

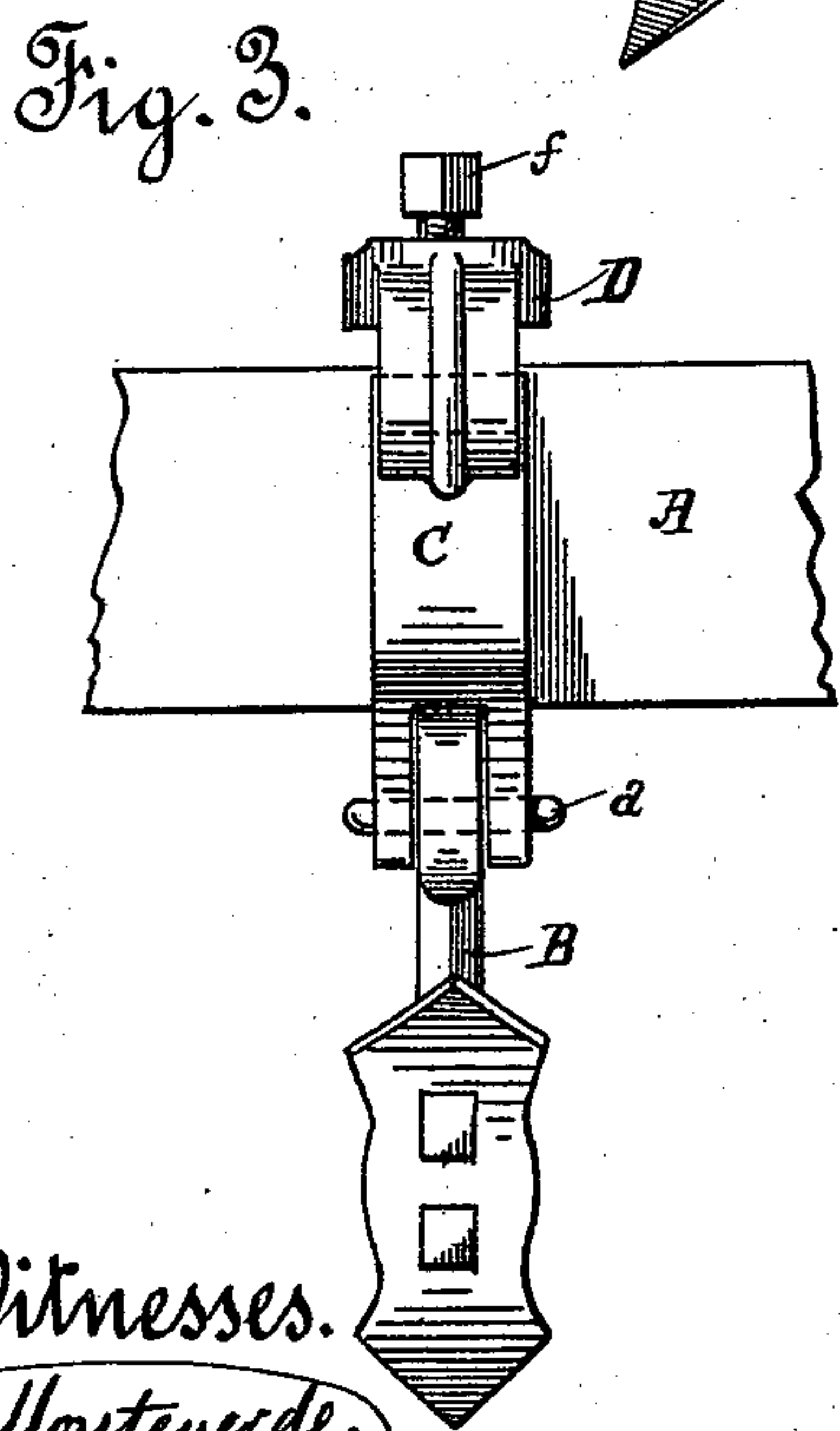
