

(No Model.)

S. SHANAHAN.
BRACE HOLDER.

No. 602,367.

Patented Apr. 12, 1898.

Fig. 1.

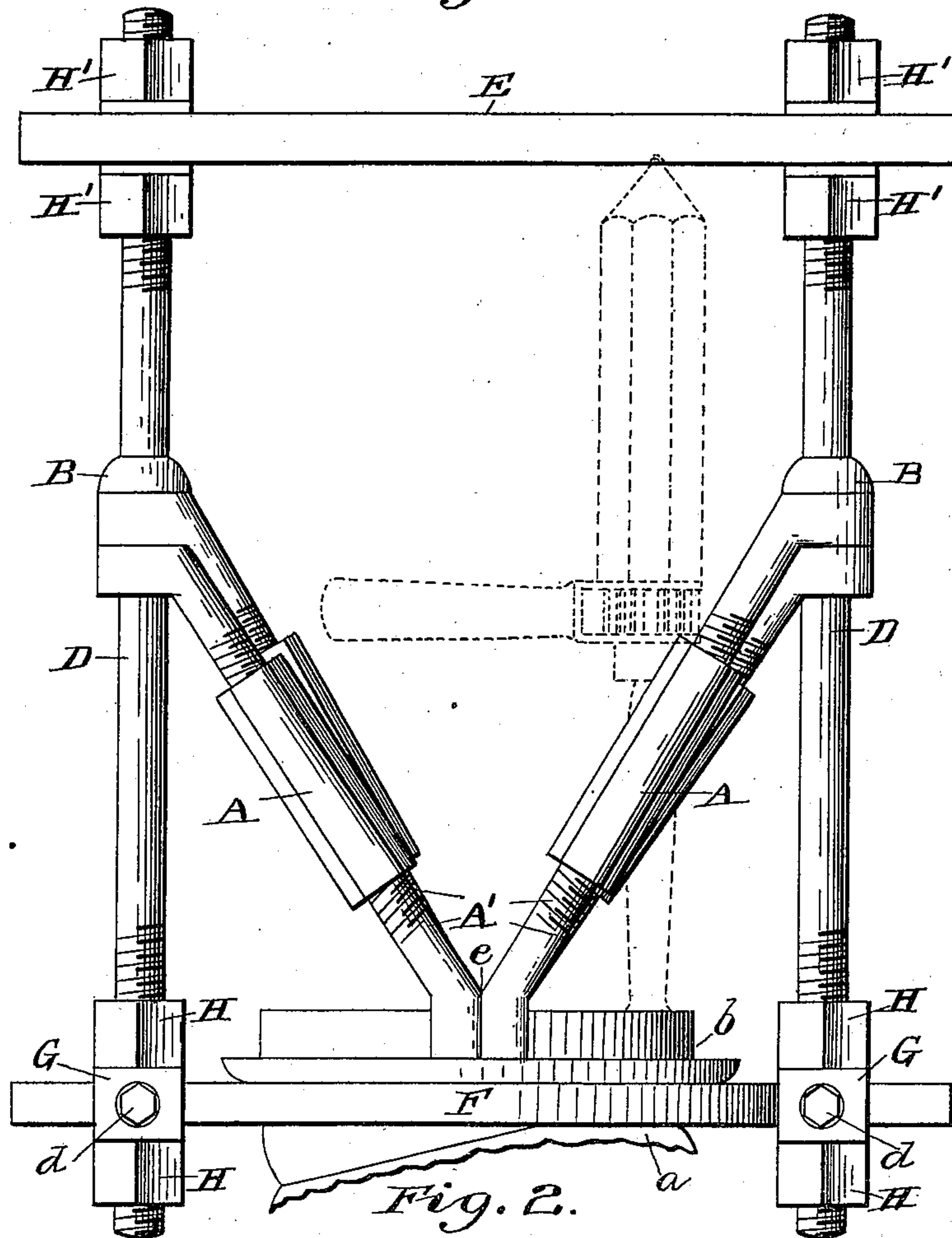
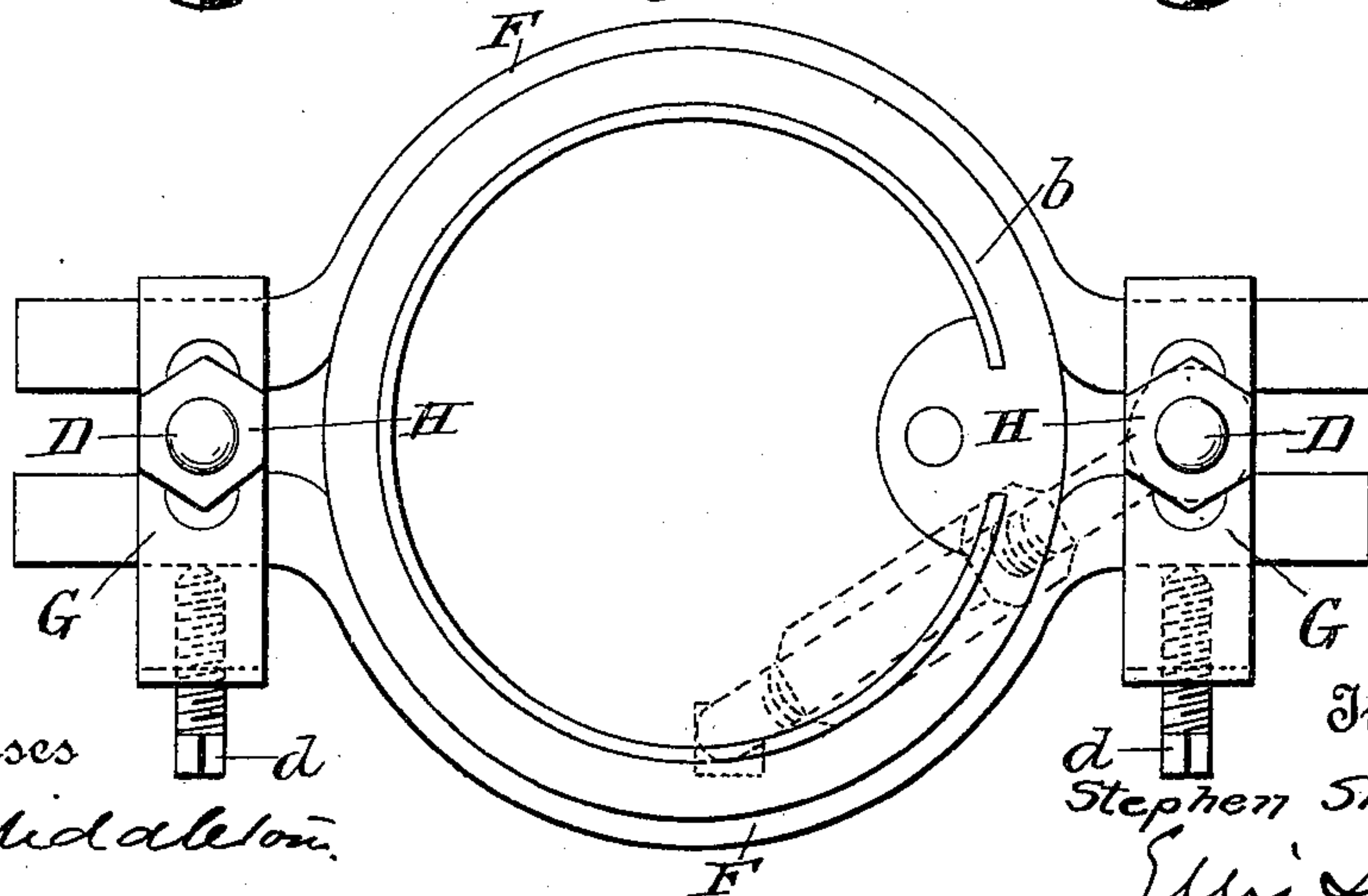


