

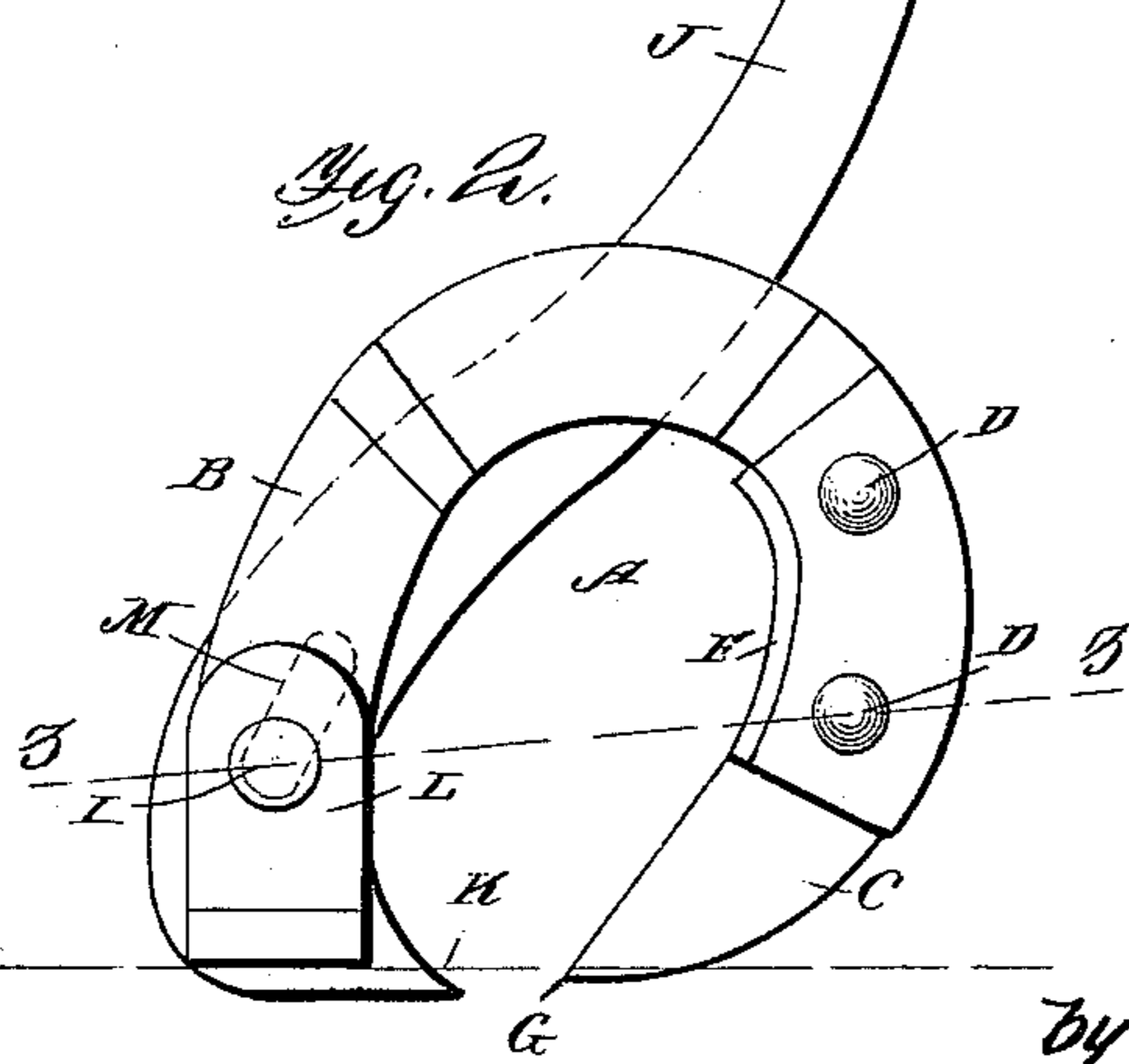