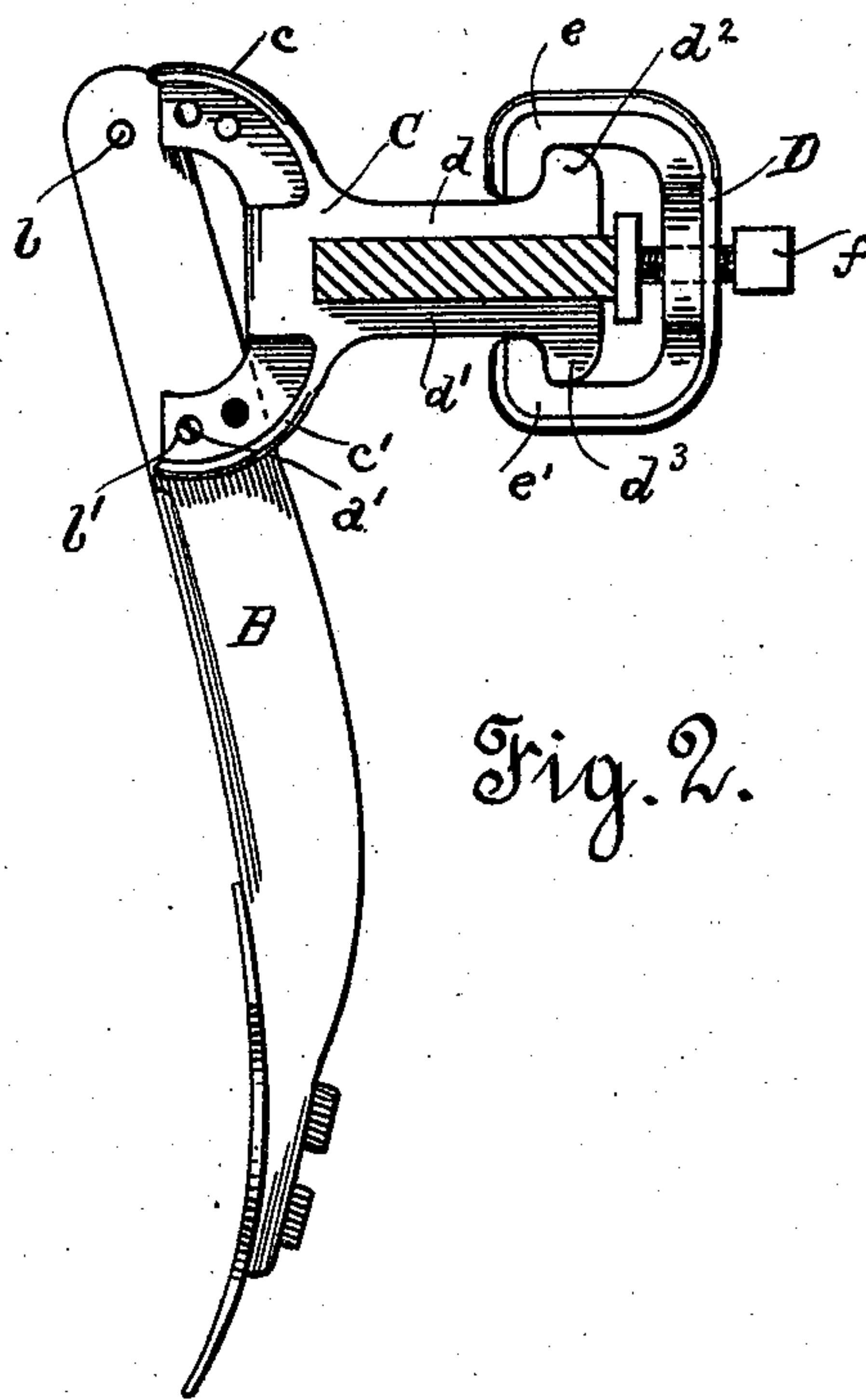
