No. 672,190. Patented Apr. 16, 1901.

C. L. KEENE.

JACK.

(No Model.) (Application filed Oct. 11, 1899.)

Fig. 1.

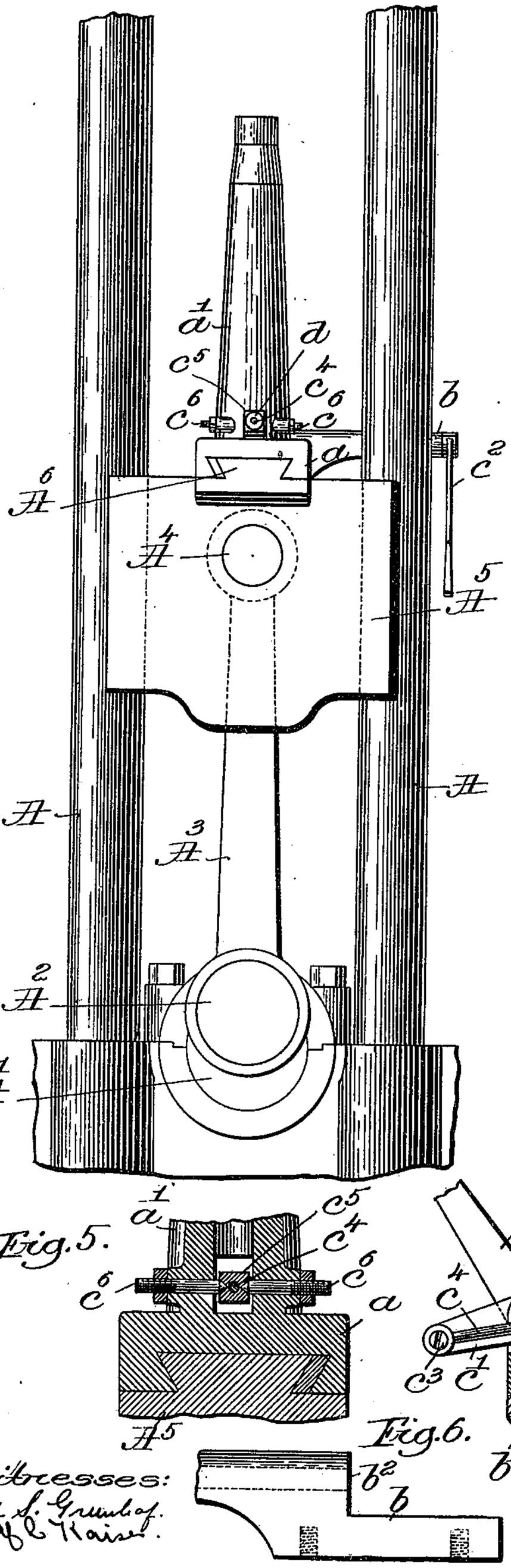

Fig. 2.

