

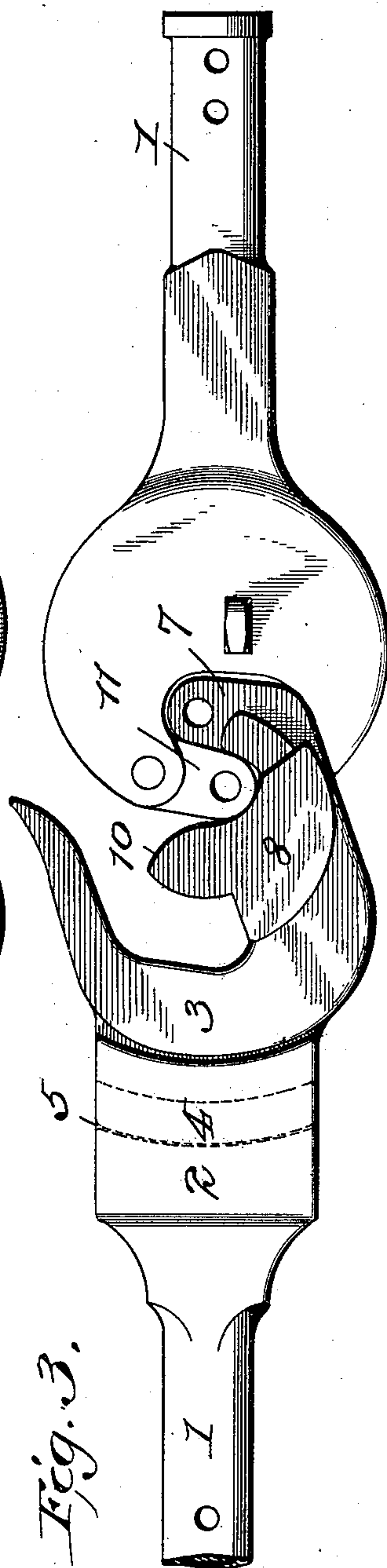
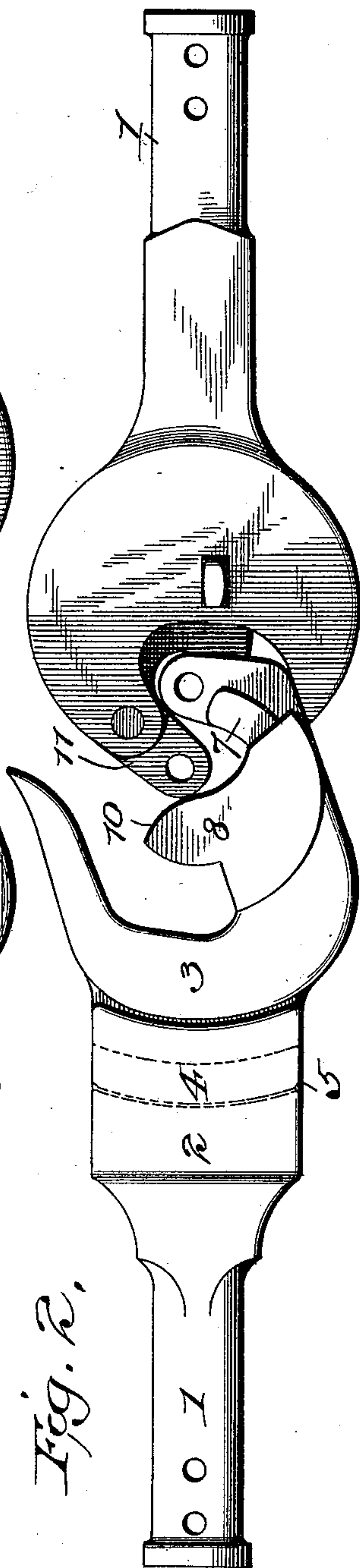
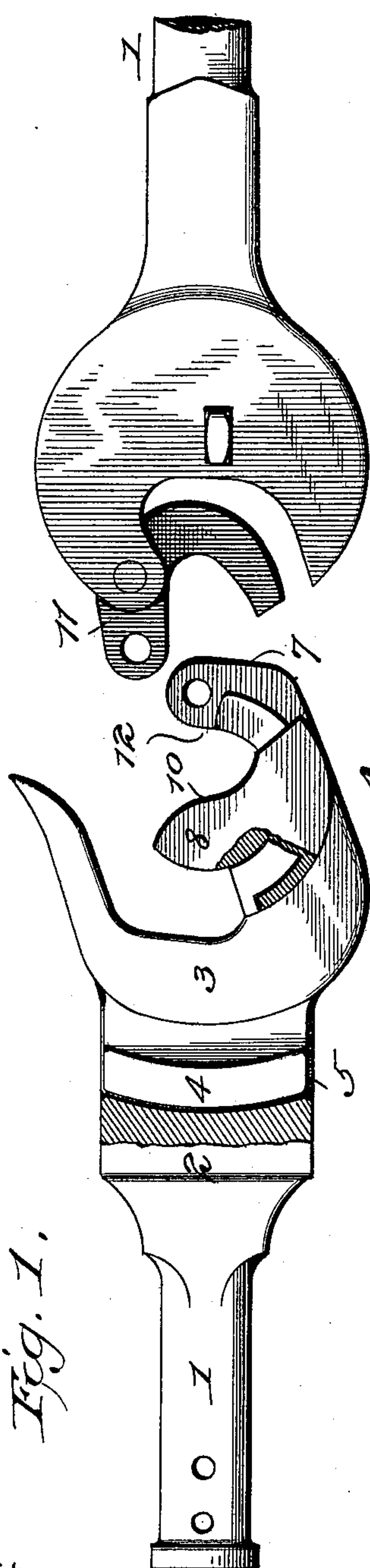
(No Model.)

