

D. T. METHVEN.

CASH REGISTERING AND INDICATING MACHINE.

No. 557,517.

Patented Mar. 31, 1896.

Fig. 2.

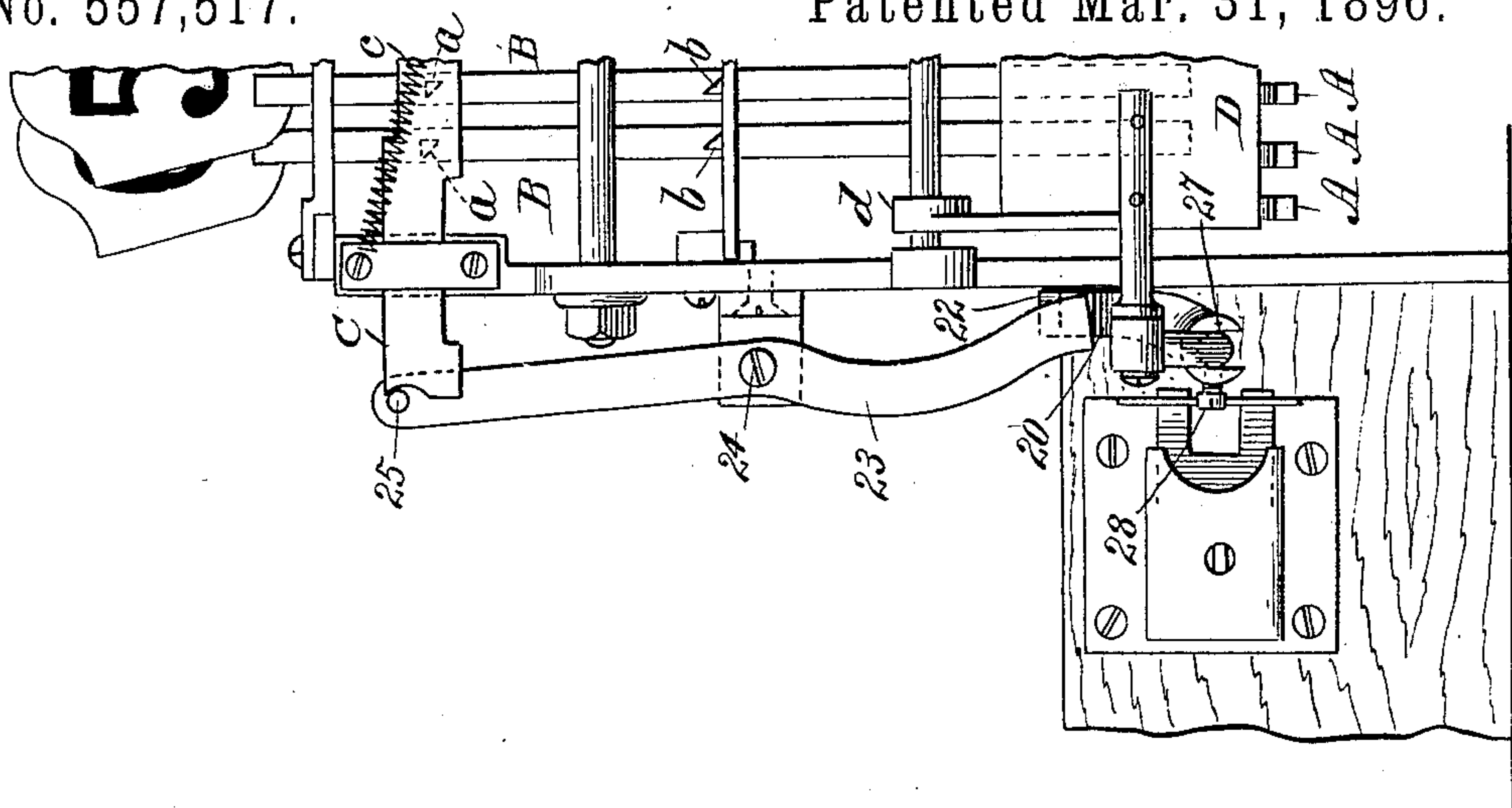


Fig. 1.

