

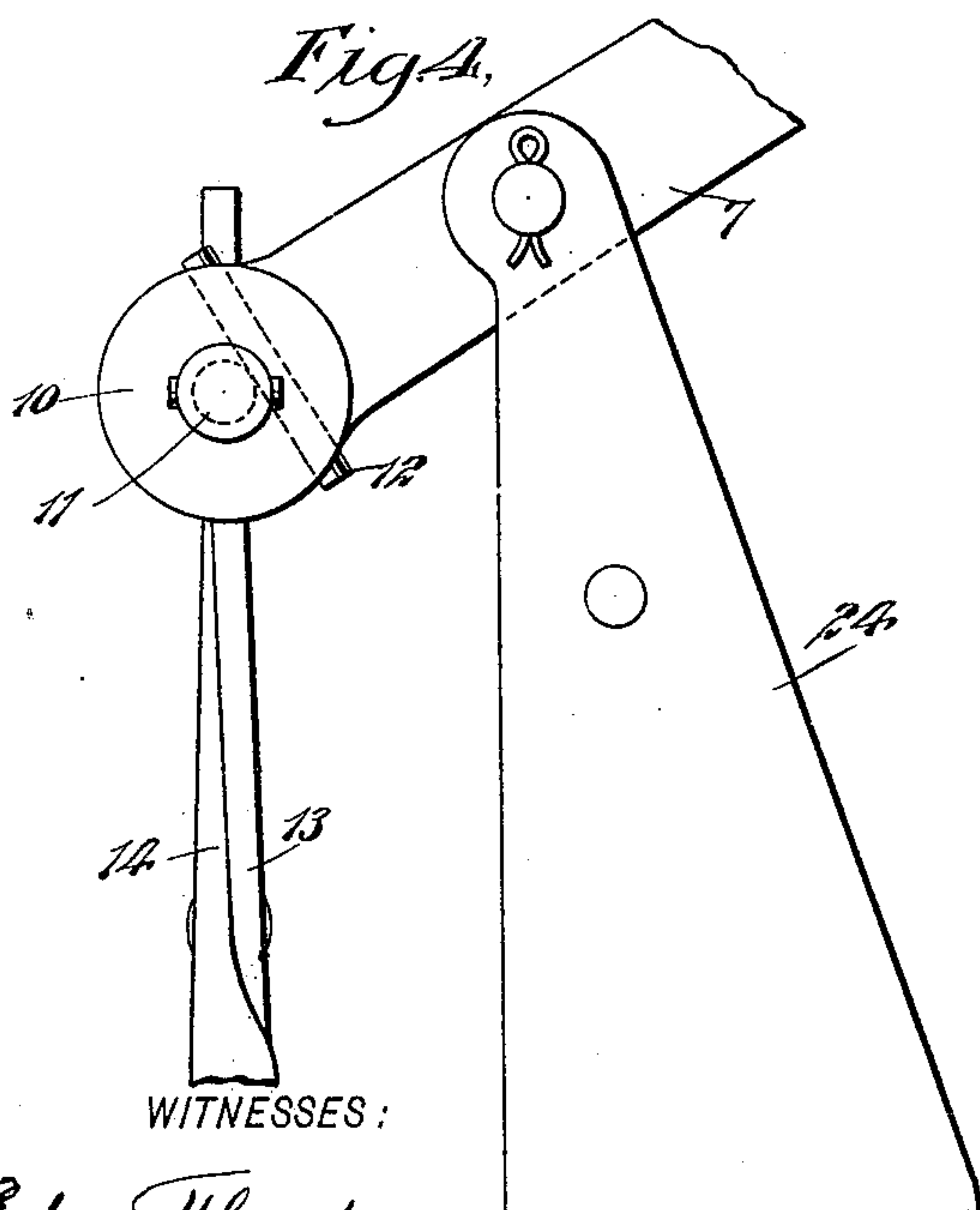