2 Sheets—Sheet 1.

M. I. WELCH.
CAR COUPLING.

No. 594,770.

Patented Nov. 30, 1897.



Witnesses
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R. A. Warfield.

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(No Model.)

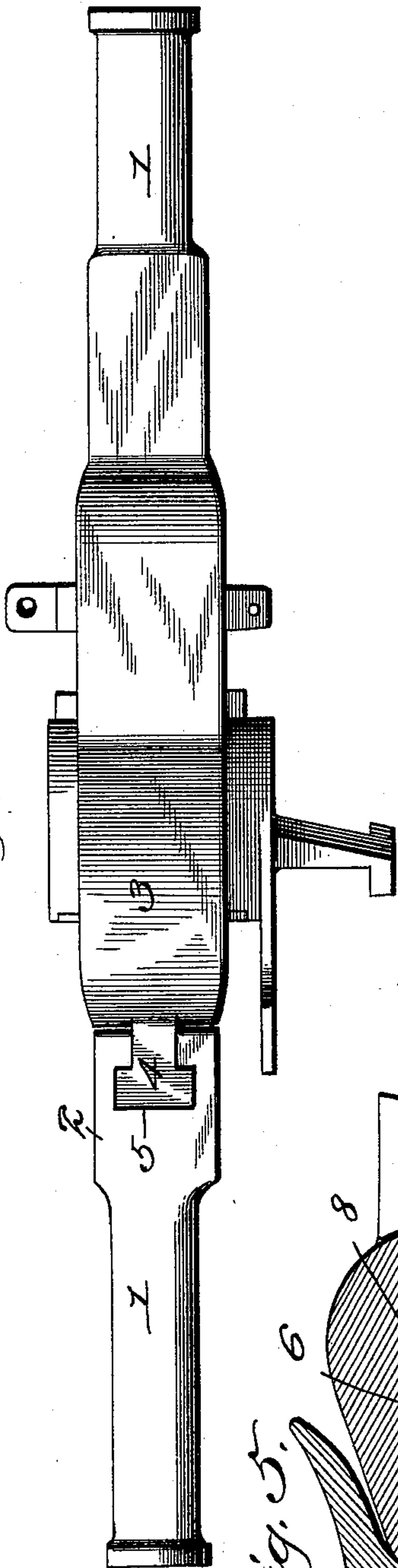
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Fig. 4.