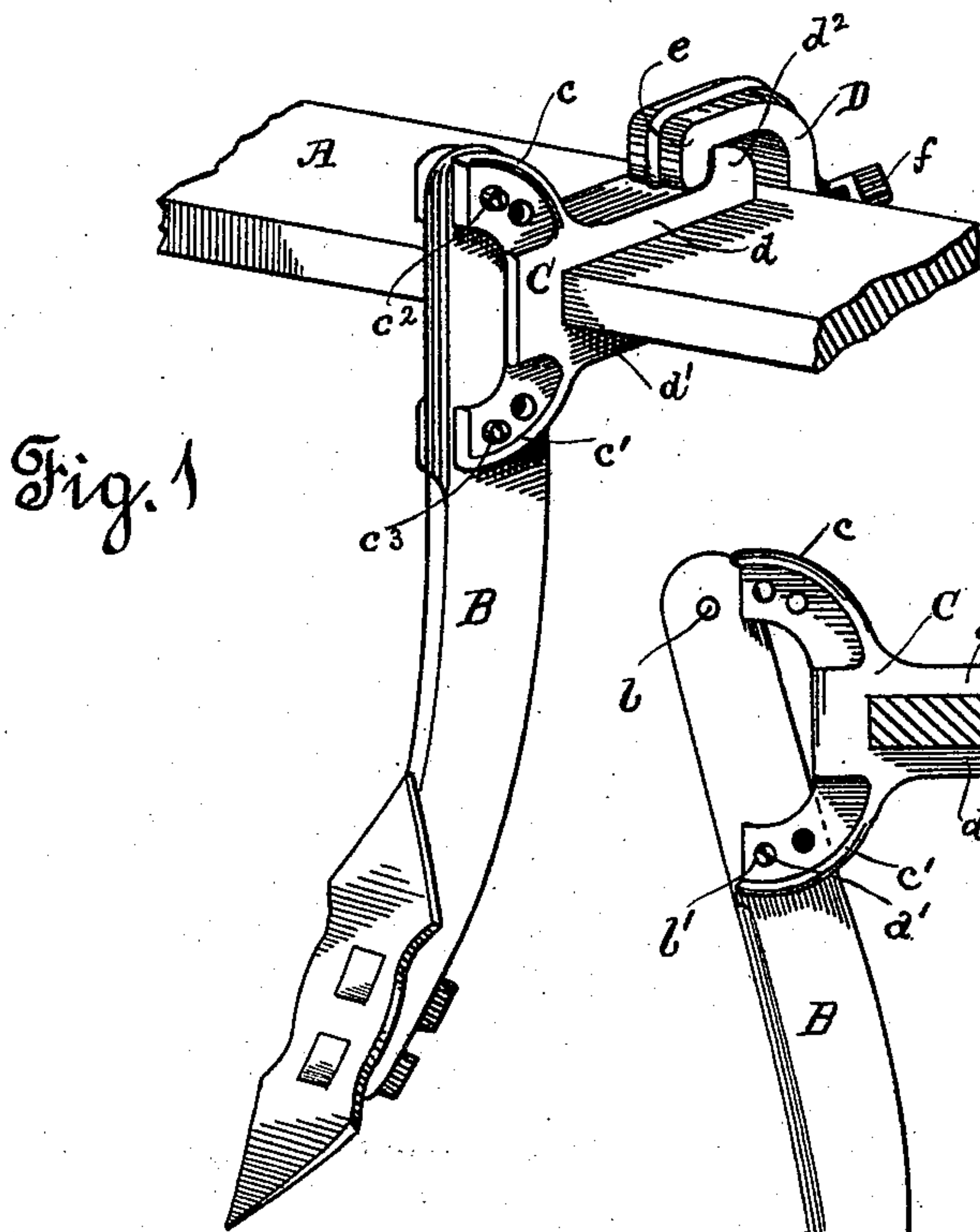
(No Model.)