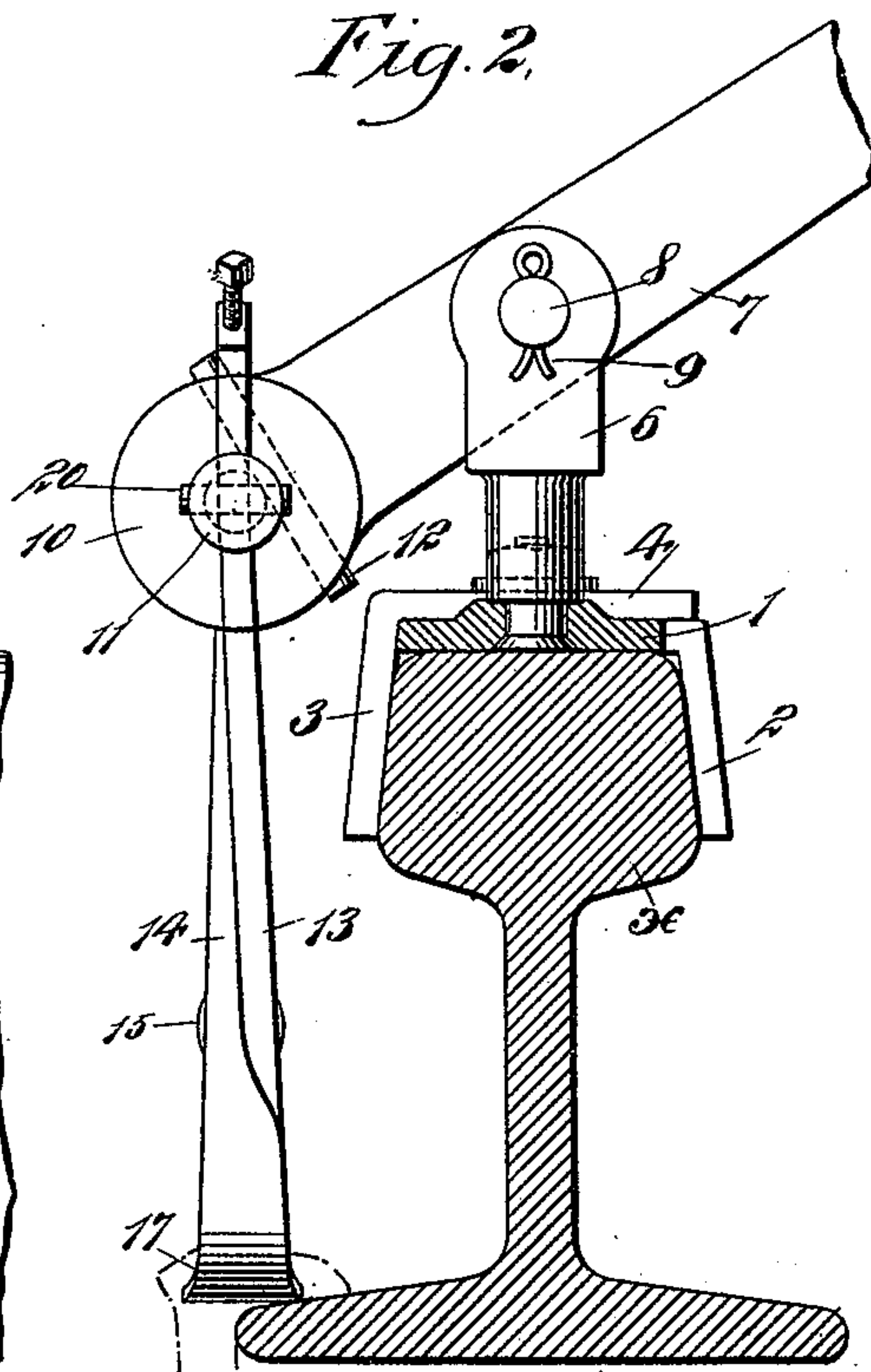
