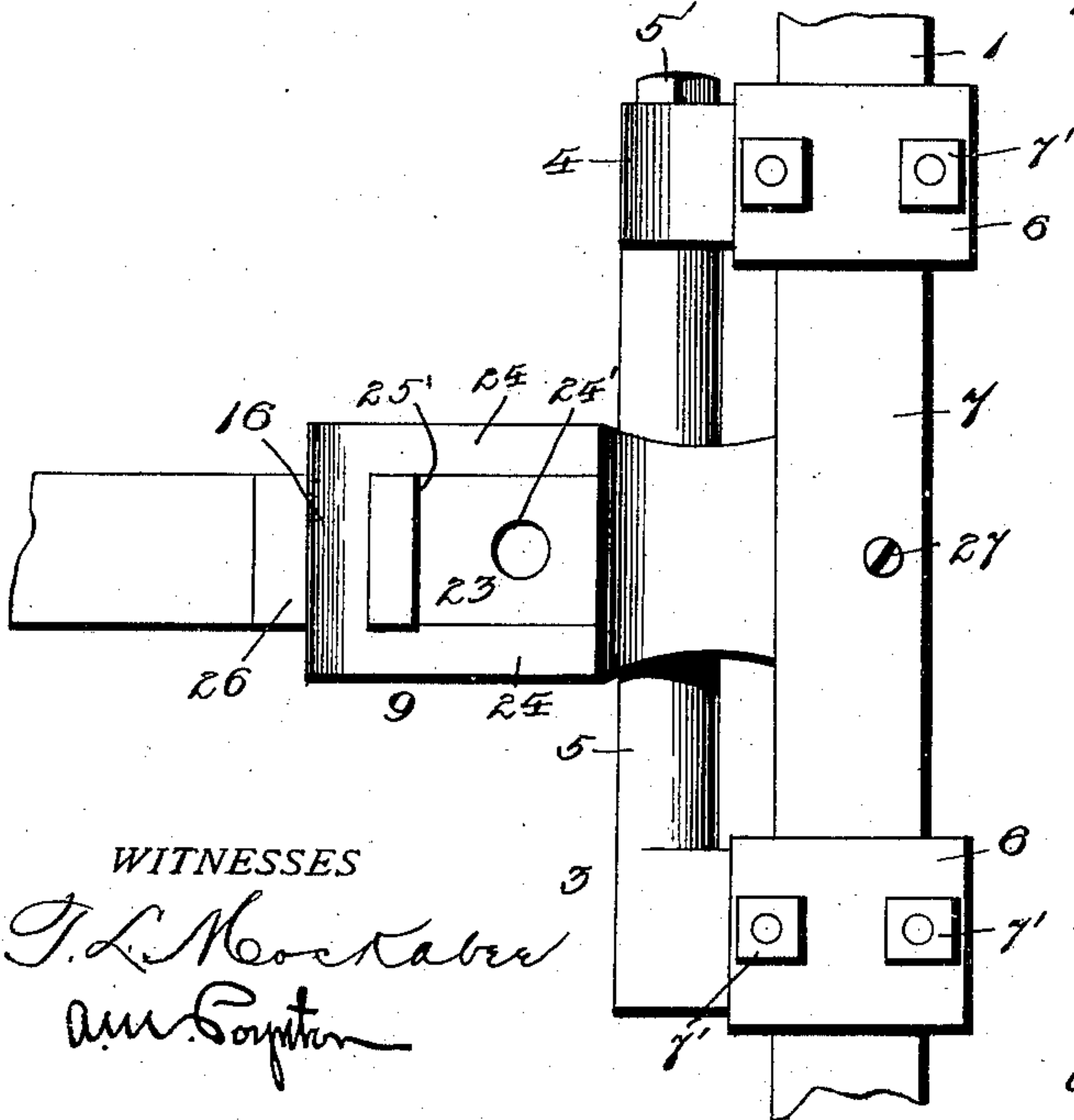
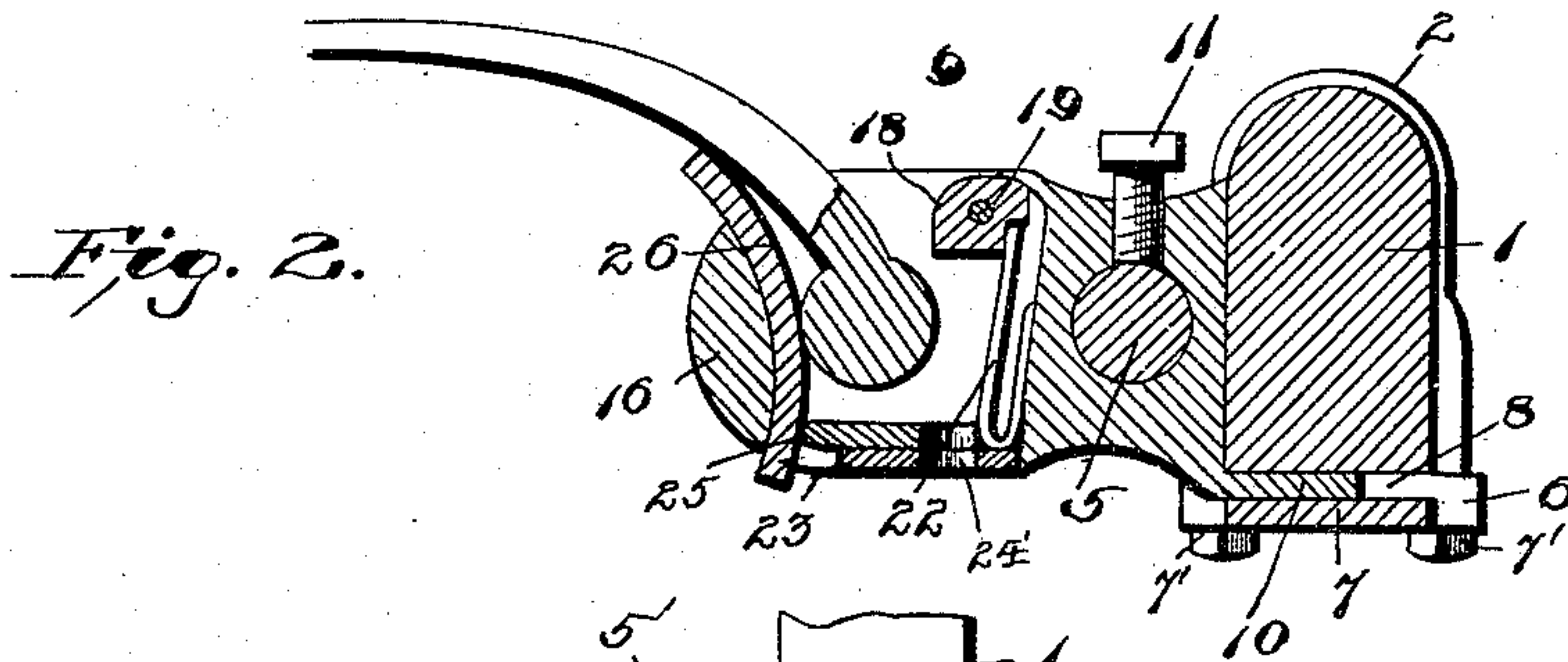