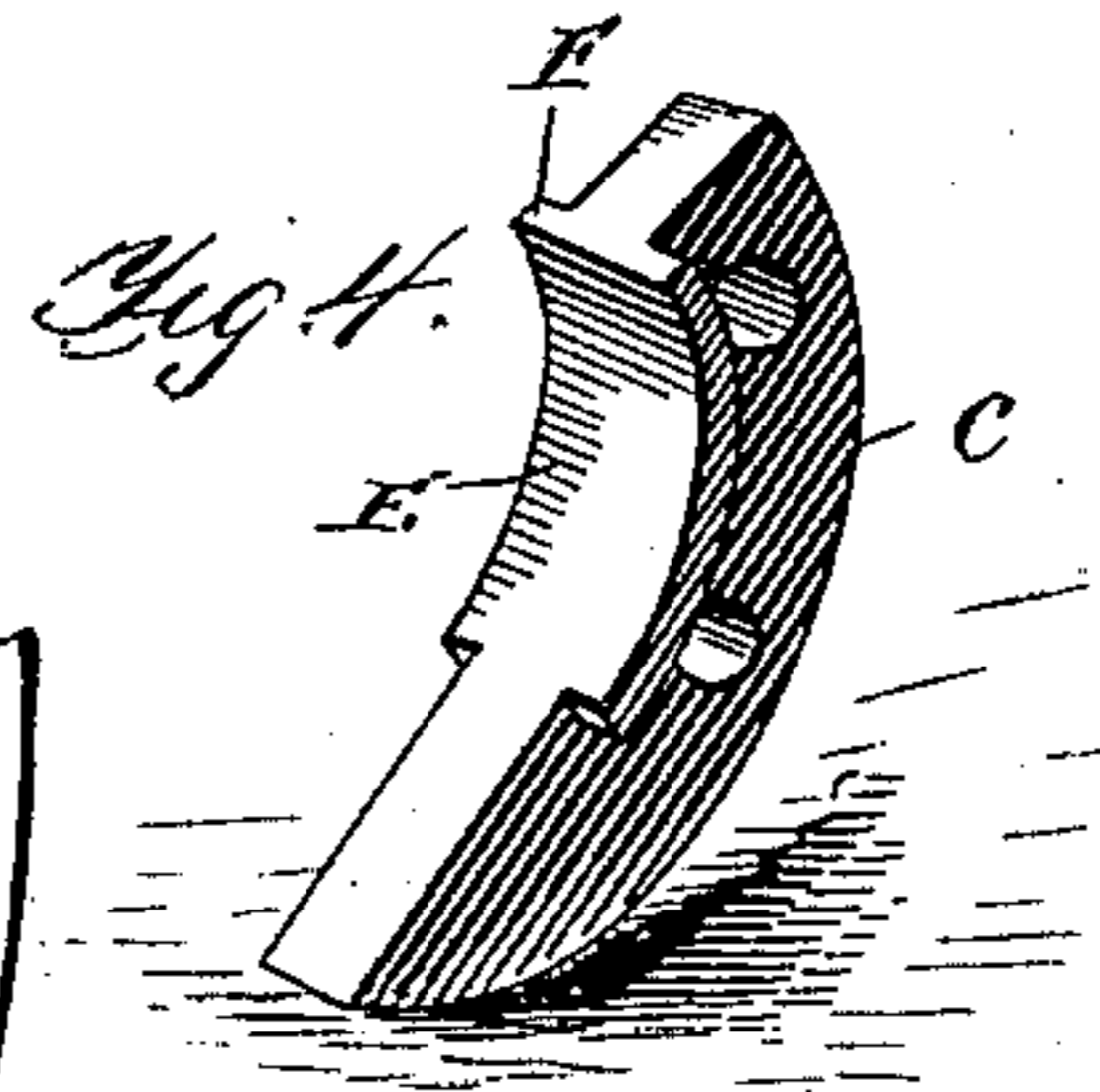
