

J. F. O'CONNOR.
 WATER METER BOX.
 APPLICATION FILED JULY 6, 1916.

1,210,197.

Patented Dec. 26, 1916.

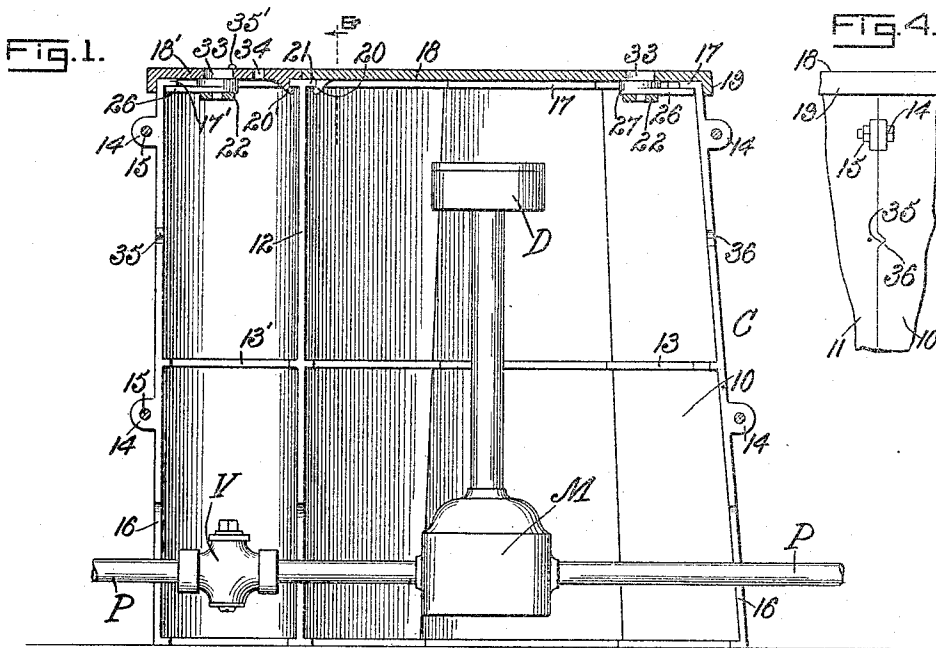


FIG. 4.

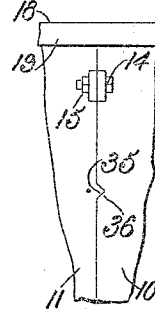


FIG. 2.

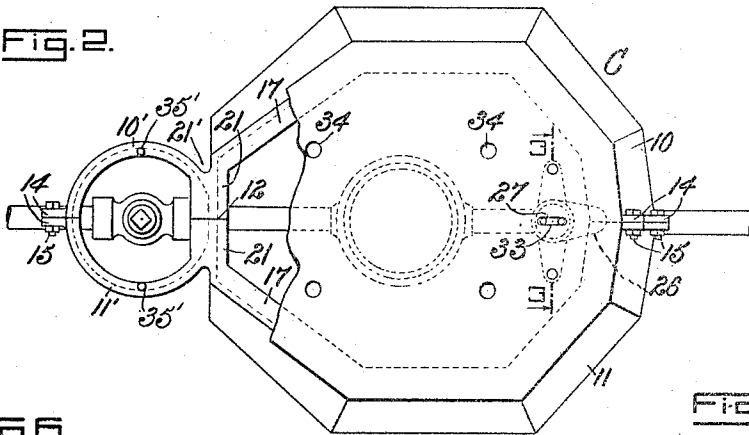


FIG. 6.

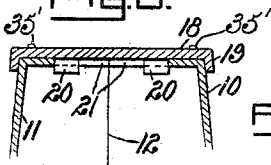


FIG. 3.

