A. BUGBEE.

METER BOX.

APPLICATION FILED AUG. 18, 1916.

1,277,373. Patented Sept. 3, 1918.

Fig. 1.

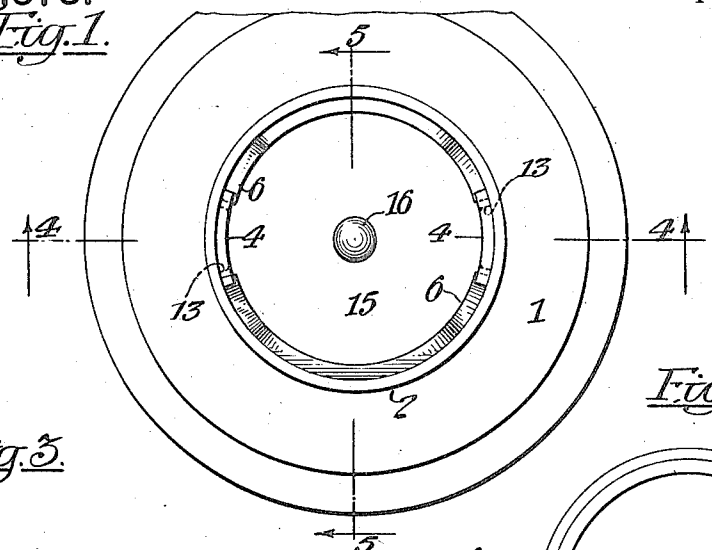


Fig. 2.

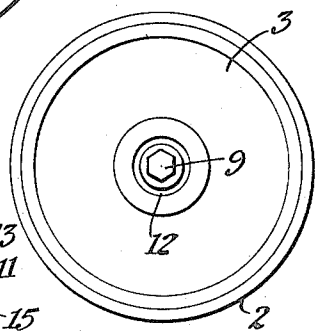


Fig. 3.

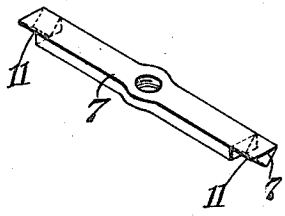


Fig. 4.

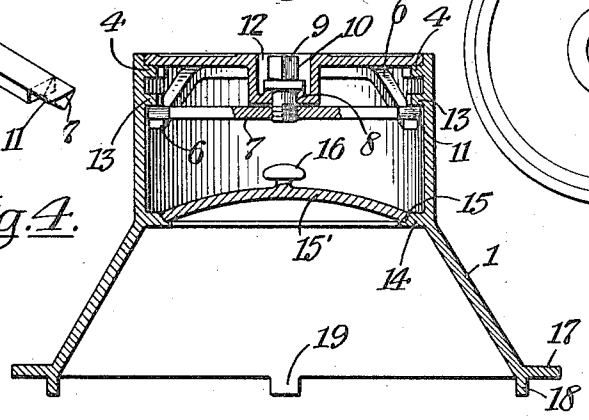
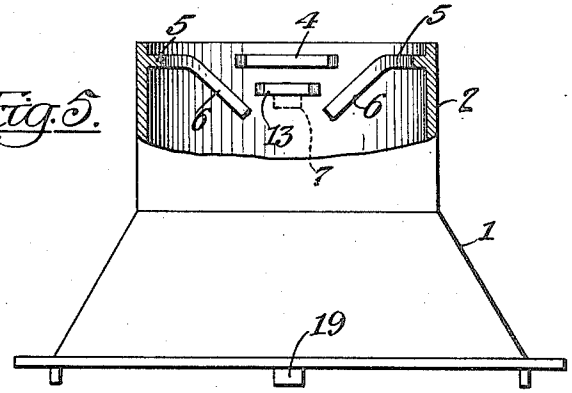


Fig. 5.



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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

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METER-BOX.

1,277,373. Specification of Letters Patent. Patented Sept. 3, 1918.

Application filed August 18, 1916. Serial No. 115,685.

To all whom it may concern:

Be it known that I, ALVIN BUGBEE, a citizen of the United States, and resident of the city of Trenton, county of Mercer, and State of New Jersey, have invented certain new and useful Improvements in Meter-Boxes, of which the following is a specification.

My invention relates to new and useful improvements in meter boxes.

The object of my invention is to provide a meter box with a cover or lid which can, with minimum effort, be opened or closed, locked or unlocked, and, when unlocked, simultaneously lifted from its seat to facilitate removal by hand. One of the principal objects is to provide a box with a cover which may be so opened when covered with ice. A further object is simplicity and economy of construction.

