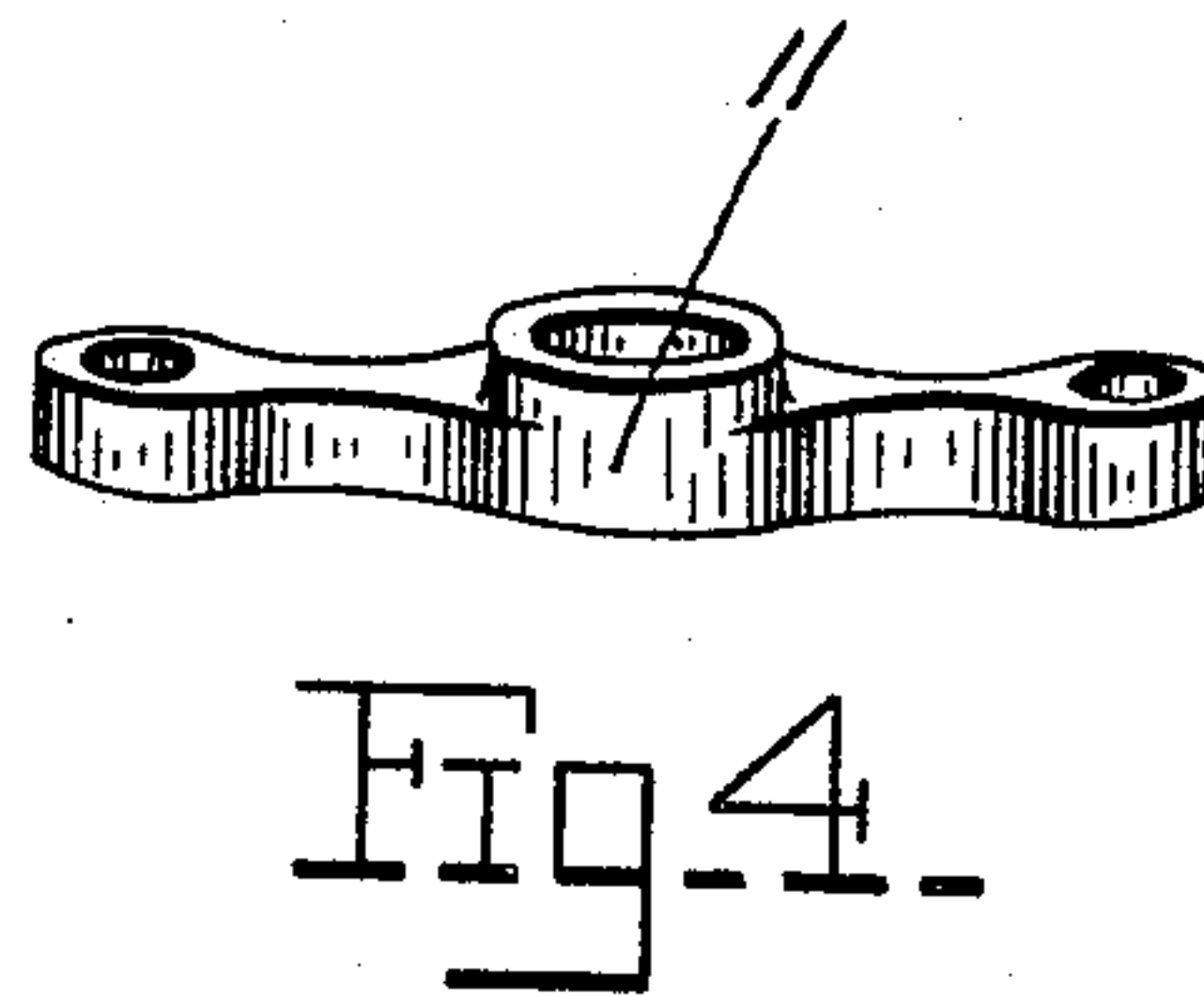
