

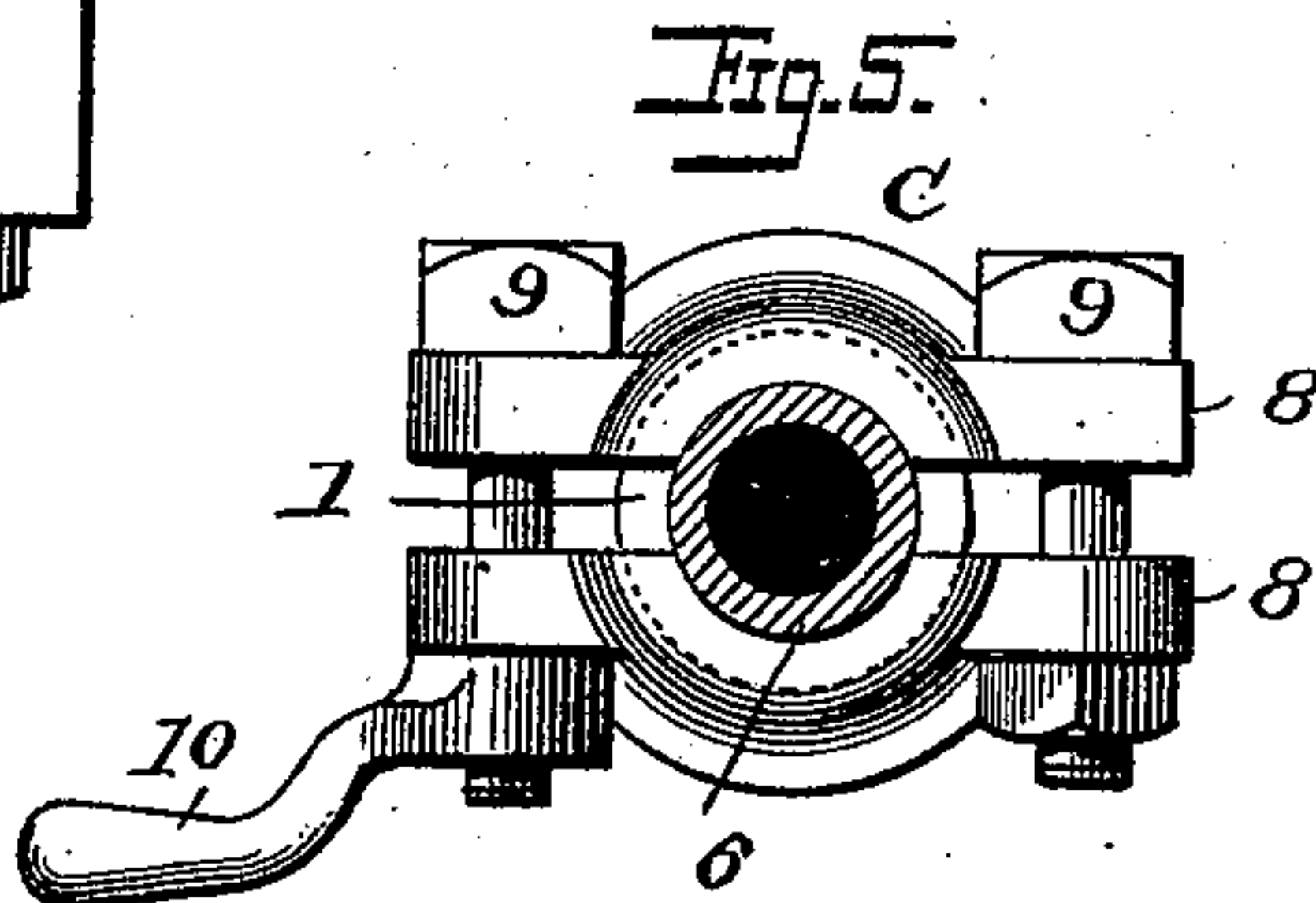
