject to leakage to such extent as to compel the use of tin or other metallic cans for shipping refined petroleum upon long voyages.

My invention consists, first, in an improved cask having its joints tongued and grooved with tongues and grooves of a V or other similar form, the tongue being a little larger than the groove, so that when the hoops are driven tightly the tongue is forced into the groove to make a tight joint; second, in an improved cask the joints of which are tongued and grooved and cemented with glue or a similar gelatinous cement suitable to resist the penetration of liquid hydrocarbons.

Figure 1 of the drawings is a top view of the cask; Fig. 2, a cross-section; Fig. 3, a vertical section through the heads and staves, and Fig. 4 a section of a stave.

The staves *a* are each made with a tongue, *b*, and a groove, *c*, as shown in the drawings. The heads *d* are also made with tongues *e* and grooves *f*, to preserve the barrels from leakage and to stiffen the heads Dowel-pins *g* may also be used in putting the head-pieces together.

I believe that pails and tubs have been made with recessed joints; but I am not aware that any barrel, cask, or keg having a bilge and closed at both ends, so as to be suitable for or of any use in the transportation of fluids, has ever before been made with joints in the manner I have described.

I make the staves and heads of good seasoned wood, and tongue and groove them before trussing them, or they may be tongued and grooved after being bent.

For the purpose of more completely securing the joints against the penetration of hydrocarbon fluids I also cement the staves and heads together at the joints with glue or similar gelatinous cement. To do this, the cask may be taken to pieces after it is made, and hot glue being spread over the joints, the cask is immediately put together and the hoops driven tight.

I have discovered that thick casks of seasoned wood thus made will effectually hold hydrocarbon liquids for storage and transportation.

The additional expense of a cask made as herein described is very small in comparison with the great economy of substituting a cheap wood cask for the expensive metallic cans used for the transportation of refined petroleum on long voyages.

I claim as of my invention and improvement in casks, barrels, and kegs used for the transportation of fluids—

1. The improved cask, substantially as described, having its joints made with tongues and grooves, substantially in the way and for the purposes hereinbefore described and set forth.

2. In combination with the joints of a tongued and grooved cask, a coating or stuffing of glue or similar gelatinous cement in the joints, substantially as hereinbefore described.

JOSHUA MERRILL.

Witnesses:

CHAS. H. PLIMPTON,

JAS. D. PENDDER.