

J. LANCASTER.
STOP-COCK BOXING.

No. 173,972.

Patented Feb. 22, 1876.

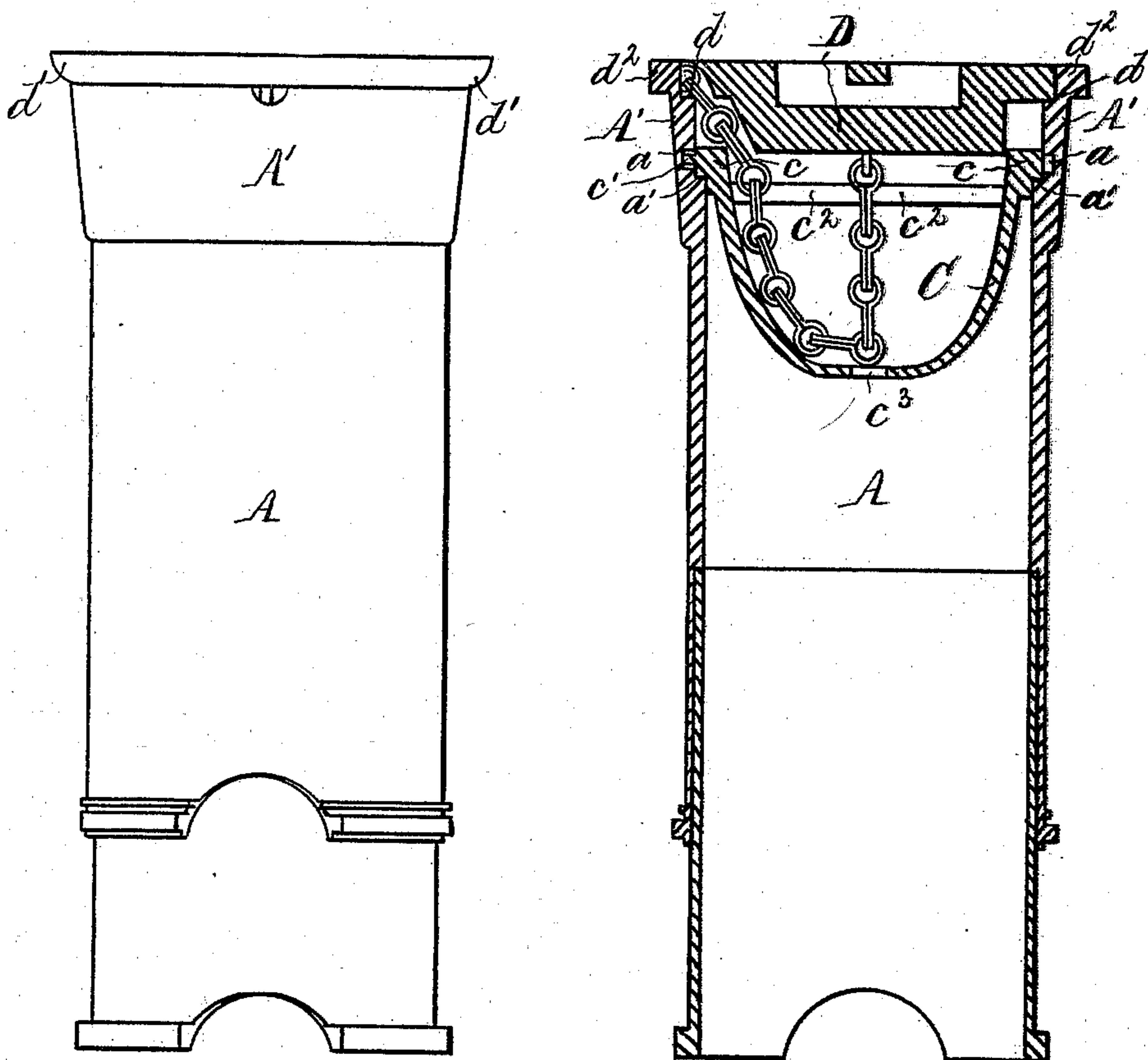


Fig. 1.

Fig. 2.

