John Marshall Impt. in Casks or Barrels.

117185

PATENTED JUL 18 1871

Fig. 2

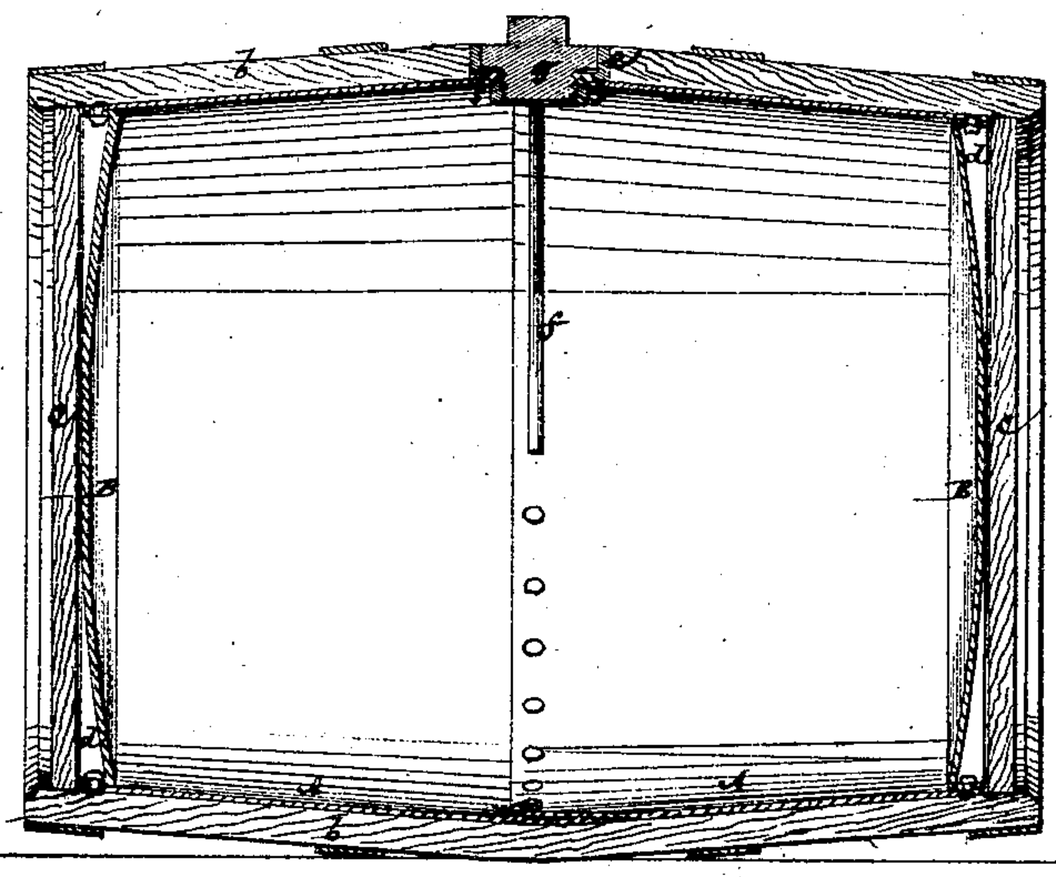
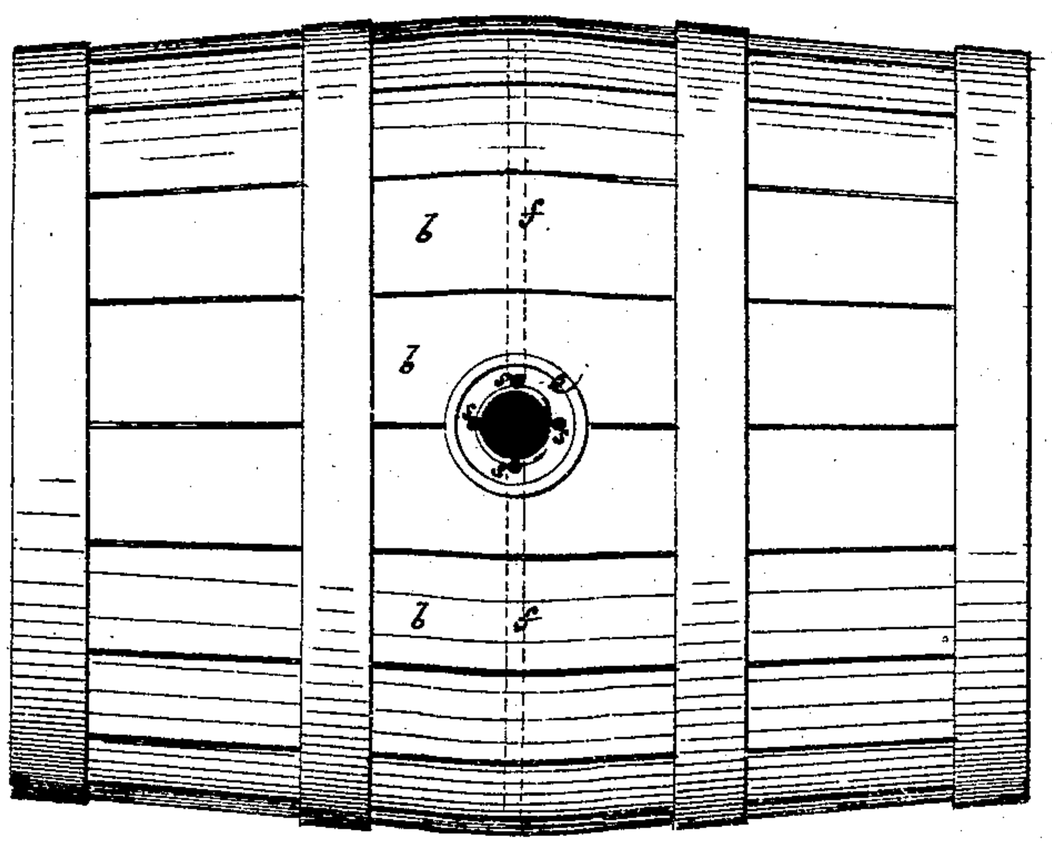