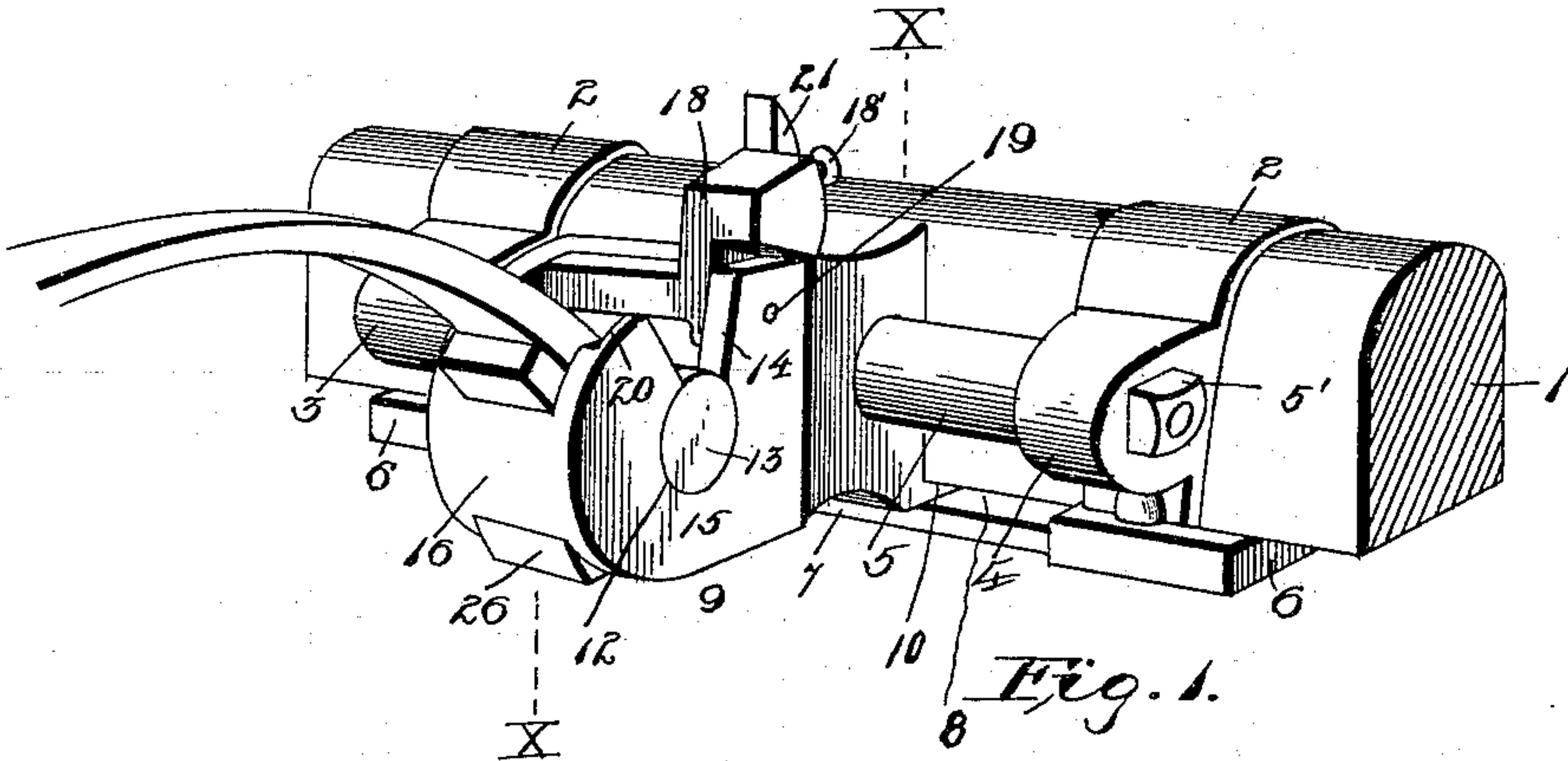