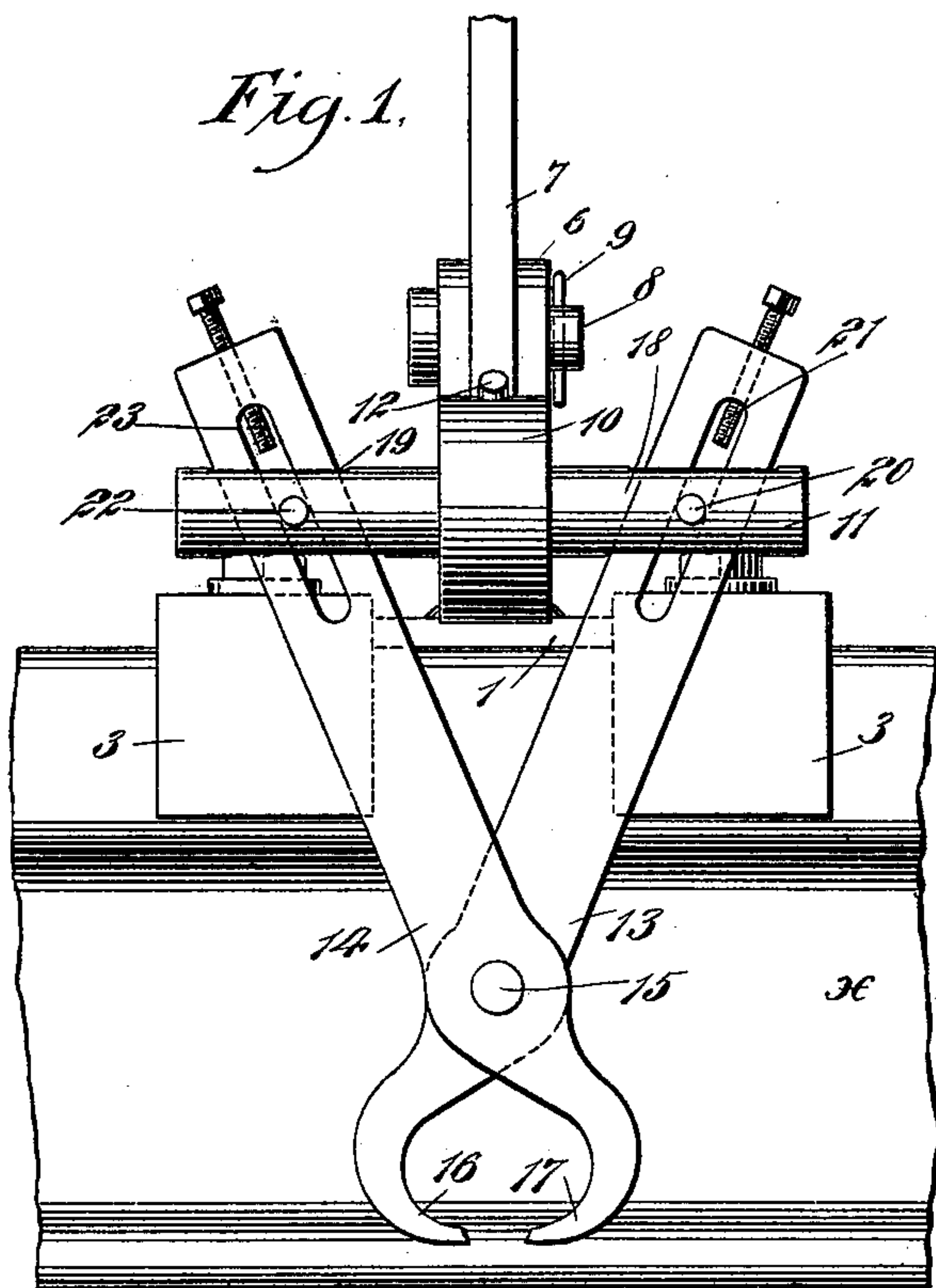
No. 631,160.

