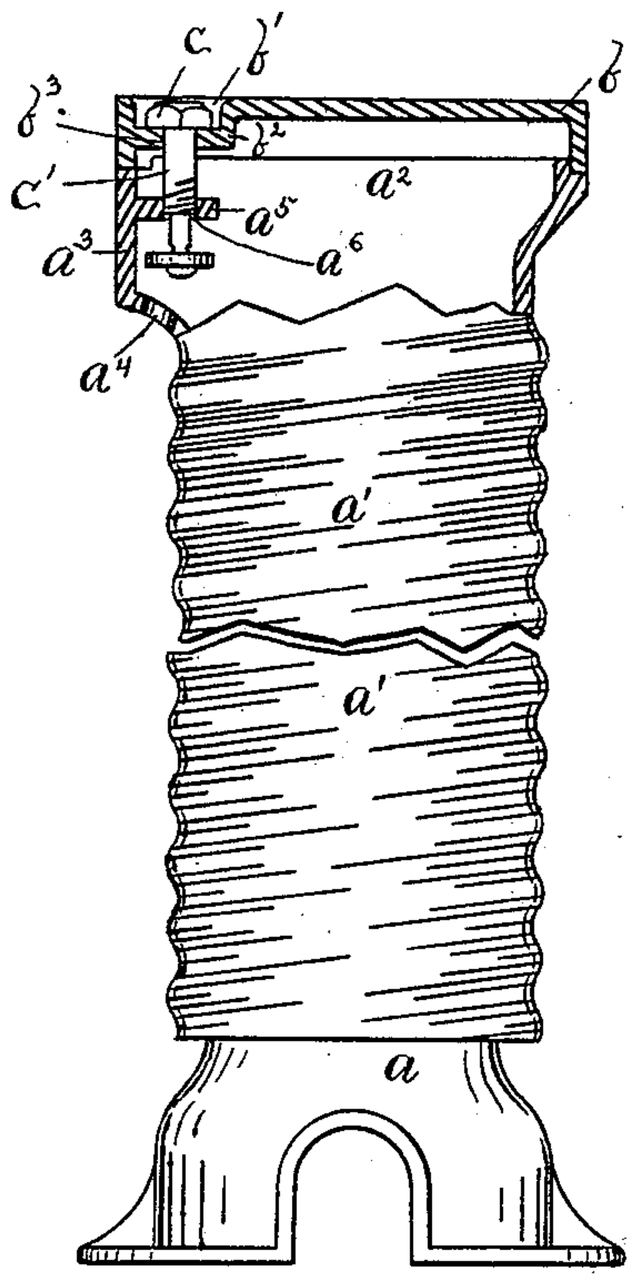
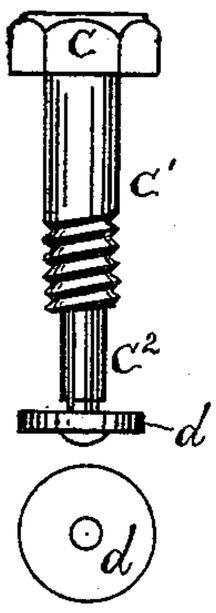
(No Model.)

C. F. BINGHAM.

STOP COCK BOX.

No. 365,232. Patented June 21, 1887.





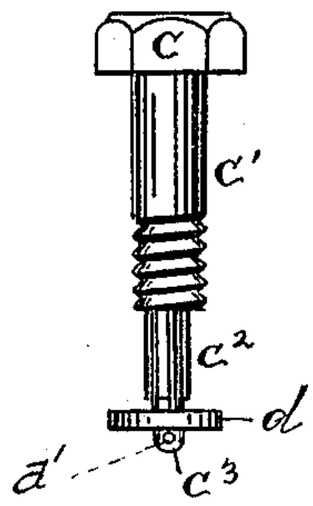


Fig. 1.

Fig. 3.

Fig. 4.

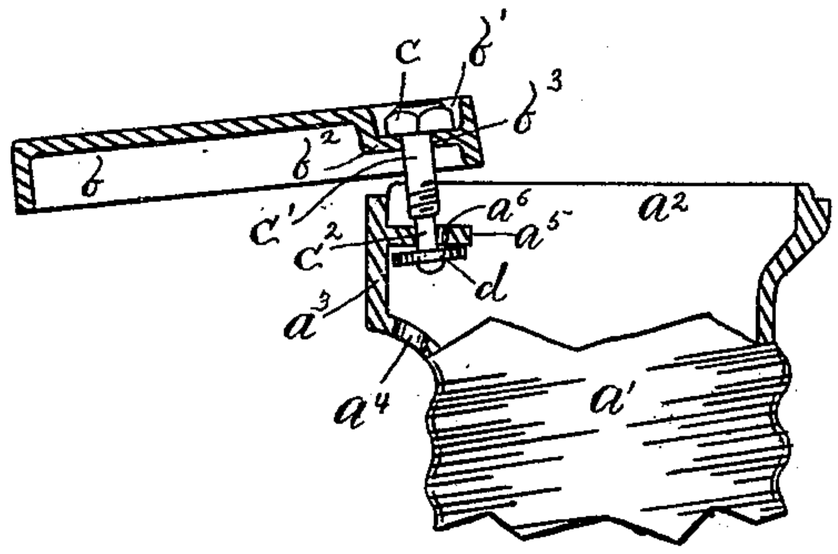


Fig. 2.