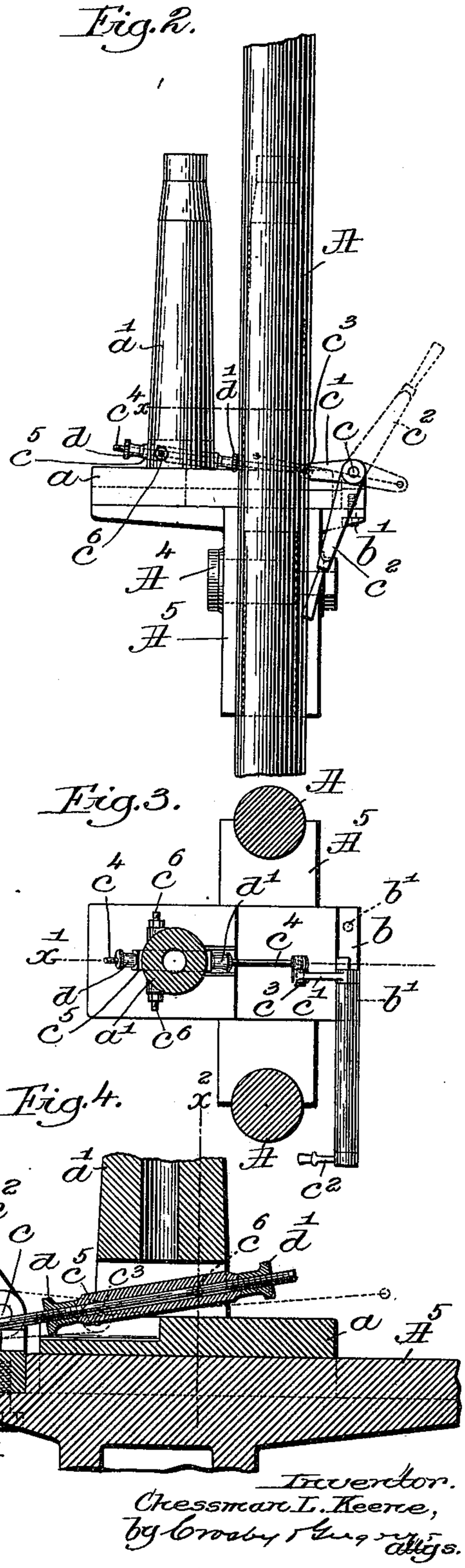

Fig. 3.

Fig. 4.

Fig. 5.

Fig. 6.

Witnesses:
Fred L. Gruntorf.
Adolf L. Haase.

Inventor.
Chessman L. Keene,
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UNITED STATES PATENT OFFICE.

CHESSMAN L. KEENE, OF WEYMOUTH, MASSACHUSETTS, ASSIGNOR TO STAPLE HEELING COMPANY, OF BOSTON, MASSACHUSETTS.

JACK.

SPECIFICATION forming part of Letters Patent No. 672,190, dated April 16, 1901.

Application filed October 11, 1899. Serial No. 733,252. (No model.)

To all whom it may concern:

Be it known that I, CHESSMAN L. KEENE, of Weymouth, county of Norfolk, State of Massachusetts, have invented an Improvement in Jacks, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

This invention is intended as an improvement upon the class of machine represented in United States Patent No. 582,502, dated May 11, 1897, wherein a jack is to be put alternately into either of two positions, said positions being adjustable according to the work to be done. Herein I have combined with the sliding jack or work-support a rock-shaft having a lever united by an adjustable connection with the jack, so that the distance of the jack from the rock-shaft may be varied at will and so that by turning the rock-shaft, it having preferably a suitable handle, the jack may readily be moved into one or the other of its positions. In one position a shoe may be applied to or taken from the jack and in the other position the fastenings may be inserted in the stock supported on the jack. Whenever the rock-shaft is stopped, the joint between the arm of the rock-shaft and the connection referred to with the jack is put at one or the other side of a line intersecting the center of the rock-shaft and the point at which the connection referred to is attached to the jack, so that in either of the extreme positions in which the jack is placed its change of centers effects the locking of the jack positively against longitudinal movement.

Figure 1 shows a sufficient portion of a machine such as represented in said patent with my improvements added to enable my invention to be understood. Fig. 2 is a side elevation of the parts represented in Fig. 1, the jack and its operative parts being shown by full lines in its inoperative position and by dotted lines in its operative position. Fig. 3 is a section below the dotted line x, Fig. 2. Fig. 4 is an enlarged section on the dotted line x' of Fig. 3. Fig. 5 is an enlarged section in the dotted line x^2, Fig. 4; and Fig. 6 is a detail showing detached the stand constituting the bearing for the rock-shaft referred to.

The framework A, having a main shaft A′, provided with an eccentric A^2, embraced by an eccentric-strap A^3, jointed to a stud A^4, mounted upon a vertically-moving carriage A^5, having a guideway A^6, herein represented as dovetail in cross-section and entering a similar-shaped groove in the foot a of a jack a', are and may be all substantially as provided for in said patent.

