

No. 775,239.

PATENTED NOV. 15, 1904.

E. M. CORNELL.
FOOT VISE FOR ANVILS.
APPLICATION FILED JAN. 20, 1904.

NO MODEL.

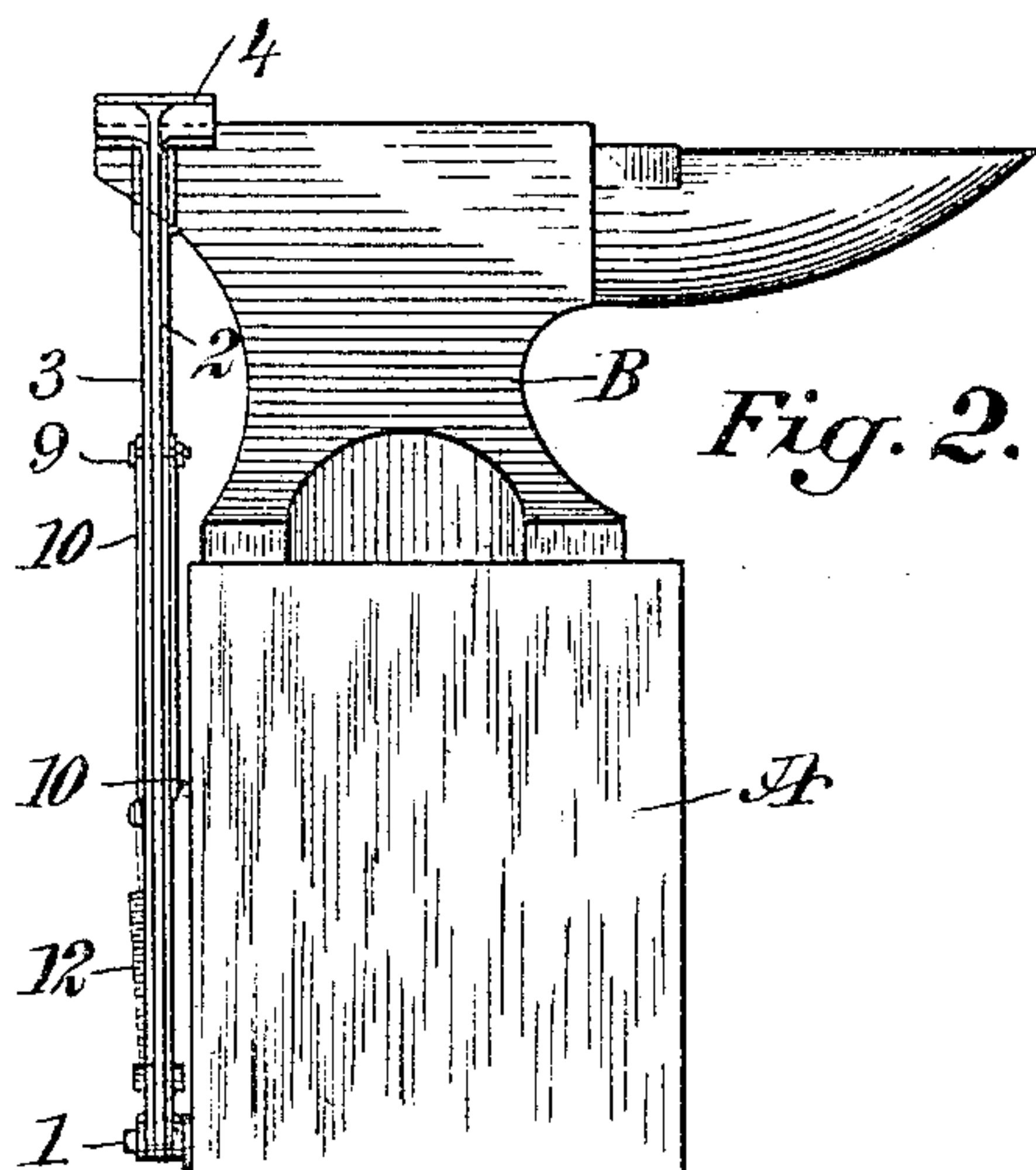


Fig. 2.

