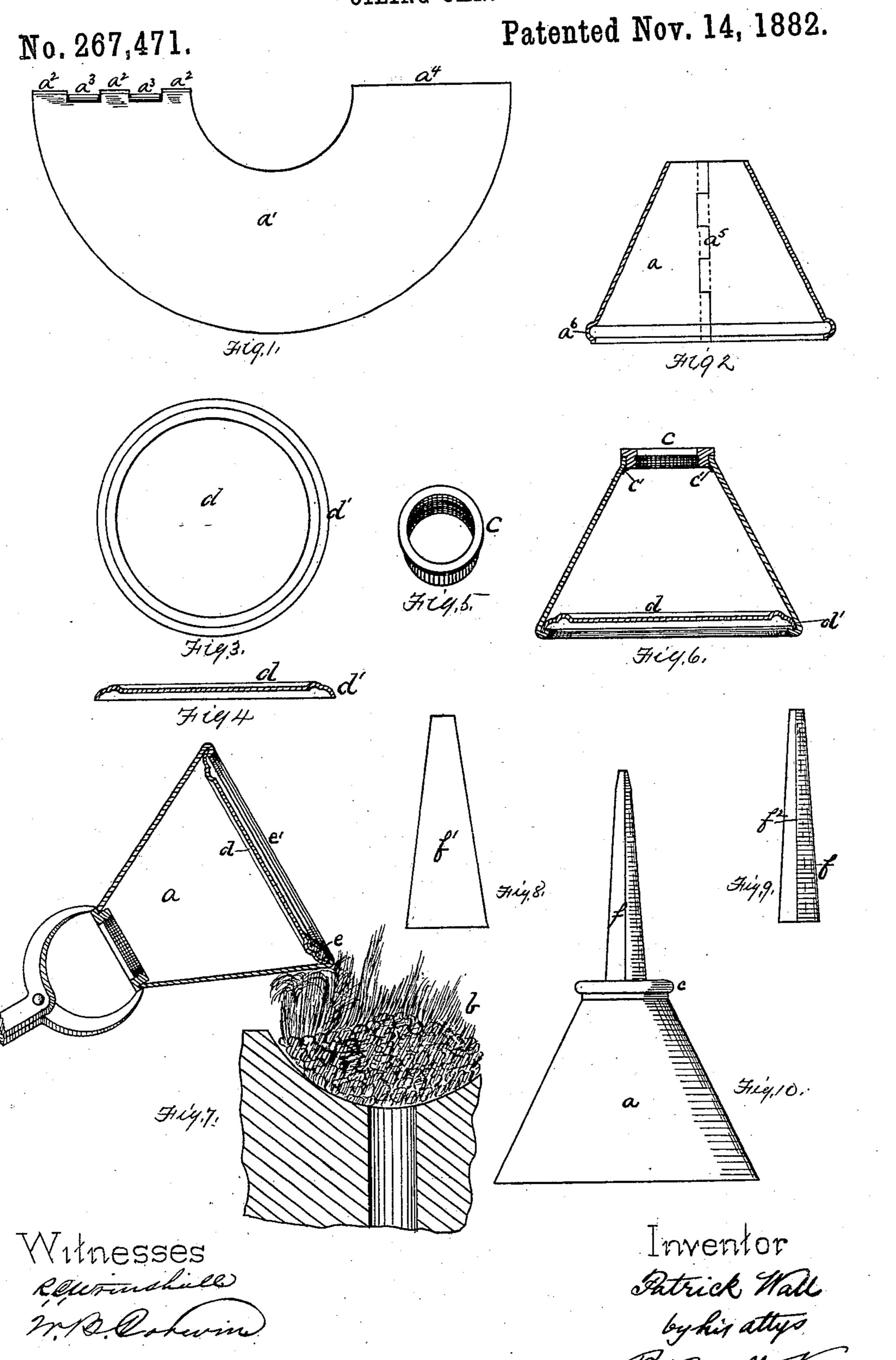
P. WALL.

OILING CAN.



## United States Patent Office.

PATRICK WALL, OF ALLEGHENY CITY, PENNSYLVANIA.

## OILING-CAN.

SPECIFICATION forming part of Letters Patent No. 267,471, dated November 14, 1882. Application filed April 11, 1882. (No model.)

To all whom it may concern:

Be it known that I, PATRICK WALL, of Allegheny city, in the county of Allegheny and State of Pennsylvania, have invented a new 5 and useful Improvement in Oiling-Cans; and I do hereby declare the following to be a full,

clear, and exact description thereof.

Heretofore oiling-cans having spring-bottoms have usually been made of tin, zinc, 10 brass, and malleable iron. The better class of these cans have been provided with hardenedbrass bottoms, which are put in with soft solder. In some instances tempered-steel bottoms have been suggested, the same being se-15 cured by a wired edge on the bottom of the can-body, and in the ordinary way of securing the bottoms of oil-cans. The objection to these cans has been that the joint was bad and the cans frequently leaked. This danger of leak-20 age is increased in cold weather, when such cans are frequently and carelessly put on the fire or stove to melt the oil. The heat to which the can was thus exposed had a tendency to melt the solder and cause the can to leak. An-25 other objection has been that a brass bottom produces verdigris, which often clogged the tube and necessitated frequent unscrewing and cleaning of the same. Another objection to this can was its great expense.

