

(No Model.)

J. H. CARROLL.

WALL SUPPORTER.

No. 370,315.

Patented Sept. 20, 1887.

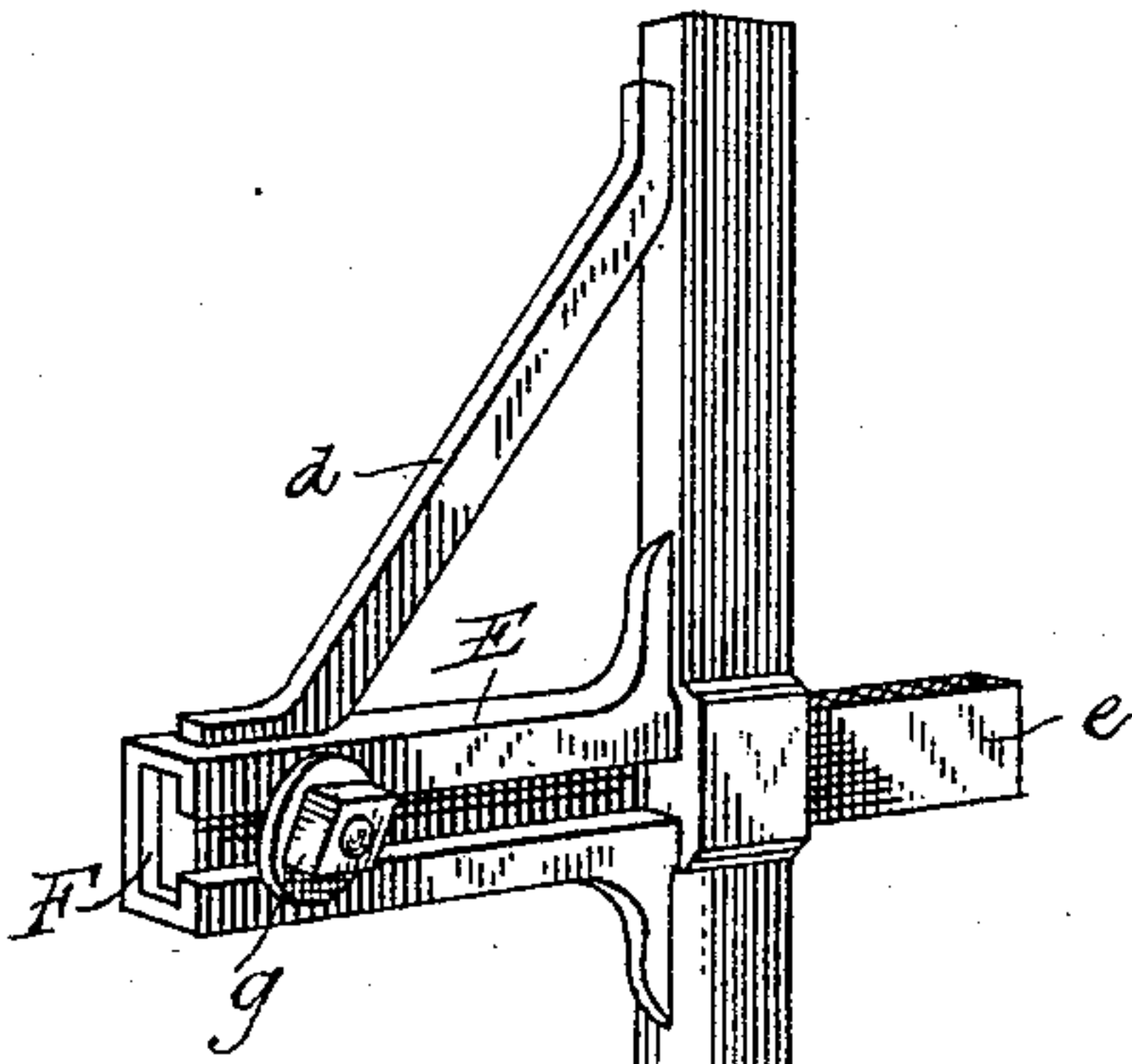


Fig. 1.

