

(No Model.)

H. F. REBMANN.

COVER FOR STOP COCK BOXES AND FRAME THEREFOR.

No. 572,217.

Patented Dec. 1, 1896.

Fig. 1.

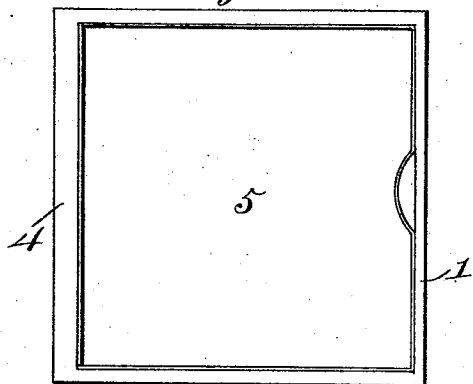


Fig. 2.

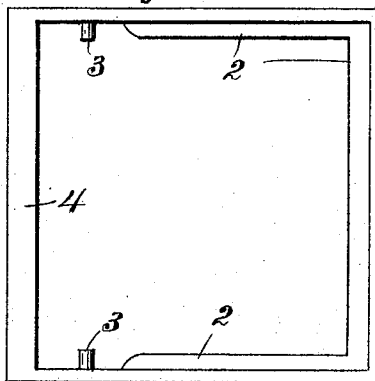


Fig. 4.

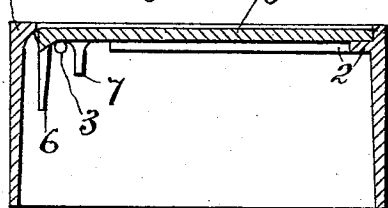


Fig. 7.

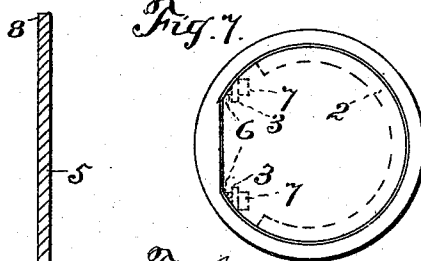


Fig. 5.

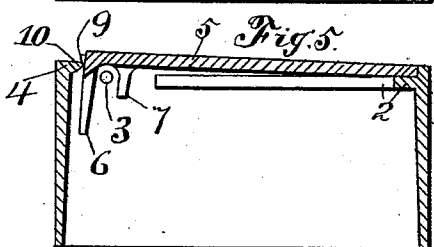


Fig. 6.

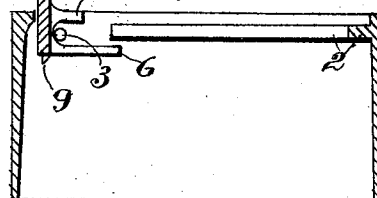


Fig. 8.

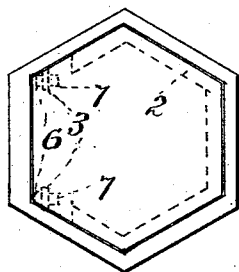
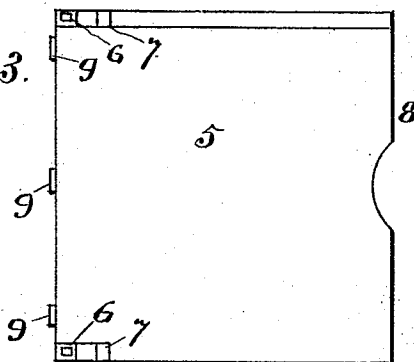


Fig. 3.



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COVER FOR STOP-COCK BOXES AND FRAME THEREFOR.

SPECIFICATION forming part of Letters Patent No. 572,217, dated December 1, 1896.

Application filed February 24, 1896. Serial No. 580,370. (No model.)

To all whom it may concern:

Be it known that I, HARRY F. REBMANN, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Covers for Stop-Cock Boxes and Frames Therefor; and I do hereby declare the following to be a sufficiently full, clear, and exact description thereof as to enable others skilled in the art to make and use the said invention.

This invention relates to covers of stop-cock boxes and frames therefor, applicable to service-cock boxes for water and gas upon thoroughfares and other stop-cock boxes exposed upon highways, and has for its object the production, at a minimum cost, of box frames and covers which are readily locked into each other, so that the cover is hinged in the frame when the parts are assembled, but so that the cover cannot be detached from the frame without having access from underneath while the cover is closed by removing or detaching the cover from the stop-cock box, and thus to prevent the purloining of the cover when in use.

To this end this invention consists of the construction of cover and frame so constructed and proportioned in reference to each other that as they are cast the cover can be inserted into the frame by springing the frame sufficiently to permit the cover to enter the frame and swing easily, so as to open upon trunnions cast in the frame, but presenting no opportunity for a hold upon the cover to lift the hinged side from the frame when closed, and having the parts of the hinge of such form that it is impossible to detach them while open.