Patented Aug. 15, 1899.

W. FIELDEN.
SPIKE PULLER.

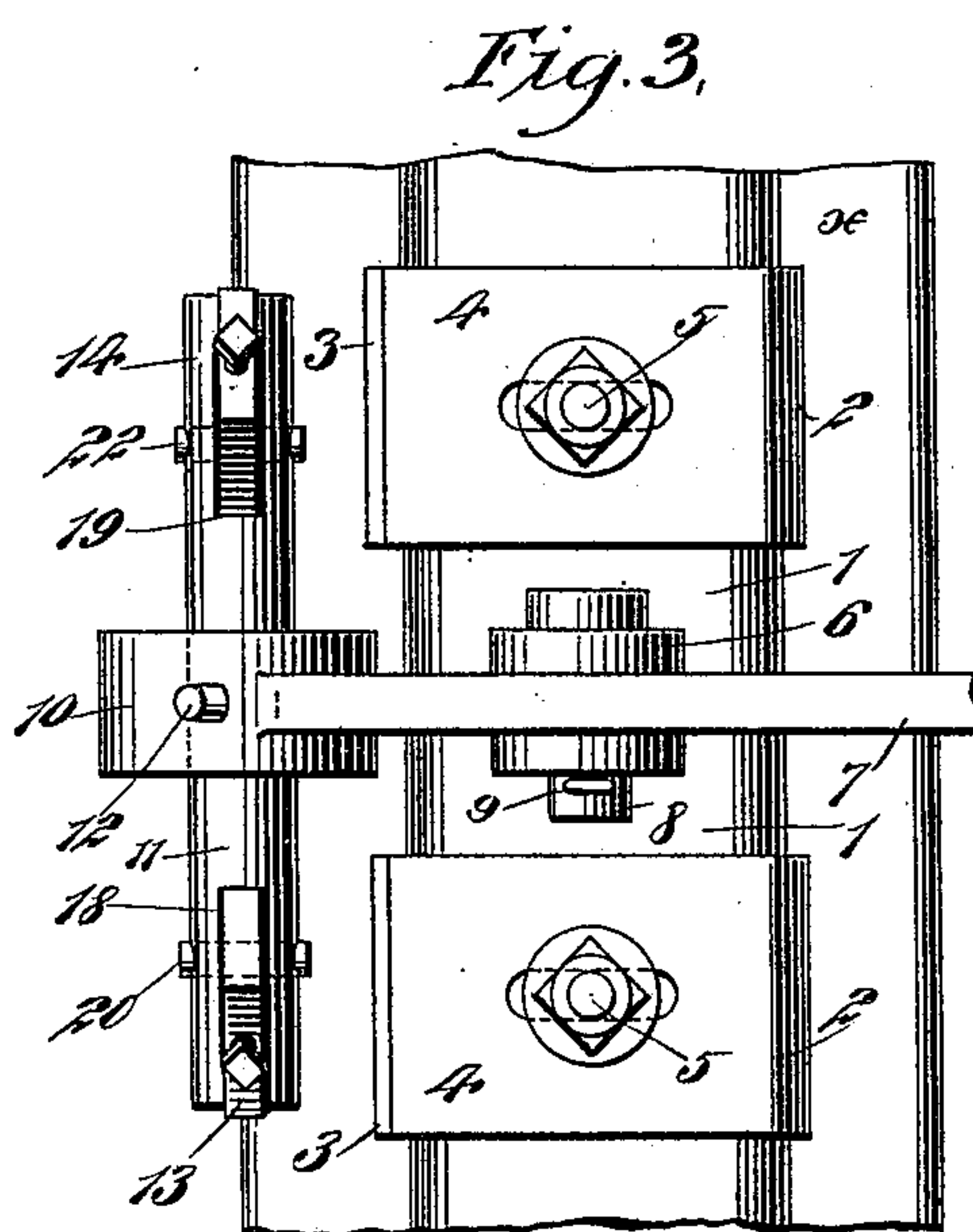
(Application filed Apr. 14, 1899.)

(No Model.)



WITNESSES:

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UNITED STATES PATENT OFFICE.

WILLIAM FIELDEN, OF PORT ORAM, NEW JERSEY.

SPIKE-PULLER.

SPECIFICATION forming part of Letters Patent No. 631,160, dated August 15, 1899.

Application filed April 14, 1899. Serial No. 713,011. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM FIELDEN, of Port Oram, in the county of Morris and State of New Jersey, have invented a new and Improved Spike-Puller, of which the following is a full, clear, and exact description.

This invention relates to improvements in devices for drawing spikes, particularly spikes securing railway-rails to ties; and the object is to provide a device for this purpose so constructed that the head of a spike may be readily and tightly grasped, and, further, to so arrange the parts that the device may be moved from place to place along a rail or any number of connected rails without removing it from the rail or rails, and, still further, to so arrange the parts that the spike-gripping jaws may be shifted from one side of a rail to the other without lifting the device from the rail.

I will describe a spike-puller embodying my invention and then point out the novel features in the appended claims.

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 figures.

Figure 1 is a front elevation of a spike-puller embodying my invention. Fig. 2 is a side view thereof, the rail and bed-plate appearing in section. Fig. 3 is a top plan view thereof, and Fig. 4 is an elevation of a modified construction.