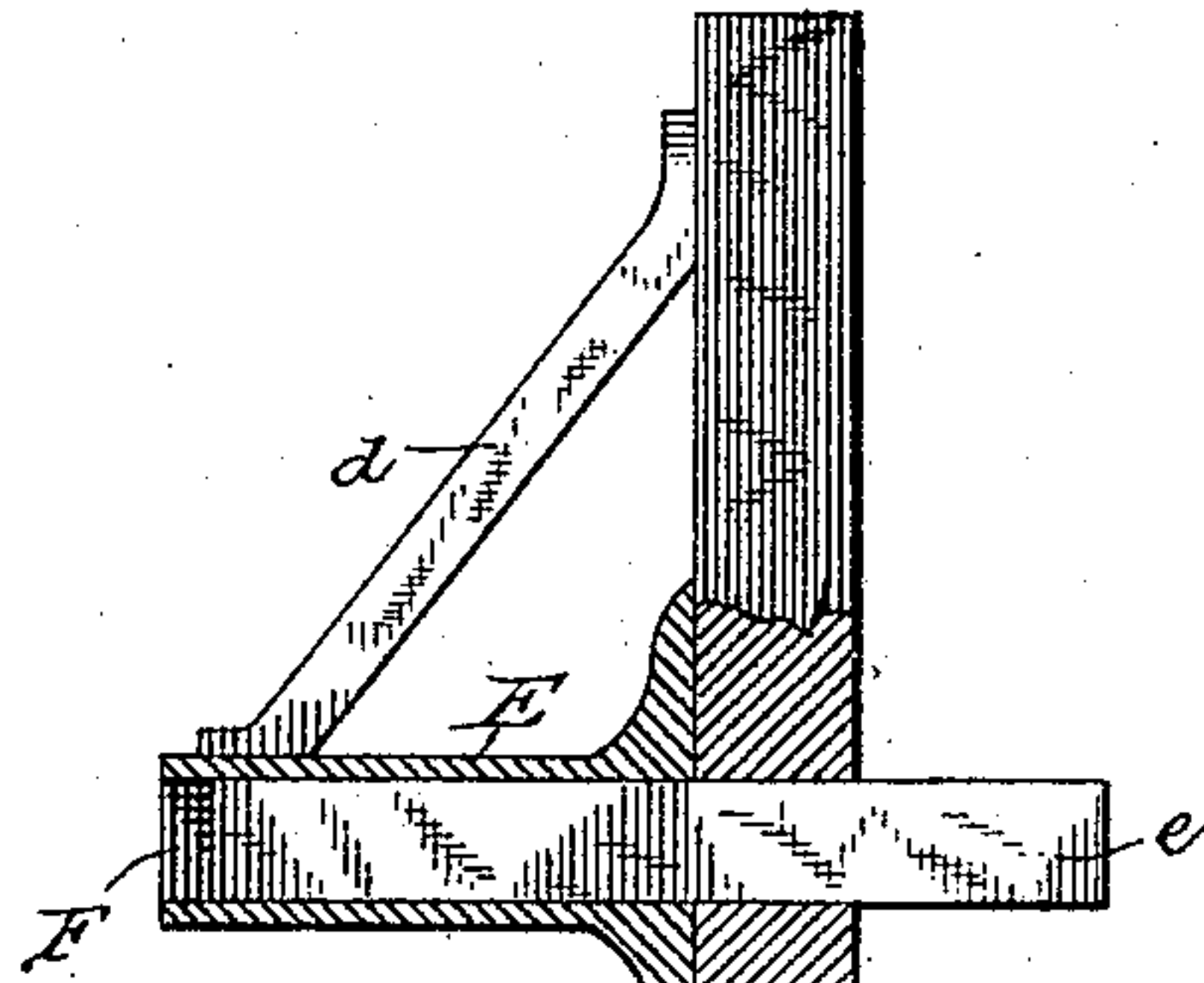
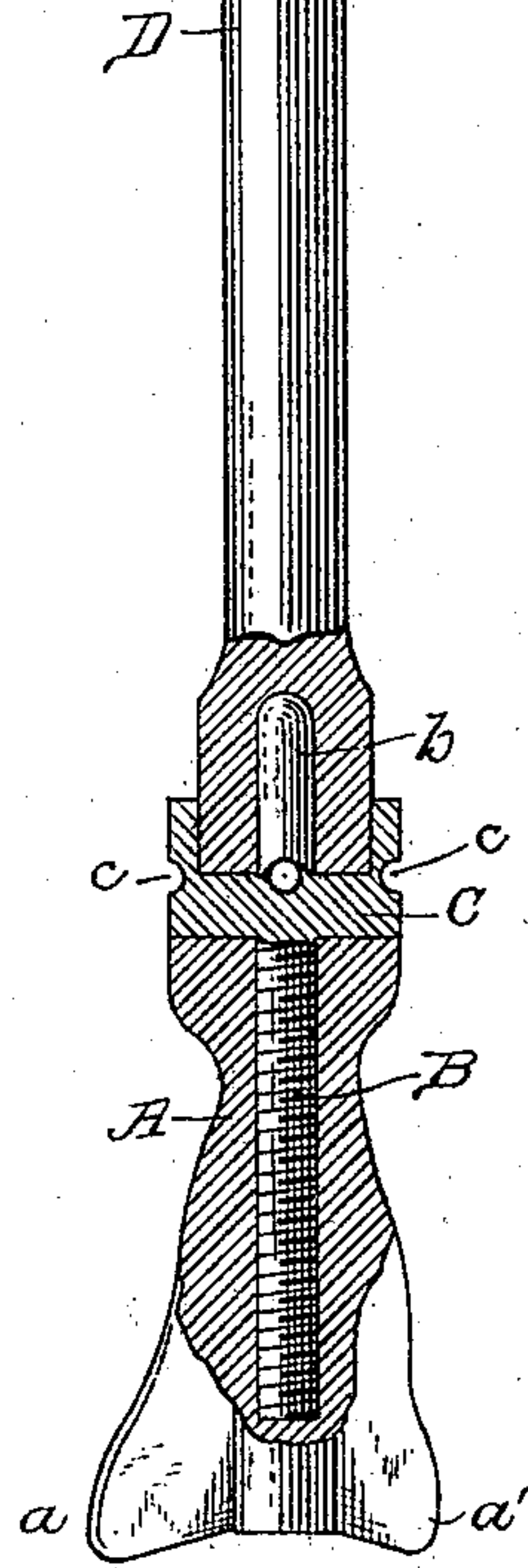
