H. O. JOHNSON & D. KEEFE.

CURB BOX.

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**1,099,804.** Patented June 9, 1914.

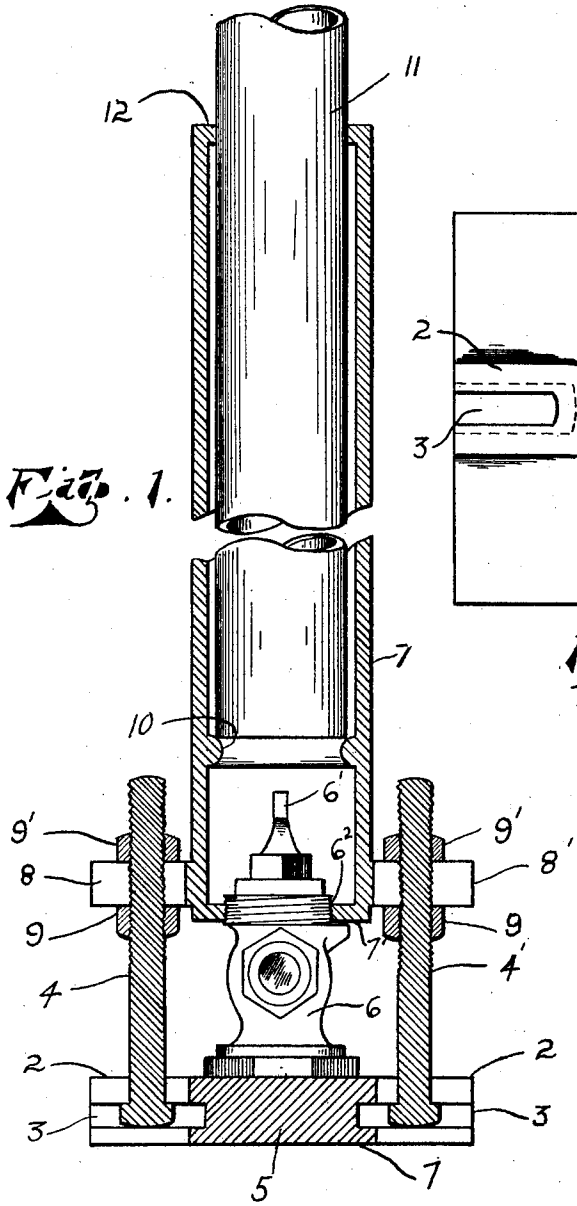



Fig. 1.

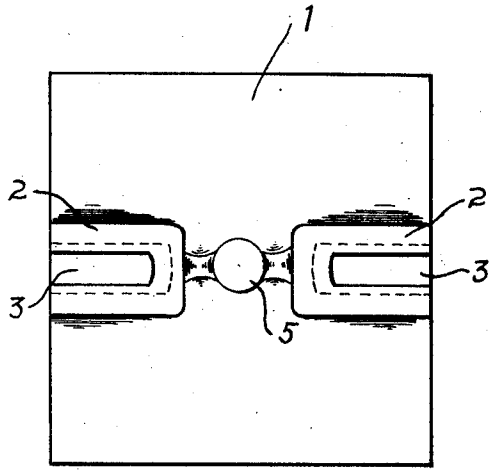



Fig. 2.

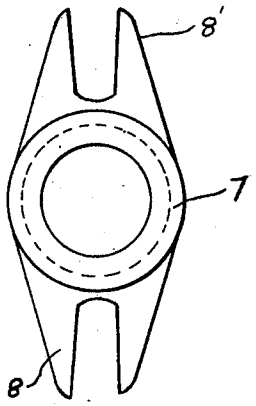



Fig. 3.

WITNESSES

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# UNITED STATES PATENT OFFICE.

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## CURB-BOX.

1,099,804. Specification of Letters Patent. Patented June 9, 1914.

Application filed March 11, 1913. Serial No. 753,530.

*To all whom it may concern:*

Be it known that we, HERBERT O. JOHNSON and DANIEL KEEFE, citizens of the United States, residing at Duluth, in the county of St. Louis and State of Minnesota, have invented certain new and useful Improvements in Curb-Boxes, of which the following is a specification, reference being had therein to the accompanying drawing.

Our invention relates to improvements in curb boxes.

The object of our invention is to provide a curb box which can be readily attached to the valve carried by the pipe line and at the same time provide a simple, cheap and more effective box of this character having certain details of structure hereinafter more fully described.

In the accompanying drawings—Figure 1 is a vertical cross-sectional view of our improved box showing the stop cock telescoping member in perspective. Fig. 2 is a top plan view of the base plate of our improved box. Fig. 3 is a bottom plan view of our improved box.

