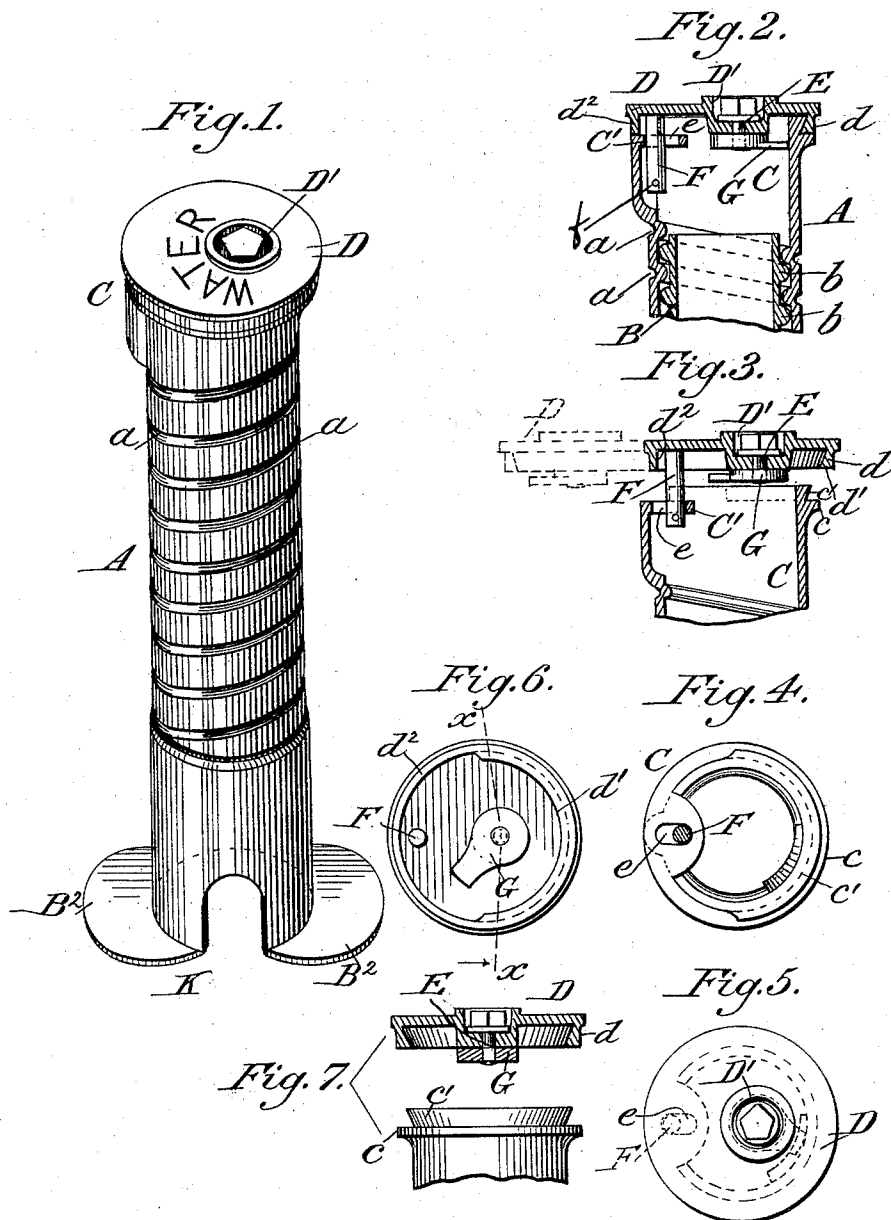


(No Model.)

C. G. ETTE.
STOP BOX.

No. 477,523.

Patented June 21, 1892.



Attest:

H. H. Schott
Am L. Boyden

Inventor

Charles E. Ette
per Fred W. Asker,
Atty.

UNITED STATES PATENT OFFICE.

CHARLES G. ETTE, OF ST. LOUIS, MISSOURI.

STOP-BOX.

SPECIFICATION forming part of Letters Patent No. 477,523, dated June 21, 1892.

Application filed October 7, 1891. Serial No. 408,051. (No model.)

To all whom it may concern:

Be it known that I, CHARLES G. ETTE, a citizen of the United States, residing at St. Louis, in the State of Missouri, have invented certain new and useful Improvements in Stop-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.

This invention relates particularly to certain details in the construction of stop-box covers and their locking mechanism; and it consists in the construction, arrangement, and combination of the several parts of the device, substantially as will be hereinafter described and claimed.

In the annexed drawings, illustrating my invention, Figure 1 is a perspective view of my improved stop-cock box. Fig. 2 is a partial vertical section of the same with the cover in its locked position. Fig. 3 is a similar view with the cover lifted and ready to be swung around into the position shown in dotted lines. Fig. 4 is a top end or plan view of the upper end of the box with the cover removed. Fig. 5 is a top plan view of the box-cover. Fig. 6 is a bottom plan view of the cover. Fig. 7 represents a cross-section of the cover on line *x* of Fig. 6 and a side view of the upper end of the box.