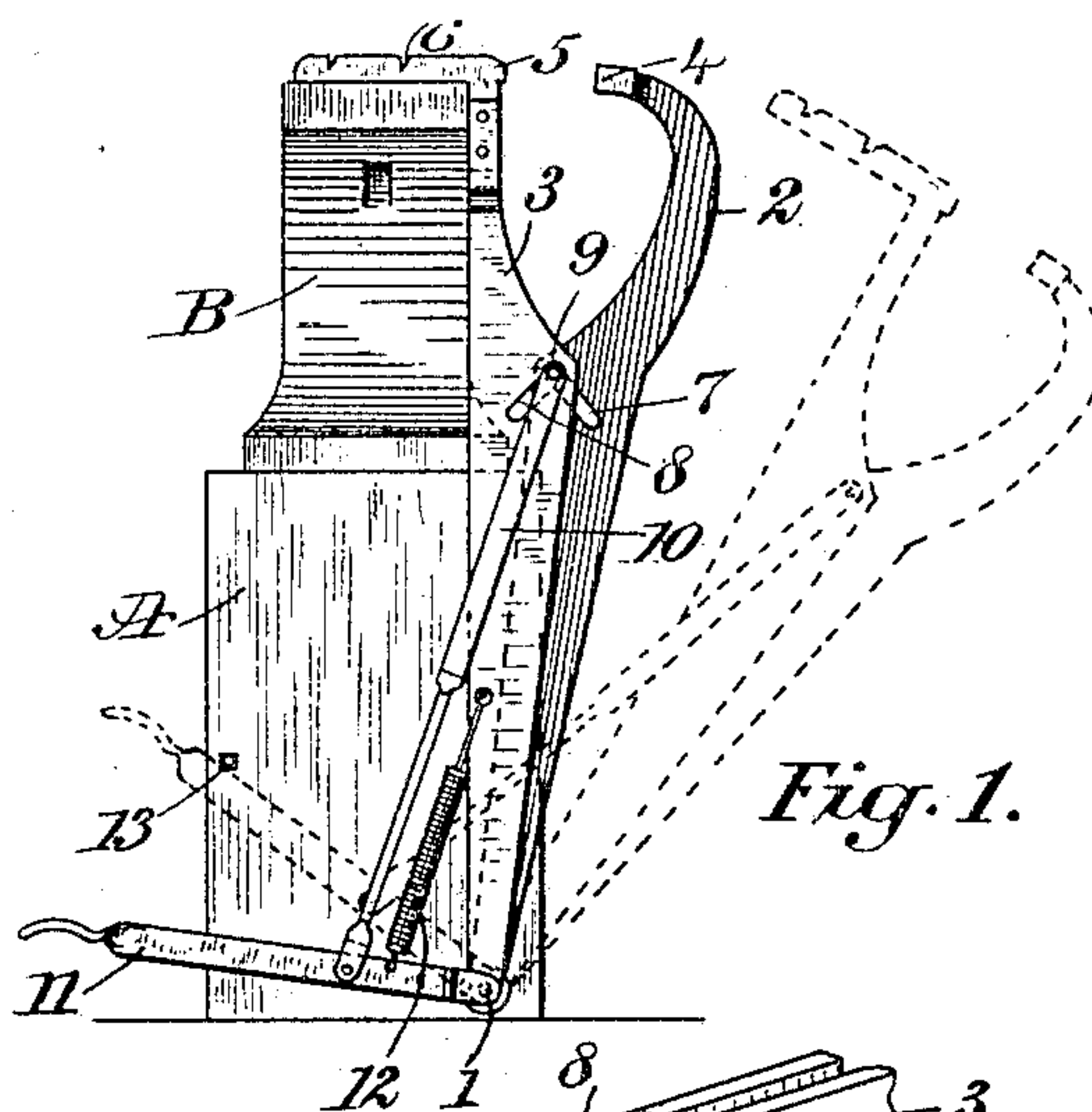


Fig. 1.