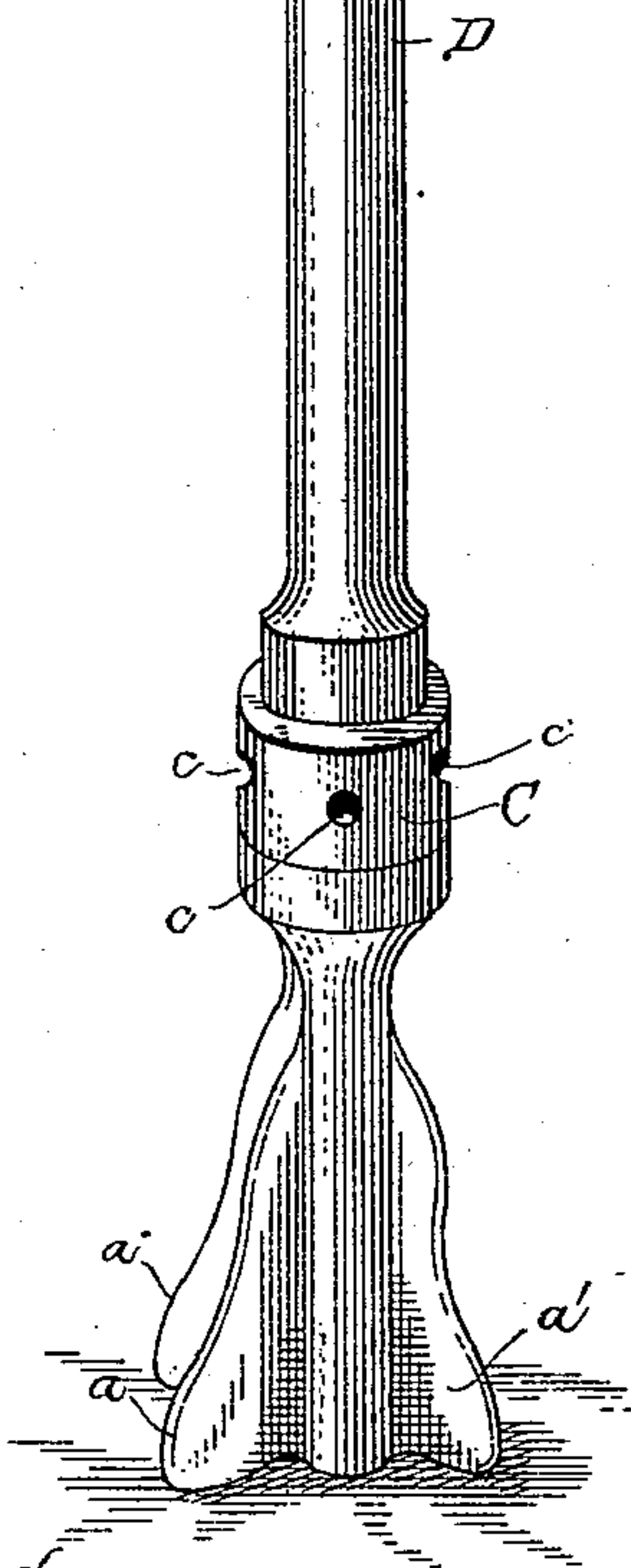