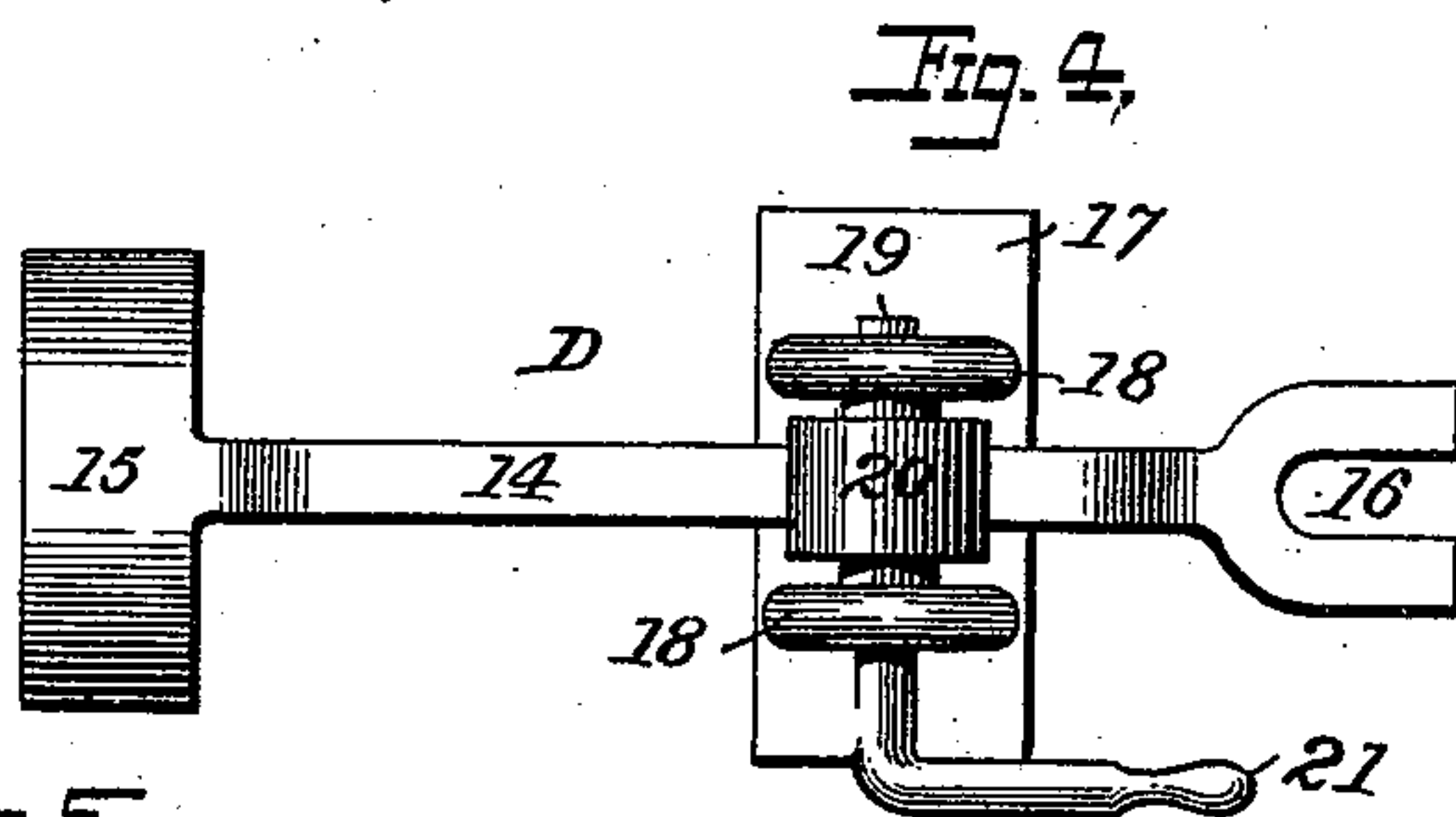
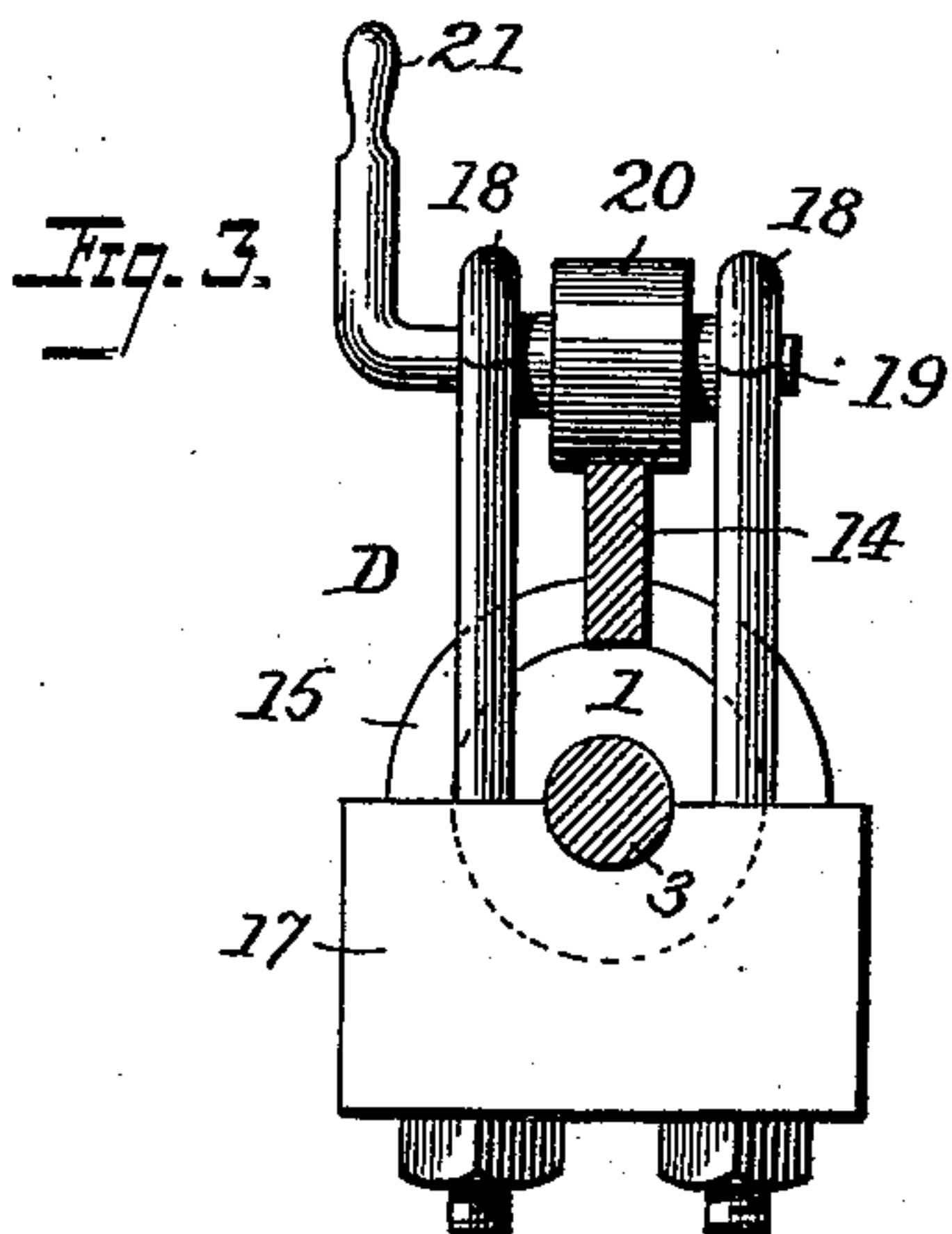