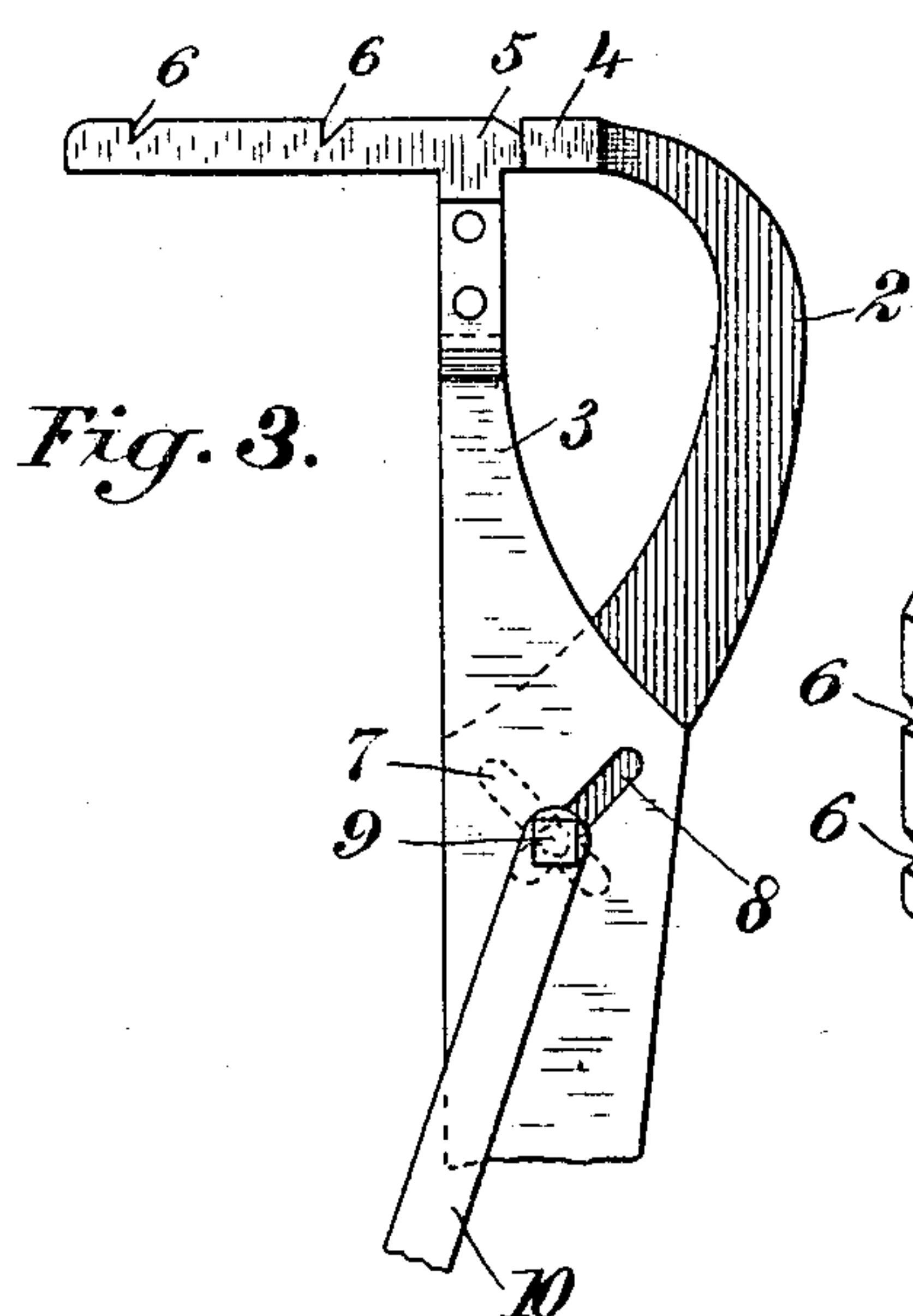


Fig. 3.