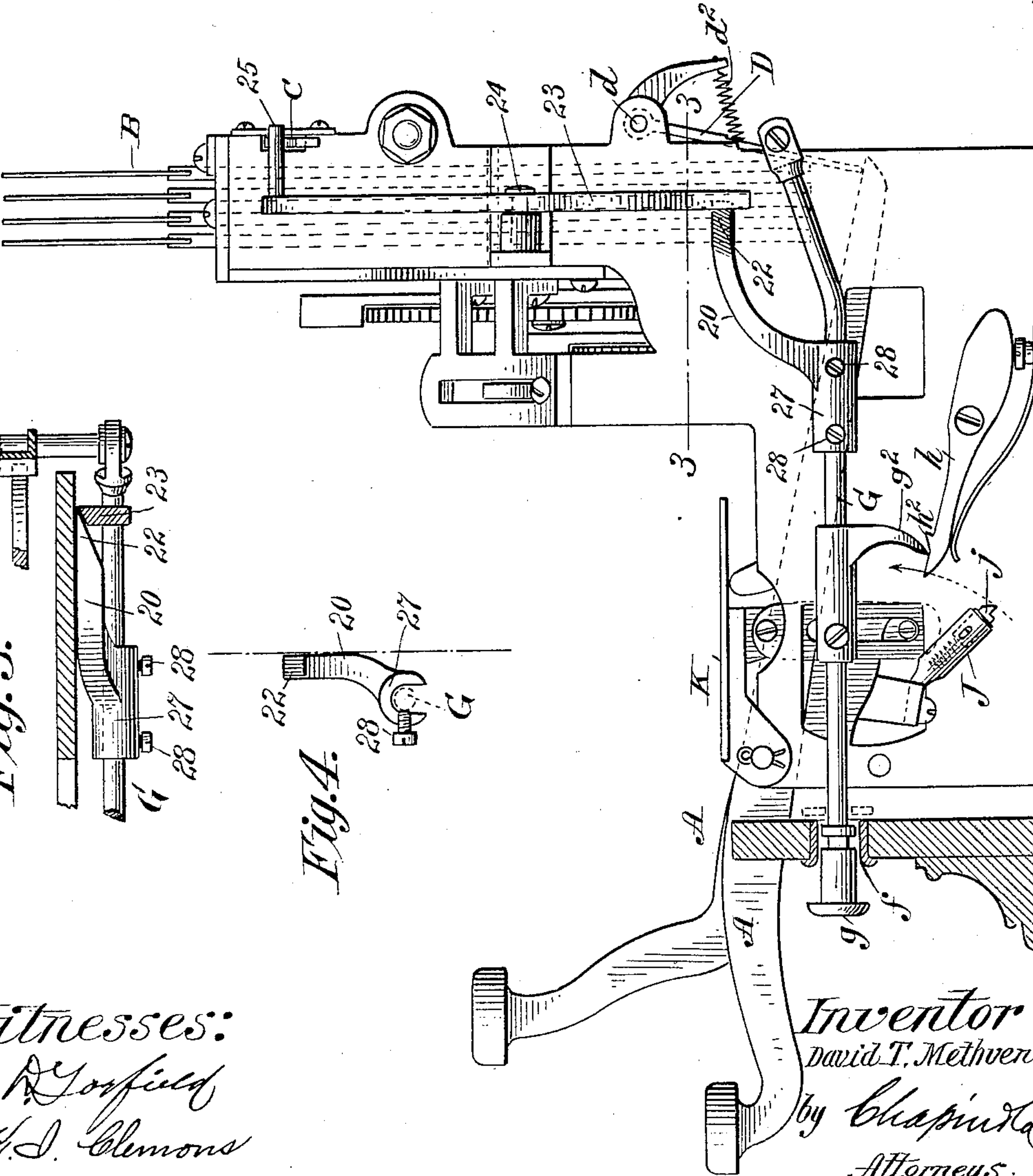


Fig. 3.