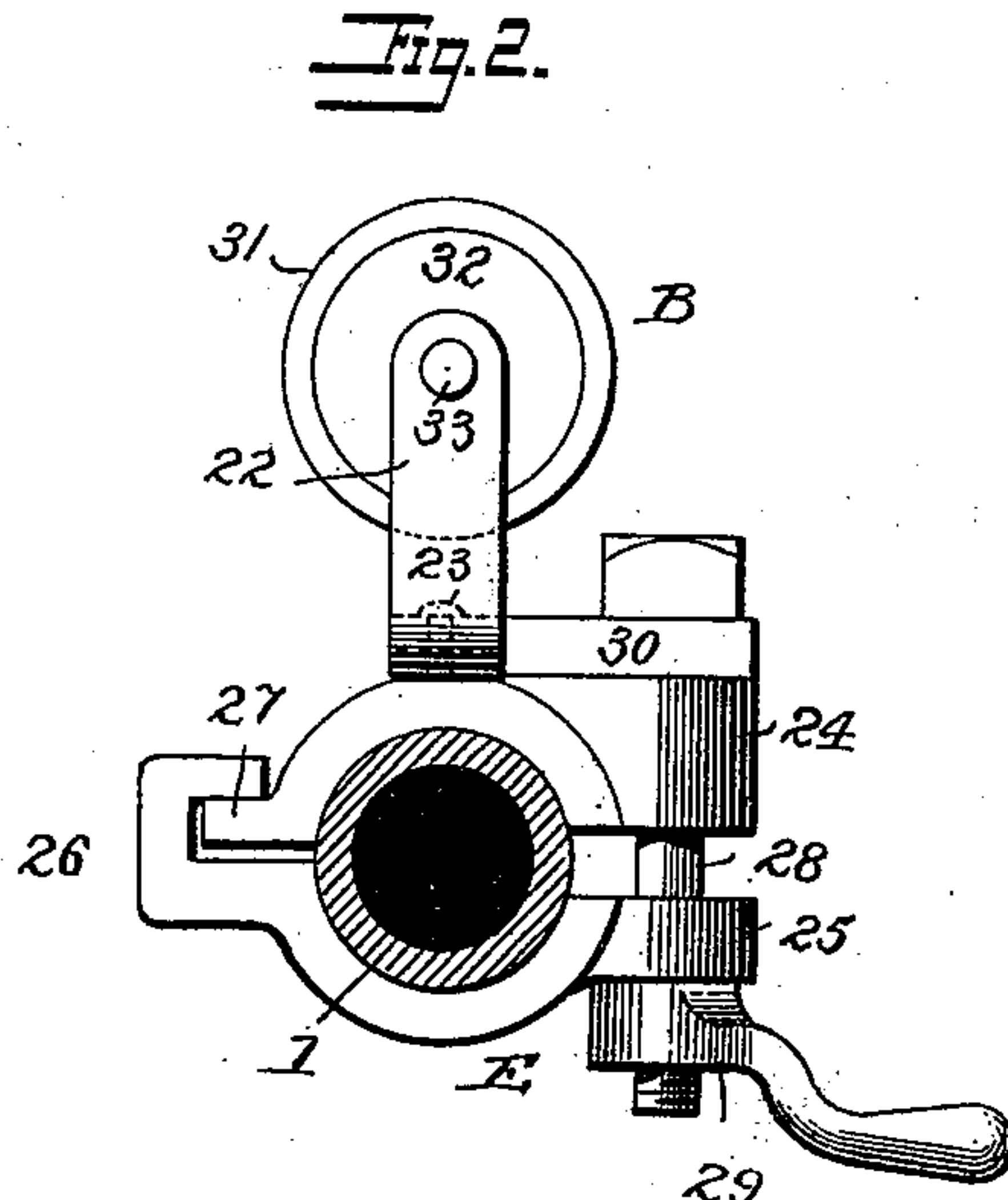
