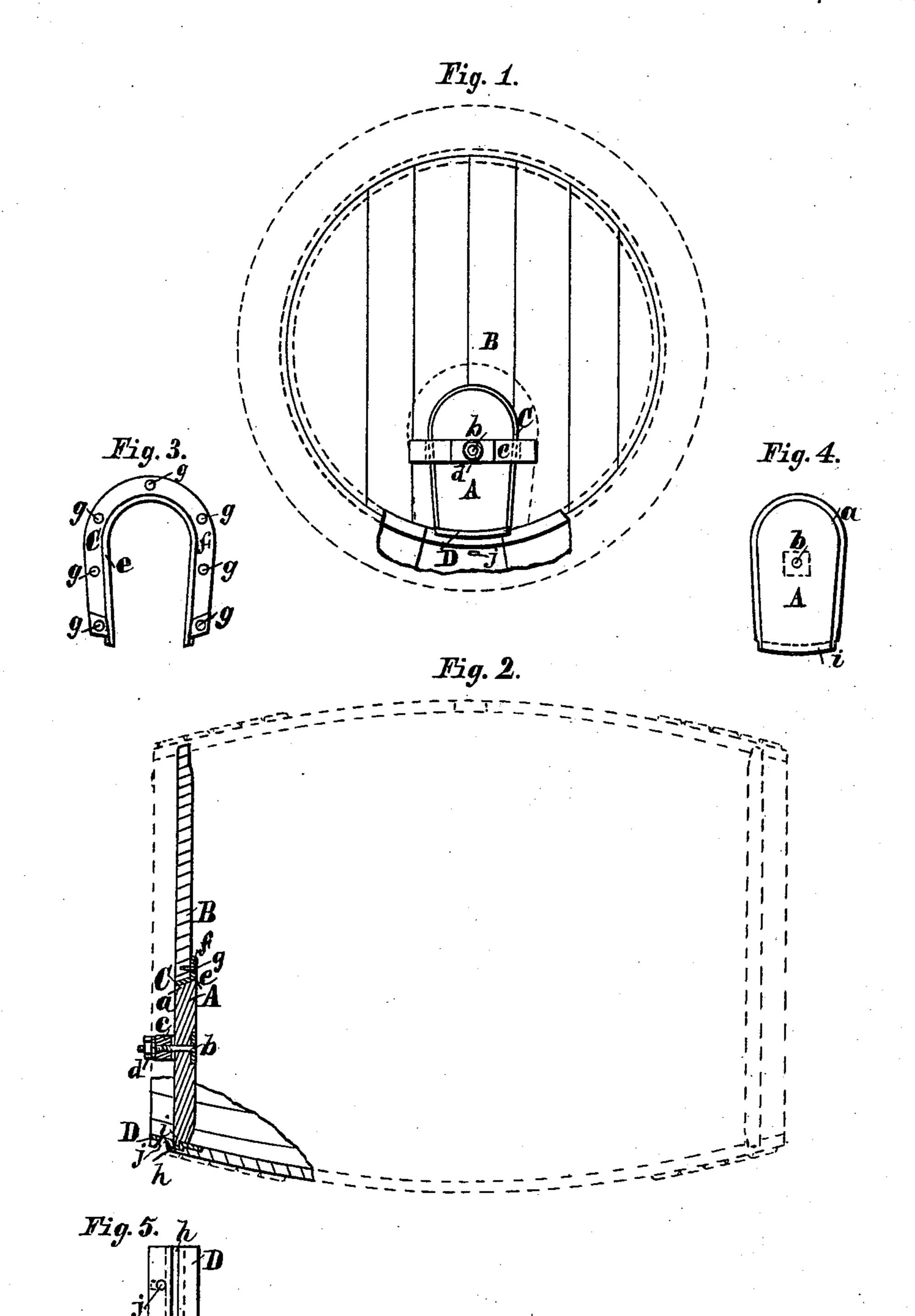
(No Model.)