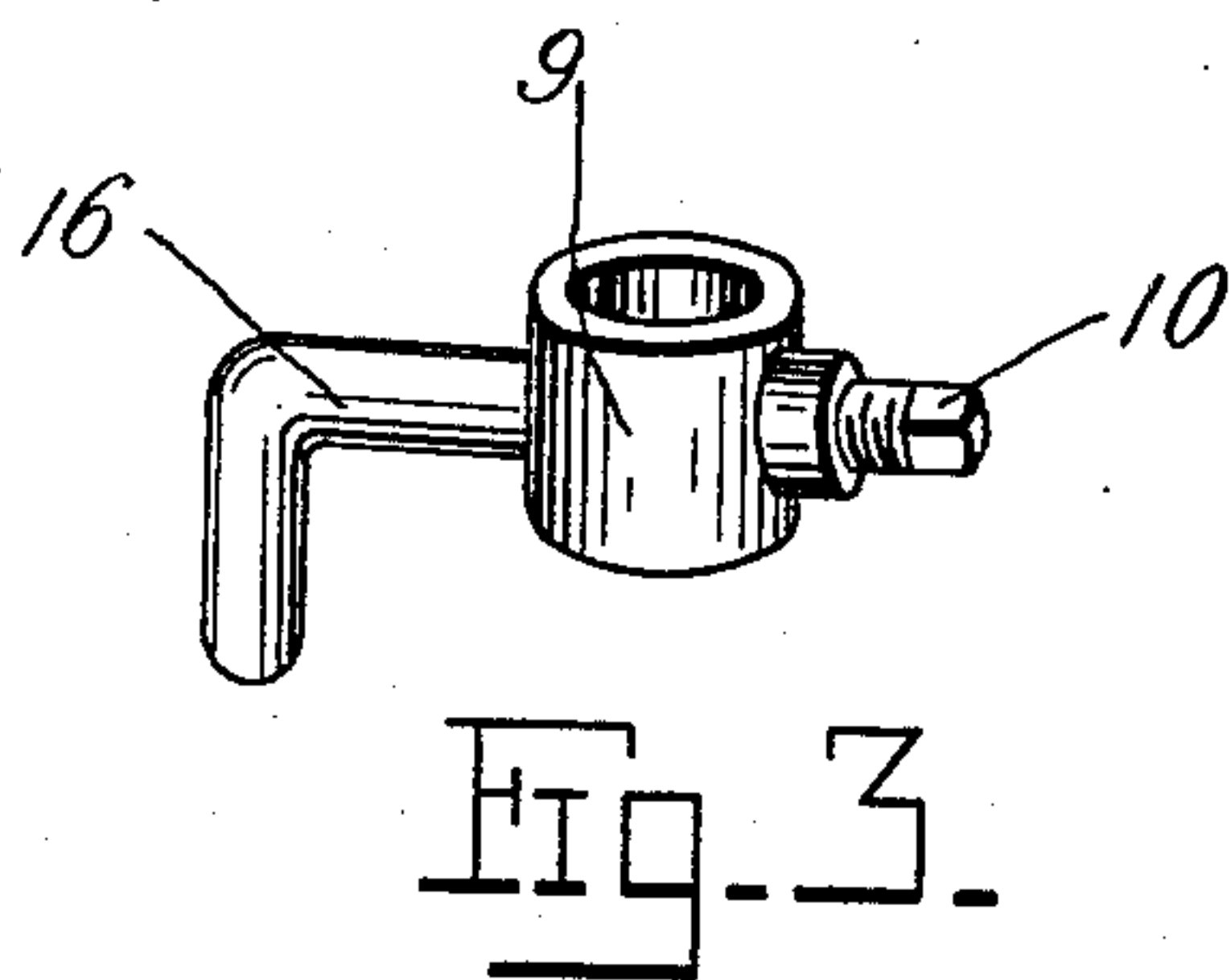