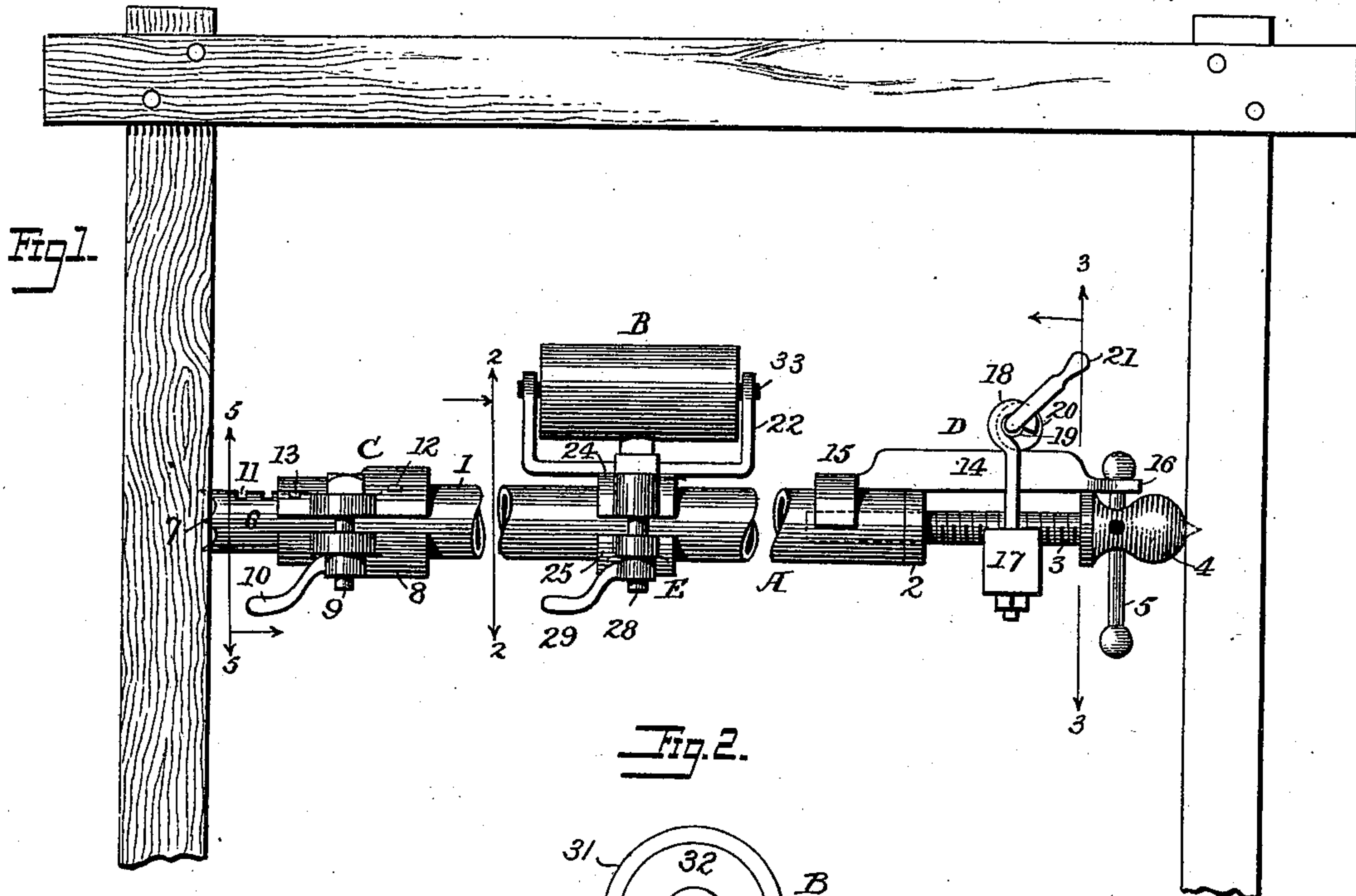
(No Model.)