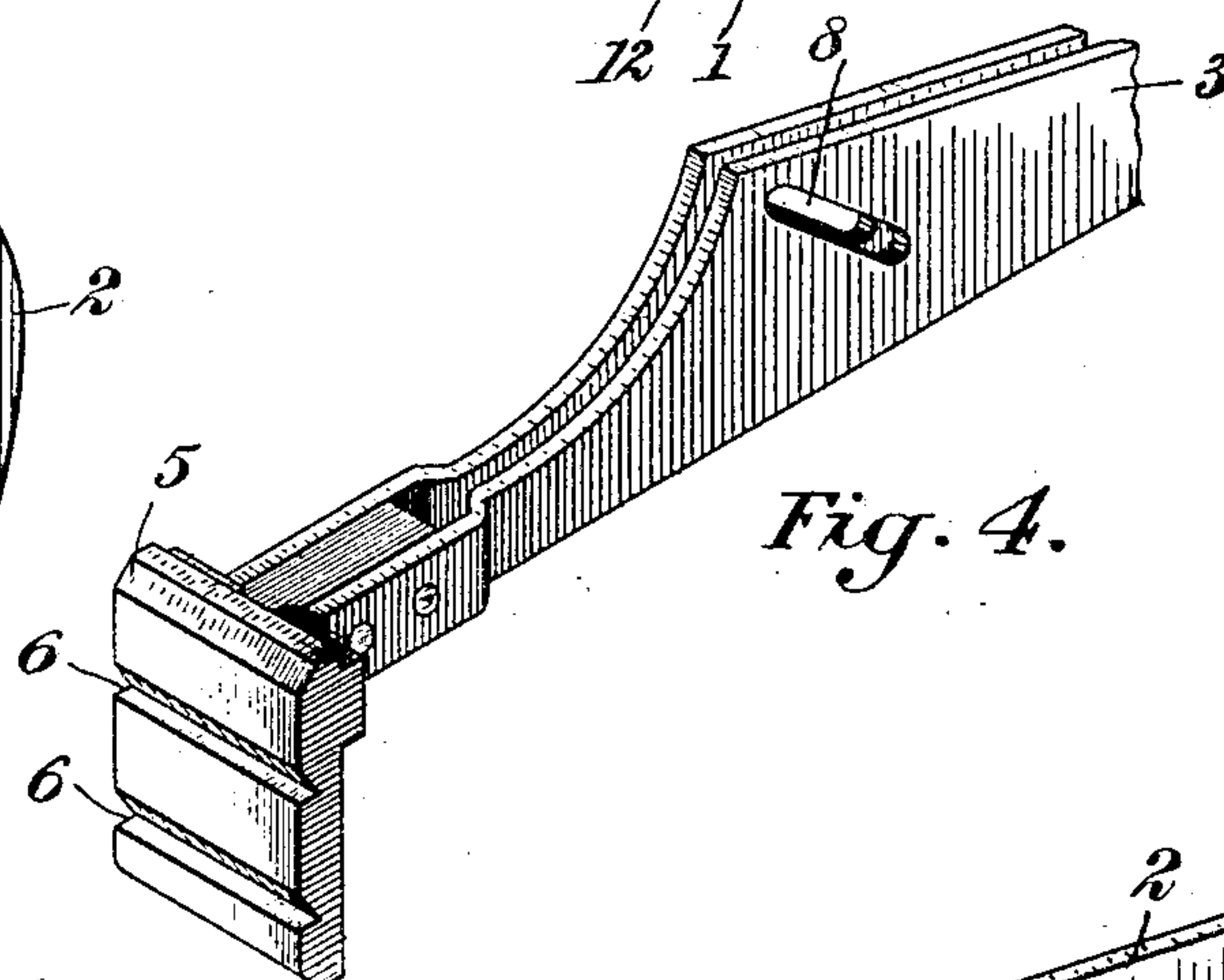


Fig. 4.