In the drawings I have shown a meter box intended to be constructed in two sections, the lower section being here omitted. Figure 1 is a top view of the box with the lid removed; Fig. 2 is a similar view of the lid; Fig. 3 is a perspective of the lever attached to the under side of the lid; Fig. 4 is a section on the line 4—4 of Fig. 1; and Fig. 5 is a section on the line 5—5 of Fig. 1.

Referring to the drawings in detail, 1 is the body of the box which has an upward extension 2, within the upper part of which and flush with its rim is the lid 3. Both body and extension, in this instance, are circular, although my invention may be adapted to other forms. On the inner surface of the upward extension are two lugs 4—4, oppositely disposed, for supporting the lid. In the same plane with these lugs are two other lugs, 5—5, also oppositely disposed, which are intended to coöperate with the first mentioned lugs for supporting the lid; but they have an additional function, each of them being provided with two downward extensions 6—6, upon which the ends of the lever 7 attached to the lid ride when the latter is lowered into or lifted from its seat. The lid 3 has an aperture 8 within which is a bolt 9 attached to the lever 7 by screw and thread or in any other suitable manner. The bolt 9 has a squared or many sided head 10 for holding it to the lid and also for operating the lever with a key. The lever 7 is of such proportional length that when the lid is on its seat its ends will ride upon the downward extensions 6—6 of the lugs 5—5, as already indicated; and to facilitate the ends of the lever riding upon the inclined portions of said lugs, the sides of the lever are beveled downwardly as at 11—11 in Fig. 3, making the ends where they ride upon the lugs triangular or V shaped in cross-section. The lid 3 is preferably cup-shaped at 12 to facilitate the use of a key upon the head of the bolt 9, the top of the latter being flush with the top of the lid 3. Beneath each of the lugs 4—4 is a lug 13, so placed that when the lid is on its seat the lever 7 will move under the same, thereby locking the lid against removal until the lever is turned for withdrawal therefrom. At the intersection of the body 1 with its upward extension 2 is a flange 14 grooved at 15 as a seat for the circular inner cover 15′, for convenience in handling which a knob 16 is provided. The lower portion of the body 1 is provided with flanges 17 and 18, and also with two oppositely positioned lugs 19 for holding the upper section of the box to the lower section.

The operation is as follows. Assuming that the upper section here shown has been connected with a lower section to form the usual meter box, and that the lid is to be seated, the latter is positioned so that one of the ends of the lever 7 will rest upon one of the inclined portions 6 of the lugs 5; the other end of the lever will, consequently, fall upon one of the inclined portions of the opposite lug. A slight movement of the lever by rotation of the bolt 9 will cause the lever to descend to a point below the plane of the bottom of the lugs 13. The lever may then be turned under the lugs 13, thereby locking the lid to the box, as shown in Fig. 5. The lid is unlocked and released from the lugs 13 by rotation of the lever in either direction, and, in riding up the downward extensions 6—6 of the lugs 5—5 will carry with it the lid 3 and raise the latter above the top of the box. It is obvious that this movement of the lever will cause the lid to break loose from the box when the parts are bound to each other by frost.

What I claim is:

1. The combination with the side wall of a box, of a lid, inclined lugs on the inner surface of the side wall, and a lever pivoted to the lid and coöperating with said lugs for lifting the lid above the top of the side wall.

2. The combination with a side wall of a box, of a lid, supporting lugs for the lid

on the inner surface of the side wall, a part of said lugs being inclined, and a lever connected to said lid to raise the latter in cooperation with the inclined lugs.

3. The combination with the side wall of a box, of a lid, supporting lugs on the inner surface of the side wall, a part of said lugs being inclined, a lever connected to said lid to raise the latter in coöperation with the inclined lugs, and additional means on the inner surface of the side wall for locking the lid against displacement.

4. The combination with a side wall of a box, of a lid, inclined lugs on the inner surface of the side wall, and a lever pivoted to the lid and coöperating with said lugs to raise the lid above the top of the side wall, the ends of said lever being beveled to correspond with the inclination of said lugs.

5. The combination with a side wall of a box, of a lid, inclined lugs on the inner surface of the side wall, a lever pivoted to the lid and coöperating with said lugs to raise the lid above the top of the side wall, the ends of said lever being beveled to correspond with the inclination of said lugs, and separate means for locking the lid against displacement.

ALVIN BUGBEE.

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