

No. 819,826.

PATENTED MAY 8, 1906.

F. R. WELCHER.
STANCHION.

APPLICATION FILED DEC. 14, 1905

Fig. 1.

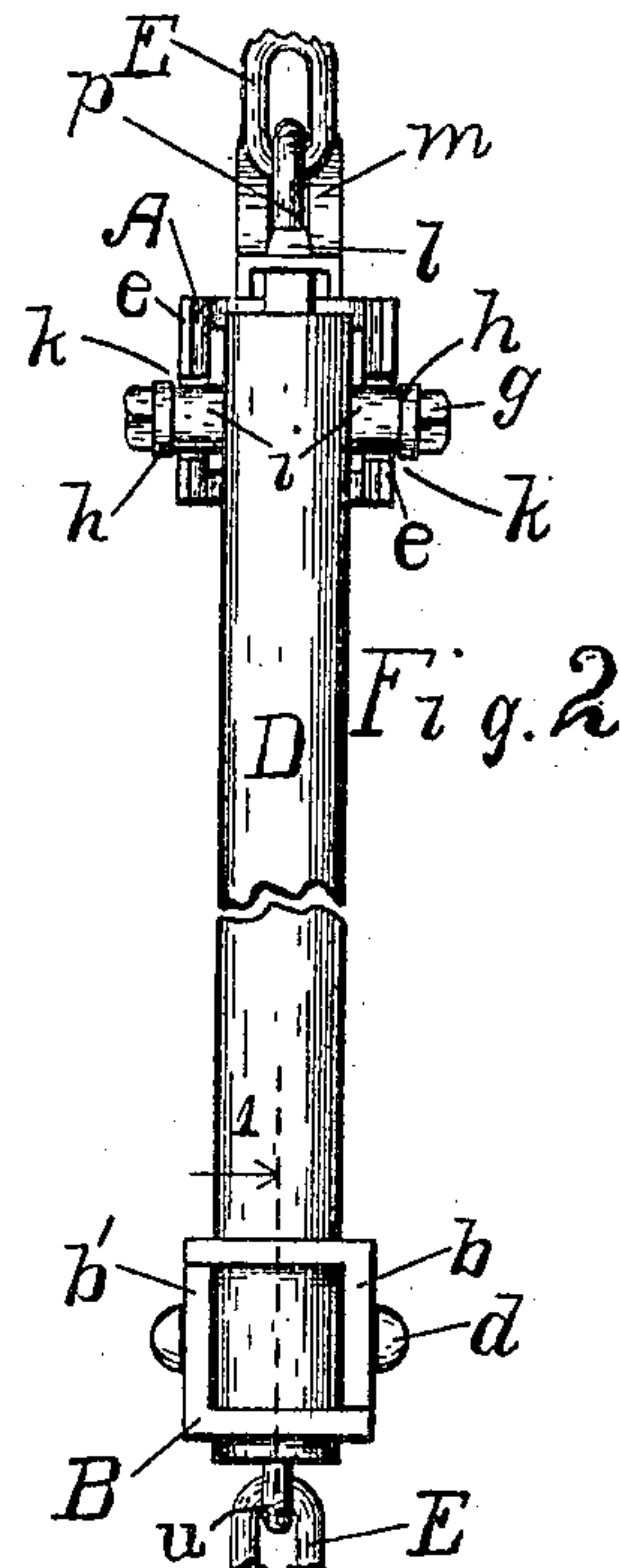
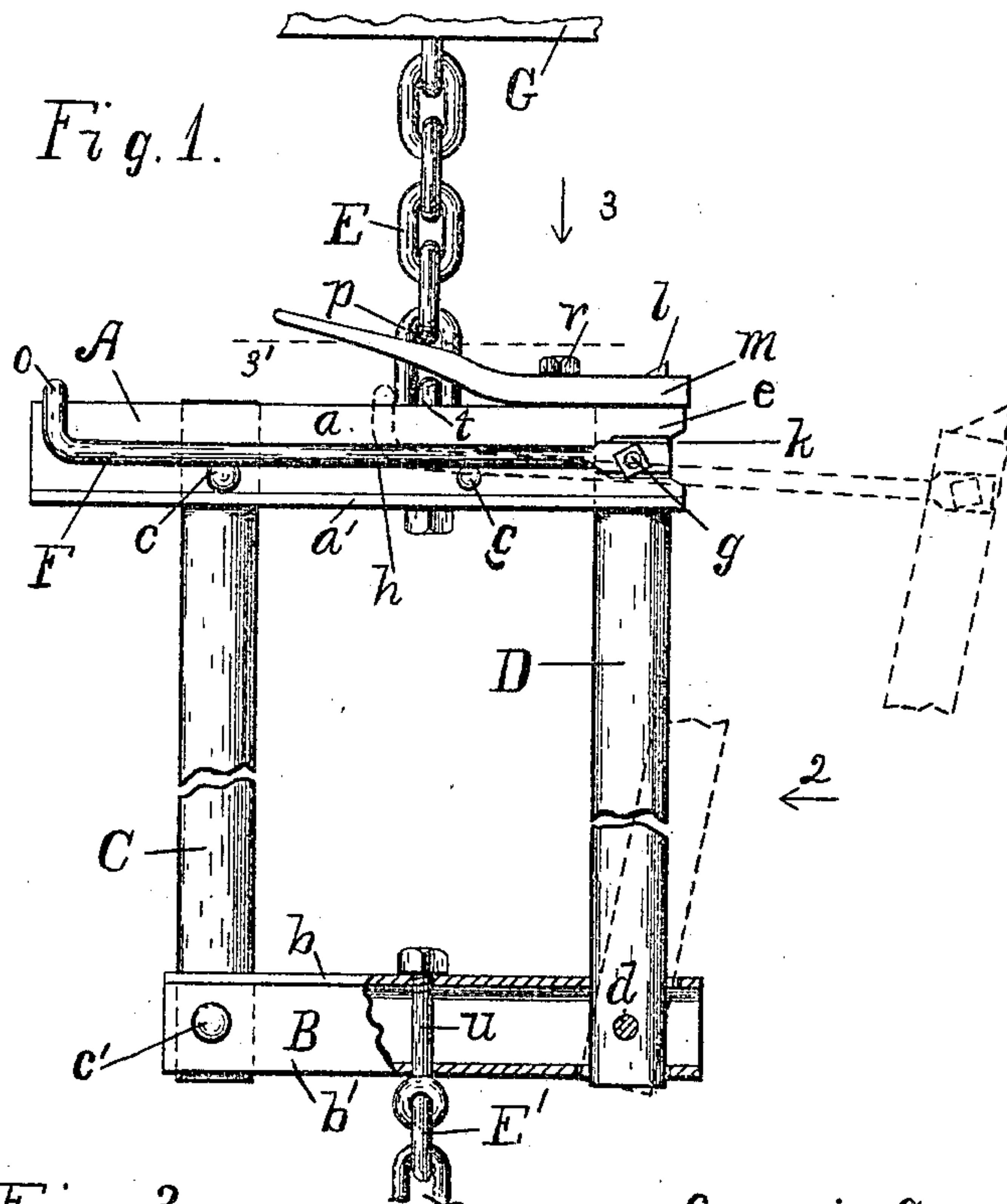