2 Sheets—Sheet 1.

G. H. SPENCER.
APPLIANCE FOR HANDLING TIMBER.

No. 516,234.

Patented Mar. 13, 1894.



Witnesses
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(No Model.)

2 Sheets—Sheet 2.

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Fig. 6.

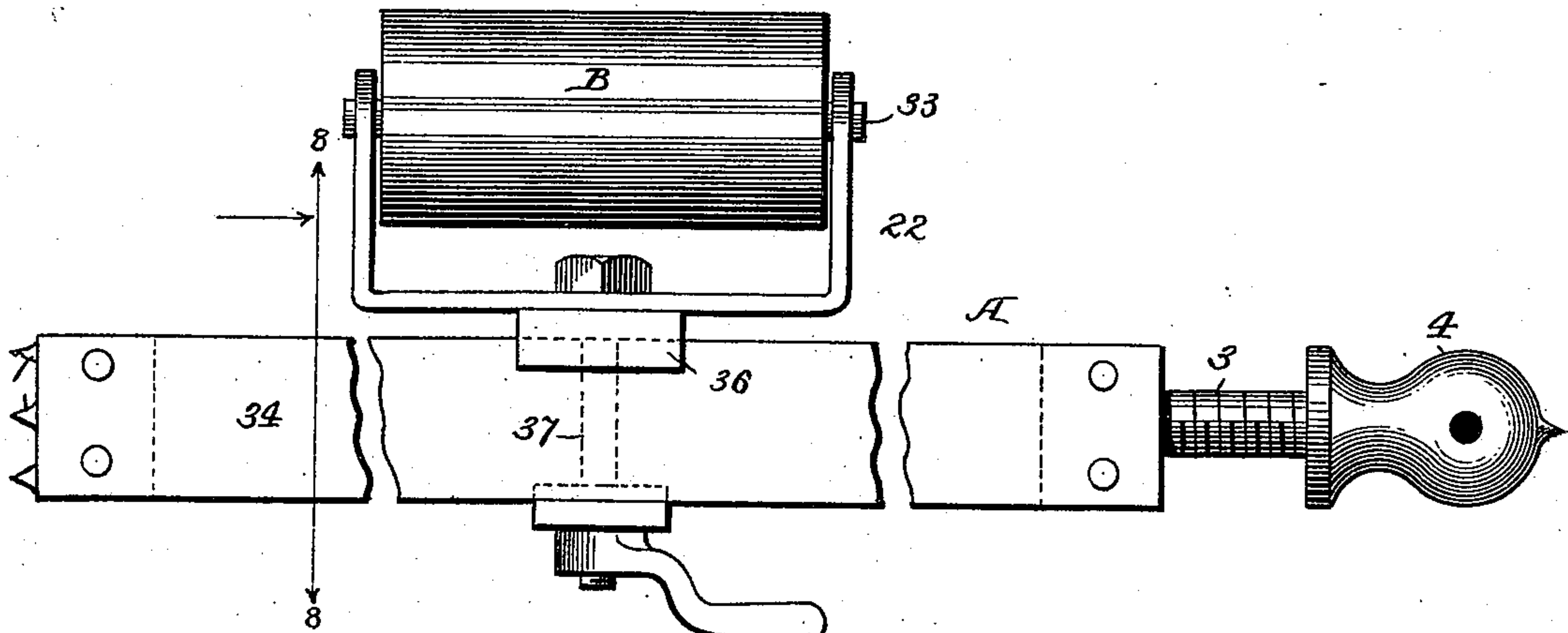
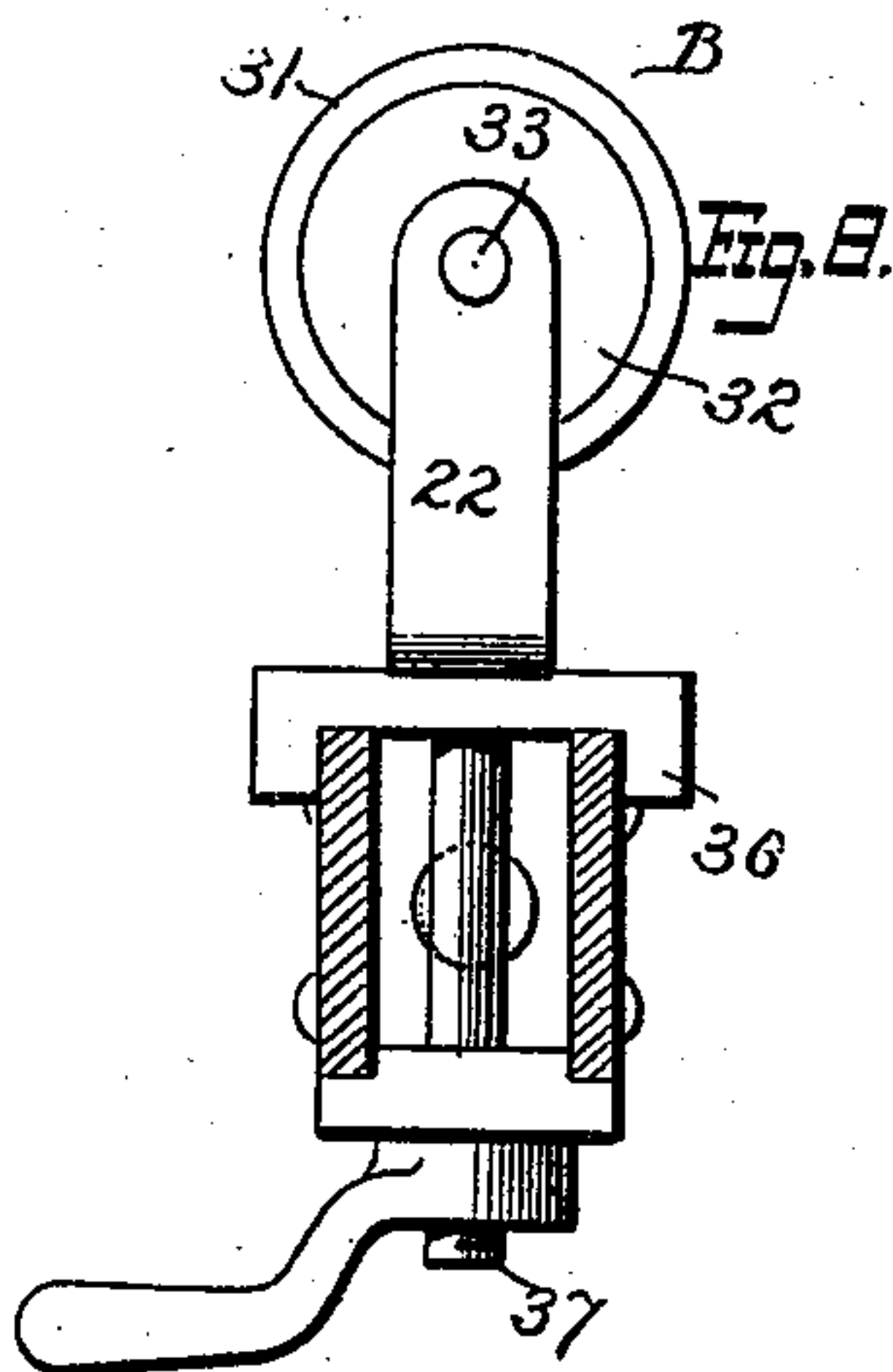
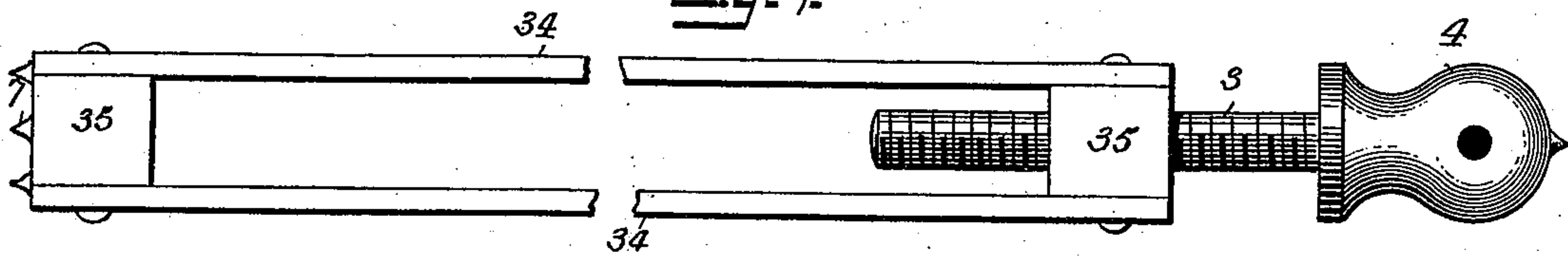