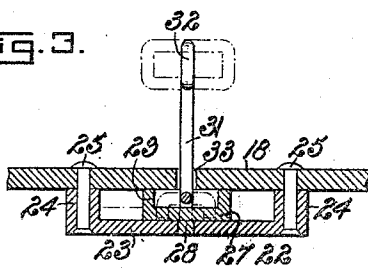
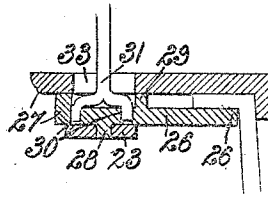


FIG. 5.



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UNITED STATES PATENT OFFICE.

JAMES F. O'CONNOR, OF EL RENO, OKLAHOMA, ASSIGNOR TO EL RENO FOUNDRY & MACHINE CO., OF EL RENO, OKLAHOMA, A CORPORATION OF OKLAHOMA.

WATER-METER BOX.

1,210,197.

Specification of Letters Patent.

Patented Dec. 26, 1916.

Application filed July 6, 1916. Serial No. 107,749.

To all whom it may concern:

Be it known that I, JAMES F. O'CONNOR, a citizen of the United States, and a resident of El Reno, in the county of Canadian and State of Oklahoma, have invented a new and Improved Water-Meter Box, of which the following is a full, clear, and exact description.

This invention relates to safety covers for water meters or the like and has particular reference to a new form of casing for inclosing either a water meter alone or a water meter in connection with an adjacent cut-off valve for the water.

Among the objects of the invention is to improve this type of devices by rendering the same not only simpler and cheaper in construction, but of a more reliable nature in practice.

Among the features of novelty of this improvement is the improved form of locking cover for the casing, the tool for locking the cover serving also as a lifting handle when the cover is unlocked.

With the foregoing and other objects in view the invention consists in the arrangement and combination of parts hereinafter described and claimed, and while the invention is not restricted to the exact details of construction disclosed or suggested herein, still for the purpose of illustrating a practical embodiment thereof reference is had to the accompanying drawings, in which like reference characters designate the same parts in the several views, and in which—

Figure 1 is a vertical sectional view showing the relation of the casing to the meter and valve, the casing shown being of the combined type; Fig. 2 is a plan view with parts of the covers broken away; Fig. 3 is a vertical section on the line 3—3 of Fig. 2 indicating the key inserted and showing in dotted lines the position of the key after it is turned to unlock the cover; Fig. 4 is a detail in front elevation indicating the form of joint for the main portion of the casing; Fig. 5 is a vertical sectional detail on a plane at right angles to Fig. 3; and Fig. 6 is a transverse sectional detail on the line 6—6 of Fig. 1.

Referring now more particularly to the drawings, I show a water pipe P having a cut-off valve V and also a meter M having an upwardly projected dial D.

The casing is indicated as a whole at C,

the body of the casing comprising two main vertical parts 10 and 11, preferably tapered upwardly, and each of these parts being provided with an extension 10' or 11' respectively, each of the extensions being shown as semi-cylindrical. Each vertical half of the casing body is so formed that the main portion and its extension are connected by an inwardly projecting vertical rib 12, this form making an exceedingly stiff and strong structure. I provide a central rib 13 lying in a horizontal plane substantially midway between the top and the bottom of the casing. This rib with its extension 13' in the casing extension provides a stiffener for this portion of the casing. Co-operating lugs 14 are formed on both the front and the rear sides of the casing, through which bolts or fasteners 15 are adapted to pass in locking the parts together. I also provide cut-outs 16 to accommodate the pipe.

The upper end of the casing is provided with an inwardly projecting horizontal flange 17, 17' which serves two functions, first, to stiffen the upper edge of the casing and secondly, as a means to interlock with the cover elements.