Fig. 3.

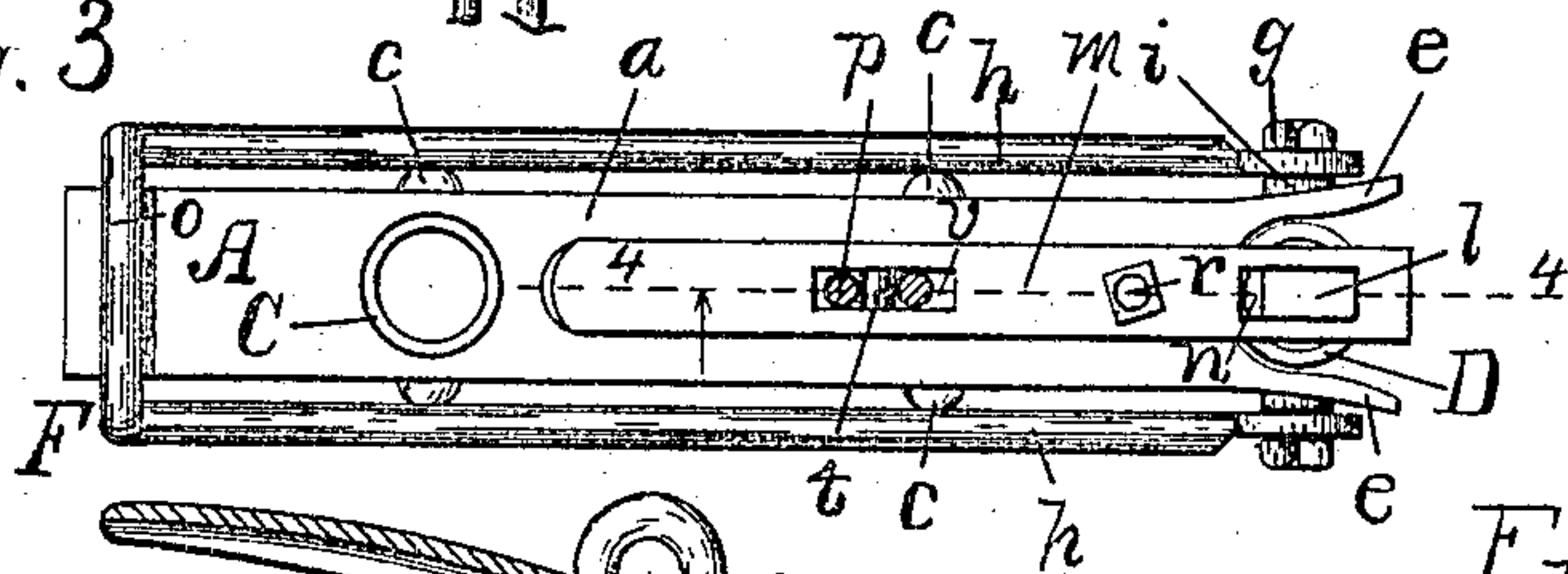


Fig. 4.

