

No. 633,187.

Patented Sept. 19, 1899.

E. H. FORD.
METER BOX.

(Application filed Dec. 20, 1898.)

(No Model.)

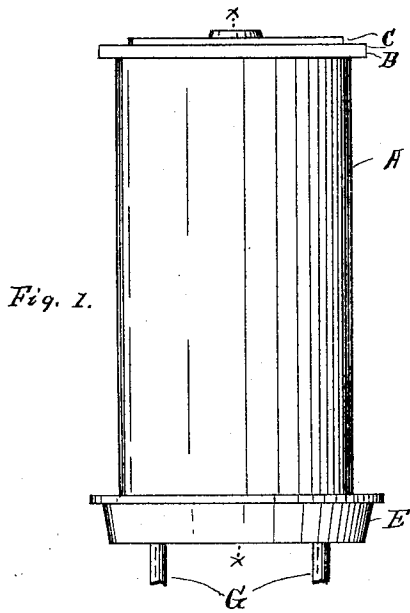


Fig. 1.

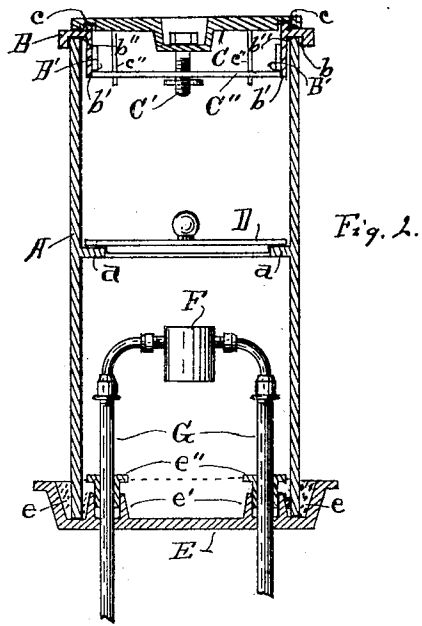


Fig. 2.

Fig. 4.

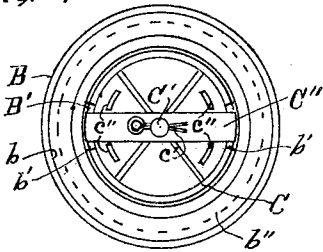
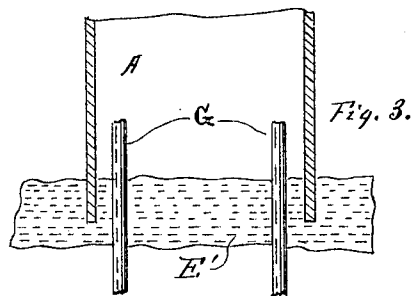
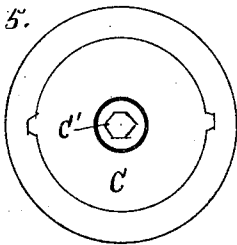


Fig. 5.



Witnesses.

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UNITED STATES PATENT OFFICE.

EDWIN H. FORD, OF HARTFORD CITY, INDIANA, ASSIGNOR OF ONE-HALF
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METER-BOX.

SPECIFICATION forming part of Letters Patent No. 633,187, dated September 19, 1899.

Application filed December 20, 1898. Serial No. 699,833. (No model.)

To all whom it may concern:

Be it known that I, EDWIN H. FORD, a citizen of the United States, residing at Hartford City, in the county of Blackford and State of Indiana, have invented certain new and useful Improvements in Meter-Boxes, of which the following is a specification.

My invention relates to improvements in boxes for protecting or housing water-meters, &c.; and its objects are, first, to protect the meters from frost when it is found necessary to place them below the surface of the ground in exposed places; second, to avert the danger of water percolating through the soil and into the box and submerging the meter, thus rendering it inaccessible or extremely difficult of access; third, to protect the meter from being meddled with by parties who are not authorized to have access to it, and, fourth, to provide for easily removing and replacing the meter. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is an elevation of the box. Fig. 2 is a vertical section of the same on the line xx of Fig. 1. Fig. 3 is a like section of the lower end, showing the body of the box embedded in concrete or other suitable material. Fig. 4 is a bottom plan, and Fig. 5 is a top plan, of the cover and cap.