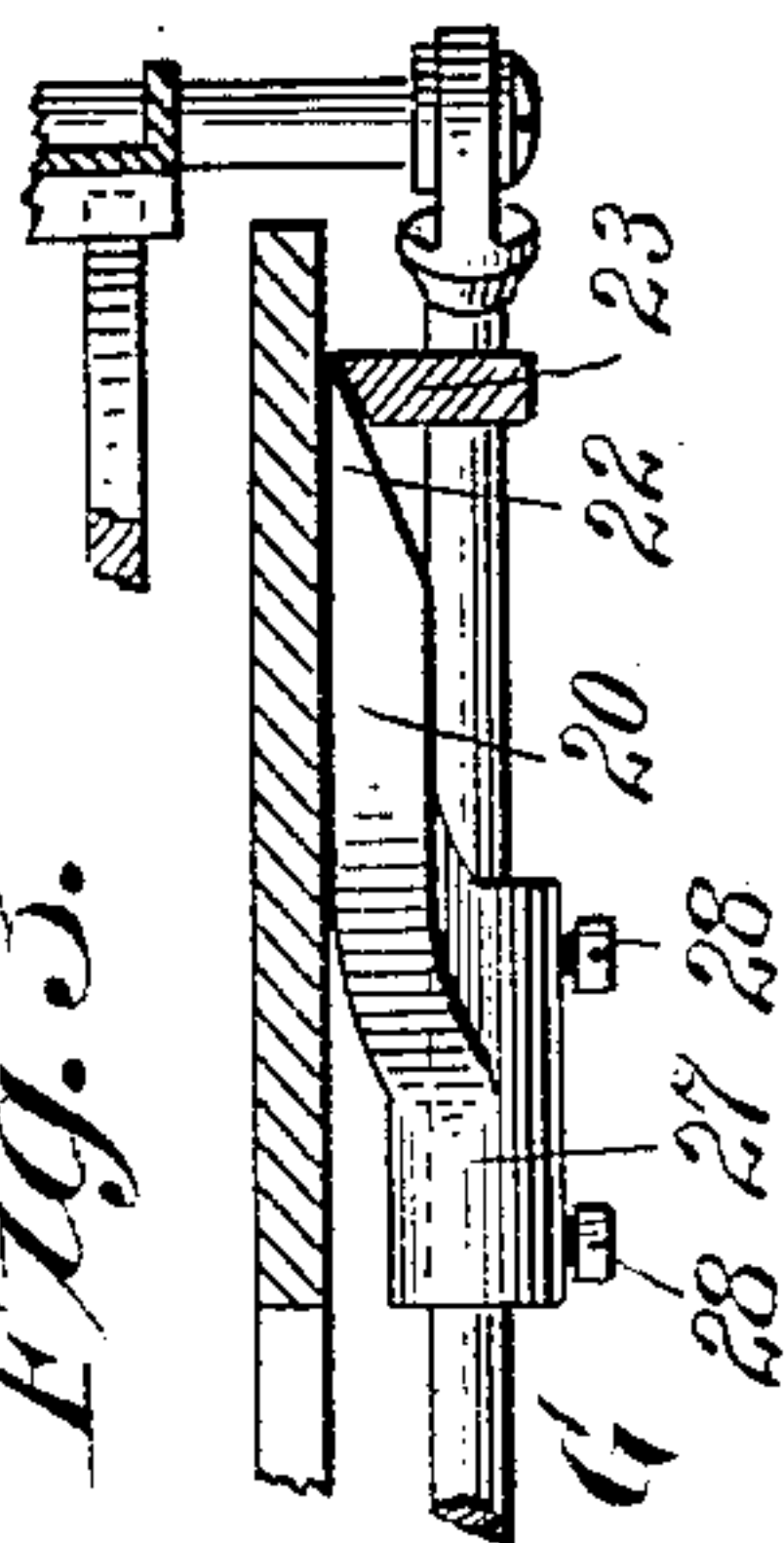
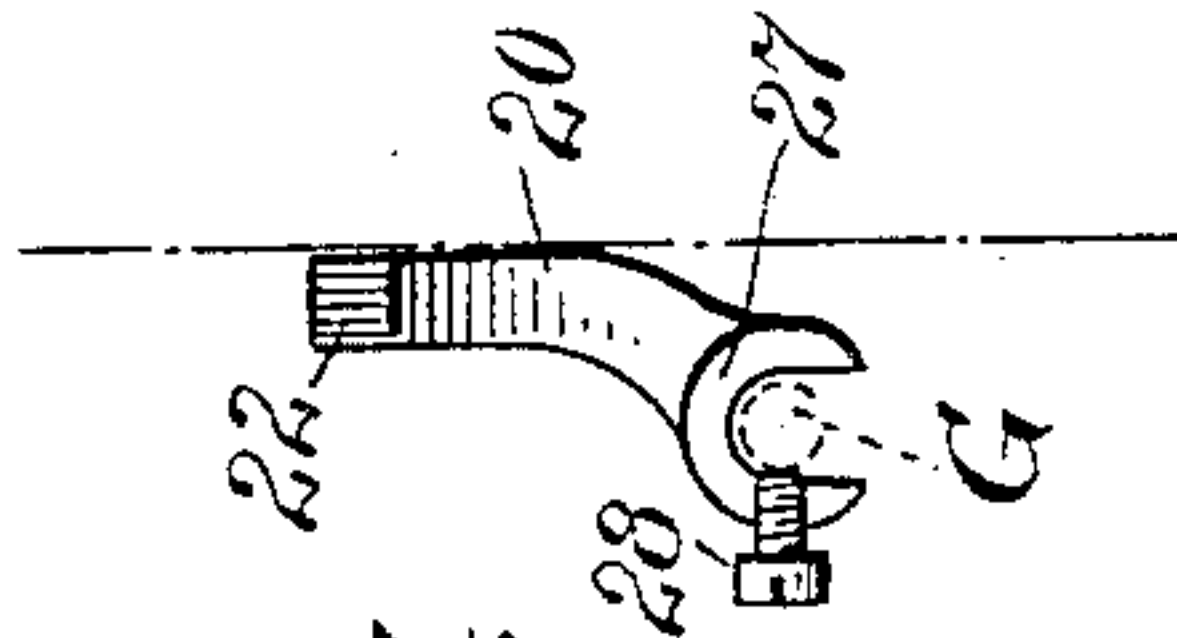