To enable others skilled in the art to make and use my invention, I will now describe the same by reference to the accompanying draw-

ings, in which—

Figure 1 is a plan view of the sheet which 35 composes the body of my improved oil-can. Fig. 2 is a view of the same after being formed into the body. Fig. 3 is a plan view of the bottom. Fig. 4 is a cross-section of the bottom. Fig. 5 is a view of the collar. Fig. 6 is 40 a vertical section of the can with the collar and bottom in place, the bottom not being brazed in. Fig. 7 is a view illustrating the view of the blank from which the tube is 45 formed. Fig. 9 is a side view of the tube. Fig. 10 is a side view of the finished can.

Like letters of reference indicate like parts in each.

The body a is formed of a sheet of wrought-50 iron of suitable gage, of the form shown in Fig. 1. One edge of the sheet a' is niched, as

at  $a^2$   $a^3$ , and the lips so formed are bent at an angle in opposite directions. Then the sheet a' is bent around, and the straight edge  $a^4$  is inserted between the lips  $a^2 a^3$ , which are ham- 55 mered down upon it, so as to secure the sheet in the shape of the body a and ready for brazing. Then the spelter or brazing material is placed upon the seam  $a^5$  thus formed, and the body a held over the fire b in such a position 60 that the flame will strike the outside of the body along the line of the seam. This causes the spelter to melt down and the seam to be securely and tightly brazed. The body a thus formed is shown in Fig. 2. It is then taken 65 and put through a flanging-machine of ordinary construction, and the recess or groove  $a^6$ is formed in the lower end, as shown in Fig. 2. I then take a collar, c, formed of either malleable or wrought iron, and place it in the 70 small end of the body a, securing it there by drawing a tool around it, and place spelter or brazing material c' in the inside of the body around the edge of the collar c, and then expose the upper end of the body to the fire b. 75 The flames striking the outer surface will melt the brazing material and cause it to run in between the collar c and the body a, and thereby fasten the collar c in place and form a tight joint between the collar and the body. I then 80 take a bottom, d, formed of sheet-steel by stamping in suitable dies, with a flange, d', around its edge, and place it in the bottom of the body a, so that the flange d' shall fit into the groove  $a^6$ . I then bend the lower edge of 85 the body a around the flange d', either by hammering or by means of a crimping-machine, so as to secure the bottom d firmly in place, as shown in Fig. 6.

In order to make a tight joint, such as will 90 prevent the leakage of oil between the body a and the bottom d, I braze the joint in the following manner: I place the spelter or brazmethod of brazing in the bottom. Fig. 8 is a | ing material around the edge of the bottom, as shown at e in Fig. 7. I then expose the can 95 to the flame of the fire b in such a manner that the flame shall strike the outside of the body a and shall not come in contact with the steel bottom d. The heat passes through the edge of the body a, melts the spelter, and roc causes it to flow into the joint between the body a and the bottom d, completely filling it

and making a close, tight joint. The can a is turned around and the spelter applied until the entire circumference of the bottom has been brazed in. It is necessary in this operation that the flame of the fire b should not come in contact with the steel bottom d, because the effect of such contact would be to burn the steel and destroy its resilience. This of course would destroy its utility as a spring-to bottom. The lower edge, e', of the can a is then ground off for the purpose of finishing it and giving it an even bottom, there being some irregularity produced by the operation of turning in the lower end of the body a over the flange d'.

The tube f is formed of a sheet, f', Fig. 8, which is bent into a tubular form and brazed along the seam f², Fig. 9. It is then threaded externally at the lower end and screwed into collar c, thereby completing the can. The result of this construction is that I obtain an oiling-can which is cheap in construction and material, capable of a fine finish, and which has a very much better spring-bottom than any used heretofore, which can be placed upon the stove for melting the oil without danger,

which is provided with tight joints, and which will not clog up in the tube.

If desired, the collar c may be made of brass or other material. If, however, it is to be secured in place by brazing, the material used must be such as will stand the heat. A brass having a large percentage of copper will answer for this purpose.

The method herein described of inserting 35 the bottom by turning the edge  $a^6$  in around the flange d' of the bottom d and then brazing it to make a tight joint may be practiced in the manufacture of mill-lamps and similar articles.

What I claim as my invention, and desire to secure by Letters Patent, is—

An oiling-can or similar vessel having a sheetmetal body and a steel spring-bottom, the parts being united by a lapped and brazed joint, sub- 45 stantially as and for the purpose specified.

In testimony whereof I have hereunto set my hand this 3d day of April, A. D. 1882.

PATRICK WALL.

Witnesses:

T. B. Kerr, W. B. Corwin.