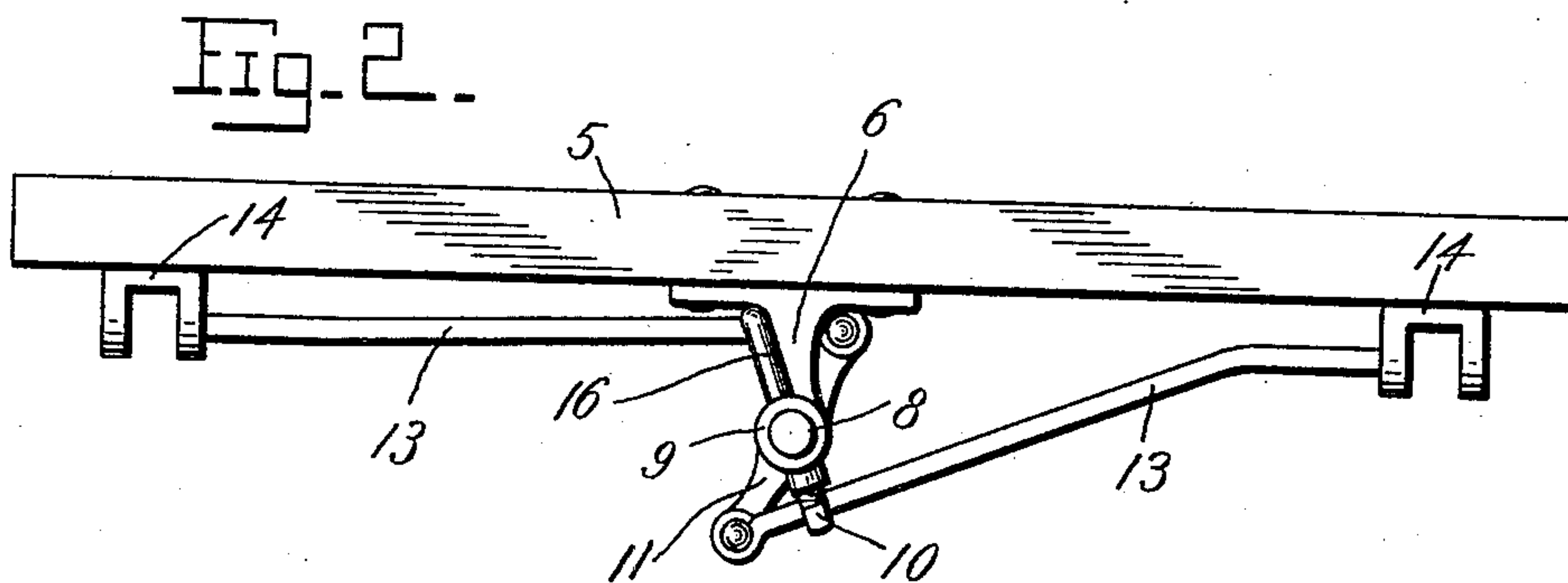