Referring now to the drawings, 1 represents the base-plate of our improved box, being preferably rectangular in shape and having formed upon its upper side two opposite raised portions 2 and 2′, forming flanged slots 3 open at their outer extremities for the admission of the box supporting bolts 4 and 4′. The heads of the bolts 4 and 4′, as shown in Fig. 1 of the drawings, enter said slots and are prevented from having any upward movement by the flanged raised portions 2 and 2′.

The base 1, as shown in Fig. 2, of the drawings, is provided with a flange 5 connecting the inner ends of the raised portions 2 and 2′. This flange strengthens the base-plates and in addition forms a level rest of support for the stop-cock 6.

It is well understood by those skilled in the art that the stop-cock 6 is arranged in the pipe line beneath the ground and may be of any desired structure. As shown, this stop cock is provided with a valve stem 6′, by means of which it may be operated, which will be hereinafter more fully described. The stop-cock is also provided adjacent its upper end with a threaded portion $6^2$, upon which is screwed the box 7. The box 7 consists of a cylindrical elongated member having its lower end turned inwardly at 7′ and screw-threaded, and adapted to be screwed upon the threaded portion $6^2$ of the stop-cock. This forms a tight joint and rigidly supports the box. The lower end of the box 7, above the inwardly turned portion 7′, is provided with outwardly extending bifurcated ears 8 and 8′, between which pass the bolts 4 and 4′. Screwed upon the bolts 4 and 4′ are nuts 9 and 9′, the nuts 9 being below the ears 8 and 8′, and the nuts 9′ being above the ears, it will be seen that the box 7 is drawn downwardly together with the stop-cock upon the base 1, and is also locked firmly between the ears 8 and 8′. The under side of the ears 8 and 8′ are stepped up some little distance so as not to be flush with the extreme lower end of the box to permit of the free revolution of the box when the same is being screwed down on to the cock.

The box proper above its lower end, is provided with an annular inwardly extending flange 10, forming a stop to limit the downward movement of the telescoping member 11. This flange also serves as a means for centering the tool used in operating the cock, so that it will readily fit over the valve stem 6′. The upper box 7 is turned inwardly at 12 to snugly fit the telescoping member 11, whereby a tight joint is formed therewith to prevent any dirt or the like entering the box 7. This inwardly turned flange 12 also holds the telescoping member away from the side of the box 7 and allows the same to be more readily telescoped within the box.

From the foregoing description it will be readily seen that applicant's device is readily attached to the cock and pipe line and firmly held in a vertical position and at the same time provided a curb box which can be readily removed when desired.

Having thus described our invention, what we claim and desire to secure by Letters Patent is:—

1. A curb box comprising a base, a valve resting upon the base, a body portion surrounding the valve stem and resting upon the upper end of the valve, a plurality of bolts carried by the base and extending upwardly and adjustably engaging the body portion, and a telescoping member within the body portion.

2. A curb box comprising a base, a valve resting upon the base, a body portion surrounding the valve stem and resting upon the upper end of the valve, and a plurality

of bolts extending from the base and adjustably engaging and holding the body-portion in its vertically adjusted position.

3. A curb box comprising a base, a stop-cock resting upon the base, a cylindrical body-portion surrounding a portion of the stop-cock, a plurality of bolts carried by the base and adjustably engaging the cylindrical body-portion, and means for attaching the lower end of the body-portion to the stop cock.

4. The combination with a stop-cock having an externally screw-threaded upper portion, a base plate supporting the stop-cock and having slots in opposite sides, a curb box having its lower ends threaded to be screwed upon the threads of the stop cock, laterally extending bifurcated ears carried by the lower end on the stop-cock, and bolts having their heads within the slots of the base and passing through the slots in the ears of the curb box, whereby the stop-cock is firmly clamped between the curb-box and the base.

5. The combination with a stop-cock having a threaded upper portion, a valve stem above the threaded portion, a curb box having its lower end turned laterally and threaded and screwed upon the threads of the stop-cock, a base plate below the stop-cock and supporting the same and having raised portions forming flanged slots, bolts having their heads within the flanged slots of the base plate, laterally extending slotted ears carried by the lower end of the curb box and through which the bolts pass, nuts carried by the bolts above and below said ears, an annular flange carried by the inner wall of the curb box above its lower end, a telescoping member within the curb box and of a diameter less than the said box, the upper end of the said box having an inwardly extending portion adapted to engage the telescoping member, substantially as shown and described.

6. The combination with a stop cock, a base plate supporting the stop cock and having slots in opposite sides, a curb-box having its lower end resting upon the stop-cock, means for securing said curb-box to the stop-cock laterally extending bifurcated ears carried by the lower end of the curb-box, and bolts having their heads within the slots of the base and passing through the slots in the ears of the curb-box, whereby the stop-cock is firmly clamped between the curb-box and the base.

In testimony whereof we hereunto affix our signatures in the presence of two witnesses.

HERBERT O. JOHNSON.
DANIEL KEEFE.

Witnesses:
H. W. COFFIN,
S. GEO. STEVENS.

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