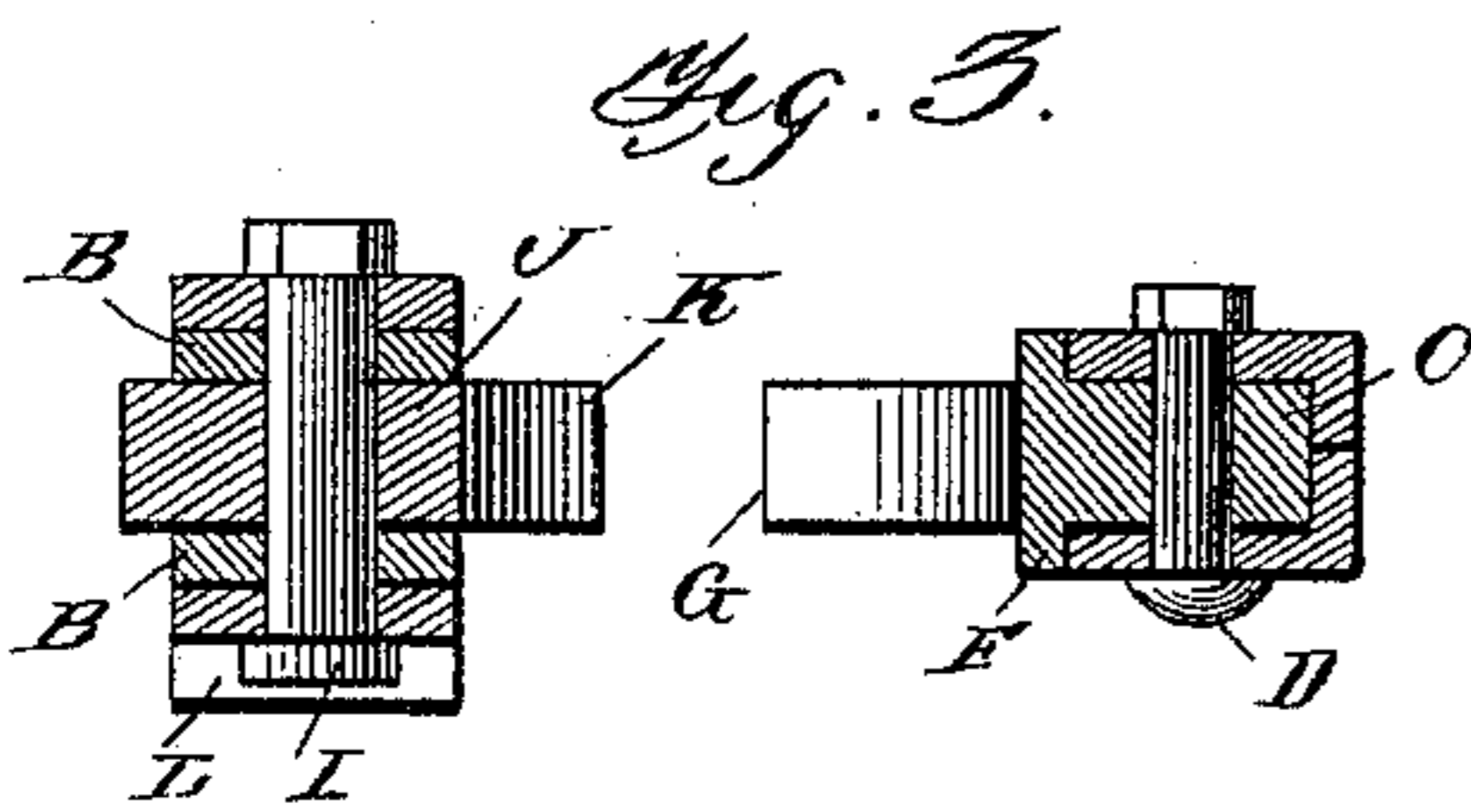
