

W. O. B. MATTHEWS.
 LOCKING LID FOR WATER OR GAS MAIN STOP BOXES.
 APPLICATION FILED AUG. 30, 1912.

1,054,782.

Patented Mar. 4, 1913.

FIG. 2.

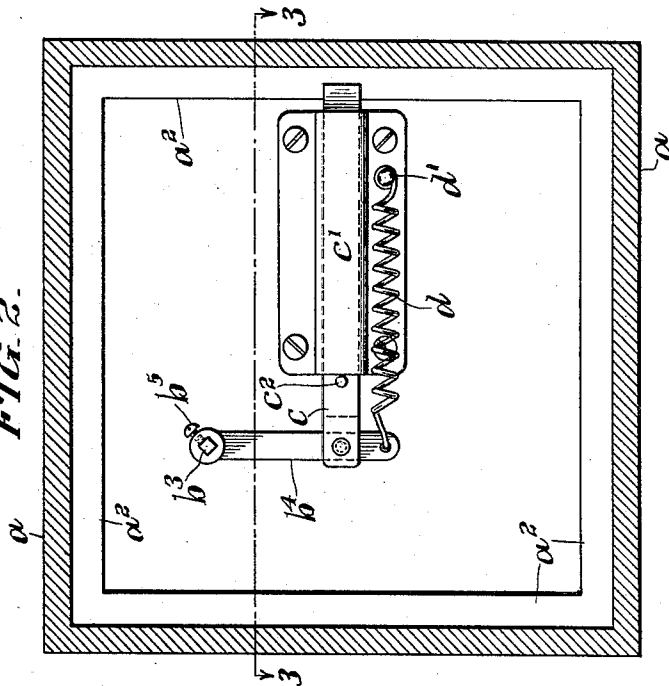


FIG. 3.

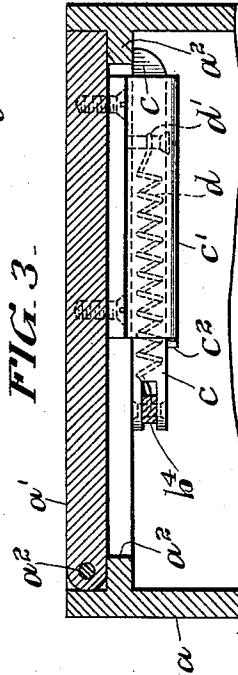


FIG. 1.

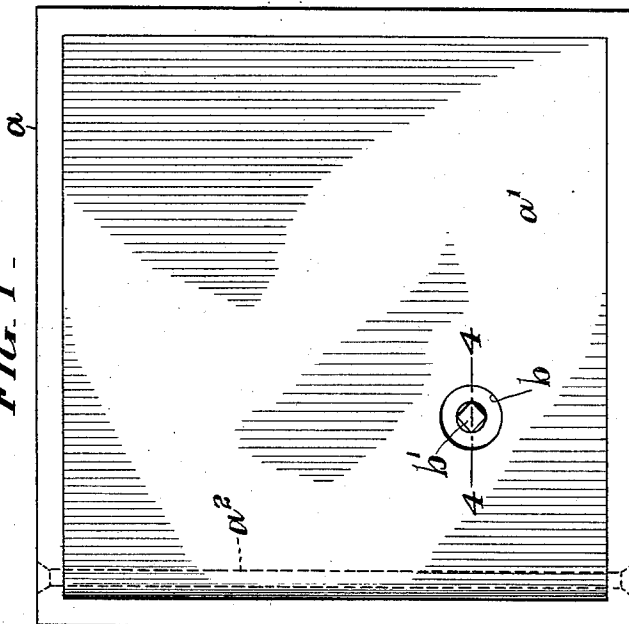
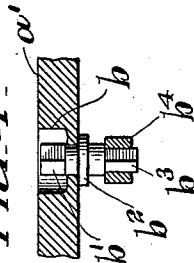


FIG. 4.



WITNESSES

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LOCKING LID FOR WATER OR GAS MAIN STOP-BOXES.

1,054,782.

Specification of Letters Patent.

Patented Mar. 4, 1913.

Application filed August 30, 1912. Serial No. 717,939.