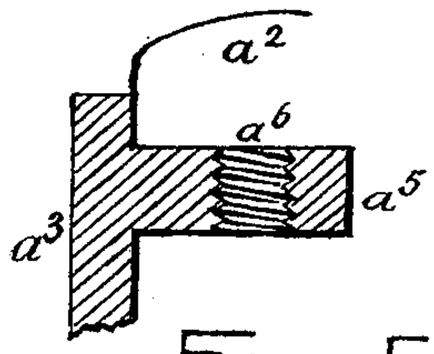


Fig. 5.

Witnesses:
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UNITED STATES PATENT OFFICE.

CHARLES F. BINGHAM, OF BUFFALO, NEW YORK.

STOP-COCK BOX.

SPECIFICATION forming part of Letters Patent No. 365,232, dated June 21, 1887.

Application filed September 15, 1886. Serial No. 213,639. (No model.)

To all whom it may concern:

Be it known that I, CHARLES F. BINGHAM, a citizen of the United States, residing at Buffalo, in the county of Erie and State of New York, have invented certain new and useful Improvements in Stop-Cock Boxes; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

This invention relates to an improvement in the fastening whereby the covers of stop-cock boxes are secured in place. Heretofore these covers have been usually attached by screws; but this manner of attachment is open to the objection that the screws can be easily removed and the cover carried off, leaving the box open and unprotected. In some cases the covers have been attached to the boxes by bolts, which permitted the cover to be swung aside, but did not secure the cover tightly to the box when applied thereto. This construction is also objectionable, because it enables unauthorized persons to swing the cover away from the box and leave the box open, so that the same becomes filled with leaves, dirt, &c., in the summer and with snow and ice in the winter, thereby rendering access to the stop-cock difficult and resulting frequently in the freezing of the service-pipes.

The object of my invention is to remedy these difficulties and provide a fastening whereby the cover is permanently attached to the box, and which will at the same time permit the requisite movement of the cover when released and tighten the cover on the box when applied.

The invention consists of the improved fastening, which will be hereinafter fully described, and pointed out in the claim.

In the accompanying drawings, Figure 1 represents an elevation, partly in section, of a stop-cock box provided with my improvement, and showing the cover in position on the box. Fig. 2 is a similar view showing the cover swung aside. Fig. 3 is an elevation of the fastening-bolt, and Fig. 4 is a modified form of the same. Fig. 5 is a fragmentary vertical section of the upper portion of the box on an enlarged scale.

Like letters of reference refer to like parts in the several figures.

a represents the lower part, and *a'* the upper part, of an extensible stop-cock box, both parts being provided with screw-threads in a well-known manner, whereby they are adjusted upon each other. It is obvious, however, that my improvement may be applied to any other suitable form of box, if desired. The upper part, *a'*, is provided with a circular top, a^2, which is formed with a shoulder upon which rests the cover *b*, the latter being provided with a depending marginal flange or rim which overlaps the shouldered top a^2.

C represents the fastening-bolt, whereby the cover is attached to the upper part, *a'*, of the box, and having its head seated in a recess or depression, *b'*, formed in the cover *b* at one end thereof. The fastening-bolt C passes through an opening, b^3, formed in the bottom b^2 of the recess *b'*, and is provided with a screw-threaded portion C', which engages in a threaded opening, a^6, formed in a horizontal lug, a^5. The latter is formed in an extension, a^3, of the upper part, *a'*, of the box. The lower end of the fastening-bolt C is formed with a contracted portion, C^2, which is made of smaller diameter than the screw-threaded portion C', and provided at its lower end with a head or enlargement, *d*, which is larger than the opening a^6 in the lug a^5, so as to retain the bolt in the lug when its screw-threaded portion C' is disengaged from the lug. The enlargement *d* consists, preferably, of a ring or washer which is secured to the contracted portion of the bolt by riveting or upsetting the end of the bolt. This is accomplished by inverting the box and inserting a suitable upsetting-tool through an opening, a^4, formed at the base of the extension a^3, below the lug a^5. If preferred, the lower end of the contracted portion C^2 may be provided with a transverse opening for the reception of a horizontal pin, *d'*, which retains the washer upon the bolt, as represented in Fig. 4.

The contracted portion C^2 of the fastening-bolt is made of such a length as to enable the cover to be raised sufficiently to allow its mar-

ginal flange to clear the shoulder at the upper end of the extension a^3 after the threaded portion C′ of the bolt has been disengaged from the lug a^5.

When it is desired to release the cover, a suitable wrench is applied to the head of the bolt C and the latter turned until its threaded portion C′ is unscrewed from the threaded opening in the lug a^5. The cover is then raised and swung to one side, as shown in Fig. 2, the contracted portion of the bolt being held in the lug a^5 by the enlargement or washer d, thereby preventing the cover from being detached from the box.

To apply the cover to the box, the same is swung in place upon the box and the bolt C is screwed into the lug a^5, thereby tightly securing the cover to the box.

My improved fastening permanently secures the cover to the box, thereby preventing the same from being carried away or stolen, and it at the same time forms a simple, convenient, and reliable locking device, which affords ready access to the interior of the box when required, and which permits the cover to be tightly closed, thereby excluding dirt, ice, &c., from the box.

I claim as my invention—

The combination, with a stop-cock box provided with a lug, a^5, having a screw-threaded opening, of a cover, b, and a fastening-bolt, C, provided with a screw-threaded portion, C′, a reduced portion, C^2, and an enlargement, d, whereby the cover is permanently attached to the box, and at the same time enabled to be lifted and swung off or to be tightened upon the box, as desired, substantially as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CHARLES F. BINGHAM.

Witnesses:

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W. T. MILLER.