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Fig. 6.

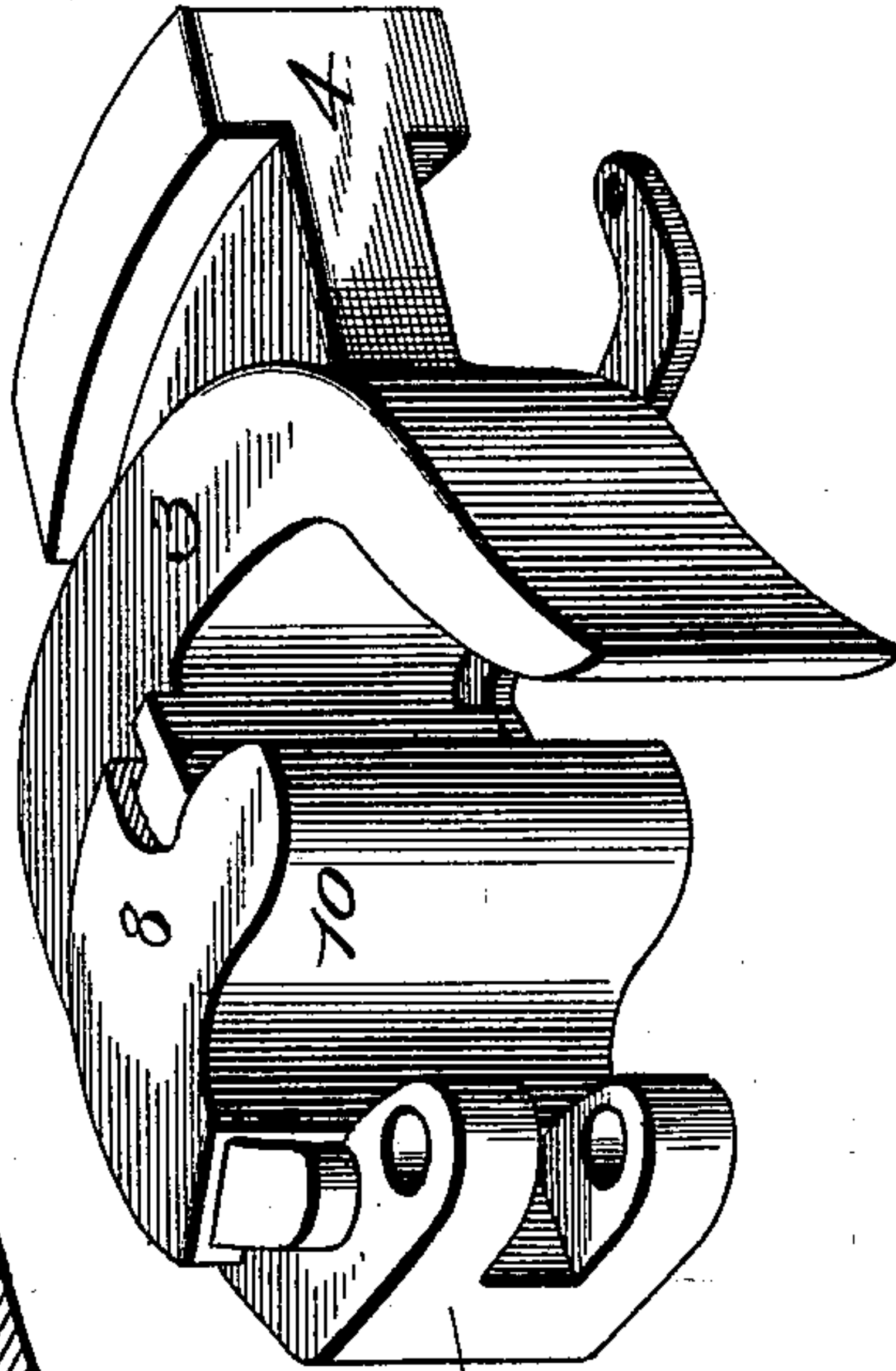
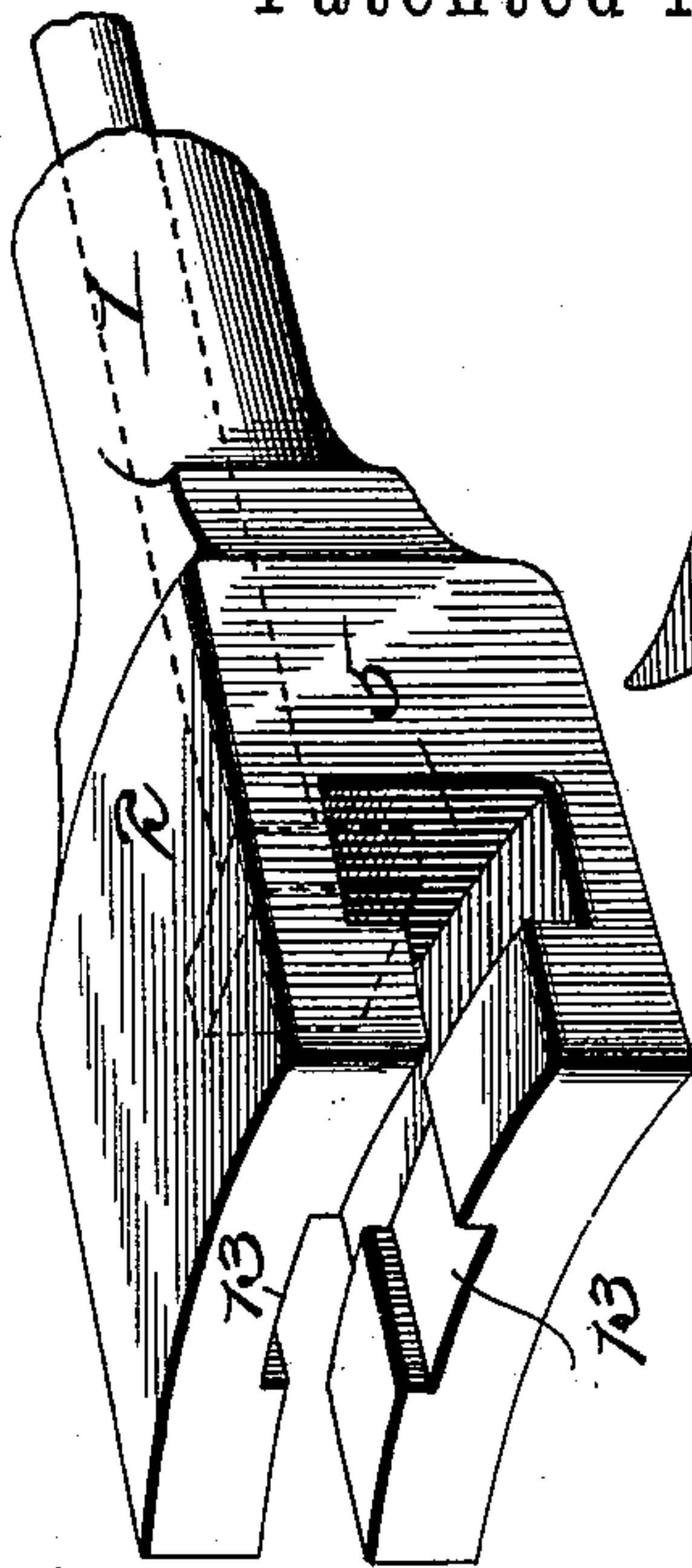


Fig. 7.