The construction and operation of this invention are illustrated in the accompanying drawings and is hereinafter fully described.

Referring to the drawings, Figure 1 is a plan of a stop-cock-box cover and frame as assembled for use. Fig. 2 is a plan of the frame with the cover removed. Fig. 3 is an inverted plan view of the cover. Fig. 4 shows a vertical section of the cover and frame as assembled with each other in closed position. Fig. 5 shows a similar section with the cover laid in place upon a frame ready to be inserted by springing it into position in the frame.

Fig. 6 shows a vertical section of the frame and cover assembled, the cover standing in open position. The above-stated figures show the invention in a rectangular form. Fig. 7 shows the invention in plan view as applied to a box and cover frame of circular form, and Fig. 8 shows a like view of a cover-frame and cover of hexagonal form.

1 represents the frame having an internal rim or flange 2 slightly below its upper surface, extending along the front side and in adjacent portions of two other sides.

3 3 are trunnions projecting internally from the frame below the upper edge.

4 is an internal flange extending across the fourth or rear side of the frame, which flange 4 is flush with the top of the frame.

5 is the cover-plate, shown in inverted plan view in Fig. 3 and in section in Figs. 4, 5, and 6.

6 6 are projections extending downwardly from the under side of the cover and of such length as to pass by the rear of the trunnion 3, and when the lid is raised in vertical position to pass underneath the trunnions 3 3.

7 7 are shorter projections extending downwardly from the lid 5 in the front of the trunnions 3 3 and in combination with the longer projections 6 6 guide the cover in its motion as it turns upon the trunnions 3 3, practically a right angle, from a horizontal to a vertical position. The projections 6 6 extend beneath the trunnions 3 3 when the lid 5 is in upright position and prevent the lifting out of the cover 5.

The cover 5 is made of such form and dimensions relatively to the frame 1 as to fit tightly between the front and rear sides of the frame; that is to say, with the front edge 8 of the cover resting on the front flange 2 and in close contact with the inside of the rim of the front of the frame 1, the rear edge of the plate pressing tightly against the inside of the flange 4. One or more projections 9 may be formed in the rear edge of the cover 5 (preferably in central position as to length of the cover) and beveled, as shown in Fig. 5, at the part marked 10, so that when the cover is placed into position, with the projections 6 and 7 upon each side of the trunnions 3 and the front edge of the plate 5 against the side inside of the front edge of the rim of

the cover and resting upon the flange 2, by forcibly driving down the rear edge of the cover the back edge of the frame springs outwardly sufficiently to permit the rear edge of the cover to pass behind the upper edge of the flange 4, so that it is impracticable with only the flat upper surface of the cover and rim exposed in flush position with each other to lift the cover out of its position of hinged engagement in the frame, on which it swings freely, and when the cover is raised the projections 6 prevent any rising movement from the trunnion, and the projections 7 support the weight of the cover upon the trunnions 3.

In the first six figures of the drawings the invention is shown as applied to a cover-frame and lid of rectangular form. In Fig. 7 a plan view is shown of one of circular contour, and in Fig. 8 one of hexagonal form.

The outlines of the pivots and projections engaging them to form the hinges and of the front supporting-flanges are in these figures depicted in dotted lines. The same features of construction by springing the frame and operation to introduce the covers occur in these forms as in the form shown in the preceding figures. By this construction of parts, which involves no finishing or machining of either part, the castings as they come from the mold simply require cleaning and placing together and cannot be separated without the application of force from underneath, which side is inaccessible when the cover and frame are placed in position for use upon the stop-cock box.

Having described my invention, what I claim therein as new is—

1. An improved stop-cock-box frame and cover, consisting of a frame having a supporting-flange extending partly around the inner edge thereof and below the upper surface; trunnions projecting inwardly from said frame, and a beveled flange 4 in said frame, in combination with a cover-plate fitted to rest on the inwardly-projecting flange with its upper surface flush with the upper surface of the frame, and provided with projections arranged to embrace the trunnions, and having a beveled edge adapted to be forced downwardly within the inwardly-projecting edge of the frame; the whole forming a flush-topped frame and cover substantially as described and shown.

2. A stop-cock-box cover and frame therefor consisting of a frame adapted to fit on the top of a stop-cock box, and a cover-plate adapted to fit flush therein, and rest upon inward projections to hold the same in flush position, trunnions formed on the frame, downward projections formed on the cover arranged to embrace said trunnions, in combination with beveled projections adapted to be forced under one side of said frame and by springing to be held within the frame by the reaction of the said side so sprung substantially as and for the purpose set forth.

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