Fig. 4.



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(No Model.)

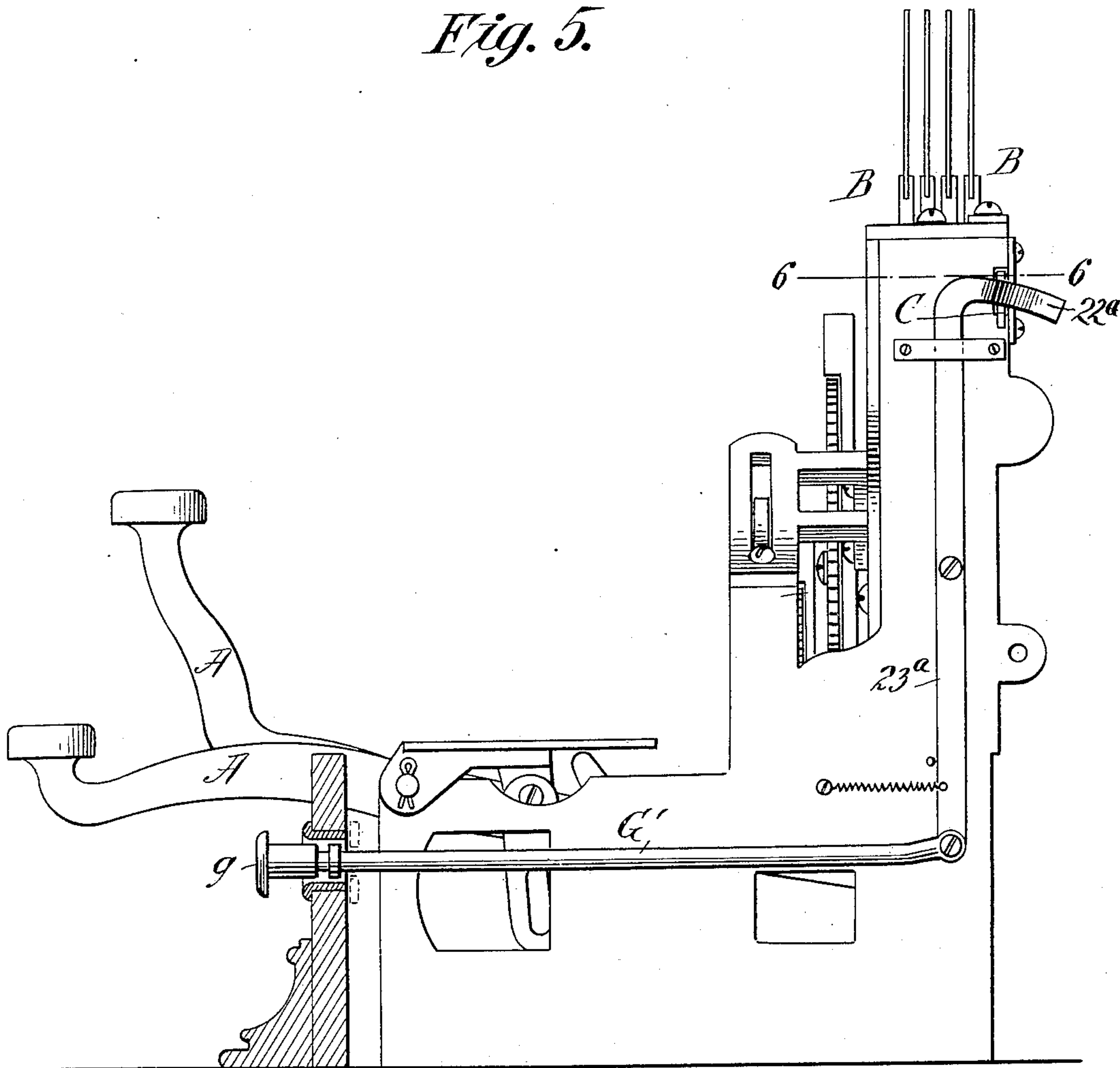
