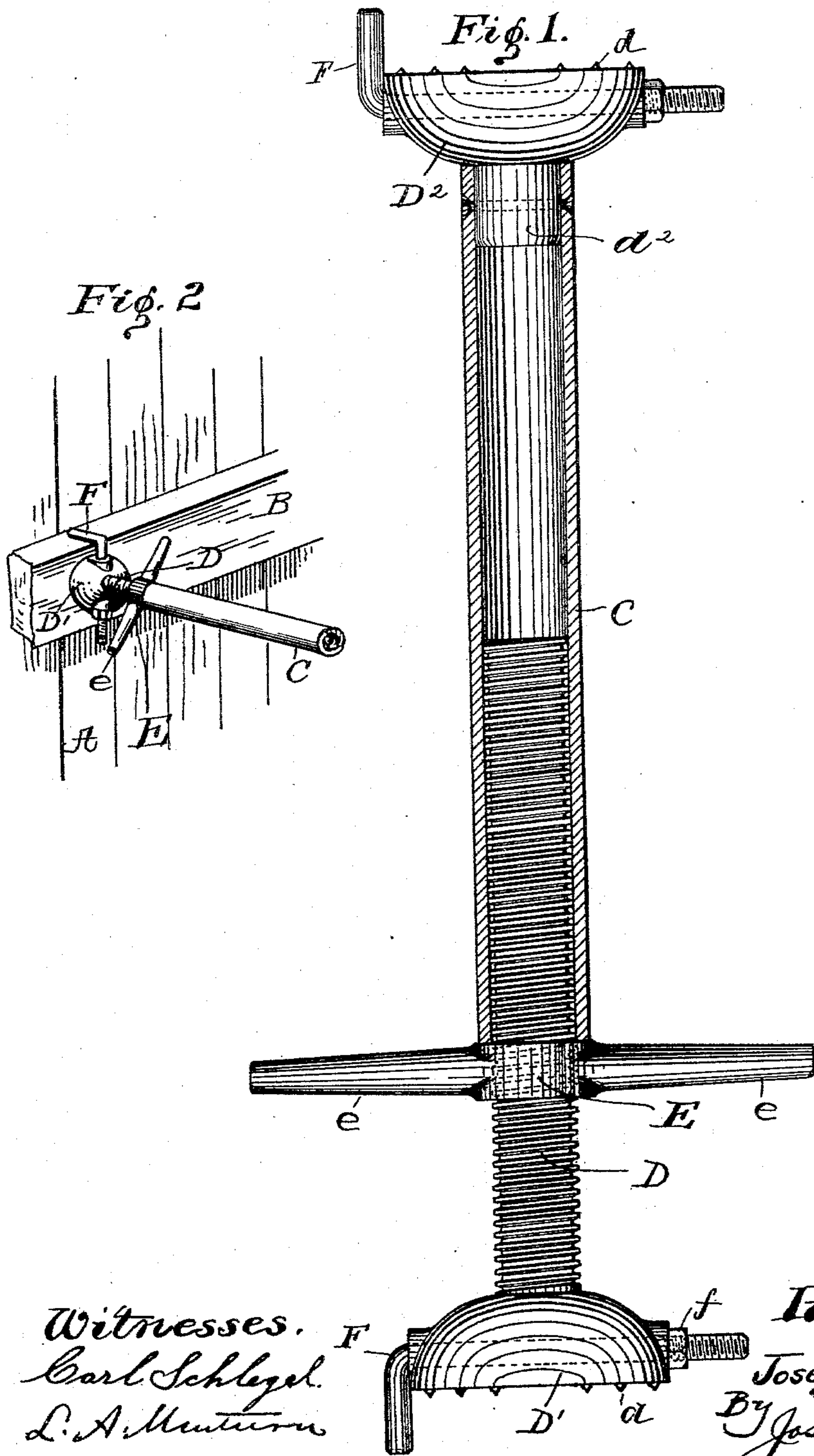


(No Model.)

J. L. POTTER.
SEWER BRACE.

No. 597,738.

Patented Jan. 25, 1898.



Witnesses.
Carl Schlegel
L. A. Minturn

Inventor,
Joseph L. Potter,
By Joseph A. Minturn
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UNITED STATES PATENT OFFICE.

JOSEPH L. POTTER, OF INDIANAPOLIS, INDIANA.

SEWER-BRACE.

SPECIFICATION forming part of Letters Patent No. 597,738, dated January 25, 1898.

Application filed September 20, 1897. Serial No. 652,257. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH L. POTTER, a citizen of the United States, residing at Indianapolis, in the county of Marion and State of Indiana, have invented certain new and useful Improvements in Sewer-Braces, of which the following is a specification.

This invention relates to improvements in braces for sewer-walls, and has special reference to the transverse braces which are used to support the woodwork required to prevent the caving in of the earth in making excavations for sewers. These excavations are usually long, deep, and narrow trenches, and the common practice is to place vertical timbers against the earth and support the timbers by horizontal stringers, generally three rows on a side, which are held up by transverse braces. Heretofore it has required two men to place the braces in position, one to support each end until the length of the brace can be extended, generally by means of a screw, until it is tight enough to keep its position. Settling of the walls from various causes frequently causes them to spread enough to loosen the braces, allowing them to fall, and as the braces for the three stringers are generally in vertical alinement, approximately, the falling of the top brace often knocks the under ones out, thereby causing much damage and also endangering the lives of the workmen who may be below.

The object of this invention is to provide means for supporting the braces, whereby one man can do the work of two in setting them and whereby they will be supported when accidentally loosened.

I accomplish the object of the invention by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a view in longitudinal section of my brace, and Fig. 2 is a view in perspective showing the end of my brace in operative position in the sewer.

Similar letters of reference indicate like parts throughout both views of the drawings.

A designates the vertical wooden timbers, and B the horizontal stringer.

C is the body portion of my improved brace, and will preferably be metal tubing.

D is a screw having the head D'. The screw is inserted into the tube C a distance which is controlled by a threaded nut E. This nut has handle-bars e, whereby it is rotated.

The head D' has spurs d on its outer face, which enter the wooden stringer against which it is screwed. It is also provided with a radial opening at right angles to the screw to receive an angle-bolt F, the cranked end of which is long enough to extend outside of the head and rest upon the top of the stringer B. It is desirable always to have the head opposite the middle of the stringer. Otherwise the side pressure or pressure near the edge of the stringer may cause the stringer to tip. Then nut f on the threaded end of the angle-bolt enables the hooked end to be raised or lowered to suit the width of the stringer. The opposite end of the tube C is provided with a head D², like the head D'. It is secured to the tube by a dowel extension d², which is inserted into the tube and there riveted.

It is obvious that a hook to contact with the top of the stringer and sustain the head might be cast integral with the head, and therefore I do not wish to limit my invention to an adjustable hook, as shown in the drawings.

The operation of my improved brace is so obvious that further description is unnecessary.

What I claim as new, and wish to secure by Letters Patent of the United States, is—

1. In a sewer-brace a screw having a head with a marginal outwardly-projected hook to rest on top of the stringer substantially as described and for the purposes specified.

2. In a sewer-brace, heads to contact with the stringer having flat contacting faces and marginal radially-adjustable hooks, substantially as described and specified.

In witness whereof I have hereunto set my hand and seal, at Indianapolis, Indiana, this 16th day of September, A. D. 1897.

JOSEPH L. POTTER. [L. S.]

Witnesses:

HARRY G. HAWEKOTTE,
JOSEPH A. MINTURN.