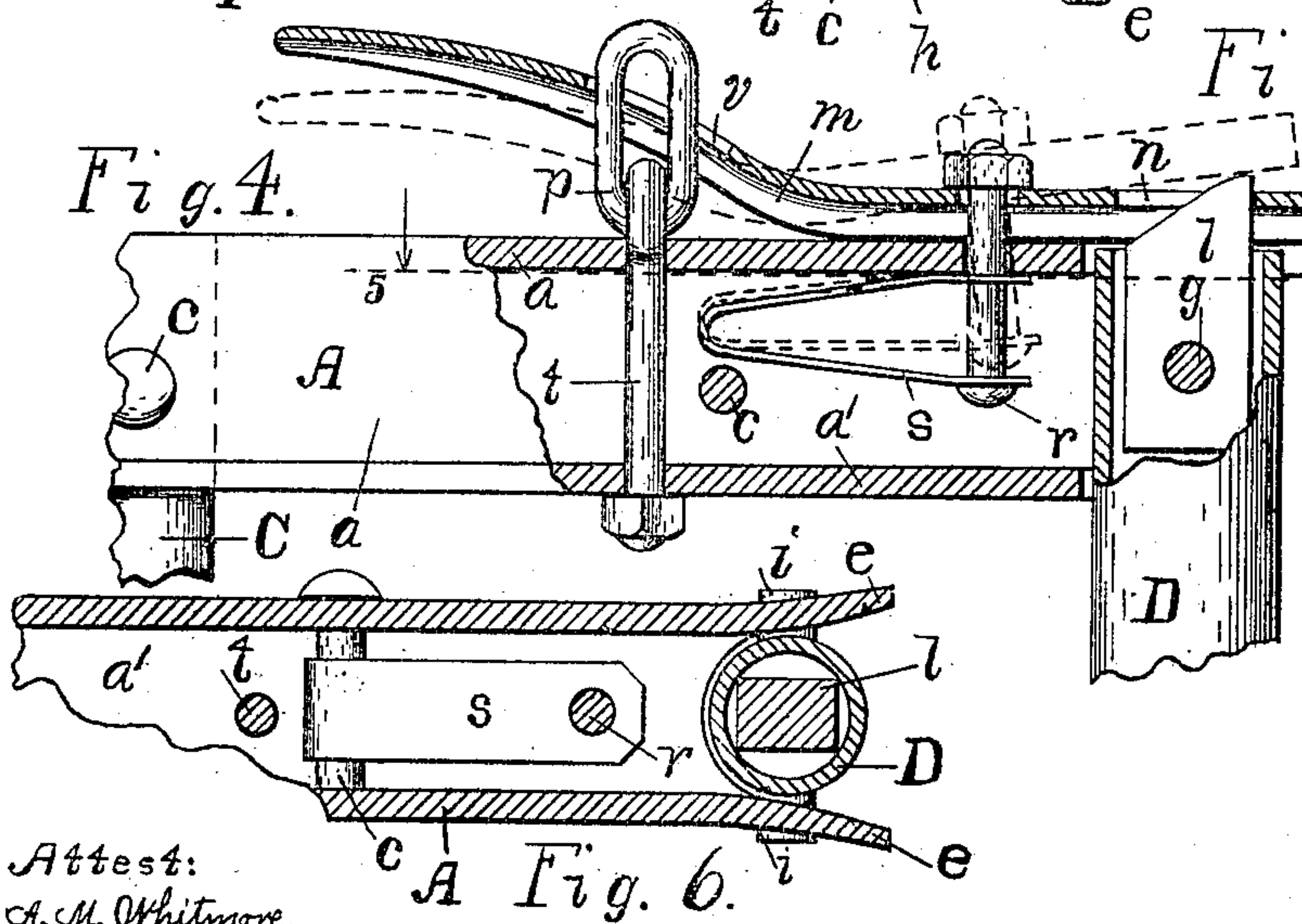
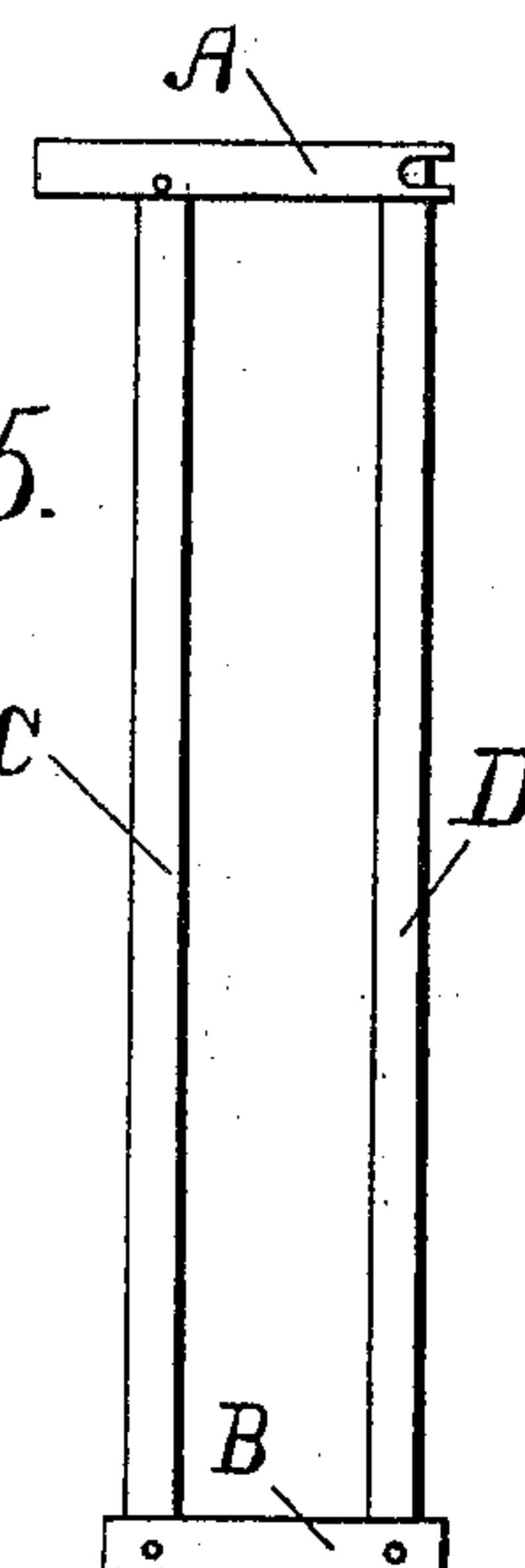


Fig. 5.