Fig. 1



Witnesses
Fred Haynes
R E Rabeau

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UNITED STATES PATENT OFFICE.

JOHN MARSHALL, OF BROOKLYN, NEW YORK.

IMPROVEMENT IN CASKS OR BARRELS.

Specification forming part of Letters Patent No. 117,185, dated July 18, 1871.

To all whom it may concern:

Be it known that I, JOHN MARSHALL, of Brooklyn, in the county of Kings and State of New York, have invented a certain new and useful Improvement in Casks or Barrels, of which the following is a full, clear, and exact description, reference being had to the accompanying drawing forming part of this specification, and in which—

Figure 1 represents an outside longitudinal view of a cask or barrel constructed in accordance with my improvement; Fig. 2, a longitudinal section of the same.

Similar letters of reference indicate corresponding parts in both figures.

My invention consists in a wood-cased metal cask or barrel, the metal body of which is made in two parts, meeting at the bilge, where they are riveted together, and the metal ends of which are of a flattened concave form, whereby, when wooden ends are inserted between the projecting ends of the staves that compose the casing, air-spaces are formed around the outside portions of the metal ends, that, in conjunction with the shape of said ends, allow for the flexing of the latter to provide for expansion and contraction of the contents of the cask or barrel, which accordingly is more solid when full and less liable to breakage. Such construction not only makes a strong cask or barrel, but provides against leakage and adds to the capacity of it. The invention also includes a novel arrangement of ventilating devices, connected with a screw, bung, or stopper, for admitting air to the upper surface of the liquid in the barrel, when pouring from the bung-hole in various positions of the barrel.

Referring to the accompanying drawing, A A represent the two metal halves of the body, made of tinned plates united by riveting together at the bilge, with the heads of the rivets arranged on the inside, which is also the arrangement for the rivets that unite the ends to the body, thereby presenting a flush or smoother surface for the staves on the outside of the metal body. The metal ends B B may be made of somewhat stouter metal than the body, and have their edges turned to form a flange for riveting them to the body. Each of said ends, as viewed from the interior, is of a flattened concave form.

The wooden staves *b b*, which, in addition to strengthening the metal body, protect it from being punctured and injured generally, may be roughly cut or shaped—that is, without any regard to close fit one against the other; and it is preferred to leave them slightly open or separate, so that room will be left between them for expansion of the metal body. When in their places they are hooped or banded as usual in the construction of wooden barrels. The wooden ends *c c* are slipped into their places between the projecting ends of the staves by making the latter sufficiently long, and so that they will spring to receive the ends *c c* in between them. Said ends *c c*, when in their places, rest upon and support the metal ends B B at their central or flattened portion, leaving an air-space, *d*, all round between them and the concave or shelving portions of the metal ends. This provides for the flexing of the metal ends to meet expansion or contraction of the liquid contained in the cask or barrel when full, and whereby a solid character is given to the latter, and breakage or bursting of it, both when standing and during rough handling, is prevented.

The ventilating arrangements or devices, when the bung-hole is at the bilge, consist, in part, of a metal socket, *e*, of an enlarged outside and smaller inside diameters, fitted so as to pass through the wood and metal of the body, and to project slightly within the latter. Said socket is provided with air-holes *s* in the seat of the enlarged or flanged portion of it, which holes are distributed to convey air up to either end of the cask and to opposite sides of its bilge, to provide for pouring from the barrel in various positions or different tilting directions of it, two of said holes, *s*, which pass air to the bilge, being connected with tubes *f*, that pass a quarter round the cask, or thereabout, in opposite directions on opposite sides of the latter, to facilitate pouring from reverse sides. The bung is formed of a flanged screw-stopper, *g*, which screws into the socket *e*, and, when in its place, closes the several holes *s* as well as the general outlet or bung-

hole. If desired, the bung-hole may be arranged at either end or head instead of at the bilge of the cask or barrel.

What is here claimed,and desired to be secured by Letters Patent, is—

1. A wood-cased metal cask or barrel, the metallic portion of which is made in sections A A, united at the bilge and with partially-concave ends B B, substantially as specified.

2. The bung-hole socket *e* with its ventilating-apertures *s* and tubes *f*, arranged as described, in combination with the flange-shaped screw-plug or bung, *g*, essentially as herein set forth.

JOHN MARSHALL.

Witnesses:

FRED HAYNES,

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