

C. T. FORD.
COVER FOR SERVICE BOXES.
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1,014,138.

Patented Jan. 9, 1912.

Fig. 1.

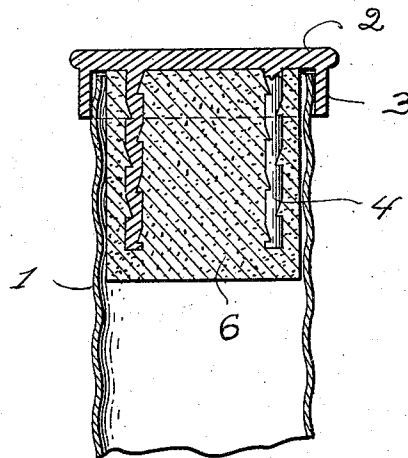


Fig. 2.

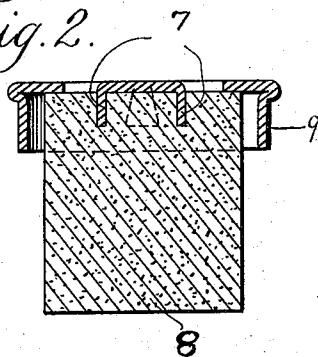
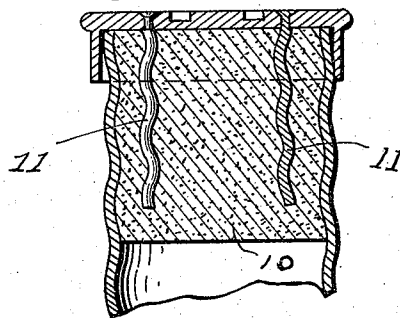


Fig. 3.



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COVER FOR SERVICE-BOXES.

1,014,138.

Specification of Letters Patent.

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Application filed March 5, 1910. Serial No. 547,585.

To all whom it may concern:

Be it known that I, CHARLES T. FORD, a citizen of the United States, residing at Washington, in the District of Columbia, have invented certain new and useful Improvements in Covers for Service-Boxes, of which the following is a specification.

The invention relates to covers for so called service boxes, which are used, generally in public places, to surround and give access to cocks or other controlling connections in service pipes.

The object of the invention is to provide a cover which shall be made of materials of such low intrinsic value as to eliminate vandalism and at the same time, to render the cover self-positioning and retaining in the sense that it requires no bolts or special locking means, and may not be displaced by such shocks as may result from the feet of pedestrians, the wheels of vehicles or the feet of horses, which may pass over it.

To these ends, the invention consists in providing a metallic foundation, which will constitute a relatively small portion of the vertical dimension of the cover and a heavy depending body of relatively cheap material, such as masonry or equivalent material, which body shall be of sufficient depth to not only position the cover upon the box, but which will lend sufficient inertia to the cover to make it irresponsive to or prevent its being displaced by the feet of pedestrians or of horses, or the wheels of vehicles, which may travel over it.

In the drawing, Figure 1 is a vertical sectional view of a service box with my improved cover in position; Fig. 2 is a vertical sectional view of a modified form of cover; and Fig. 3 is a vertical section view of another modified form of cover.

1 is a service box which may have straight sides or may be provided with spiral grooves, as shown in Fig. 1.

2 is a cover having an annular depending flange 3, which is of a diameter adapting it to be fitted outside of the box 1, as shown in Fig. 1. The cover 2 is provided with depending lugs or reinforcing members 4 provided with notches or recesses 5. These members 4 are cast integral with the cover 2 and may be of any desired length.

6 is a cement composition which is molded solid around the members 4, the members 4 acting as a reinforce for the composition so that the cover 2 is provided with a de-

pending weighted body which extends some distance within the service box 1, the weight of said body being sufficient to hold the cover in place on the box without the intervention of screws, bolts and the like. The length of the body 6 is such that the cover cannot be removed from the box accidentally.

In Fig. 2, I have shown a construction wherein the reinforcing members 7 are formed by striking up the metal from the cover, the cement composition body 8 being keyed or molded to said reinforce members 7, as clearly shown. The cover in this view is provided with the flange 9 which corresponds with the flange 3 in Fig. 1.

In Fig. 3, I have illustrated a cover in which the depending cement composition body 10 is formed with a spiral groove which may be threaded in the spiral groove of the box shown in Fig. 1. In this construction, it is not necessary that the body 10 be as long nor as heavy as the bodies 6 and 8 shown in Figs. 1 and 2, respectively, inasmuch as the threads formed by the spiral grooves interlock with the spiral groove formed in the box. This cover shown in Fig. 3 may be molded directly in one end of the service box. In carrying out this feature of my invention, it is, of course, necessary to coat or paint the inner face of the service box with graphite, clay or other easily disintegrated material, after which the cement is introduced and pressed into the end of the box, with the box acting as a mold. After the cement has set, the clay, graphite, or other easily disintegrated material is readily removed from the inner face of the service box by tapping the box or giving the cover a twisting movement, whereupon the clay, graphite, etc., will readily fall to the bottom of the service box, thus leaving the cover with an easy fit within the service box.

A cover constructed according to my invention not only possesses maximum strength, but is of such construction that it cannot be accidentally displaced or removed from the service box, thus insuring the closure of the box at all times and preventing accidents. These covers may be molded at odd times by city government at the supply station in molds provided for that purpose, or, as above stated, they may be molded directly in the service box, the service box acting as a mold.

It is to be understood that the several forms of projections for the purpose of securing the depending weighted body to the cap or cover are merely suggestive and there is no intention of limiting the invention to any particular means for accomplishing this result. It is also to be understood that, as illustrated in Fig. 3, the projections 11 may be made separately from and attached to or placed in position upon the cap or cover and the depending weighted body or core cast about the same. This is important in converting existing caps or covers for the new use. In Fig. 3, the depending projections are shown riveted in place, but it is obvious that they might merely be dropped through openings made in the cap or cover and allowed to project sufficiently beyond the inner surface to insure the attachment of a sufficiently deep body of cement to hold the cap in place by its weight.

It is to be understood that I do not limit myself to the particular forms shown, which are merely illustrative of the principles of my invention.

The box cover having the characteristics described is peculiarly advantageous in that it is not of sufficient value to suggest dishonesty, resulting in its removal; it has no attaching screws or other parts that may work loose and develop dangerous projections in the surface to be traveled over; it remains in place in spite of any shocks that may be brought upon it by travel over the surface; it is exceedingly cheap to make and

practically indestructible, and therefore very economical; and the invention affords a convenient and economical means for repairing existing covers, which exist in large numbers in any municipality with their original attaching means lost, destroyed or stolen.

What I claim is:

1. A gravity retained service box cover comprising a relatively light metallic sustaining member adapted to fit the end of the box and a relatively deep body of heavy masonry secured to and depending from said sustaining member, adapted to enter the box for which the cover is intended and hold the cover in place by its inertia.

2. A service box cover for the purpose described, comprising a metallic supporting member constructed on its under side with means for interlocking with a molded body of plastic material, and a body of plastic material molded upon said under side of the base having a transverse dimension which adapts it to enter and project within the box and having a vertical dimension which lends a relatively large weight to the body and adapts it to resist shocks and hold the cover in place by its weight or inertia.

The foregoing specification signed at Washington, D. C., this 26 day of Feby., 1910.

CHARLES T. FORD.

In presence of—

HERVEY S. KNIGHT,
EDWIN S. CLARKSON.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."