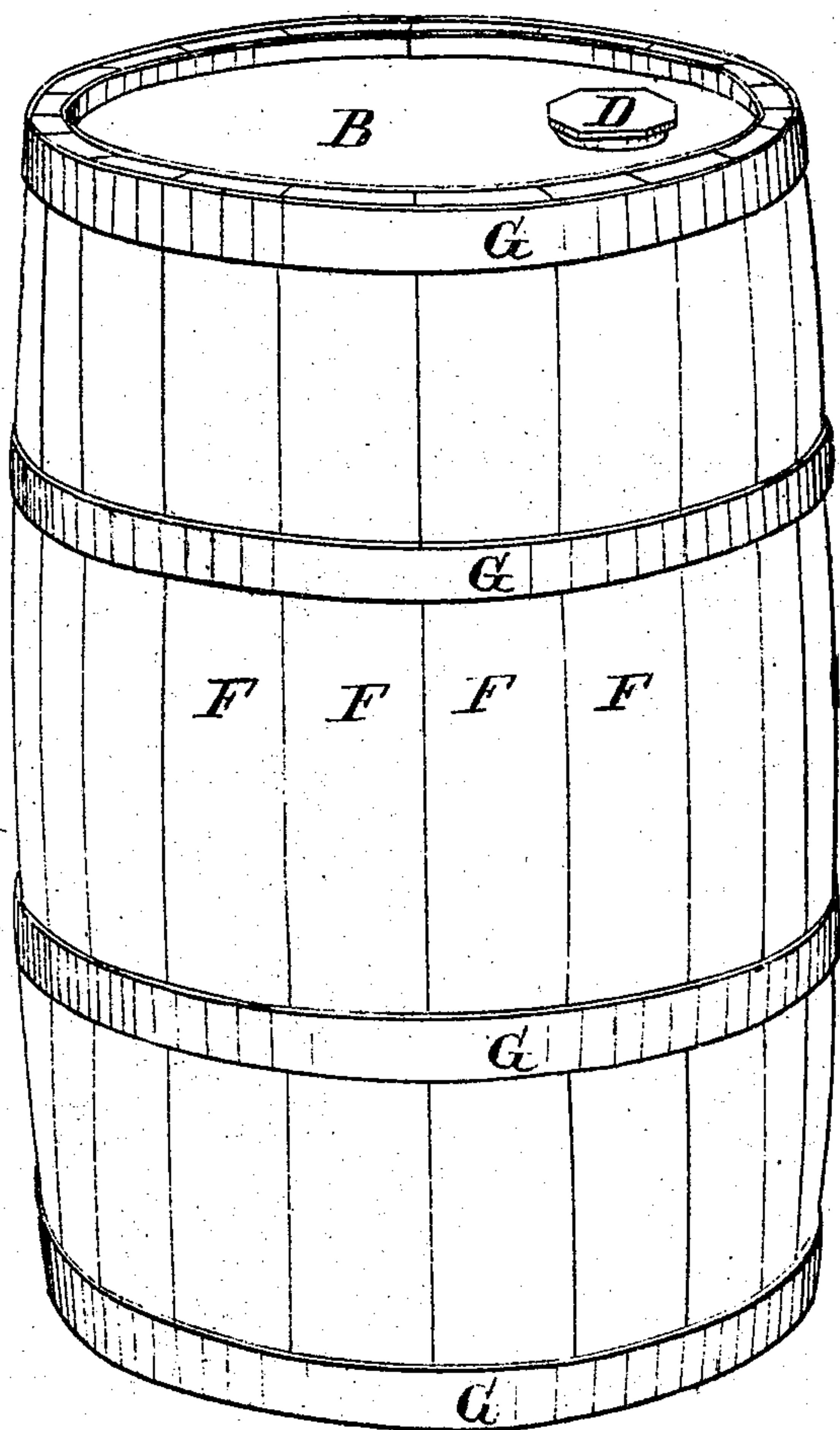


*R. N. Allen,*  
*Oil Barrel,*  
*No 37,427,      Patented Jan. 20, 1863.*

*Fig: 1.*



*Witnesses;*  
*J. Brainerd*

*W. H. Furnage*

*Inventor;*

*Richard N. Allen*

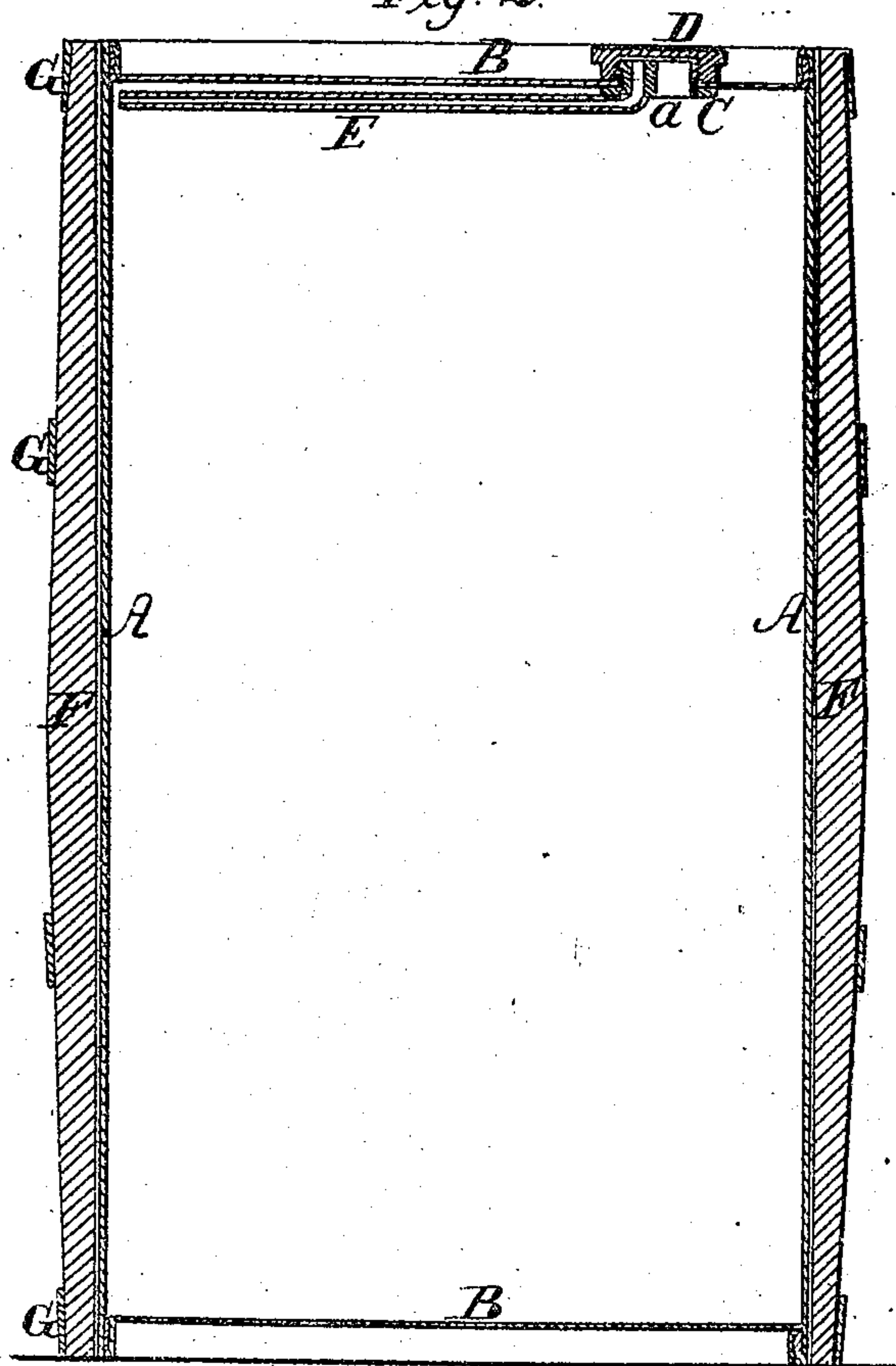
R. N. Allen,

Oil Barrel,

No 37,427,

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Fig. 2.



Witnesses

J. Brainerd

W. H. Burrage

Inventor;

Richard N. Allen



# UNITED STATES PATENT OFFICE.

RICHARD N. ALLEN, OF CLEVELAND, OHIO.