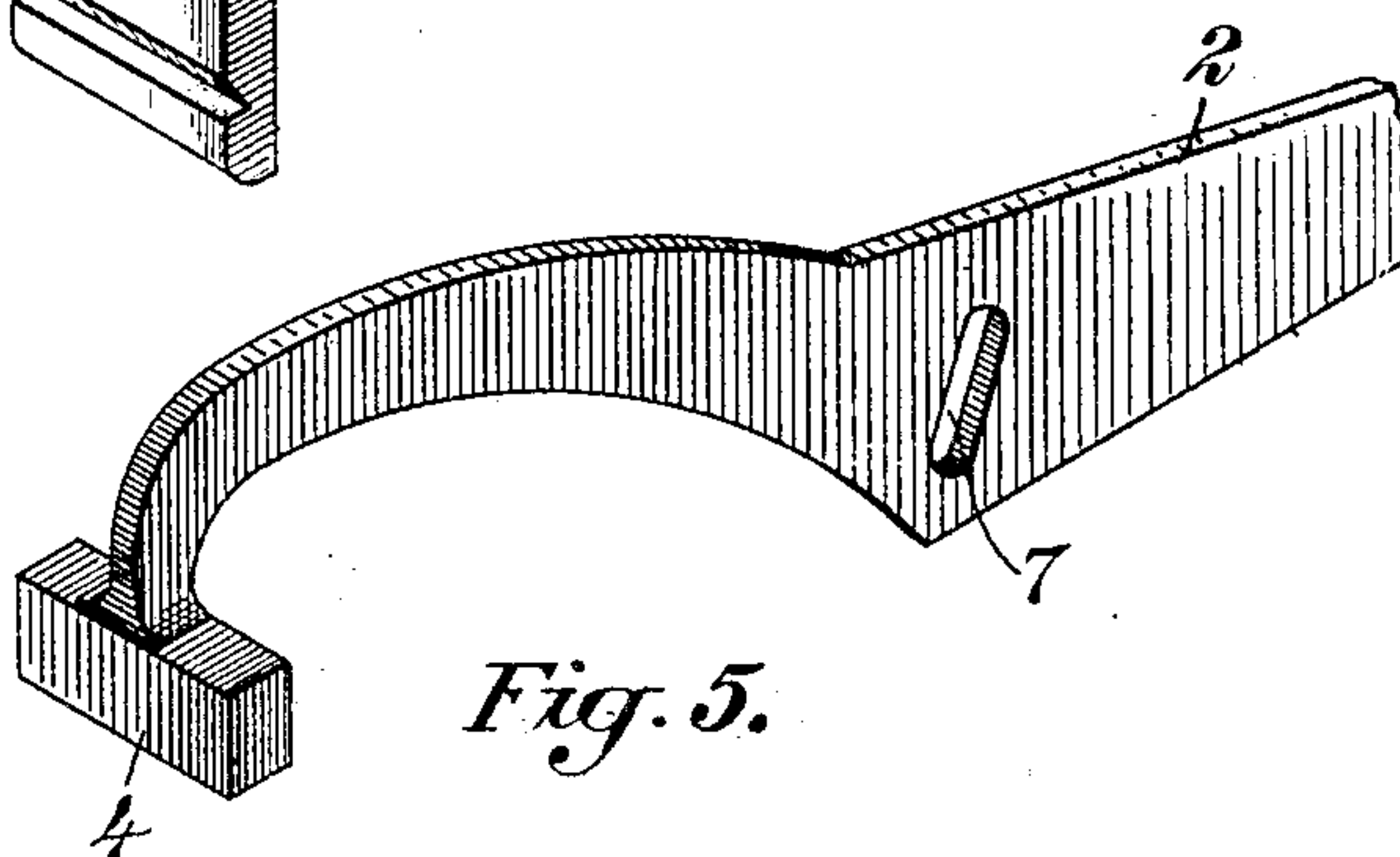


Fig. 5.