The invention herein to be contained lies chiefly in devices for putting the jack a' into its operative and inoperative positions, it when in its inoperative position having applied to it a shoe or having a shoe removed from it, the jack in its operative position, as shown by dotted lines in Fig. 2, presenting usually the stock on the jack, so that suitable fastenings, preferably staples, may be driven into the heel of a shoe to attach said heel to the sole of the shoe, all as provided for in said patent. Herein I have provided the block A^5 with a stand b, (shown detached in Fig. 6,) said stand being confined to said block by means of suitable clamp-screws b', the stand being bored at b^2 (see dotted lines, Fig. 6) for the reception of a rock-shaft c, having at one end a projecting crank or arm c' and at its opposite end a suitable handle c^2, which may be engaged by the operator of the machine whenever it is desired to turn the rock-shaft into either of its extreme positions, as represented by full and dotted lines in Fig. 2. The rock-shaft is united by stud-screws c^3 to one end of a connection c^4, represented as a screw-threaded rod extended loosely through a block c^5, supported in a recess in the jack and mounted to turn about suitable trunnions c^6, (see Figs. 4 and 5,) extended through said jack a'. The connection c^4 has applied to it at the opposite side from said block suitable adjusting-nuts d d', and by adjusting these nuts in the same or opposite directions the exact position desired for the jack with relation to the rock-shaft c when the jack is in either of its extreme positions may be determined. When the handle c^2 and the lever or arm c' of the rock-shaft are in the full-line positions, Figs. 2 and 3, the jack is in its inoperative position for the application or removal of stock from it, and when in its dotted-line position, Fig. 2, and the full-line position, Fig. 4, the jack is in its operative position.

Viewing Fig. 2 it will be seen that the joint between the arm and the connection c^4 constituted by the stud-screws c^3 occupies a position below a line intersecting the center of the rock-shaft c and the trunnions c^6, and such positions of the centers c and c^6 constitute a lock to retain the jack in the position in which it then stands.

By engaging the handle and turning the rock-shaft from the full-line positions into the dotted-line positions, Fig. 2, it will be seen that the stud-screw c^3, constituting the joint between the arm c' and the connection c^4, is put in a position below a line intersecting the rock-shaft c and the trunnions c^6, and consequently in such position by the difference in centers is held in a locked position.

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

1. A jack having a pivoted block, a guide for the jack, a rod extended loosely through said block and connected with an arm of a rock-shaft, means to adjust said rod in said block to thereby position the jack with relation to the rock-shaft, and means to move the jack positively in either direction.

2. A jack, a guideway on which it is mounted, a block pivoted to said jack, a crank-shaft having an arm, a rod connected to said arm and extending loosely through the block, adjusting-nuts on said rod at each side of the pivoted block whereby the position of the jack relative to the crank-shaft may be adjusted, and means to operate the crank-shaft.

3. A jack, a guideway upon which it is mounted, a block pivoted in a recess in said jack, a rock-shaft having an arm, a rod connecting said arm and the pivoted block, and means to move the rock-shaft to slide the jack in the direction desired.

4. A jack, a support for the same, a rock-shaft having an arm, connections between said arm and said jack, said connections being pivoted to the arm whereby the turning of the rock-shaft operates to move the jack back and forth, said connections operating also to automatically lock the jack in either of its extreme positions.

5. A jack, a guideway for the same, a block pivoted in said jack, a rock-shaft having an arm provided with a rod connection engaging said block, said rock-shaft when in either of its extreme positions putting the connection between its arm and said rod in a position below the center line of said rock-shaft and the pivotal point of the block in said jack, whereby by such location of centers the jack is locked in either of its extreme positions.

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

CHESSMAN L. KEENE.

Witnesses:
F. O. WELLINGTON,
CHAS. B. EDWARDS.