Attest:
A. M. Whitmore.
D. M. Devo.

Fig. 6.

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UNITED STATES PATENT OFFICE.

FRANK R. WELCHER, OF NEWARK, NEW YORK.

STANCHION.

No. 819,826.

Specification of Letters Patent.

Patented May 8, 1906.

Application filed December 14, 1905. Serial No. 291,718.

To all whom it may concern:

Be it known that I, FRANK R. WELCHER, of Newark, in the county of Wayne and State of New York, have invented a new and useful Improvement in Stanchions, which improvement is fully set forth in the following specification and shown in the accompanying drawings.

It is frequently convenient for farmers and others having the care of domesticated animals to have means for holding them temporarily in given locations, but leaving them free to change positions and move about without securing anything directly to any part of their bodies. Some devices for this purpose are known as "stanchions," and my invention relates to this class, the device being designed more particularly to be used with horned animals or bovines.

The main object of my invention is to provide a stanchion that shall be strong and practically indestructible and with simple operative parts, making it handy and convenient of use.

Other objects and advantages of the invention will be hereinafter brought out and made to appear and the novel features particularly pointed out in the appended claims, reference being had to the accompanying drawings, which, with the reference characters marked thereon, form a part of this specification.

Figure 1 is a side elevation of the stanchion with parts broken away and parts shown in different positions by full and by dotted lines, a part of the lower bar being longitudinally sectioned on the dotted line 1 in Fig. 2. Fig. 2 is an edge view of the device indicated by arrow 2 in Fig. 1, parts being broken out. Fig. 3 is a plan seen as indicated by arrow 3 in Fig. 1, the upper chain being horizontally sectioned on the dotted line 3'. Fig. 4 is a side elevation of a portion at one end of the upper bar and associated parts with the trailing link removed, parts being in vertical central section on the dotted line 4 4 in Fig. 3 and parts being shown in various positions by full and by dotted lines. Fig. 5 is a horizontal section of a part of the upper bar and other parts on the dotted line 5 5 in Fig. 4, further showing the interior construction. Fig. 6 shows in outline the four main parts of the device in place. Figs. 2 to 5, inclusive, are drawn to various scales larger than those of Figs. 1 and 6.

Referring to the parts shown, A B are re-

spectively the upper and the lower horizontal bars of the stanchion, and C D parallel vertical rods passing vertically through and joined to the bars A B. These four parts constitute a rectangular frame, as appears in Fig. 6, said frame being suspended in a vertical position by a chain E from a part G, Fig. 1, overhead and controlled by a similar chain E', reaching downward and secured to the floor. The bars A B are made hollow for the purpose of lightness, they being preferably made each of two equal parts or sections of angle-iron $a a'$ and $b b'$, respectively, held together by simple bolts or fasteners $c c'$. The rods C D are likewise hollow or tubular, the former rod being rigid with the bars A B and the rod D being free to turn or swing in a vertical plane upon a pivot d outward from the bar A to an inclined position. (Indicated by dotted lines in Fig. 1.) The right end of the upper bar A is vertically bifurcated, the branches $e e$ being bent slightly outward, as clearly shown in Figs. 3 and 5, the upper end of the swinging rod D occupying the space between the branches when the rod is in its normal or vertical position, as shown in the figures.