Fig. 2.



Witnesses:
Preston Phelps.
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Inventor.
John H. Carroll
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UNITED STATES PATENT OFFICE.

JOHN H. CARROLL, OF DUBUQUE, IOWA.

WALL-SUPPORTER.

SPECIFICATION forming part of Letters Patent No. 370,315, dated September 20, 1887.

Application filed June 6, 1887. Serial No. 240,446. (No model.)

To all whom it may concern:

Be it known that I, JOHN H. CARROLL, a citizen of the United States, residing at Dubuque, in the county of Dubuque and State of Iowa, have invented certain new and useful Improvement in Wall-Supporters; and I do hereby declare the following to be a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

This invention relates particularly to an improvement in wall-supporters, and is to be described as such; but before beginning the description it should be understood that a supporter of this construction is equally applicable to a variety of other purposes.

Wall-supporters are now used when it is necessary to undermine a wall—that is, when only the lower portion of a wall has to be removed—and are adapted to support the upper or untouched portion.

Heretofore the great objection attending the use of the present kind of supporters has been that when it is being elevated or screwed up the wall, instead of being elevated with it, has a tendency to bulge outwardly, thereby permanently injuring the wall. By the use of my invention this great defect is completely obliterated.

For a more thorough understanding of the parts in detail attention is invited to the accompanying drawings, wherein like letters of reference denote corresponding parts in the several views, and in which—

Figure 1 is a perspective view of my improved wall-supporter, and Fig. 2 is a vertical central section of the same.

A is a metallic base provided with an internally screw-threaded chamber for the reception of the screw-threaded stem B, and with vertical flanges *a a' a'* extending from top to bottom and made wider at their lower ends.

To enable the device to be placed in close contact with a wall, I make the flanges *a' a'* very narrow at the bottom and the flanges *a a'* correspondingly wider.

The collar C is provided with the screw-threaded stem B, with a chamber in its upper end large enough to allow of the insertion of the lower portion of the pillar D, and to the bottom of this chamber, extending upwardly

and made slightly longer than the same, is fastened the smooth stem *b*, which is adapted to fit snugly within a recess in the lower end of the pillar. This collar C is also provided with suitable openings, *c c c*, for the insertion of the levers for revolving said collar.

On the top of the pillar D is fastened and securely braced, by means of the brace-iron *d*, the immovable arm E, made hollow for the reception of the sliding arm *e* and provided with the long horizontal slot F. At this point, where the hollow arm E is attached to the pillar and made as large as the hollow in said arm, is an opening extending horizontally through said pillar, which is practically a continuation of said hollow. The sliding arm *e* extends through this opening in the pillar and through the hollow arm, and is provided near one end with the set-screw *g*, the bolt of which slides in the slot F, and which can be tightened to hold the sliding arm *e* immovable at any desired point. As great strain would necessarily come directly on this sliding arm *e*, which would tend to throw this arm downward, to prevent such occurrence I have made the pillar enlarged at this point.

To enable the arm *e* to better hold or grip the wall, it is advisable to provide said arm with a series of ratchet-teeth on its outer end.

The mode of operation is as follows: After the serrated end of the sliding arm *e* is inserted under the wall the collar C is revolved by means of suitable levers, and carrying the screw-threaded stem B in its revolution, it will be readily seen that the revolutions of the collar will not rotate the pillar D, by reason of the two being separate, but will have a tendency to raise said pillar and tightly grip the wall by reason of the screw-threaded stem B working in the chamber of the base. As the arm *e*, upon which the wall rests, is out of the line of gravity, the heavy pressure upon it will tend to force the device inwardly; but this inward pressure is retarded by the upper part of the upright pillar D coming in contact with and pressing closely against the wall. Consequently it will be seen that the heavier the wall the greater will be this inward pressure, and the greater this inward pressure the less liable is the wall to bulge or sag outwardly.

Having now fully described my invention,

what I claim, and desire to secure by Letters Patent, is—

1. A wall-supporter provided with a sliding arm adapted to support a wall out of the center of gravity.

2. In a wall-supporter, the combination of a base having an internally screw-threaded chamber therein, a movable collar provided with a screw-threaded stem adapted to work in said chamber, and a main rod or pillar provided with a hollow immovable slotted arm, substantially as described, and for the purpose set forth.

3. In a wall-supporter, the combination of a flanged base, a movable collar provided with a recess in its upper end, and with a smooth stem adapted to fit in a recess in the lower end

of the main rod or pillar, said collar being further provided with a screw-threaded stem by which it is elevated, substantially as described.

4. In a wall-supporter, the combination of a base, a movable collar provided with a screw-threaded stem, a main rod or pillar provided with a hollow immovable slotted arm, and a serrated arm provided at one end with a set-screw and adapted to slide in said hollow immovable arm, substantially as described.

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

JOHN H. CARROLL.

Witnesses:

DE WITT C. CRAM,
WILLIAM GRAHAM.