Referring to the drawings, 1 designates a bed-plate adapted to rest upon the top of a railway-rail *x*. At one side this bed-plate 1 has clips 2, designed to engage against one side of the rail, and clips 3 at the other side to engage against the other side of the rail. To adapt the device for different widths of rail, the clips 2 and 3 are adjustable toward and from each other. As here shown, the upper portions 4 of the clips 3, which rest upon the top of the bed-plate 1, are provided with longitudinal slots through which bolts 5 extend, these bolts being connected with the bed-plate 1 and having clamping-nuts on their outer ends. Mounted on the bed-plate 1 is a fulcrum-block 6. This fulcrum-block 6 has a swivel or rotative connection with the bed-

plate and fulcrumed in it is the operating-lever 7. This lever 7 is mounted on a pin 8, extended through an opening in said lever and also through the side pieces of the fulcrum-block. It may be removably held in place by means of a cotter 9. Extended transversely through the head 10 of the lever 7 is a cross-head 11. This cross-head is designed to have a slight rocking movement relatively to the head 10 when the lever is operated. Therefore it is made round to fit in a correspondingly-shaped opening in the head 10, and to prevent a longitudinal movement of the cross-head relatively to the head a pin 12 is passed through the head 10 and engages in a diagonal slot formed in the cross-head.

13 and 14 designate cross-levers pivoted together at 15, the lever 13 terminating in a jaw 16 and the lever 14 terminating in a jaw 17. These jaws 16 and 17 have their ends turned toward each other and are designed to engage underneath the head of a spike at opposite sides of the spike. The levers 13 and 14 have sliding connection with the cross-head 11. As herein shown, the lever 13 extends through a slot 18 in said cross-head, and the lever 14 extends through a slot 19 in said cross-head. A pin 20 extends across the slot 18 and passes through a longitudinal slot 21 formed in the lever 13, and a pin 22 extends across the slot 19 and passes through a longitudinal slot 23 formed in the lever 14.

In operation the device is to be placed upon a rail, as indicated in the drawings. Then upon a downward movement of the head portion of the lever 7, and while the jaws 16 and 17 are in engagement with the top of the bottom flange of the rail, the jaws will be spread apart by means of the pins 20 22 bearing upon the outer walls of the slots 21 23. Then by manipulating the lever 7 to move the head portion upward the said pins, by engaging with the inner walls of said slots, will cause the jaws to engage tightly underneath the head of a spike, so that by downward pressure on the free end of the lever 7 the spike may be easily drawn from the tie. After drawing this spike the levers and jaws may be turned upward, and then the parts may be reversed by turning the lever and the fulcrum-block, so that a spike at the opposite side of

the rail may be engaged and drawn. After drawing two opposite spikes it is obvious that the device may be slid along the rail without removing it therefrom, thus materially reducing the labor in drawing spikes.

In Fig. 4 I have shown the device so arranged as to place the fulcrum-block on a tie at the inner or outer side of a rail. This fulcrum-block consists of a standard 24, in the upper portion of which the lever 7 is fulcrumed in a manner similar to that of the example first described. In using this device the standard 24 is to rest upon the tie, either upon the outer or inner side of the rail, depending, of course, on which side the spike to be drawn is located.

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

1. A spike-puller, comprising a bed-plate adapted to rest on the top of a railway-rail, clips adjustably mounted on said bed-plate for engaging the sides of the rail, a fulcrum-block having pivotal connection with the plate so as to rotate in a horizontal plane relatively to the plate, a lever fulcrumed in said block, a cross-head carried by said lever, jaw-carrying levers pivoted together and having sliding connection with the cross-head,

and gripping-jaws on said levers, substantially as specified.

2. A spike-puller, comprising a bed-plate adapted to rest upon the top of a railway-rail, clips having adjustable connection with said plate for engaging the sides of the rail, a fulcrum-block having pivotal connection with the bed-plate so as to rotate in a horizontal plane relative to the plate, a lever fulcrumed in said block, a cross-head mounted to rotate in said lever, the said cross-head being provided with slots, jaw-carrying levers pivoted together and having portions extended through said slots, the said portions being slotted and pins extended through the cross-head and through the slots of the jaw-carrying levers, substantially as specified.

3. A spike-puller, comprising a bed-plate adapted to rest on the top of a railway-rail, a fulcrum-block mounted to rotate in a horizontal plane on said plate, a lever fulcrumed in said block, and jaw-carrying levers carried by the first-named lever, substantially as specified.

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Witnesses:

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