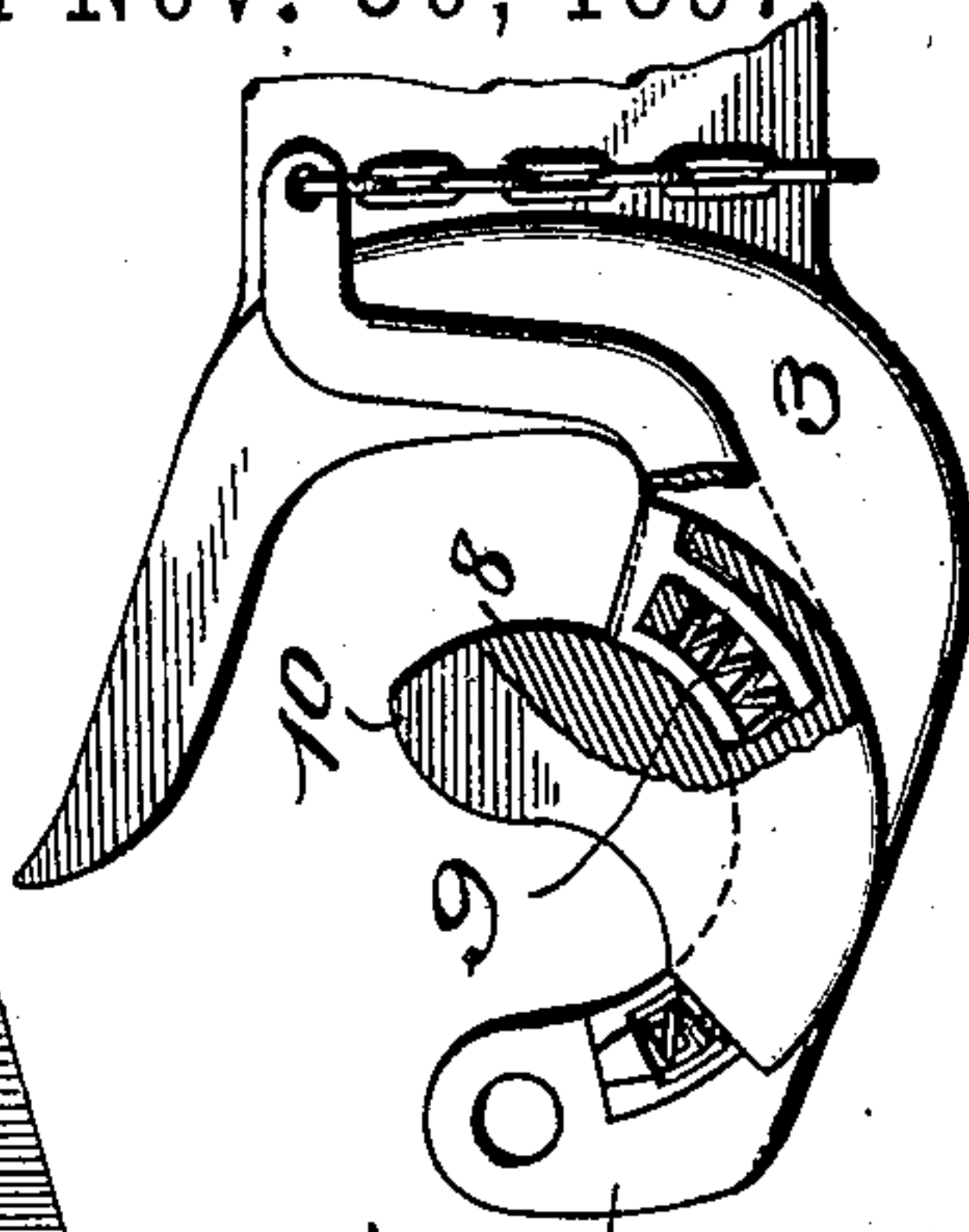