Fig. 7.



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UNITED STATES PATENT OFFICE.

GEORGE H. SPENCER, OF CHICAGO, ILLINOIS.

APPLIANCE FOR HANDLING TIMBER.

SPECIFICATION forming part of Letters Patent No. 516,234, dated March 13, 1894.

Application filed July 28, 1892. Serial No. 441,519. (No model.)

To all whom it may concern:

Be it known that I, GEORGE H. SPENCER, a citizen of the United States, residing at Chicago, Cook county, State of Illinois, have invented certain new and useful Improvements in Appliances for Handling Timber, &c., of which the following is a specification.

My invention relates to improvements in devices for handling timber, iron, &c., and it consists in a novel construction, combination and arrangement of rollers and roller supports which will be hereinafter fully described.

In the accompanying drawings in which like reference signs refer to similar parts throughout the several views, Figure 1, shows my improved device in operative position in a doorway. Fig. 2, is a section on line 2—2 of Fig. 1. Fig. 3, is a section of the line 3—3 of Fig. 1. Fig. 4, is a plan view of the screw support. Fig. 5, is a cross section on the line 5—5 of Fig. 1. Figs. 6 and 7, are side and plan views respectively of another form of my invention, and Fig. 8, is a section on the line 8—8 of Fig. 6.

My invention consists chiefly of an improved form of stock or roller support which may be clamped in any position in a car or other doorway, the hatchway of a vessel, or any other opening through which it may be desired to deliver lumber or other material in strips or bars, either in loading or unloading the same; and the roller adjustably connected to said support.

It also consists in various details of construction of the said parts whereby they are rendered cheap and strong and well adapted to the various requirements of lumber dealers, railway employes and others having use for such appliances.

Referring to Fig. 1, A, indicates the stock or roller support and B, the roller which is adjustable lengthwise of the support and also angularly thereto. The support A, preferably consists of a wrought iron tube 1, having in one end a nut or bushing 2, which is threaded to receive a screw 3, whereby the length of the support may be increased to clamp it within a doorway. The screw is finished with a pointed head 4, which as shown is perforated and provided with a hand lever 5, for operating the screw, the pointed end

being adapted to enter the wood of the door frame and prevent the support from slipping, while permitting the screw to be turned freely. The other end of the tube 1, may be provided with spurs or points adapted to hold upon the other side of the frame of the door opening, or it may be provided with an extension as shown in Figs. 1 and 5, whereby the support may be lengthened or shortened independently of the screw. Thus 6, indicates a section of pipe which is small enough to telescope within the main tube 1, and C, indicates a coupling for adjustably connecting the two tubes. The section 6, is formed with retaining points 7. The coupling C, is preferably formed in two parts 8—8, the interior of the parts at one end being adapted to fit upon the larger pipe 1, and at the other end to fit the smaller pipe 6. The coupling is provided with bolts 9—9, and one of the nuts is preferably provided with a hand lever 10, so that it may be readily adjusted without the use of a wrench. In some instances, instead of depending entirely upon the frictional grip of the coupling sleeve, I provide the smaller pipe with a series of notches 11, and the larger pipe with a single notch 12, and I pass keys 13, through the openings in the couplings and the notches 11 and 12, thus positively locking the pipe sections.