Each portion of the body of the casing is provided with its own cover adapted to be manipulated independently of the other cover, but in general construction and operation the covers are similar in character. The cover 18 is provided with an outer downwardly projecting flange 19 which fits over the top of the casing all the way around, except where the main body of the casing is connected to its extension. The inside of the cover adjacent its rear edge or that portion remote from the lock is provided with a pair of claws 20 which project downwardly and outwardly beneath a pair of lips 21 formed at the ends of the flanges 17. These claws positively prevent the lifting of the cover at that portion. At the front portion of the cover is provided a novel form of lock, the same comprising a keeper 22, see Fig. 3. Said keeper includes a plate 23 and hollow posts 24. Permanent fasteners 25 extend through these posts locking the keeper to the under surface of the cover. The lock bolt 26 extends from a hub 27 having a central downwardly projecting pivot 28 journaled in a hole in the center of the plate 23. The hub has an upwardly project-

ing flange 29 bearing against the under surface of the cover 18, and thereby the lug 28 is held in its bearing in the plate 23. The hub, furthermore, is provided with any suitable number or form of key sockets 30, the bolts of different covers being differently formed as to these key sockets or holes, so that no cover can be manipulated except with its own individual key. The key is shown at 31 and comprises a loop or handle 32 at its upper end and having prongs at its lower end adapted to pass through a slot 33 formed in the cover, and into the sockets 30 formed in the hub of the lock bolt, the shoulder portion of the key being adapted to lie beneath the cover slot and within the flange 29 of the hub, so that when the key is inserted into its place through the slot 33, it may be turned approximately ninety degrees so as to throw the point 26' of the bolt out from beneath the flange 17. At this time the fork portion of the key will lie substantially transverse to the slot 33 or will be interlocked beneath the cover 18, and therefore the handle 32 of the key will constitute a handle for lifting the cover from its normal position. While this action is taking place, the cover will roll slightly around the lips 21 as a hinge. In replacing the cover to its normal position, the claws 20 will first be engaged beneath the lips and then the front portion of the cover will drop into place, after which the key will be turned again to swing the bolt into its locking position. At this time, the key will be free to be withdrawn. While the main portion of the body of the casing is shown angular in cross section, the body extension is shown circular, and hence to prevent rotation of the cover 18' thereof, I form the lips 21' parallel to lips 21, whereby rotation of the cover, as might be attempted to

release the same, will be prevented. The claws 20' so cooperate with these straight lips as to prevent rotation of the cover. The action of the bolt 26 securing the cover 18' is the same in character as that described above in detail, but calling for a different specific type of key, so that a separate key is required for each lock.

The covers 18 and 18' are preferably formed with ventilating holes 34 to prevent the accumulation of sweat on the inside of the casings. Moisture accumulating in a device of this character interferes with the reading of the meter. In order to fit the two halves of the casing body together properly so that the covers and locks will operate accurately, I prefer to employ cooperating lugs 35 and notches 36 in the body parts. I may also employ dowel pins 35' or the like extending upwardly from the flange 17' into or through holes in the cover 18' to prevent lateral shifting or movement of said cover.

I claim:

In a meter box of the character set forth, the combination of a rigid casing having an inwardly projecting flange at its top at one side and having inwardly projecting lips at its other side, a cover for the casing having outwardly and downwardly projecting claws cooperating with said lips and having a downwardly projecting flange embracing the top of the casing, a movable bolt connected to the under surface of the cover remote from the claws, and means projecting through the cover to manipulate the bolt to cause the bolt to engage with or disengage from said inwardly projecting flange, said bolt turning means comprising a handle for lifting the cover when unlocked.

JAMES F. O'CONNOR.

It is hereby certified that Letters Patent No. 1,210,197, granted December 26, 1916, upon the application of James F. O'Connor, of El Reno, Oklahoma, for an improvement in "Water-Meter Boxes," were erroneously issued to "El Reno Foundry & Machine Co." as sole owner of said invention, whereas said Letters Patent should have been issued to the inventor, said *O'Connor*, and *El Reno Foundry & Machine Co.*, jointly, said El Reno Foundry & Machine Co. being assignee of *one-third* interest only in said invention, as shown by the records of assignments in this office; and that the said Letters Patent should be read with this correction therein that the same may conform to the record of the case in the Patent Office.

Signed and sealed this 6th day of February, A. D., 1917.

[SEAL]

R. F. WHITEHEAD,

Acting Commissioner of Patents.