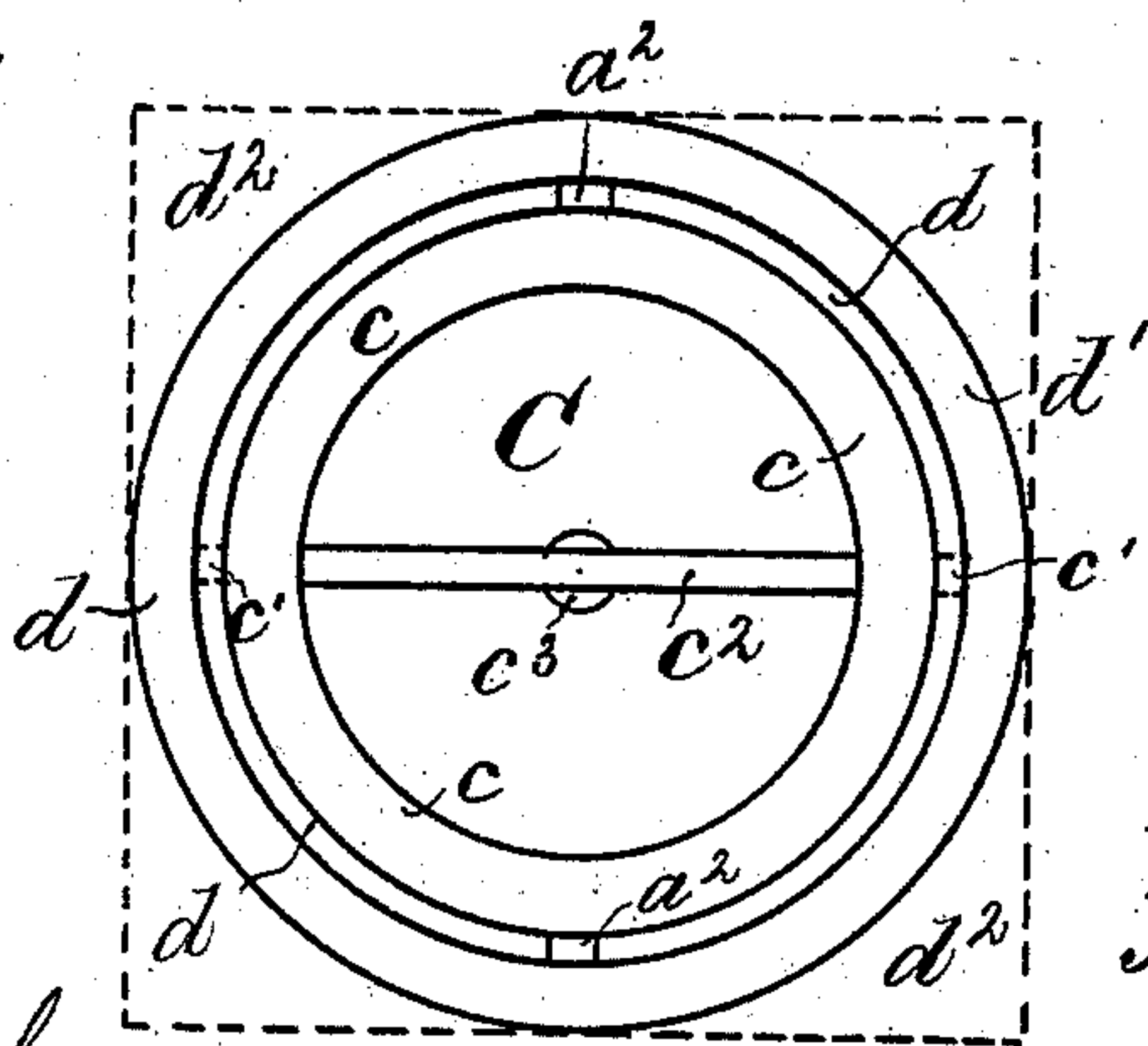


Fig. 3.

Witnesses:
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Atty.

UNITED STATES PATENT OFFICE.

JAMES LANCASTER, OF ST. LOUIS, MISSOURI.

IMPROVEMENT IN STOP-COCK BOXINGS.

Specification forming part of Letters Patent No. **173,972**, dated February 22, 1876; application filed December 15, 1875.