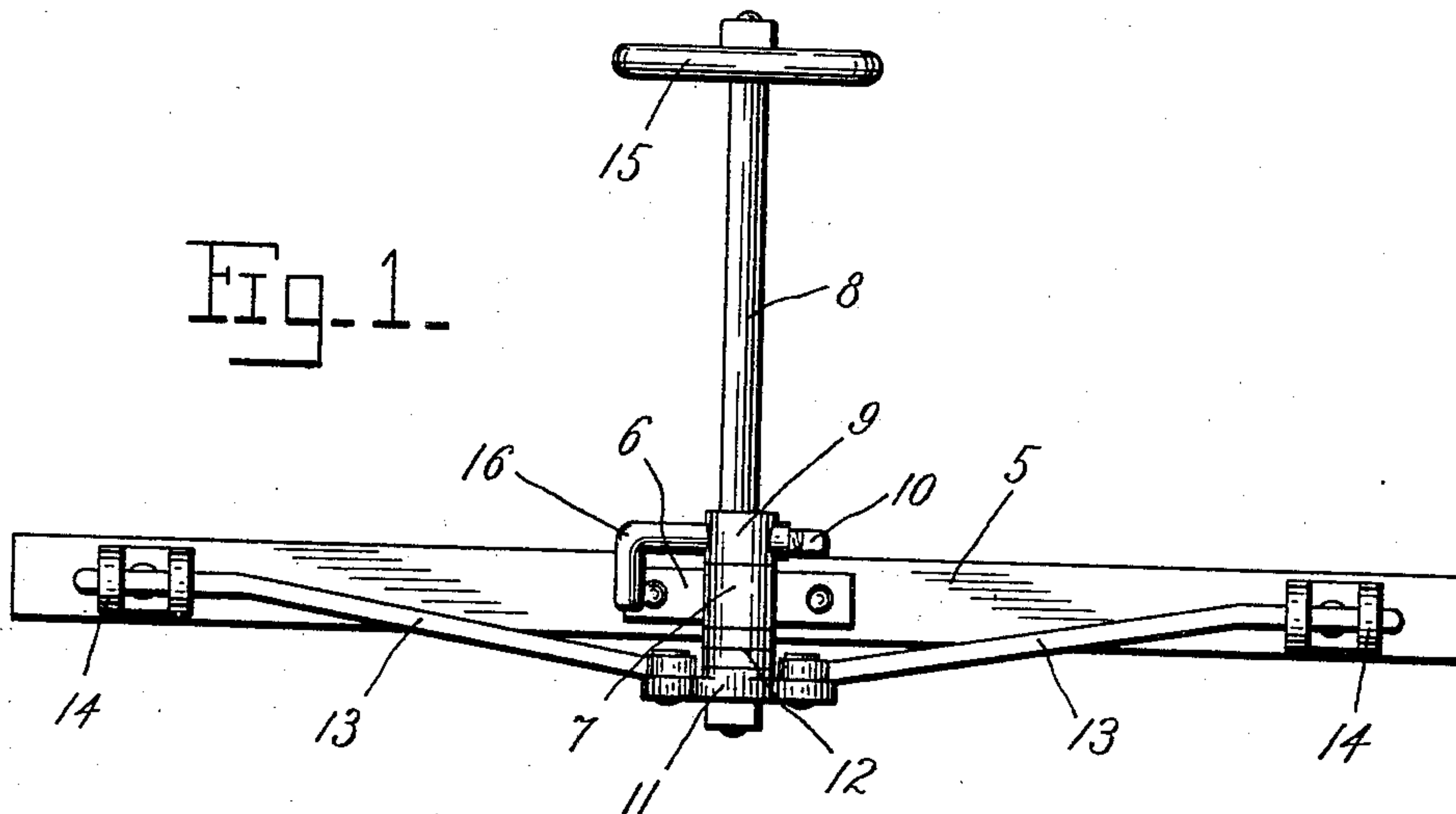