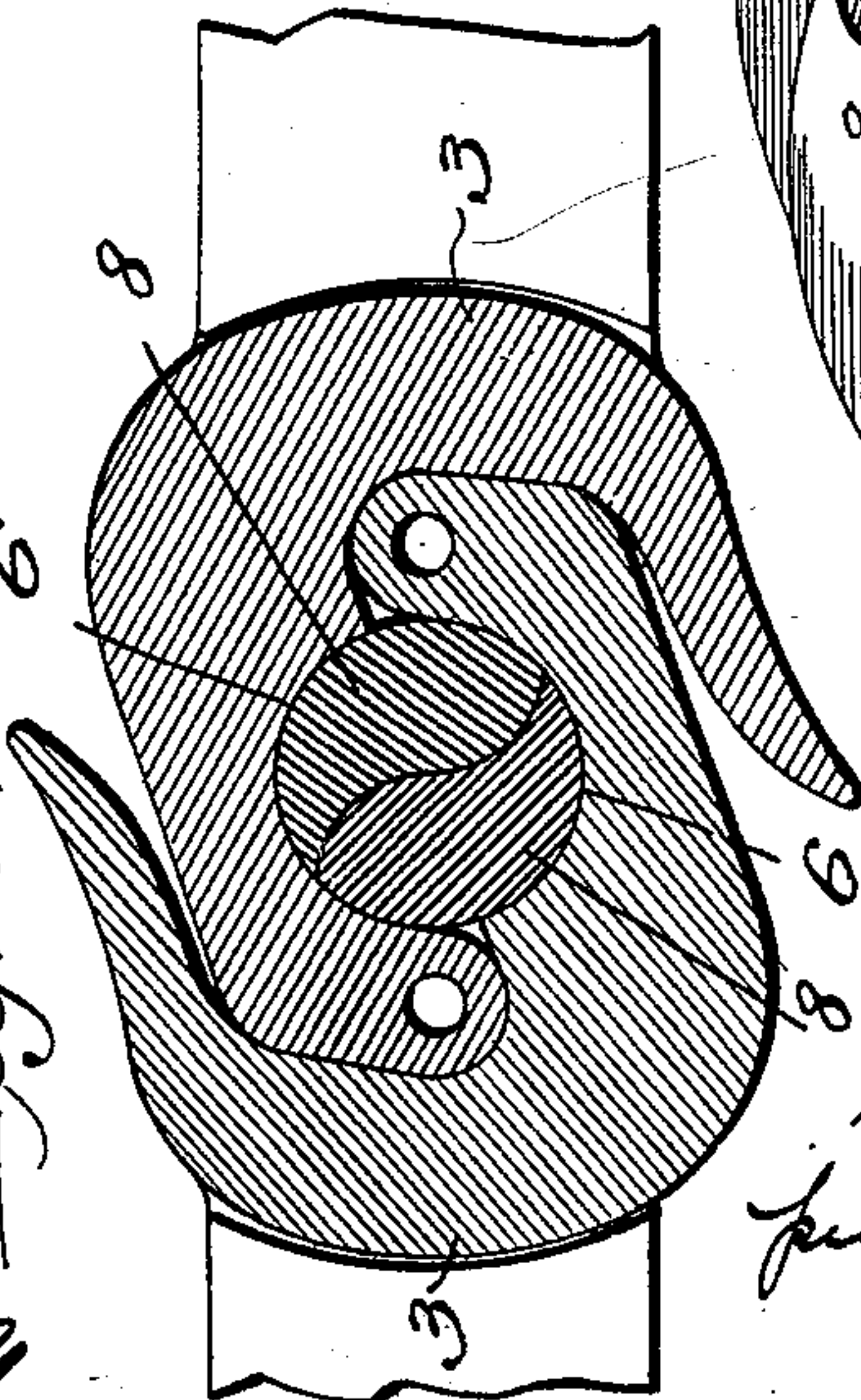


