

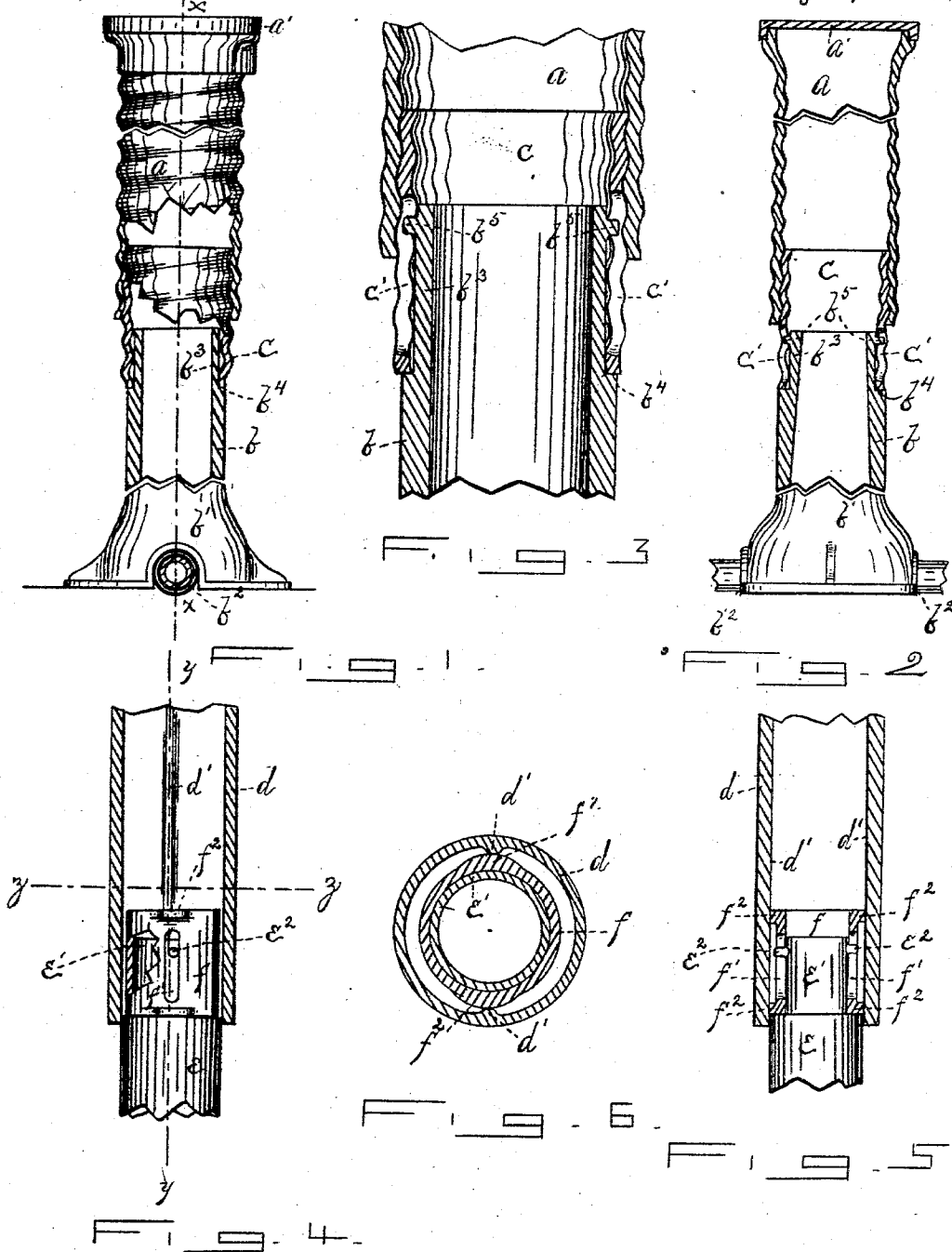
(No Model.)

W. A. BURROWS.

EXTENSION SERVICE AND VALVE SHUT-OFF BOX.

No. 321,483.

Patented July 7, 1885.



Witnesses:
Otto Hoddick.
H. H. Little.

Inventor:
Willis A Burrows
By,
W T Miller
Attorney.

UNITED STATES PATENT OFFICE.

WILLIE A. BURROWS, OF BUFFALO, NEW YORK.

EXTENSION SERVICE AND VALVE SHUT-OFF BOX.

SPECIFICATION forming part of Letters Patent No. 321,483, dated July 7, 1885.

Application filed May 5, 1885. (No model.)

To all whom it may concern:

Be it known that I, WILLIE A. BURROWS, 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 Extension Service and Valve Shut-Off 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.