To all whom it may concern:

Be it known that I, JAMES LANCASTER, of St. Louis, Missouri, have invented an Improved Stop-Cock Boxing, of which the following is a specification:

This invention specially applies to stop-cock boxings for water pipes, though in general applicable as a stop-cock boxing, housing, casing, &c., for gas and similar pipes laid in streets, alleys, sidewalks, &c. The chief object of this invention is to prevent the lower interior part of the boxing from becoming clogged, shut up, or closed by accumulations, such as stones, dirt, rubbish, &c., and which, as is well known, frequently occurs, and makes it difficult to get at the stop-cock to open and close the same. This invention, therefore, relates to an improved construction of the boxing itself, adapting it to contain a cup-valve, which shuts the top interior part of the boxing from its lower interior part containing the shut-off cock. My invention relates to the manner in which I am enabled to insert and lock the cup-valve in its seat; and, lastly, my invention relates to an improved combination of parts, all of which will now more fully appear.

Of the drawing, Figure 1 is a front or side elevation. Fig. 2 is a sectional elevation. Fig. 3 is a top plan with the cap removed.

A represents my boxing of cylinder shape, and which I further adapt to receive my improved parts as follows: The upper part of the boxing I cast or form to present a bell end, A', thus enlarging the diameter at top more so than the diameter at bottom of boxing. Further, at the junction of the bell end A' (with the body) I provide an annular groove *a*, and at *a*¹ I form a seat, as shown in Fig. 2. The purpose of the groove *a* is to receive and lock the lug of the valve, and the purpose of the seat *a*¹ is to seat the valve proper. At *a*², Fig. 3, of the interior of the bell end I form open slots. These enable the lug of the valve to pass in order to seat it in its seat. The bell end thus adapted is ready to receive my valve C. This, as shown in Figs. 2 and 3, is cup-shaped, so that it properly forms a vessel to receive whatever contents may enter same. I form the valve C at top to present the annular rim

c, which can have one or more projections or lugs *c*¹, and for the purpose before indicated. The interior of the cup-valve has a rod or bar, *c*², (see Figs. 2 and 3,) which serves as a hold to receive the stop-key, and by means whereof the cup-valve can be turned in its seat to grind itself loose in case it is held unduly fast, and when it is necessary to remove said valve. At the bottom the cup-valve has an aperture, *c*³, to allow water or fluid matter to pass through it. The bell end, as well as the cup-valve, being thus made, it is plain that in order to seat the latter it is necessary to bring its lugs *c*¹ in line with the open slots *a*²; this done, the valve can be let down on its seat, and so that its lugs will rest in the annular groove *a*, the rim of the valve resting at the same time upon the bearing edge or seat *a*¹, and as shown in Fig. 2. Thus seated, in order to lock the valve a slight turn imparted to it (either right or left) will bring its lug or lugs out of line with the side entrance-slots, and thus the valve will be held on its seat by its lugs being in engagement with the groove. This novelty in seating and locking the valve will make it difficult for those unacquainted with this operation of the valve to remove it in an unlawful manner. Also, the lower part of the boxing is thus effectually divided from the upper part, and hence no accumulation can enter said lower part of such a character as to make it difficult to control the stop-cock. A further advantage consists that the cup-valve, as a vessel containing any contents whatever, can be readily lifted out of the box. D represents the cap or cover. This is fitted to seat in the top of the bell end on the seat *d*, (see Figs. 2 and 3.) This cap can be united by a chain, (see Fig. 2,) or, as usual, hinged.

As shown in Figs. 1 and 2, my stop-cock boxing is adapted for streets, alleys, &c., the bell end A' having the upper edge rim or flange at *d*¹ formed circular. For street pavements, however, instead of the circular flange *d*, just referred to, I prefer to form the bell end at top to have a square or similar shaped plate or flange, as indicated at *d*², (see dotted lines in Fig. 3.)

What I claim as my invention is—

1. A stop-cock boxing having bell end A'

and a cup-valve, C, as and for the purpose set forth.

2. A cup-valve, C, having rim *c*, lug *c*¹, in combination with the bell end A', having a groove, *a*, seat *a*¹, side slots *a*², as and for the purpose set forth.

3. The combination of the cup-valve C, having rim *c*, lugs *c*¹, bar *c*², with bell end A' of the housing, having a groove, *a*, seat *a*¹, open slots

*a*², seat *d*, flange *d*¹ or *d*², and the cap D, substantially as and for the purpose set forth.

In testimony of said invention, I have hereunto set my hand.

JAMES LANCASTER.

Witnesses:

WILLIAM W. HERTHEL,
CHAS. F. MEISNER.