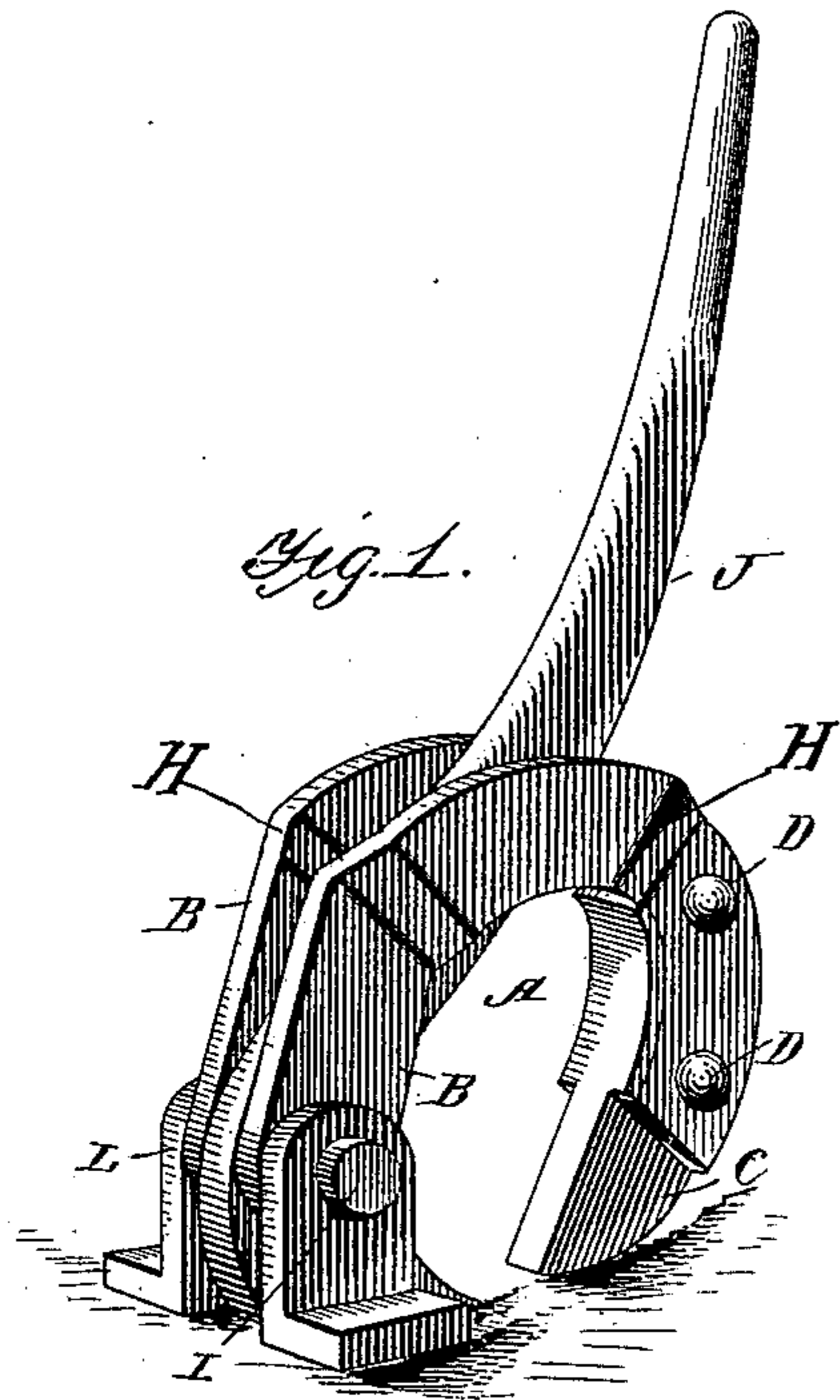
No. 639,887.