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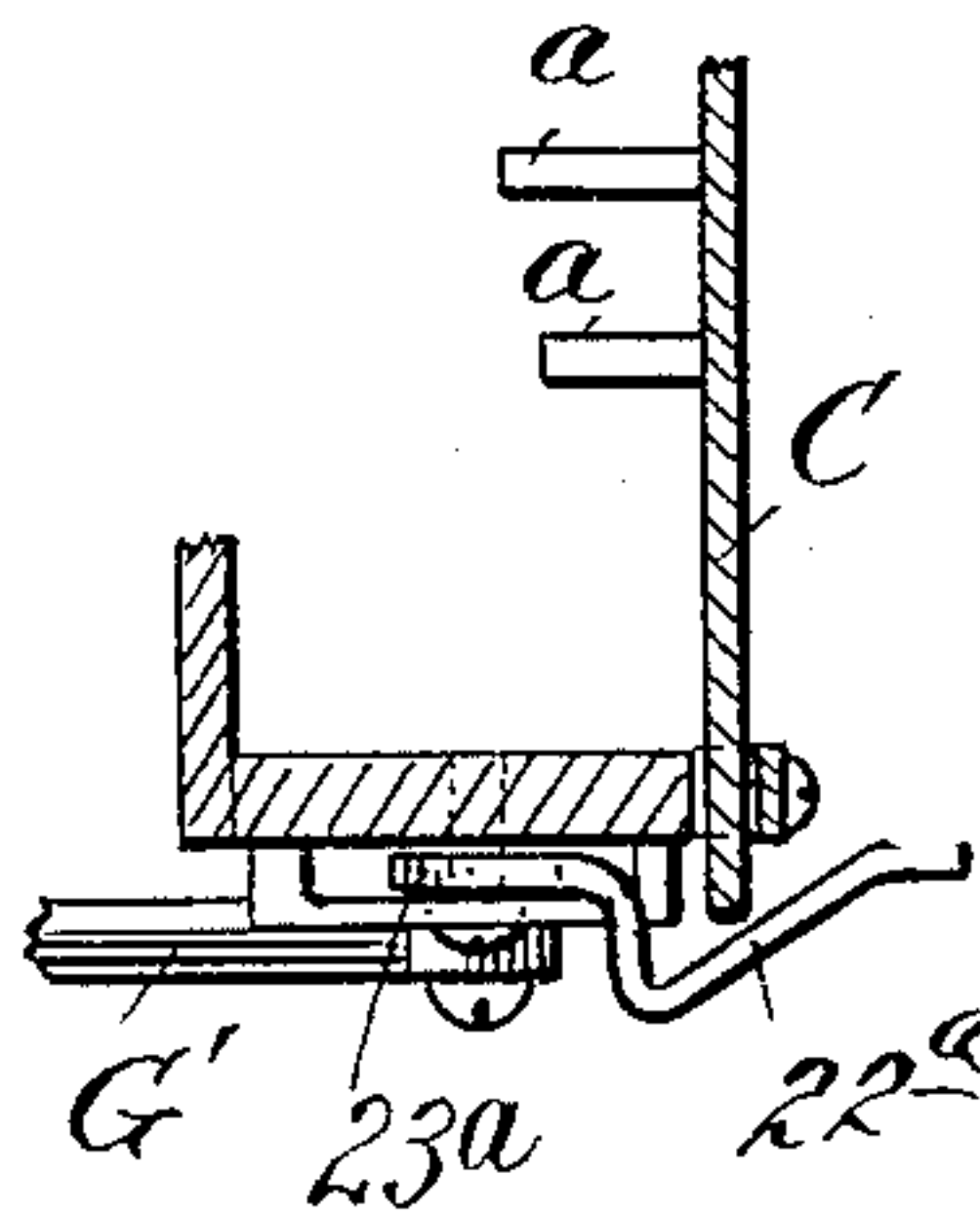
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*Fig. 5.*