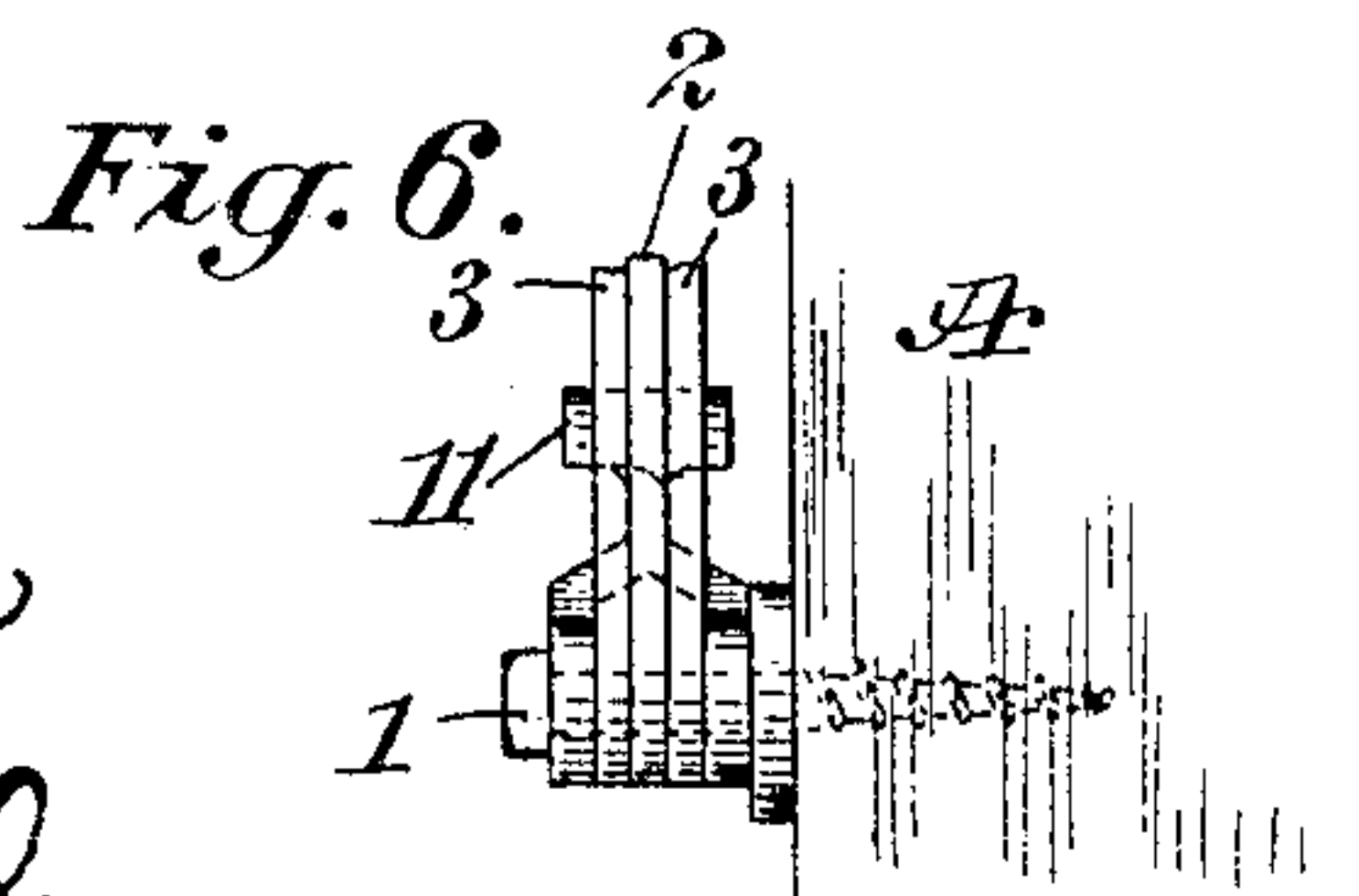


Fig. 6.

WITNESSES:

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EUGENE MONROE CORNELL, OF CENTERBURG, OHIO.

FOOT-VISE FOR ANVILS.

SPECIFICATION forming part of Letters Patent No. 775,239, dated November 15, 1904.

Application filed January 20, 1904. Serial No. 189,785. (No model.)

To all whom it may concern:

Be it known that I, EUGENE MONROE CORNELL, a citizen of the United States, and a resident of Centerburg, in the county of Knox and State of Ohio, have invented a new and Improved Foot-Vise for Anvils, of which the following is a full, clear, and exact description.

My invention relates to a foot-vise to be attached to and used in connection with an anvil; and it consists in certain constructions and arrangements of parts, which will be hereinafter described, and specifically pointed out in the appended claims.

The objects of my invention are to secure a convenient and inexpensive arrangement of an anvil with a vise attached which shall be for general use and of special value in horseshoe-work, such as welding sharp toe-calks.

Further objects of my invention are to so construct the vise that it may be very easily and quickly brought into position for use with the anvil and may be swung out of the way when not in use to permit other work to be performed on the anvil.

Further objects of my invention are to provide a holding device normally open, so that it is always ready for use without first making a superfluous motion to open the jaws.