G. W. MORTER.  
HORSE RELEASER.  
APPLICATION FILED JUNE 23, 1908.

904,552.

Patented Nov. 24, 1908.



Witnesses

T. Sonoyama.  
B. E. Cooksey.

Inventor  
George W. Morter.

By *Charles Charles*  
Attorneys.



# UNITED STATES PATENT OFFICE.

GEORGE W. MORTER, OF OTSEGO, MICHIGAN.

## HORSE-RELEASER.

No. 904,552.

Specification of Letters Patent.

Patented Nov. 24, 1908.

Application filed June 23, 1908. Serial No. 439,976.

*To all whom it may concern:*

Be it known that I, GEORGE W. MORTER, a citizen of the United States, residing at Otsego, in the county of Allegan, State of Michigan, have invented certain new and useful Improvements in Horse-Release; 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.

The present invention has reference to improvements in horse releasing devices, and it aims primarily to provide an exceedingly simple, readily operated and efficient releasing device of that type which includes a vertically-disposed rotatable shaft and a pair of oppositely-extending rods having their inner ends pivoted to the ends of a strap secured to the shaft, and their outer ends movable through the perforations formed in a pair of clips secured to the ends of the axle, the movement of said rods being effected by the rotation of the shaft. This type of releaser, however, is open to the defect that the outer ends of the rods are frequently completely disengaged from the clips when the shaft is rotated, their subsequent engagement consuming considerable time and expense and also to the further defect that the shaft is weakened by the formation of openings therein for the reception of the pins which connect the strap to the shaft and the latter to the axle.

It is the principal object of this invention, therefore, to provide a horse releaser in which this objection is overcome by the attachment to the shaft of a supporting collar upon which is formed a depending finger arranged for engagement with a bracket carried by the axle, when the shaft has been rotated a predetermined distance, to limit the retraction or inward movement of the rods.

The preferred embodiment of the invention is illustrated in the accompanying drawings, in which corresponding parts are designated by the same reference numerals throughout the several views.

Of the said drawings, Figure 1 is a front elevation of the complete invention, showing the rods in their projected position. Fig. 2 is a plan view, the rods being shown in their retracted position, the hand wheel being omitted in this figure, to illustrate more clearly the position of the axle bracket and the supporting collar which rests thereon.

Figs. 3 and 4 are detail views respectively of the supporting collar and the strap.

Referring more particularly to the drawings, 5 designates the front axle of a vehicle, and 6 a laterally-projecting bracket which is secured to the front face of the axle intermediate the ends thereof and terminates at its outer end in a collar 7 through the perforation in which extends the lower end of a vertical shaft 8. This shaft is held against vertical displacement by means of a supporting collar 9 fastened thereto by a thumb screw 10 which extends through an opening formed in said collar and impinges at its inner end against the shaft, said collar resting upon the upper face of the collar 7, as shown in Fig. 1. Owing to the fact that the supporting collar is attached to the shaft by the thumb screw, the position of the collar upon the shaft, and in consequence, the extent to which the extreme lower end of the shaft projects below the collar 7 may be varied to compensate for the wear upon either collar.

At its extreme lower end, the shaft 8 has secured thereto a double-ended strap 11 between which and the under face of the collar 7 is interposed a pair of brass washers 12. Each end of the strap 11 has pivoted thereto the inner end of a rod 13 whose outer end is arranged for movement through the perforations formed in the legs of a pair of U-shaped clips 14 which project laterally from and are secured to the front face of the axle at the ends thereof. It will thus be apparent that when the shaft 8 is rotated in one direction by means of the hand wheel 15, which is secured to its upper end, the two rods 13 will be moved in opposite directions, their outer ends being thus caused to pass through the perforations formed in said clips. In like manner, said rods will be moved towards each other when the shaft is rotated in the other direction, the outer ends of the rods being completely released from engagement in the perforations formed in the outer legs of the clips, whereupon the shafts (not shown) will be disconnected from the axle by the movement of the horses.

As originally stated, however, the invention contemplates the provision of means for limiting the retraction or inward movement of the rods, so as to prevent the outer ends of the rods from becoming released completely from the inner legs of the clips. To this end, the supporting collar is formed



with an L-shaped finger 16, whose depending arm is arranged for movement into and out of contact with the stem portion of the bracket 6, it being obvious therefore that as soon as said finger engages with the bracket, the movement of the rods towards each other will terminate.

What is claimed is:

The combination with an axle and a perforated clip secured to each end thereof, of a centrally-located perforated bracket secured to the axle; a vertical shaft having its lower end extending through the perforation in the bracket; a strap secured centrally to said end; a pair of oppositely-extending rods having their inner ends pivoted to the ends of the strap, and their outer

ends arranged for movement through the perforations in said clips; means for rotating said shaft; a collar carried by said shaft and arranged to rest upon said bracket, to hold said shaft against displacement; and a finger carried by said collar and arranged for movement into and out of contact with said bracket, when said shaft is rotated, to limit the movement of said rods towards each other.

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

GEORGE W. MORTER.

Witnesses:

EDGAR J. ROSE,  
JOHN D. WODBECK.