Similar letters refer to similar parts throughout the several views.

The body A of the box is made, preferably, cylindrical in form and of tile-clay or other suitable material that is impervious to water and may be provided with an inwardly-projecting rim or ledge a near its longitudinal center for the support of the lid D to divide the body into two compartments, as indicated in Fig. 2. I supply my better grade of box with a metal or earthen bottom E, that is constructed with an annular receptacle e for the lower end of the body. After the body is placed in this receptacle it is to be filled with cement, water-lime, or other suitable material to form a water-tight joint. The water-pipes G pass through apertures e' in the bottom of the box, and these apertures are provided with packing-plugs e'' to prevent the passage through them into the box. With the cheaper grade of boxes I set the lower

end of the box in concrete, as indicated in Fig. 3 at E'. While this manner of constructing the bottom is perfectly practical, I do not deem it as desirable as the other form of bottom herein described, as it is not detachable, and its formation in the ground renders it very hard to remove when it is once placed without endangering the breaking of the body and the ruination of the box.

I prefer that the top be made in two sections, the first section being an annular rim or cap B, which has an annular bead b around its lower outer edge and a downwardly-projecting inner rim B'. Between this rim and the inner wall of the body A, I place a sufficient quantity of cement to render the joint not only water-tight, but perfectly secure. Between the bead b and the downwardly-projecting rim B' is an annular bearing b'' , designed to rest upon the top of the body of the box, and on the inner surface of this rim I form two lugs b' . The second section C of the top is formed with an annular groove c near its edge which is designed to receive and set over a corresponding bead or flange on the section B, as indicated in Fig. 2, so that suitable packing may be introduced to form a water-tight joint. I form a depression in this cover and pass a bolt C' through the cover and down to screw into the cross-bar C'', so that I can draw the cross-bar solidly against the lugs b' to draw the cover to a bearing with the rim B. I pass a key c' through the lower end of the bolt C' to avert the danger of screwing the bolt out of the cross-bar, and I place lugs c'' on the cover each side of the cross-bar, so that the bar will be made to turn with the cover when turning the cover to place, but will turn with the bolt when screwing it to place, thus insuring engagement with the lugs b' with little difficulty.

I do not desire to restrict myself to the exact construction herein shown and described, as the spirit of my invention consists not in the particular form or application of the several parts, but in constructing a box that will absolutely attain the objects hereinbefore stated and other beneficial objects incidental thereto.

The central partition D should be so constructed that should water get into the upper

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compartment of the box it could not pass through into the lower compartment to interfere with the meter F. The principal object of the upper chamber is, however, to form an
 5 air-chamber having a non-conducting partition between the upper and the lower chambers, so that the danger of freezing the meter is reduced to the minimum and with but slight extra outlay or expense.

10 Having now fully described my invention, what I claim as new, and desire to secure by Letters Patent of the United States, is—

1. In a meter-box, a water-tight body, a bottom placed thereto and made water-tight, a
 15 cover formed of a rim to rest upon the top of the body and form a water-tight joint therewith, a cover resting on said rim, a cross-bar and bolt for securing the cover to the rim, an annular ledge around the inner surface of

the body above the meter-chamber, and a re- 20 movable cover on said ledge dividing the box into two compartments, substantially as and for the purpose set forth.

2. In a meter-box, a water-tight body, a cover formed of a rim to rest upon the top of 25 the body and form a water-tight joint therewith, a cover resting on said rim, a bolt passing through the cover and into a cross-bar, and lugs upon the rim to engage the cross-bar to secure the cover to the rim, and lugs to pre- 30 vent the cross-bar from turning with the cover, substantially as set forth.

Signed at Hartford City, Indiana, December 9, 1898.

EDWIN H. FORD.

In presence of—

WILLIAM H. ERVIN,

JOHN CANTWELL.