## H. BLETZER.

### BREWER'S CHIP CASK.

No. 350,522.

Patented Oct. 12, 1886.



Attest;

J.F. Horyant, Ym H. Park. Inventor;

Senry Bletzer,

per Edw. Dummer, aty.

# United States Patent Office.

### HENRY BLETZER, OF BOSTON, MASSACHUSETTS.

#### BREWER'S CHIP-CASK.

SPECIFICATION forming part of Letters Patent No. 350,522, dated October 12, 1886.

Application filed January 16, 1886. Serial No. 188,797. (No model.)

To all whom it may concern:

Be it known that I, Henry Bletzer, a citizen of the United States, residing at Boston, in the county of Suffolk and State of Massachusetts, have invented a new and useful Improvement in Brewers' Chip-Casks, of which the following is a specification, reference being had to the accompanying drawings.

My invention relates to an improvement in "chip-casks," technically so called, which are employed in the process of "fining" beer. A chip-cask has an opening in the head and a door therefor, the opening being of proper form and size to admit a person, when necessary, for cleaning the cask, and also whereby

the chips may be introduced into and removed from the cask. The door is fitted to said opening, and provision is made whereby it may be clamped in place to make a tight joint.

My invention consists in a metallic frame for said door, preferably of cast-iron, constructed and secured in place as hereinafter described, and specifically pointed out in the claims.

In the drawings, Figure 1 shows an end view of a cask provided with my improvement, the cask being shown partly by dotted lines. Fig. 2 is a vertical central section. Fig. 3 is a view of the interior face of the

bushing which is inserted in the head. Fig. 4 is a view of the exterior face of the door. Fig. 5 is a plan of the metallic piece, which is inserted in the stave or staves.

The usual form and location of the door A, which is made of wood, is substantially as shown. At the sides and top its edge-face a is beveled. A bolt, b, is fastened in the door at right angles thereto, and extends outward through a bar, c, so that by means of a nut, d, and this bar the door may be clamped firmly in place.

In the head B of the cask I fit a bushing, C, the interior edge-face, e, of which is beveled to correspond to the edge-face of the door. The bushing C has a flange f so that by means

The bushing Chas a flange, f, so that by means of screws extending through this flange at g the frame may be secured to the head. It will be seen that the head of the cask may be of several narrow pieces, as shown, owing to the

Let into the staves and fastened thereto is a metallic piece, D, which has a groove, h, into which the lower ends of the bushing C may be inserted, and also the lip i, at the lower edge of the door A. Thus a joint may be made at this part as tight as throughout the balance of the periphery of the head. The bushing C and piece D form a complete frame, which will protect the wooden head and staves at the sides, top, and bottom of the opening for the 60 door.

In use the cask rests substantially in the position shown, so that there is a recess at the lower edge of the head formed by the head and the staves, in which liquid may stand. This 65 is objectionable, and no provision has heretofore been made for the escape of the liquid. I make an opening or hole, j, through the piece D, which is also extended through the stave. Through this hole all of said liquid 70 may pass away.

I claim as my invention—

1. In a cask having an opening in the head extending to the stave or staves, a metallic frame for said opening, consisting of two pieces, 75 C and D, fixed to the head and to the stave or staves, substantially as set forth.

2. In a chip cask, and in combination with the head and door therein provided with a lip, *i*, a metallic piece, D, let into the stave or 80 staves, and provided with a groove, *h*, substantially as and for the purposes set forth.

3. In a chip-cask, a metallic piece, D, let into the stave or staves at the circumference of the head, provided with an opening or a 85 hole, j, substantially as and for the purpose specified.

4. In a chip-cask, and in combination with a door for an opening in the head of the cask extending to the stave or staves, a metallic 90 bushing, C, fixed in the head, and a metallic piece, D, at the bottom of said opening, said bushing and piece being fitted to said door, substantially as specified.

HENRY BLETZER.

Witnesses:

FRANCIS A. STRATER, EDW. DUMMER.