(No Model.)

T. E. KELLOGG.
THILL COUPLING.

No. 604,494.

Patented May 24, 1898.



WITNESSES

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THOMAS E. KELLOGG, OF WALLA WALLA, WASHINGTON, ASSIGNOR OF
ONE-THIRD TO HARRY A. REYNOLDS, OF SAME PLACE.

THILL-COUPLING.

SPECIFICATION forming part of Letters Patent No. 604,494, dated May 24, 1898.

Application filed March 27, 1897. Serial No. 629,559. (No model.)

To all whom it may concern:

Be it known that I, THOMAS E. KELLOGG, of Walla Walla, in the county of Walla Walla and State of Washington, have invented certain new and useful Improvements in Thill-Couplings; and I do hereby 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.

My invention relates to improvements in thill-couplings; and the object of the same is to provide a coupling which is capable of lateral adjustment upon the axle, whereby the same may be adjusted according to the width of the thills which are to be coupled.

The invention also relates to the provision of an antirattling thill-coupling, whereby noise and rattling of the parts are prevented as the same wear by use.

The invention consists in the novel details of construction hereinafter fully described and claimed, and illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of my coupling applied to the axle, the latch for holding the thill-iron within the coupler-head being raised and the thill-iron in position for removal. Fig. 2 is a sectional view on the line *xx* of Fig. 1. Fig. 3 is a bottom view of the coupling.

Referring to the accompanying drawings, 1 indicates the axle, to which my thill-coupling is attached by means of the clips 2, and projecting from the sides of these clips are the lugs 3 and 4, the lug 3 carrying the rod 5, which extends longitudinally of the axle and is adapted at its opposite end to project through the perforation of the lug 4 upon the opposite clip. A nut 5' upon the extended end of the rod secures it in position. The legs of the clips extend through the perforated lugs 6 on the ends of a strip 7, which is positioned beneath the axle and extends longitudinally of the same. The nuts 7' upon the ends of the legs of the clips secure the strip 7 and the clips together and also to the axle.

Movable upon the rod 5 is the coupler-head 9, which is provided with a passage, through which said rod extends. The lower edge of

the head is elongated to form a projection 10, which is adapted to move in the space 8 between the strip 7 and the under side of the axle. Set-screw 11 passes through the coupler-head and engages the rod 5, so that the head may be retained at any position upon the rod.