## IMPROVED OIL-BARREL.

Specification forming part of Letters Patent No. 37,427, dated January 20, 1863.

*To all whom it may concern:*

Be it known that I, RICHARD NORTON ALLEN, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented new and useful Improvements in Barrels and Casks for Storing and Transporting Oil, &c.; and I do hereby declare that the following is a full and complete description of the construction and operation of the same, reference being had to the accompanying drawings, making part of this specification, in which—

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

The nature of my invention relates to a cylindrical cask or barrel composed of sheet metal and wooden lags or staves fitting its exterior cylindrical surface and bound with hoops, leaving the metallic ends exposed, in one of which, near the margin, is fixed a compound metallic bung, tap-hole, and vent-pipe, the same being secured for storage or transportation by means of a screw-cap and gasket, in the manner hereinafter specified, the whole structure being a new article of manufacture.

I am aware that oil-casks of various forms have been constructed by having the interior composed of sheet metal and the exterior of staves or wooden lags bound on by hoops or otherwise. I shall therefore lay no claim to this feature of the construction, but to my special arrangement and combination of parts, as fully set forth in the following specification and claim. I first take sheet metal (galvanized sheet-iron, for example) and form it into a cylinder, as shown in vertical section A, Fig. 2. The edges are united by a clasp-joint, or lapped and riveted, and either soldered with soft solder or brazed, in order to make the joint perfectly tight. I then cut two disks, B, of the same kind of metal, in diameter about one inch or less greater than the inside of the cylinder. The margin of these disks or heads are turned at right angles, the lip thus formed being just large enough to fill the bore of the cylinder, to the ends of which they are secured by rivets or by a clasp-joint, as seen in Fig. 2, and then further secured by soft soldering or brazing, so as to make them perfectly tight. In one of the heads, before inserting it into a cylinder, I secure a combined bung, tap-hole, and vent, as seen at C, Fig. 2. This compound bung-hole consists

of a heavy metallic ring, with a circular flange upon the inside, which projects about half an inch around the opening in the head made to receive it, and this circular flange is brazed or soldered to the head upon the inside. This compound bung and tap-hole projects about half an inch outside of the head, and is provided with a screw-thread on the outside, upon which is screwed the cap D. This cap D has a gasket of sheet-lead or other soft substance impervious to oil, to insure perfect tightness when the cap is screwed on. The bung and tap-hole is situated upon the lower margin of the head when the vessel lies in a horizontal position, leaving a space above the bung-hole in the ring C sufficiently large to introduce the vent-pipe E. This vent-pipe consists of a small metallic pipe having a bore of one-tenth of an inch or less. The lower end of the pipe E is soldered into the bung C, through which it passes, and upon the inside the pipe turns at right angles and follows up the inside of the head B to the upper portion of the interior of the cask, as seen in Fig. 2, thus forming a communication between the interior of the cask and the external air when the cap D is off, but which communication is closed when the cap D is screwed on. The lags or staves F are sufficient in number to cover the external surface of the cylinder, to which they are closely fitted, being thicker in the middle and thinner at each end, to insure the binding of the hoops G, by which they are held in place. The outside of the cylinder being smooth, with no flanges or projections entering into the inner surface of the staves, by loosening the hoops any one of the staves can be shoved endwise and removed, which might become necessary in order to solder up a fracture accidentally made in the metallic cylinder. Any such fracture upon either end would be accessible without removing a stave, for the heads are not covered with wood. In filling the vessel it is placed on end, as seen in Fig. 1. The cap D being removed, a funnel can be introduced into the bung-hole and the barrel filled with oil, the confined air escaping through the vent-pipe E. In storing and transporting, the barrels or casks are placed in a horizontal position. In fitting the barrel or cask for drawing off the contents, it is placed on end, the cap D re-

moved, and the faucet introduced into the hole  
a. A faucet may be so constructed as to close  
the vent-pipe E at the same time the flow of  
oil is cut off.

What I claim as my improvement, and de-  
sire to secure by Letters Patent, is—  
The herein-described oil barrel or cask, in  
which the parts are constructed, combined,

and arranged in the manner and for the pur-  
pose set forth, the same being a new article of  
manufacture.

RICHARD N. ALLEN.

Witnesses:

J. BRAINERD,

W. H. BURRIDGE.