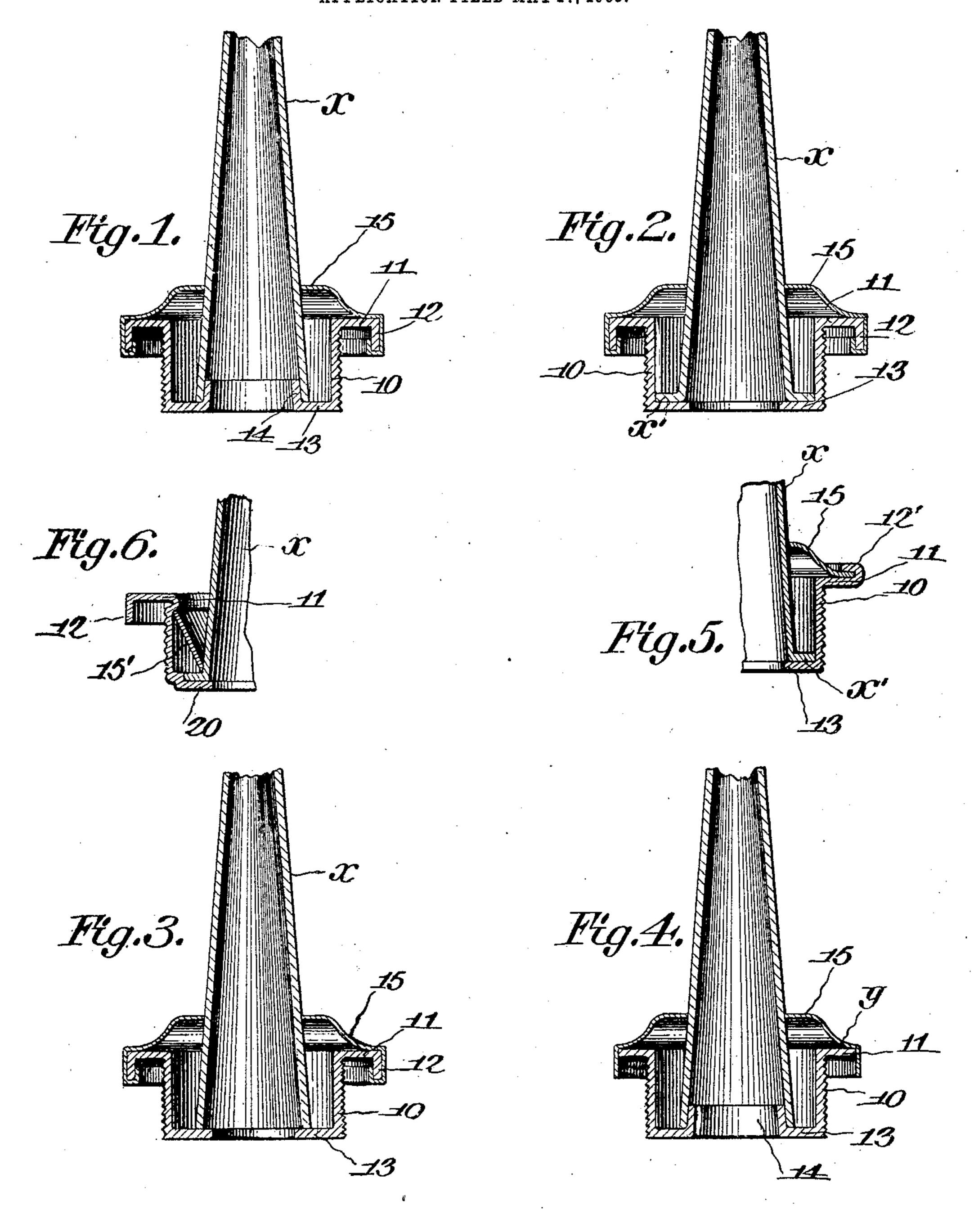
No. 832,282.

PATENTED OCT. 2, 1906.

P. WALL.
OIL CAN BUSHING.
APPLICATION FILED MAY 17, 1905.



Witnesses From Canton Patrick Wall, Inventor, by Cashow the Attorneys

## UNITED STATES PATENT OFFICE.

## PATRICK WALL, OF ALLEGHENY, PENNSYLVANIA.

## OIL-CAN BUSHING.

No. 832,282.

Specification of Letters Patent.

Patented Oct. 2, 1906.

Application filed May 17, 1905. Serial No. 260,846.

To all whom it may concern:

Be it known that I, Patrick Wall, a citizen of the United States, residing at Allegheny, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Oil-Can Bushing, of which the following is a specification.

This invention relates to improvements in

sheet-metal oil-can bushings.

The principal object of the invention is to provide an improved means for securing a spout to the bushing and prevent it from falling or from being driven inward when once placed in position.

A further object of the invention is to provide a novel form of bushing in which the spout may be firmly held in place without the employment of solder or auxiliary fasten-

ing means of similar character.

A still further object of the invention is to provide a two-part bushing for engagement with the spout at widely-spaced points, one part serving to prevent longitudinal movement of the spout in one direction and the other holding it from similar movement in

the opposite direction.