Patented Dec. 26, 1899.

T. G. BROWN.
RAILWAY SPIKE OR NAIL PULLER.

(Application filed June 2, 1897.)

(No Model.)



Witnesses

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UNITED STATES PATENT OFFICE.

THURMAN G. BROWN, OF GILLESPIEVILLE, OHIO.

RAILWAY-SPIKE OR NAIL PULLER.

SPECIFICATION forming part of Letters Patent No. 639,887, dated December 26, 1899.

Application filed June 2, 1897. Serial No. 639,187. (No model.)

To all whom it may concern:

Be it known that I, THURMAN G. BROWN, residing at Gillespieville, in the county of Ross and State of Ohio, have invented a new and useful Improvement in Railway-Spike or Nail Pullers, of which the following is a specification.

My invention relates to devices for pulling railway-spikes or nails; and it has for its object to furnish a tool of this class which shall be cheap to manufacture, powerful in operation, reliable at all times, and not liable to get out of order or be broken.

With these objects in view my invention consists, primarily, of a puller having an arched frame with a removable point at one end, bifurcated for the greater part of its length, and having at its other end a curved pointed pulling-lever pivoted between its arms and bracket-supports pivoted outside of said arms.

My invention further consists in the improved construction, arrangement, and combination of parts hereinafter fully described and afterward specifically pointed out in the subjoined claim.

In order that persons skilled in the art to which my invention most nearly appertains may be enabled to construct and operate the same, I will now proceed to describe the same in connection with the accompanying drawings, in which—

Figure 1 is a perspective view of a puller made in accordance with my invention and in position for practical operation. Fig. 2 is a view of the same in side elevation, the upper end of the lever-handle being broken away. Fig. 3 is a sectional view taken on the transverse plane indicated by the broken line 3 3 in Fig. 2, and Fig. 4 is a detail perspective view showing the tooth of the arched support or brace detached therefrom.

Like letters of reference mark the same parts wherever they occur in the various figures of the drawings.

Referring to the drawings by the letters of reference marked thereon, A is the main body of the tool, which is made in the form of a partial circle or of an arch for sake of strength and rigidity. It is bifurcated or forked, the greater part of its length being in this in-

stance composed of two side bars B B, although, if desired and found practical to manufacture, I might make it of a single piece, forked, as shown. The two bars are shaped at one end to embrace a removable tool C, which is inserted between their ends and secured therein by means of bolts D D. This tooth, as clearly shown in Fig. 4, is curved on its inner face at E on the same arc as the curve of the body or arch A and is provided with side flanges F to lie on the inner faces of the members B B of said arch A. It is further formed as to its main body flat and of a size to fit between bars B B, with bolt-holes to receive bolts D D and a chisel-point at G to engage the side of the spike or nail to be pulled under the head thereof. The bars B B are bent at H to widen the space between them, which space continues to the opposite end of the arch, where bolt-holes are provided to receive a bolt I, which forms the pivotal connection between the arch A and a lever J, mounted between its members B B and having a point K opposite to point G, before described, to engage the opposite side of the nail or spike to be pulled under the head thereof. The bolt I also serves as the pivotal connection between the arch A and an angular supporting-bracket L on the outside of each of the members B B, said bolt passing through the upright flanges of said brackets L and their horizontal flanges resting upon the ground or whatever the instrument is located upon.

The hole in lever J, through which the pivotal bolt I passes, is round or in the form of an elongated slot, as shown in dotted lines at M in Fig. 2.

In operating my device it is placed in position to bring the points of the bit or tooth and lever on opposite sides of the spike or nail whether the same is in a cross-tie, a platform, or elsewhere, when the point of the tooth will engage under one side of the head and the point of the lever under the other side, and by the movement of the lever great power will be exerted to draw out the nail or spike. The base of the arch, or, as in this case, the bracket-support pivoted thereto, will rest upon the tie or platform, the arch extending either across or lengthwise thereof,

and the pivotal bolt connecting the arch and brackets will act as a pivot on which the arch will swing and rise with the nail or spike. The lower end or heel of the lever rests upon
5 the tie or platform or upon the rail, if necessary, in the beginning of the movement and until the lever has been moved sufficiently to permit the brackets to rest on the tie, &c., when the lever will swing free on its pivot
10 and continue the movement.

The removability of the tooth or bit from the arch is for the purpose of sharpening it when dull or its replacement by a new one when worn out or broken, the greatest wear
15 coming upon the tooth at all times.

Having thus fully described my invention,

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

In a spike or nail puller, the combination of two arched bars spaced apart, a tooth or bit 20 secured between them near one end, a chisel-pointed lever between them, and a supporting-bracket on each side pivoted near the other end, the supporting-brackets being of less length than that portion of the lever be- 25 tween the pivot and end thereof, substantially as set forth.

THURMAN G. BROWN.

Witnesses:

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