My invention relates to an improvement in extension service and valve shut-off boxes for gas and water. Prior to my invention these extension-boxes have been so constructed that when in a fixed position in the ground the lift of the frost would frequently exert such a pressure that the boxes would be either broken or displaced. My improved construction entirely obviates such difficulty; and to that end it consists in providing one of the ends of the extensible parts of the box with a collar loosely surrounding such end and having a limited play thereon, such movable collar being adapted for engagement with and adjustment upon the other portion of the box, by means of which sufficient play of the two parts of the box is provided to counteract the lifting tendency of the frost, and at the same time the two parts of the box cannot become detached.

In the drawings, Figure 1 is an elevation, partly in section, of one form of service-box to which my improvement is applied. Fig. 2 is a central vertical section of Fig. 1 taken in the line *xx*. Fig. 3 is an enlarged view of that portion of Fig. 2 which shows my improvement. Fig. 4 is a partial view of another form of service-box to which my improvement is applied. Fig. 5 is a central vertical section of Fig. 4 taken in the line *yy*; and Fig. 6 is a horizontal section taken in the line *zz*, Fig. 4.

Referring to the drawings, Figs. 1, 2, and 3 represent the form of service-box for which Letters Patent were granted to A. W. Morgan, and which shows my improvement applied thereto.

a is the upper portion of such box, having the usual cover, *a'*, and below such cover this portion *a* is cast in the form of a screw-thread.

In the above-named patent the lower portion of the service-box is in one piece, its upper end being screw-threaded and engaging within the upper portion.

My improvement is applied substantially as follows: *b* is the main part of this lower portion, which has at its base the enlarged part *b'*, in which are the side openings, *b² b²*, in which the pipe passes, the stop-cock in such pipe resting within the enlarged portion *b'*. The upper end, *b³*, of the portion *b* is of smaller diameter, forming the shoulder *b⁴*, and on the upper outside service of this portion *b³* are the lugs *b⁵ b⁵*, diametrically opposite to each other.

Surrounding the portion *b³*, and resting loosely thereon, is the exteriorly screw-threaded collar *c*, having the elongated slots *c' c'* diametrically opposite each other, in which the lugs *b⁵ b⁵* loosely rest.

The upper portion, *a*, of the service-box, with its interior screw-thread, engages with the exteriorly threaded collar *c*, as shown in the drawings, and can be adjusted thereon for any depth of pipe, and in the normal condition of the service-box the collar *c* rests upon the shoulder *b⁴* of the lower portion, *b*. Should, however, the frost exert a lifting tendency upon the upper portion, *a*, of the box that part, and with it the screw-threaded collar *c*, is allowed, by means of the lugs *b⁵ b⁵* and slots *c' c'*, an upward play, which effectually prevents any straining of parts, and which, after the frost is gone, permits the parts to return to their normal position, as shown in the drawings.

It will also be observed that the vertical play of the parts does not interfere with their adjustment one upon the other in the same manner as when the box is formed in only two parts, as in the above-mentioned patent. In practice the length of the slots *c' c'* is preferably three inches, that length being found sufficient for extreme cases.

In Figs. 4, 5, and 6 I have shown another form of extensible service-box to which my improvement is equally applicable, in which *d* is the upper portion, having the interior longitudinal ribs, *d' d'*, diametrically opposite each other. *e* is the lower portion of such box, having its upper end, *e'*, of smaller diameter and provided with the lugs *e² e²*. Around this portion *e'*, and resting loosely thereon, is

the collar *f*, having the side slots, *f' f'*, in which the lugs *e² e²* play. On the exterior surface of this collar *f* are the enlargements *f² f²*, at top and bottom. In this form of service-box just described the parts are adjusted as to length and held in position by the engagement of the enlargements *f² f²* with the longitudinal ribs *d' d'*, while the slots *f' f'* of the collar *f* and the pins *e² e²* of the portion *e'* allow for the action of the frost in the same manner as in the form of service-box just described.

It is apparent that my improvement is applicable to all forms of extensible service-boxes, other than those herein shown, where one part is adjustable within the other.

I claim—

1. An extensible service or valve shut-off box for gas and water, consisting of two boxes or pipes, one adjustable within the other, one of such boxes or pipes being provided with a

collar loosely surrounding its end and having a limited play thereon, such movable collar being adapted for engagement with and adjustment upon the other portion of the box, substantially as and for the purpose stated.

2. In an extension service or valve shut-off box for gas or water, the combination, with the upper screw-threaded portion, *a a'*, of the lower portion, *b*, having the upper end of smaller diameter and provided with the lugs *b⁵ b⁵*, and the screw-threaded collar *c*, having the slots *c' c'*, substantially as and for the purpose stated.

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

WILLIE A. BURROWS.

Witnesses:

J. H. MARLING,
W. T. MILLER.