With these and other objects in view, as will more fully hereinafter appear, the invention consists in certain novel features of construction and arrangement of parts, hereinafter fully described, illustrated in the accompanying drawings, and particularly pointed out in the appended claims, it being understood that various changes in the form, proportions, size, and minor details of the structure may be made without departing from the spirit or sacrificing any of the advantages of the invention.

In the accompanying drawings, Figure 1 is a sectional elevation of a bushing and spout arranged and constructed in accordance with the invention. Figs. 2, 3, 4, 5, and 6 are similar views illustrating modifications of the

invention.

Similar numerals of reference are employed to indicate corresponding parts throughout

the several figures of the drawings.

In the construction shown in Fig. 1 the bushing is formed of stamped or spun sheet metal, including a barrel 10, provided with peripheral screw-threads. At the upper edge of the barrel is an outwardly-turned flange 11, the outer edge of which is bent downward to form a peripheral flange 12, parallel with the barrel 10. From the lower end of the drum extends an inwardly-direct-

ed flange 13, the inner edge of which is turned upward to form a small annular flange 14. The can-spout x is seated on the flange 13, the flange 14 fitting within the end of the 60 spout, and said flange 13 positively limits in-

ward movement of the spout.

The upper or cap part 15 of the bushing is formed of spun or die-shaped metal and has an opening at its center for the passage of the 65 tapering spout, the opening being of such diameter that considerable force is required to drive the spout through to the position shown in Fig. 1, and if the edge of the cap member 15 is then locked to the main por- 70 tion of the bushing it will be impossible for the spout to move outward and at the same time the spout will be held from lateral displacement at two widely-separated points and any force exerted at the outer portion of 75 the spout sufficient to move the inner end thereof would result in bending or breaking the spout proper.

In securing the two members of the bushing together it is preferred to spin or curl the 80 edge of the cap member 15 around the flange 12, as shown in Fig. 1, without the use of solder or other auxiliary fastening means; but, if necessary, a small piece of solder may be placed in the annular space formed between the bushing members and the spout and this afterward melted by a blowpipe or other heating means and run into the joints between the spout and the members of the

bushing.

In Fig. 2 is illustrated a slightly-modified construction in which the flange 14 is dispensed with, while the lower end of the spout is provided with an outturned flange x', which is seated on the flange 13, the periphery of the 95 flange x' fitting snugly against the inner wall of the barrel 10.

Fig. 3 illustrates a further modification, which is found effective, although not offering the same resistance to the lateral stress as 100 the constructions shown in Figs. 1 and 2. It will be observed in the construction shown in Fig. 3 that both the spout-flange x' and the flange 14 of the bushing are dispensed with, the end of the spout simply seating on the 105 flange 13. In this case also solder may be employed as an auxiliary for preventing lateral displacement of the lower end of the spout.

downward to form a peripheral flange 12, In Fig. 4 is illustrated a construction simi- 110 parallel with the barrel 10. From the lower lar to Fig. 1, with the exception that the end of the drum extends an inwardly-direct- large 12 is dispensed with and the edge of

the cap member 15 is not turned over the lower and main bushing member, solder y being here relied upon to hold the parts of the bushing in proper position.

It is obvious that instead of turning the ends of the cap member over the flange of the main bushing member the arrangement of the flanges may be reversed, as shown in Fig. 5, wherein the flange 12' is shown as turned over the edge of the upper bushing member 15.

In all cases the object is to prevent displacement of the spout, and it will be seen that by supporting the latter at two separated points all lateral movement is prevented and advantage is taken of the tapering form of the spout to prevent outward movement thereof by wedging or forcing the tapered spout through the opening of the cap member 15 of the bushing, downward or inward movement of the spout being prevented by the inturned flange of the bushing, as described.

In Fig. 6 is illustrated a further modification of the invention, in which the periphery of the base is provided with an inwardly-projecting flange 20, while the cap member 15' here takes the form of a tapered ring, the inner wall of which is seated against the base-flange of the spout, while the outer portion rests against an inwardly-extending rib or shoulder 21, formed in the barrel 10'.

Having thus described the invention, what is claimed is—

1. The combination with a tapered spout, of a base member having vertical walls and of larger internal diameter than the major

diameter of the spout, and provided with an inturned annular flange at its lower edge and an outwardly-directed flange at its upper edge, there being a flanged connection between said inturned flange and the base or lower end of the spout to maintain the latter in spaced relation to the vertical wall of the base, a cap member having an opening through which the spout is tightly fitted, and 45 means for securing the edge of the cap member to the base.

2. The combination with a tapered spout, of a base member including a threaded barrel having an inturned base-flange, and an upper 50 peripherally-extending flange, the outer edge of the latter being turned to form an annular flange in parallel relation and concentric with the barrel, a spout resting on the base-flange, and a cap member having an opening into 55 which the spout is tightly fitted, the periphery of the cap being curled or spun over the peripheral flange of the base member.

3. The combination with a tapered spout, of a two-part bushing including a base mem- 60 ber having an inturned flange arranged to enter the enlarged end of the spout, and a cap member having an opening through which said spout passes.

In testimony that I claim the foregoing as 65 my own I have hereto affixed my signature in the presence of two witnesses.

PATRICK WALL

Witnesses:

A. F. SMELTZER, SAMUEL L. SCHNITZER.