In loading iron or heavy timber the strain may be taken off of the adjusting screw 3, by a bridge device D, which as shown consists of a bar 14, resting upon the screw head and the adjacent end of the tube 1, and a device for suspending the screw from the bar. The bar 14, has a yoke 15, at one end which fits over the tube 1, and a yoke 16, at the opposite end through which the hand lever 5, may project, the bridge device being applied after the screw is adjusted. The means shown for suspending the screw from the bar 14, consists of a block 17, passing beneath the screw, a pair of eye-bolts 18, one at each end of the block and a shaft 19, passing through the eye bolts and provided with a cam 20, which rests upon the bridge bar 14, and a hand lever 21, for adjusting the cam.

The roller B, is carried in bearings in a U-shaped frame 22, the horizontal portion of which is centrally perforated to receive a pivot bolt 23. The frame 22, is connected by the

pivot 23, to a sliding clamp E, preferably formed of two parts 24, 25, constructed to grasp between them the pipe 1. As shown one of the parts is provided at the back with a hook 26, which fits over a projection 27, upon the other, and at the front both parts are perforated to receive a bolt 28. A nut 29, having a hand lever is used to draw the parts of the clamp together and hold it firmly in any desired position upon the roller support. Before tightening the clamp by means of the nut 29, the roller B, is adjusted to the proper angle and after adjustment it is held in such position by means of an additional clamping piece 30, through which pass the bolt 28, and the pivot 23. The roller B preferably consists of a section of wrought iron tube 31, into which a tightly fitting block of wood 32, is forced by hydraulic or other pressure. The axle 33, is then forced by heavy pressure through a central perforation in the block.

In Figs. 6, 7 and 8, I have shown another form of roller support. This is composed of a pair of separated side bars 34, having spacing blocks 35, at the ends. Into one of the blocks is fitted the screw 3, and the opposite block is formed with points 7. The roller and its supporting frame are adjustably held upon the stock by means of clamping plates 36, and a bolt 37, which passes through between the side bars 34. The bolt 37, also forms the pivot for the roller supporting frame.

In operation the stock or support is adjusted and clamped in the hatchway or door opening after which the roller is adjusted at the proper angle and in the proper location upon the stock. As the lumber is passed in or out of the car or other receptacle the stock should be occasionally shifted to keep it approximately at the elevation of the increasing or decreasing pile of lumber or other material being shifted.

Without limiting myself to the precise construction and arrangement of parts shown and described, I claim—

1. The combination with a stock adapted to be arranged horizontally within and clamped against the sides of a door opening, of a frame, a roller mounted in the frame, and means whereby said frame may be adjusted horizontally and at different angles relative to said stock, substantially as described.

2. The combination with a stock adapted to

be arranged horizontally within a door opening and having retaining points at one end and a clamping screw at the opposite end of a sliding clamp upon the stock, a roller supporting frame pivotally mounted upon said clamp, and capable of an angular adjustment and a roller in said frame, substantially as described.

3. The combination with a stock having an extensible portion and a clamp C, at one end and an adjusting screw at the opposite end, of a roller adjustably mounted upon the stock, substantially as described.

4. The combination with a stock having retaining points at one end and a clamping screw at the opposite end, of a bridge device D, resting upon the end of the stock and the head of the screw and means for sustaining the screw from said device, substantially as described.

5. The combination with the stock and clamping screw, of a bridge device consisting of a bar 14, block 17, eye-bolts 18, cam shaft 19 and cam 20, substantially as described.

6. The combination with the tubular section 1, having a threaded bushing or nut in one end thereof, of a clamping screw fitting said nut, a smaller section 6, telescoping within the section 1, and a clamp for holding said sections together, substantially as described.

7. The combination of the tubular section 1, having a clamping screw in one end and a notch or opening 12, near the other, a smaller section 6, sliding within the larger section and provided with retaining points and notches or openings 11, and a coupling adapted to fit both of said sections and provided with keys 13, to enter the notches 11, 12, substantially as described.

8. The combination with a stock adapted to be clamped between the sides of a doorway, of a clamp E, adjustable lengthwise of the stock, a frame 22, pivotally mounted upon the clamp, a roller supported in the frame and a clamping screw 28, adapted to hold the frame 22, and the clamp immovable upon the stock, substantially as described.

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

GEORGE H. SPENCER.

Witnesses:

I. STERN,

DANIEL RIEGER.