A further object of my invention is to so construct the vise that it may be swung into position for use with the jaws open and the jaws may be forced together by a single motion of the foot-lever.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is an end view of an anvil of ordinary construction provided with the preferred form of my invention, showing the vise in position on the anvil, but the jaws open, and also showing in dotted lines the position of the vise when thrown back out of the way. Fig. 2 is a side elevation of the same. Fig. 3 is a view of a part of the vise shown in closed position. Figs. 4 and 5 are perspective views of the upper ends of the two arms of the vise; and Fig. 6 is a frag-

mentary view of the support for the anvil, showing in detail the way of connecting the several parts of the vise thereto.

In the figures, A indicates a support for an anvil B of any ordinary construction, and the numeral 1 indicates a screw or other device attached to the support A and used as a pivot for the arms 2 and 3 of the vise, the arm 3 consisting of two parallel members and the arm 2 entering the space between the members of the arm 3. These arms are provided at their upper ends with jaws 4 and 5, and one of said jaws is provided with dies 6, as shown, which may be of the form used for welding sharp toe-calks or of any other form. In these arms 2 and 3 are formed inclined slots 7 and 8, through which passes a bolt 9. To this bolt is attached a link 10, which at the other end is also attached to a foot-lever 11, which is pivoted on the screw 1. A spring 12 or other tension device is attached to the foot-lever 11 and also to one of the arms of the vise, as shown. 13 is a stop, and its use will be hereinafter explained.

In operation from the position shown in dotted lines in Fig. 1 the operator presses upon the lever 11 with the foot, and the first part of the downward movement of this lever causes the two arms 2 and 3 of the vise to swing up to the position shown in full lines in Fig. 1 through the instrumentality of the link 10. Further downward movement of the lever causes the link 10 to pull the bolt 9 downwardly and from the shape and position of the slots 7 and 8 causes the arms 2 and 3 to close together in the position shown in Fig. 3. Before the jaws close together, of course, the work is to be placed between them. Upon completing the work upon the anvil the reverse operation takes place. The foot upon the lever 11 is raised slightly, which allows the spring 12 to force the rod 10 up with the bolt 9, the slots 7 and 8 to open the jaws, whence the work may be removed, and upon further upward movement of the lever 11, caused by raising the foot, the two arms will be permitted to drop into the position shown in dotted lines in Fig. 1. The extent to which the vise may drop is limited by the stop 13.

It is obvious that this construction may be modified in many ways without departing from the spirit of my invention.

It will be seen that by this construction a very simple and effective vise is obtained and one in which the vise may be moved up into operative position against the anvil and the jaws forced together to grip the work by one motion of the foot-lever, and after the work is completed the jaws are released and the whole device moved back out of the way by merely relieving the pressure on the foot-lever. It will further be seen that no extra motions are required and no time lost by such motions.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. In an anvil attachment, the combination of a support, two arms and a foot-lever pivoted to said support at the same point, said arms being provided with jaws and constituting a vise, oppositely-inclined slots in said arms, a bolt passing through both of said slots, a link connecting said bolt and said foot-lever, and a spring connecting said vise and said foot-lever.

2. An anvil attachment, comprising a pivoted vise having two pivoted arms, and means for opening the arms, said means comprising means for swinging the vise to and from the anvil.

3. A vise, comprising two pivoted arms, means for opening the arms, said means comprising a treadle, and a link connected to said treadle and to said vise, said treadle and link

also constituting means for swinging both arms on their pivots in the same direction.

4. A pivoted vise comprising two pivoted arms and means for opening the arms, said means comprising a treadle, a spring connecting said treadle and one of the arms and means for swinging the vise bodily to and fro.

5. The combination of a support, a pivoted vise comprising two pivoted arms and means for opening the arms, said means comprising a treadle and link for swinging the vise to and from the support and a spring connected to one of said arms, and to the treadle.

6. The combination of a support, and a vise pivoted to said support, said vise comprising two arms, a treadle pivoted to said support at the point at which said vise is pivoted thereto, a link connecting said treadle and vise, a spring connected with one of said arms and with the treadle, and a stop for the treadle.

7. The combination of a support, two arms and a treadle pivoted to said support at the same point, said arms being provided with jaws and constituting a vise, said arms being provided with oppositely-inclined slots, a bolt passing through both of said slots, and a link connecting the said bolt with said treadle.

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

EUGENE MONROE CORNELL.

Witnesses:

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E. E. SHAMAN.