*Fig. 6.*



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# UNITED STATES PATENT OFFICE.

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## CASH REGISTERING AND INDICATING MACHINE.

SPECIFICATION forming part of Letters Patent No. 557,517, dated March 31, 1896.

Application filed April 30, 1895. Serial No. 547,671. (No model.)

*To all whom it may concern:*

Be it known that I, DAVID T. METHVEN, a citizen of the United States of America, residing at Springfield, in the county of Hampden and State of Massachusetts, have invented new and useful Improvements in Cash Registering and Indicating Machines, of which the following is a specification.

This invention relates to improved means for operating the shiftable support for the indicator-tags of cash registering and indicating machines, whereby after a key has been operated and a tag elevated thereby and so left the tag may be dropped by means independent of the registering-keys of the machine.

My invention consists in a tag-support and a lever which engages this support, combined with the push-rod and the yoke and the arm applied thereto and secured in position by set-screws, the arm being provided with a wedge-like extremity, as will be more fully described hereinafter and claimed.

Reference is to be had to the accompanying drawings, in which—

Figure 1 is an end elevation of a cash registering and indicating machine with the present improvements applied thereupon, the front part of the cabinet or casing being shown in vertical section. Fig. 2 is a rear elevation of the portion of the machine which comprises the parts seen in Fig. 1. Fig. 3 is a horizontal sectional view taken on the line 3 3, Fig. 1, and showing in plan view the relation of certain parts below the line of section. Fig. 4 is an end view of a part in detail to be hereinafter referred to. Fig. 5 is an end elevation illustrating the essentials of the present invention and which will be hereinafter referred to. Fig. 6 is a plan and horizontal section taken on line 6 6, Fig. 5.

In the drawings, A A represent the key-levers of the cash-registering machine, acting as usual, in conjunction with the indicator-tags B B.

C represents the shiftable support for the tags, having stops or rests *a* for the lugs *b*, which are provided on the stems of the indicator-tags, the operations of which, one relative to the other, are well known.