Similar letters of reference designate corresponding parts throughout all the different figures of the drawings.

A designates the outer and upper of the telescoping-sections of my service or stop-cock box, said section having at its upper end the stop-box proper C provided with the cover D.

B indicates the inner or middle section of the stop-box. The outer section A is longitudinally-adjustable upon this inner or middle section. Furthermore, it must be noted that the outer and upper section A is formed with a spiral thread or screw *a*, which is cast on or with the box-section.

K designates the base of my improved service or stop-cock box. Base K is hollow and communicates with the tubular interior of the section B, and this base is provided at its lower edge with a broad flange or flanges B², so that the base may have a solid or firm foot-

ing and rest to stand on and may be held firmly down after the earth has been packed solidly around it.

The inner or middle section B of my improved stop-box is made in general as a plain pipe, (see Fig. 2;) but near its upper end its external surface is provided with a number of lugs or projections of suitable size and shape, cast or otherwise formed thereon integral with the substance of the inner tube. In the drawings, *b b* designate two of these lugs. These lugs are adapted to be engaged by the spirals *a* on the outer section A, as shown in Fig. 2, and therefore the lugs *b b* will be so placed or situated relatively as to be at a proper distance apart to permit the spiral thread *a* to properly and successfully engage them. By simply taking hold of the upper and outer section A and giving it a simple turn either way the height of the stop-box will be regulated and adjusted so that it may be kept level with the sidewalk or below it or in any other position, as may be desired. Furthermore, a sufficient frost-lift is at all times provided for.

The cover D of the stop-box proper C is provided with a circular flange *d*, which fits down over the end of the upper box-section A and rests within a suitable outer peripheral rabbet *c*, formed in said upper end. The flange *d* is inclined on its inside wall at *d'* for about half its circumference, the remaining half being straight on the inside, as at *d''*, or at right angles to the cover-top, (see Figs. 3, 6, and 7;) also the rabbet *c* has its upright side inclined inwardly from top to bottom, so that its upper edge will project outward farther than its lower edge, and thus provide an inclined ledge *c'*, with which the flange *d* may engage, and when they are so engaged the cover will be locked, because it cannot be lifted vertically.

The cover D is provided with a downwardly-extending pin F, which is securely fastened to or made integral with the cover, which pin passes through a lug C', cast on the inside of the stop-box proper C, and said pin being provided on its bottom end with a projection or pin *f*, which is adapted to strike against the under side of the lug C' after the cover has been lifted. The lug C' is provided with an elongated slot *e*, through which the pin F

passes, and which permits said pin to have a free movement when the cover slides in locking and also when the cover is removed from the top of the box. Thus it will be seen that the downwardly-projecting pin F enables the cover to have a loose though permanent connection with the stop-box. Said pin permits the cover to be lifted vertically for some distance, and thus removed from the end of the box and turned around upon the pin, acting as a swivel, so as to open the end of the box; but the stop or projection upon the lower end of the pin F prevents the said pin from being disengaged from the stop-box, and slot *e*, moreover, after the cover has been turned around into the position shown in dotted lines in Fig. 3, permits said cover to be more completely removed from obstructing the opening in the box by thrusting the pin F into the outer end of slot *e*.

The cover is formed upon its upper side with a depression or recess *D'*, of suitable size and shape to allow the head of the bolt E to rest neatly therein, which bolt-head is squared or otherwise shaped to permit the application thereto of an operating-wrench for the purpose of rotating the bolt. This bolt E passes down through the cover and is secured to a horizontal arm G, the lower end of the bolt being squared or other shaped where it is connected to this arm, so that the connection is a rigid one and so that when the wrench is applied to the head of the bolt for the purpose of turning the same the said arm G will be turned in one direction or the other, as may be desired, and said arm is of a proper length

to allow its outer end to strike against the inner side wall of the box, so that the result of shifting the arm will cause in this way the cover to be shifted sidewise and locked by the engagement of the inclined edge of the flange *d* of the cover with the inclined edge of rabbet *c* in which flange *d* is seated.

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

The combination, with a stop-box having on the inside near the top edge a slotted lug and on the outside a peripheral rabbet whose upright wall is inclined inwardly from top to bottom to provide a locking-ledge, of a cover having a downwardly-projecting pin that passes through the slotted lug, and thereby loosely hinges the cover, and having also an encircling flange whose inner wall is inclined for a part of its length and adapted to engage the inclined ledge on the box, and a bolt supported in a perforation in the cover, said bolt having its upper end suitably squared for the application of a wrench thereto and carrying at its lower end a rigid arm, the outer end of which strikes against the inside wall of the box when the bolt is turned, and thus acts to shift the cover sidewise and lock the same, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

CHARLES G. ETTE.

Witnesses:

WM. E. ALBITZ,

HARRY S. HARMON.