The forward end of the coupler-head is recessed vertically and formed with the transverse perforation 12, into which the trunnion 13 of the thill-iron is adapted to extend. The transverse perforation has a wedge-shaped opening 14, communicating therewith through the side wall 15 of the head, by means of which the thill-iron is inserted and removed from the coupler-head by moving the iron to a vertical position. When the thill-iron is inserted within the head, it is turned downward in the recess between the side walls until it presses against the bottom wall 16 of the same. For preventing the removal of the thill-iron from the head I provide the swinging latch 18, which is pivoted at one end between the side walls of the head by the pin 19 and provided with a wedge-shaped projection which is adapted to fit within the wedge-shaped opening 14 and close communication to the transverse perforation or thill-eye. I form the wall 15 of the head at its upper end with a shoulder 20 and the latch with the shoulder 21 and cut away the wall and latch on opposite sides, so that when the latch is lowered an interlocking joint is provided. The shoulders, as will be understood, form a stop for the latch, and for operating the latch I provide the handle 18', by means of which the same may be conveniently raised or lowered. A U-shaped spring 22 is positioned behind the latch within a vertical groove or recess extending inward from the underside of the coupler-head. This spring serves to hold the latch 18 either in a closed position or thrown backward to permit the withdrawal of the thill-iron. For inserting the spring within the recess I provide the slide 23, which moves in guides 24 on the under side of the coupler-head and closes the lower end of the spring-recess. Thus the spring is inserted within the recess and the slide closes the same. The slide is provided with a perforation 24', as is also the bottom wall of the head, whereby the dirt which comes

in from the top of the coupler-head may pass downward and out from the perforations. Should the dirt clog up within the head, the slide can be withdrawn and the dirt removed.

5 For preventing the rattling of the parts of the coupler I form recess 25 in the bottom of the coupler-head and insert the rubber strip 26 therethrough and under the lower side of the thill-iron, as illustrated. This prevents
10 any rattling, as will be understood. I also provide the set-screw 27, which passes upward through the strip 7 and engages the bottom of the axle, whereby the strip may be clamped tightly against the elongated end of
15 the coupler-head when the proper adjustment of the latter has been secured.

When it is desired to remove the thill-iron, the same is raised to a vertical position, as illustrated in Fig. 1, and the latch is thrown
20 back, which permits the iron to be removed through the side wall of the head. The latch when lowered prevents the displacement of the thill-iron.

It will be understood that the coupler-heads
25 may be adjusted according to the size and distance apart of the pair of shafts which are to be coupled, all that is necessary being to move the heads on the opposite ends of the axle together or apart and secure them in position
30 by the set-screws. When it is desired to use a pole instead of the shafts, the same adjustment may be secured to accommodate the size of the pole.

Having thus described the invention, what
35 is claimed as new, and desired to be secured by Letters Patent, is—

1. The combination of a rod adapted to be attached to the axle, a coupler-head movable upon said rod, a bar supported beneath the
40 axle and forming a guideway between the same and the under side of the axle, said coupler-head formed with an elongated portion adapted to move in said guideway; and means for securing the coupler-head at the
45 desired position, substantially as described.

2. The combination of clips adapted to embrace the axle, lugs carried by said clips, a rod supported by said lugs, a bar adapted to be positioned beneath the axle, said bar hav-
50 ing perforated lugs formed on its ends through

which the legs of the clips extend and are secured, a coupler-head movable upon the rod and having a projecting portion adapted to move in the guideway formed between the bar and the under surface of the axle, and
55 means for securing the head at the desired position upon the rod, substantially as described.

3. In a thill-coupler, the combination with a coupler-head having a transverse passage formed therein with a central vertical recess
60 communicating with the transverse passage, one of the walls formed by the vertical recess having a cut-out portion communicating with the transverse passage, whereby the thill-iron may be inserted in the coupler-head with its
65 trunnion engaging the transverse passage, a pivoted latch adapted to close said opening, a spring engaging said latch for holding it in an open or closed position, the bottom wall of the head being slotted, and a slide con-
70 trolling said slot, whereby when said slide is drawn out the dirt may be removed from the coupler-head and also the spring, substantially as described.

4. A thill-coupling comprising a coupler-
75 head having a transverse passage formed therein with a central vertical passage communicating therewith, one of the side walls formed by said passage being cut out above the transverse passage and communicating
80 therewith, whereby the thill-iron may be inserted with its trunnion taking the transverse passage, a latch pivoted to the head and closing said opening formed by the cut-out portion, a U-shaped spring engaging the latch
85 at its upper end and having its double portion bearing against the back wall of the coupler-head, said head being formed with an opening in its bottom wall beneath said spring, and a slide closing said opening, said
90 slide being perforated, the parts operating substantially as described.

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

THOMAS E. KELLOGG.

Witnesses:

W. S. CLARK,

ALLEN H. REYNOLDS.