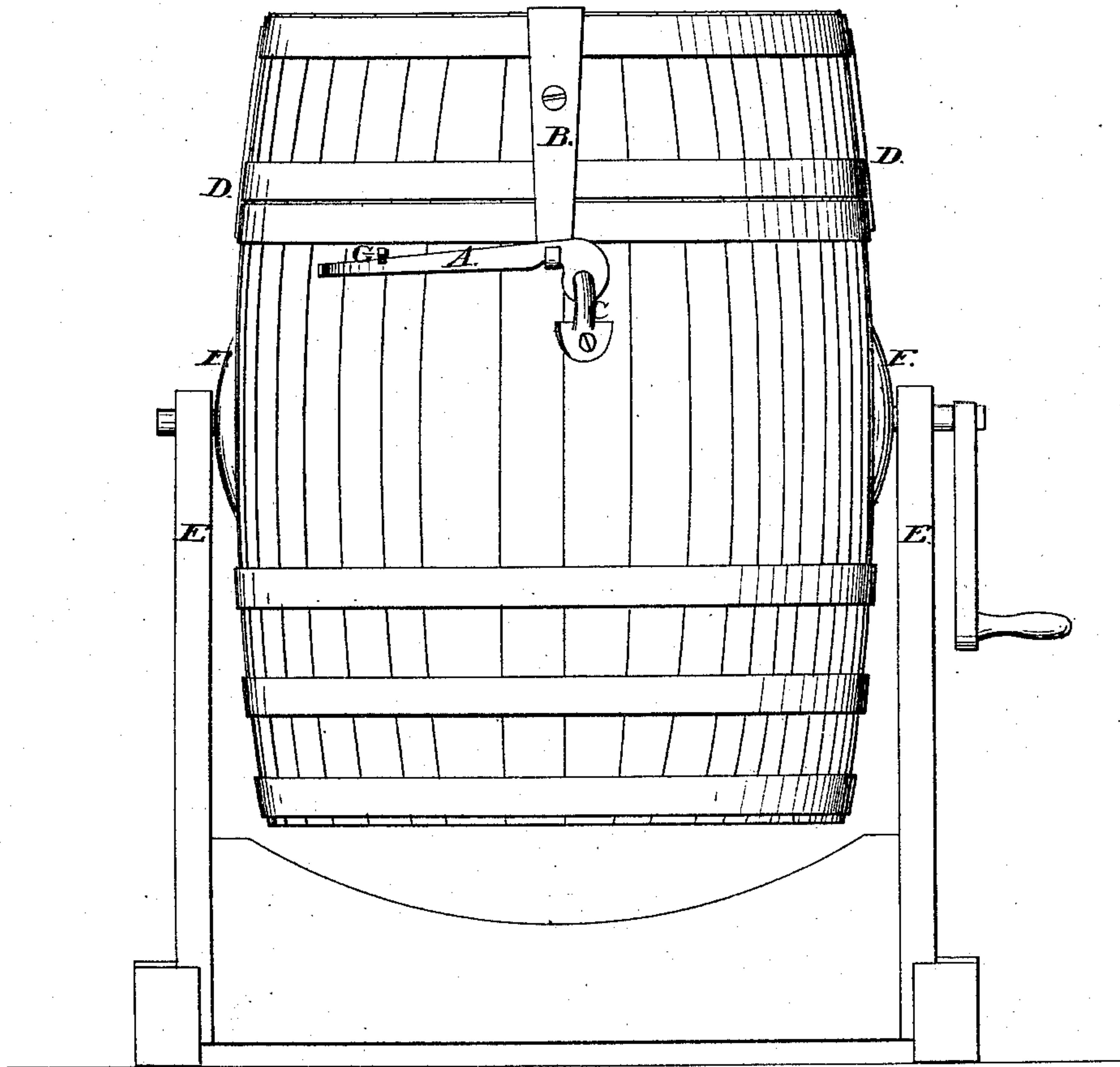


R. MURPHY.  
REVOLVING-CHURNS.

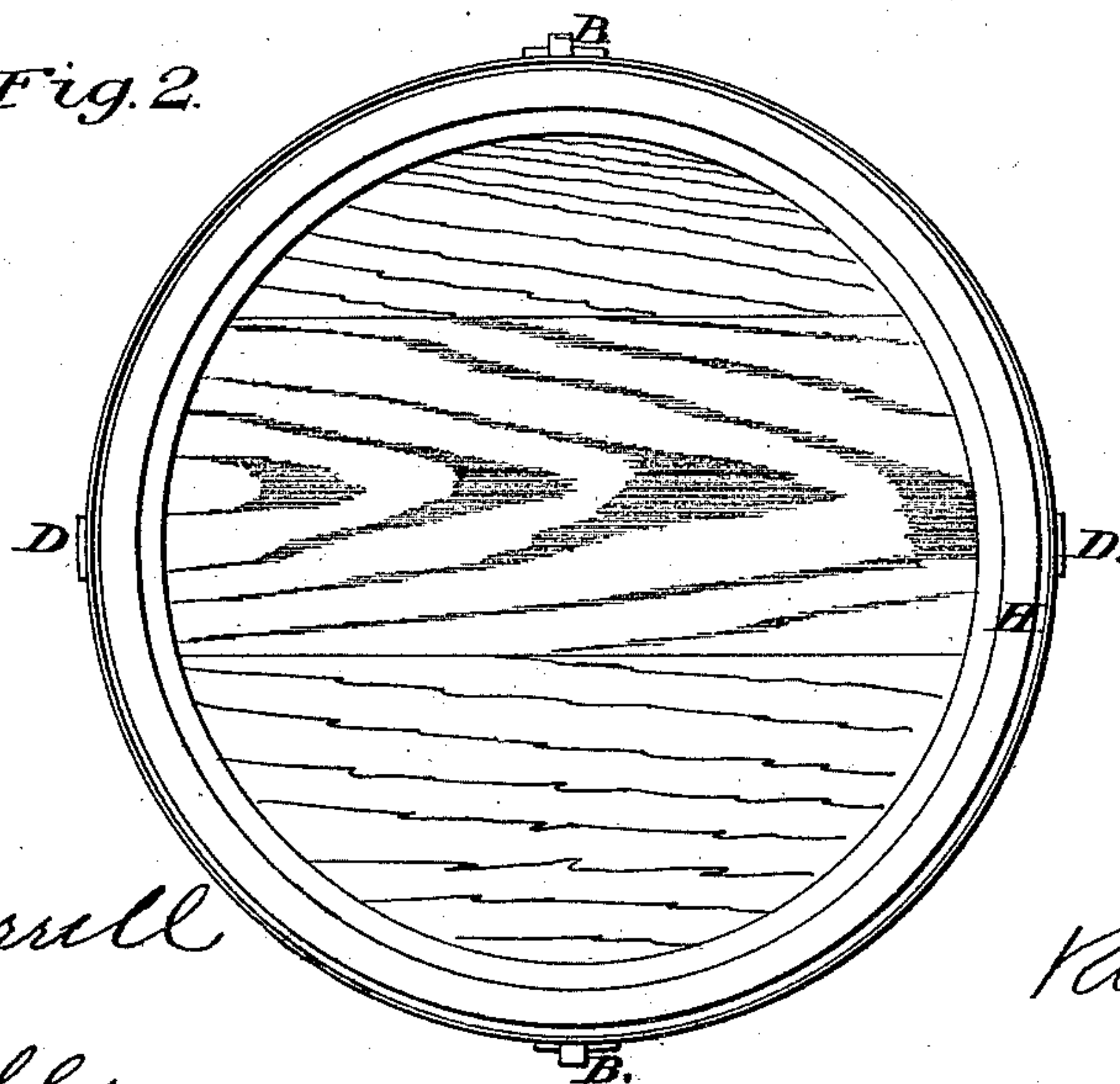
No. 184,165.

Patented Nov. 7, 1876.

*Fig. 1.*



*Fig. 2.*



Witnesses:

*A. A. Burrell*

*Eli Soule*

Inventor:

*Robert Murphy*

# UNITED STATES PATENT OFFICE.

ROBERT MURPHY, OF CANISTEO, NEW YORK.

## IMPROVEMENT IN REVOLVING CHURNS.

Specification forming part of Letters Patent No. **184,165**, dated November 7, 1876; application filed September 5, 1876.

*To all whom it may concern:*

Be it known that I, ROBERT MURPHY, of Canisteo, in the county of Steuben and State of New York, have invented a new and useful Improvement in Rotating Churns, which improvement is fully set forth in the following specification, reference being had to the accompanying drawings.

The objects of my invention are to simplify the making of the movable head to the cask, to render the cask water-tight, to facilitate the removal and replacing of the head, to hold the head firmly in place, and to keep the cask and head in shape.

The head is made by placing two hoops about one-fourth of an inch apart near one end of the cask, and then sawing through the cask between the said hoops, the smaller piece making the head, Figure 2. A small groove, about one-fourth of an inch deep, is cut in the center of the end of the staves of the head, into which is placed a strip of rubber belting, H, which extends a little above the surface of

the end of the staves. Upon the sides of the head are placed four arms, B B D D, which extend a short distance below the head, and fit closely to the outside of the cask when in place, B D D, Fig. 1, two of which, B B, are hooked at both ends. Two staples, C, are placed on the sides of the cask, near the ends of the hooked arms, to which one end of the levers A is fastened. The head is drawn tight to place by pressing the levers down over the hooks at the end of the arms B B, and is held there by placing the long end of the levers under the catch G.

I claim as my invention—

The strip of rubber H, the arms B B and D D, the staple C, the lever A, and the catch G, in combination with the cask and head, as above specified.

ROBERT MURPHY.

Witnesses:

A. H. BURRELL,  
ELI SOULE.