D. E. BARTON.

CLAMP FOR THE ATTACHMENT OF CULTIVATOR TEETH.

No. 456,393.

Patented July 21, 1891.



Witnesses.

H. Houtenwerde.

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UNITED STATES PATENT OFFICE.

DELBERT E. BARTON, OF ALAMEDA, CALIFORNIA.

CLAMP FOR THE ATTACHMENT OF CULTIVATOR-TEETH.

SPECIFICATION forming part of Letters Patent No. 456,393, dated July 21, 1891.

Application filed April 4, 1891. Serial No. 387,671. (No model.)

To all whom it may concern:

Be it known that I, DELBERT E. BARTON, a citizen of the United States, residing at Alameda, in the county of Alameda and State of California, have invented certain new and useful Improvements in Clamps for Attachment of Cultivator-Teeth; and I do hereby declare the following to be a full, clear, and exact description of said invention, such as will enable others skilled in the art to which it most nearly appertains to make, use, and practice the same.

My invention has relation to certain new and useful improvements in clamps for attachment of cultivator-teeth to the beam thereof, which consists of the parts and details of construction, as will be hereinafter more fully set forth and described.

My invention consists in providing for the novel attachment of the teeth, so as to constitute what is known as a break-pin connection, whereby the tooth may readily free itself in case of making or coming in contact with heavy roots, stones, or the like during the line movement of the cultivator, thus preventing damage ensuing to the tooth—such as breaking—by reason of the forward strain exerted thereon.

Referring to the drawings forming a part of this application, wherein similar letters of reference refer to corresponding parts throughout the entire specification, Figure 1 is a front view in elevation, showing the teeth secured within the clamp; Fig. 2, a side view in elevation, showing teeth thrown forward or position assumed when meeting with heavy obstructions; and Fig. 3, a top plan.

The letter A is used to indicate the cultivator-beam, and B one of the cultivating-teeth secured thereto by means of clamp C. Said clamp is cut away at its front and bifurcated, so as to form the upper and lower arms $c\ c'$, respectively, between which the tooth B fits, as clearly shown in the drawings. Through the arms $c\ c'$ I form the bolt-holes $c^2\ c^3$, and in tooth B corresponding holes $b\ b'$. The teeth are held between the arms $c\ c'$ by means of bolts or pins $a\ a'$, which pass through holes $c^2\ c^3\ b\ b'$. The rearwardly-extending

portion of clamp C is also bifurcated, in order to form arms $d\ d'$, which embrace the beam A. The outer ends of arms $d\ d'$ have shoulders $d^2\ d^3$ formed thereon, over which fit arms $e\ e'$ of brace D, in order to secure the clamp upon the beam. By means of the set-screws f working through the brace, so as to bear against the cultivator-beam, the tension of brace upon the clamp proper may be easily regulated. The upper bolt or pin a is composed of wood, so as to allow for breakage by severe strain, while the lower pin a' is composed of metal, so as to allow for an axis for swinging of the tooth, as hereinafter set forth. As the tooth travels through the soil the pins $a\ a'$ maintain the same in position. Should, however, the tooth contact with heavy roots, stones, or the like, the pressure brought to bear thereon by the forward movement of the cultivator causes the pin a to break and thus allow of the tooth moving backward, so as to clear the obstruction. After clearance the tooth is secured in position by the insertion of a new pin. Thus I overcome the danger of breakage resulting to the tooth itself.

Having thus described my invention, what I claim as new, and desire to secure protection in by Letters Patent of the United States, is—

The combination of a cultivator-beam, a clamp secured thereto, said clamp being formed upon its forward end with upper and lower bifurcated members having transverse registering perforations passing there-through, a plow beam or standard having its upper end passing between the arms formed by the bifurcated members of the clamp, a break pin or bolt passing through the registering perforations of the upper member and through the standard, and a permanent bolt passing through the registering perforations of the lower member and through the standard, substantially as set forth.

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

DELBERT E. BARTON.

Witnesses:

J. W. KEY,

L. W. SEELY.