Fig. 5.



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UNITED STATES PATENT OFFICE.

MICHAEL I. WELCH, OF CORDELE, GEORGIA, ASSIGNOR TO SAMUEL
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CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 594,770, dated November 30, 1897.

Application filed May 19, 1897. Serial No. 637,278. (No model.)

To all whom it may concern:

Be it known that I, MICHAEL I. WELCH, a citizen of the United States, residing at Cordele, in the county of Dooly and State of Georgia, have invented certain new and useful Improvements in Car-Couplers; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

My invention relates to an improvement upon the construction shown and described in my Patent No. 571,030, granted November 10, 1896, in which was shown a pair of twin jaws of the Master Car-Builders' type provided with an oscillating split pin composed of two semicylindrical members adapted to come in contact with each other to lock the jaws together.

The object of my improvements is to facilitate the operation of coupling and uncoupling the jaws with a jaw of a different species, such as the Janney or Master Car-Builders' type; and a further object is to render the work of separating a draw-head from its stem easier, in addition to cheapening the construction.

To this end my invention consists in the peculiar features and combinations of parts more fully described hereinafter, and pointed out in the claims.

In the accompanying drawings, Figure 1 represents one of my couplers and a common Master Car-Builders' coupler approaching each other, parts being cut away to show the mechanism beneath; Fig. 2, a similar view showing the same two in contact; Fig. 3, a similar view showing them coupled. Fig. 4 is a side elevation of my coupler coupled as in Fig. 3 to another species; Fig. 5, a horizontal section of a pair of my couplers coupled together; Fig. 6, a perspective view showing the draw-head and stem portion detached from each other; and Fig. 7, a bottom view of my draw-head, in which parts are cut away to disclose the spring beneath.

The reference-numeral 1 denotes the stem portion, which is provided with a central lon-

gitudinal hole for the draft-rod and a widened forward end 2. The draw-head proper is represented by the numeral 3, and it has the general outline of the Master Car-Builders' type, to which it is shown coupled in Fig. 3. This draw-head 3 is attached to the widened portion of the stem by what will for convenience be termed a "T" connection, consisting of a T-head 4 on the draw-head and corresponding open slot 5, extending horizontally in the arc of a circle across the full width of the end 2 in order to allow the T-head to slide laterally therein when rounding curves.

13 represents the square openings in the neck of the T-slot 5 to receive the head on a draft-rod (shown in Fig. 6) when connecting the latter to the stem 1. Oscillating in a vertically-concaved socket 6 on the jaw 7 is a semicylindrical or split-pin section 8, held normally in an oblique position across the mouth of the draw-head by a spiral spring 9. This spring is adapted to be overcome by collision with a knuckle 11 or corresponding section on the opposite draw-head.

To enable the incoming knuckle to slide over and couple more easily, I provide section 8 with a reversely-curved contact-surface 10, whereby when the end of the knuckle 11 strikes it the surface will guide it laterally into the cavity 12 behind the jaw into the coupled positions shown in Figs. 3 and 5.

When one of my couplers couples with one of its own kind, the end of the jaw comes in contact with the convex outer portion of the contact-surface 10 of the semicylindrical section 8, pushes it back, and drops behind it, while the section snaps back into the locked position shown in Fig. 5.

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

1. In a car-coupler, a stem portion provided with a horizontal T-slot and having a longitudinal bore for the reception of the draft-rod, and an enlargement in the neck of the T-slot for the passage of the head of a draft-rod into the T-slot, substantially as described.

2. A car-coupling provided with a ship-lap or semicylindrical member having a reversely-curved contact-surface, substantially as described.

3. In a car-coupling, a ship-lap or semicy-
lindrical member adapted to oscillate on a
vertical center and provided with a reversely-
curved contact-face adapted to meet a corre-
5 sponding face on the opposite member, sub-
stantially as described.

4. In a car-coupling, a ship-lap or semicy-
lindrical section having a vertical concaved
contact-surface on the inner half of its front

face and a vertical, convex, contact-surface 10
on the other half of said face, substantially
as described.

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

MICHAEL I. WELCH.

Witnesses:

R. G. DU BOIS,

R. S. WARFIELD.