To all whom it may concern:

Be it known that I, WILLIAM O. B. MATTHEWS, a subject of the Emperor of Germany, but now residing at the city of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Locking Lids for Water or Gas Main Stop-Boxes, of which the following is a specification.

My invention has relation particularly to a locking lid for gas or water main stop-boxes, yet such lids are equally applicable to manhole conduits housing electric and other wires underground, to prevent thereby accidents incident to the use as now of unprotected lids, for such boxes or conduits.

My invention stated in general terms, consists of a locking lid for a stop-box or conduit manually operative from the outside thereof, by means of a key, for elevating the lid to gain access to the interior of the box or conduit, and when constructively arranged as illustrated in the accompanying drawings and as hereinafter fully described and claimed.

In the accompanying drawings:—Figure 1, is a top or plan view of a water or gas main stop-box provided with a hinged lid having a key-hole in connection with a locking device not shown in this view, but fully shown in Fig. 2, embodying main features of my present invention. Fig. 2, is an under plan elevational view of the locking device for the lid of the said defined box or conduit, showing the same in this view in an operative position. Fig. 3, is a transverse sectional view through the box on the line 3—3, of Fig. 2; and Fig. 4, is a similar view of the key-hole on the line 4—4 of Fig. 1.

Referring to the drawings *a*, is the rectangular-shaped water or gas main stop-box having a lid *a*¹, pivoted as shown, by means of a bar *a*², journaled in two of the sides of the box *a*, as in Fig. 1, and forming thereby a hinged connection of the lid *a*¹, with the box *a*.

b, is a circular recess formed in the body of the lid and in which is mounted the key-hole *b*¹, arranged square at the upper end, in the said recess and rounded beneath and on which is secured a washer or gasket *b*², so as to hold it up against the lid body. The

lower end of the said key-hole *b*¹ is formed square as at *b*³, and to which is secured a cross-bar *b*⁴, by means of a set-screw *b*⁵, making the same removable therefrom. The cross-bar *b*⁴, is pivoted to the forked end of the lock-bolt *c*, mounted in a housing *c*¹, and which lock-bolt *c*, is provided with a limiting stop-pin *c*², beyond the rear end to the left of the housing *c*¹, as illustrated in Fig. 2. The outer end of the cross-bar *b*⁴, is connected with one end of preferably a coiled spring *d*, the opposite end of which is pinned at *d*¹, to the base of the housing *c*¹, for the lock-bolt *c*. The said lock-bolt *c*, at the forward right hand end is rounded off on one side, as clearly shown in Fig. 3, so that the flat opposite side of the same may rest on the inner ledge or rim *a*², of the box *a*, as clearly shown in Fig. 2. The ledge or rim *a*², is arranged on all four sides of the box *a*, so that when the lid *a*¹, rests thereon, its upper surface will be flush with the top surface of the box *a*, as clearly illustrated in plan in Fig. 1.

By fitting a key into the key-hole *b*¹, and then manually turning the same, the cross-bar *b*⁴, will be drawn in a rearward direction, that is, to the left on the under side of the box-lid and thereby the spring *d*, expanded to withdraw at the same time the lock-bolt *c*, from its contact or engagement with the ledge or rim *a*², of the box, and thus to permit the lid *a*¹, to be readily by hand elevated so as to gain access to the interior of the box *a*, for the intended purposes. The limiting stop-pin *c*², when the energy exerted is released that caused the lid to be elevated and the lid has been closed down onto its countersunk seat, will bear against the left hand end of the housing for the lock-bolt *c*, and the opposite end of the said bolt will rest upon the under side of the said ledge or rim *a*², to thereby lock the lid in connection with the said box *a*, as will be clearly understood from Fig. 2, of the drawings.

Having thus described the nature and object of my invention, what I claim as new and desire to secure by Letters Patent is:—

In a stop-box, a key operating means and having pivotally connected thereto a cross-lever which carries at one extremity a re-

tracting spring, an incasement for a lock-bolt, said bolt having a limiting stop to engage said incasement and said lock-bolt pivoted to said cross-lever and operated by said
5 key operating means, substantially as and for the purposes described.

In witness whereof, I have hereunto set

my signature in the presence of the two subscribing witnesses hereto.

WILLIAM O. B. MATTHEWS.

Witnesses:

J. WALTER DOUGLASS,
THOMAS M. SMITH.

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