D represents a key-locking bar pivotally

supported at *d* and having the spring *d*<sup>2</sup> applied thereto for normally maintaining it in its position of engagement with the rear extremities of the several key-levers.

G represents a push-rod having a connection with the key-locking bar and having its forward end protruding through the front of the cabinet, as seen at *f*, the protruding end being provided with the button or knob *g*. This push-rod has thereon a depending projection *g*<sup>2</sup>, which as the rod is rearwardly pushed to release the key-lever-locking bar snaps past the trigger *h*, which is upwardly spring-pressed and remains in engagement with the tooth *h*<sup>2</sup> of the trigger until after the key has been operated. It is understood that in this mechanism there is a dog J, which swings as one with the rocker-plate K, which is common to all of the keys of the bank and moves in unison with any one of such keys. This dog has the outwardly-spring-pressed tooth *j*, which may recede inwardly within the body of the dog, which is hollow, as the dog is upwardly swung, acting in the manner of a door-latch, whereby the tooth may assume its position above the point of the trigger, and so that when the key-lever is returned to its normal position and the rocker-plate with it the dog will trip the trigger and allow the push-rod to return to its forwardly-projected position, which occurs in consequence of the spring *d*<sup>2</sup>, which restores the key-lever-locking bar to its normal and key-locking position. This same push-rod has thereon an arm 20, which is upwardly and rearwardly extended, the extremity of which, as seen at 22, is of wedge form.

23 represents a lever which is vertically hung by being intermediately pivoted, as at 24, whereby it may have a swinging movement in a plane parallel with the direction of the shifting movement of the shiftable tag-support C, which it engages through means of the stud or projection 25. This lever has its lower end in contact with and subject to the cam-operating impingement of the wedge-formed extremity 22 of the aforesaid arm, which is movable bodily with the push-rod G. Each time the push-rod is rearwardly forced and temporarily held by a trigger to release the locking-bar D, whereby one of a bank of



keys may be operated once, the tag-support is given a shifting movement, so that a tag which has been sustained thereby will at once be permitted to drop to its normal and non-exposed position.

The tag-support remains in its non-supporting position until a key-lever has been fully depressed and starts back upon its return movement, whereupon the dog J trips the trigger and allows the push-rod G to resume its advanced position and the arm 20 to withdraw from its position which maintains the lever 23 so swung as to hold the tag-support in its non-supporting position, so that now the tag-support by its spring c is moved into its tag-supporting position, this of course occurring before the key-lever has so far returned toward its normal position as to permit the tag-lug b to pass below the tag-support.

In order to render the present device applicable upon cash-registering machines of the particular class shown in Patent No. 479,334, of July 19, 1892, granted to J. J. Range, which have already been constructed and which may be in use, the arm 20 has at the base thereof the yoke or saddle 27, which may set over and about an intermediate part of the push-rod and be confined thereon by the set screw or screws 28.

Of course it is apparent from the statement of invention hereinbefore given and from an understanding of the improved device as considered in its primary aspect that the shifting device for the tag-support need not necessarily be combined with key-locking mechanism substantially as described, although,

as has been described in detail, it has most advantageously a coöperative combination therewith and it is the purpose more often to so employ it.

In Figs. 5 and 6 the invention is substantially illustrated, the parts being combined and arranged thus: The push-rod G' is connected directly to the lever 23<sup>a</sup>, which swings in a plane parallel to the length of the push-rod, and which rod has formed on or attached to its upper extremity the cam-faced member 22<sup>a</sup>, operating directly against the shiftable support-bar, and so in this mechanism also is found the combination of shiftable tag-support, a rod independent of the operating register-keys, and a mediate device for moving the shiftable support by reason of the movement of the independent rod.

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

In a cash registering and indicating machine, the combination with the shiftable tag-support, C, and the lever, 23, engaging said support, of the push-rod, G, having thereon the device consisting of the yoke, 27, and the arm, 20, with the wedge-formed extremity, 22, and one or more set-screws for confining said arm-provided yoke upon the push-rod whereby its inclined end will have an operative impingement against said lever, substantially as described.

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