The rod D is arranged to swing away from the bar A, as shown and above stated, to open the stanchion for the purpose of passing it over the head of the animal, its swinging motions outward being controlled by a U-shape trailing link F, Figs. 1 and 3. This link is commonly an iron rod formed with an upward bend o over, across, and resting upon the upper bar A near its left end, the branches or tines h of the link being at the sides of and parallel with said bar, as shown. The link is connected with the rod D by means of a bolt g , passing horizontally through the ends of the tines h of the link and diametrically through the rod, the link being free to turn on the bolt. The rod D is provided on either side with equal spacing-rings i on the bolt g to hold the tines h clear of the expanded branches $e e$ of the bar A, as clearly shown in Fig. 3, these rings i passing into and occupying horizontal cavities $k k$, Figs. 1, 2, 4, and 6, when the rod D is in its erect position. The rod D is further provided with a catch l , Figs. 1 to 5, inclusive, rigidly fixed within the rod and pierced by the bolt g , with its upper inclined end projecting above the rod, as shown. A latch m is provided upon the bar A, elongated and having its operative end overhanging the end of the rod D in position to receive within an opening n the projecting

catch *l* when said rod is in its vertical position, thus serving to catch and hold the rod normally closed and prevent its swinging away from the bar A. When the rod D is tilted or swung away from the bar A to open the stanchion, as stated, the bend *o* of the trailing link F, meeting the lower link *p* of the upper chain E, constitutes a stop for the outward swinging of the rod.

The bent latch *m* rests upon the bar A, as appears in Fig. 1, a bolt *r*, Fig. 4, reaching vertically upward through it from the interior of the said bar and controlled by a spring *s* within the bar A, serving to hold said latch in position to keep the rod D normally locked in place. The latch is perforated at *v*, Figs. 3 and 4, to receive the link *p* of the upper chain and extends above and across the upper end or head of the staple *t*, holding the lower link *p* of the chain, as appears in Figs. 1, 3, and 4. When it is wished to release the rod D to open the stanchion, the extreme elevated end of the lever-latch is pressed downward, as indicated by dotted lines in Fig. 4, which acts to lift the opposite end of the latch in a manner to clear the catch *l*. The form of the latch *m* is such that when being tilted, as stated, it acts as a lever of the first order, it first rolling upon the bar A and subsequently rocking across the staple *t* as a rigid fulcrum, finally wholly clearing the bar A. This releasing movement of the lever-latch is made against the action of the spring *s*, which when the latch is again released draws it quickly back to place upon the bar A ready to catch and hold the rod D when again swung to its vertical position, the inclined end of the catch *l* permitting it to glide under and temporarily lift the adjacent end of the latch *m*. When the latch is tilted, the bolt *r* moves freely through an opening in the upper side of the bar A, the latch being held in place on the bar loosely by the free-acting bolt *r* and the link *p* of the chain E passing freely through the latch, as stated.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. A stanchion consisting of an upper and a lower horizontal bar, and rods connecting said bars, one rod being rigid with the bars

and the other rod being hollow and joined pivotally to the lower bar and adapted to occupy an end opening in the upper bar, a latch within said hollow rod and a controlling-link for said pivotal rod, with branches at the sides of the upper bar and connected with the pivotal rod the connection of said rod serving also to hold said latch in the hollow rod.

2. A stanchion comprising upper and lower bars, a pair of vertical rods connecting said bars one rod being rigidly in place and the other adapted to swing away from the upper bar and having a catch at its upper end, and a lever-latch on the upper bar to engage said catch to control the swinging rod and a suspending device passing loosely through said lever-latch.

3. A stanchion comprising upper and lower parallel bars the upper one having a cavity at one end, a pair of vertical rods connecting the bars one being rigid and the other held pivotally in the lower bar with its upper end occupying said cavity in the upper bar, a catch on the pivotal rod and a spring-controlled latch on the upper bar for said catch, said latch being lengthened and acting as a lever of the first order having fulcrum-bearing on the said upper bar, and a suspending device passed loosely through said latch.

4. A stanchion comprising upper and lower hollow bars parallel and in a plane, a pair of vertical rods joining the bars the said four parts constituting a rectangular frame, a chain for supporting the frame, one rod being rigid with the bars and the other pivoted in the lower bar and adapted to swing away from the upper bar, a catch on the pivotal rod and a lever-latch on the upper bar adapted to engage said catch, a spring in the upper bar to control the lever-latch the latter having an opening occupied by said chain, and having a fulcrum-bearing on the upper bar.

In testimony whereof I have hereunto set my hand, this 11th day of December, 1905, in the presence of two subscribing witnesses.

FRANK R. WELCHER.

Witnesses:

M. I. GREENWOOD,
H. J. WELCHER.