Fig. 2.



Witnesses
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BRACE-HOLDER.

SPECIFICATION forming part of Letters Patent No. 602,367, dated April 12, 1898.

Application filed December 30, 1897. Serial No. 664,521. (No model.)

To all whom it may concern:

Be it known that I, STEPHEN SHANAHAN, a citizen of the United States, residing at Charleston, West Virginia, have invented certain new and useful Improvements in Brace-Holders, of which the following is a specification.

My invention relates to means for repairing street-service boxes; and the object of my invention is to provide a simple arrangement of frame adapted to support the brace of the drill in convenient position to do its work and in drilling out broken screws in the valve-boxes whether these boxes be in place in the street or at the shop.

My invention includes a clamp adapted to fit around the periphery of the valve-box with standards supported by the clamp and a top plate for resisting the pressure of the drill and forming a support for the upper end of the brace, and it also includes details of construction.

In the accompanying drawings, Figure 1 is a side elevation showing the invention as applied to a valve-box and ready for use, while Fig. 2 is a plan view of the box and clamp with the plate E removed.

In the figures, *a* represents the top of the valve or service box, which is provided with a rim or flange *b*, and beneath this flange a pair of clamps *F* are fitted, their ends being secured together by a clip *G* at each end and a set-screw *d*. Extending upwardly from the projecting ends of the clamp *F* are two uprights or standards *D*, and these standards pass through the clips *G* and are supported by nuts *H* above and below the position of the clips *G*. The standards are screw-threaded on their lower ends and they are adjustable on the nuts *H* to raise or lower. In order to hold the valve-box stationary upon the clamp, I use four inclined braces *A'*, which have bifurcated lower ends fitting over the edge of the valve-box, as shown in Fig. 1, four of these braces being used, two on each side, and these braces extend at an angle from the standards *D* to centrally of the valve-box, where their adjacent edges are in contact, as

at *e*, Fig. 1. The braces are adjustable in length by being made in two parts, with the adjacent ends of the parts held in a screw-threaded sleeve *A*. The upper ends of the braces are provided with openings fitting the standards, and the upward movement of the braces is prevented by a shoulder *B* on each standard *D*. A plate *E* connects the upper ends of the standard, being held in proper position between nuts *H'* and adjustable on the standards by the turning of these nuts. It will thus be observed that the service or valve box is securely held, and the framework described is strongly supported upon it, and it is only necessary to fit in a brace and drill with the ratchet-handle, as shown in dotted lines in Fig. 1, the ends of the brace bearing against the under side of the plate *E*, this plate being provided with a series of indentations to receive the pointed end of the brace.

What I claim is—

1. In combination, a clamp adapted to be secured to the head of a valve or service box, a frame supported by said clamp, and braces carried by the frame and engaging the upper end of the valve or service box, substantially as described.

2. In combination, a clamp adapted to be secured to a valve or service box, a frame supported by said clamp, braces extending from said frame to the edge of the box, said braces being adjustable, and stops for limiting the upward movement of the braces, substantially as described.

3. In combination, a clamp adapted to be secured to a valve or service box, uprights or standards supported by the clamp, a cross-piece connected with the upper end of the standards and braces between the standards and the upper edge of the box, substantially as described.

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

STEPHEN SHANAHAN.

Witnesses:

C. H. HATCHER,
W. O. JONES.