

(No Model.)

G. H. RYAN.
MACHINE FOR MAKING TACKS.

No. 559,542.

Patented May 5, 1896.

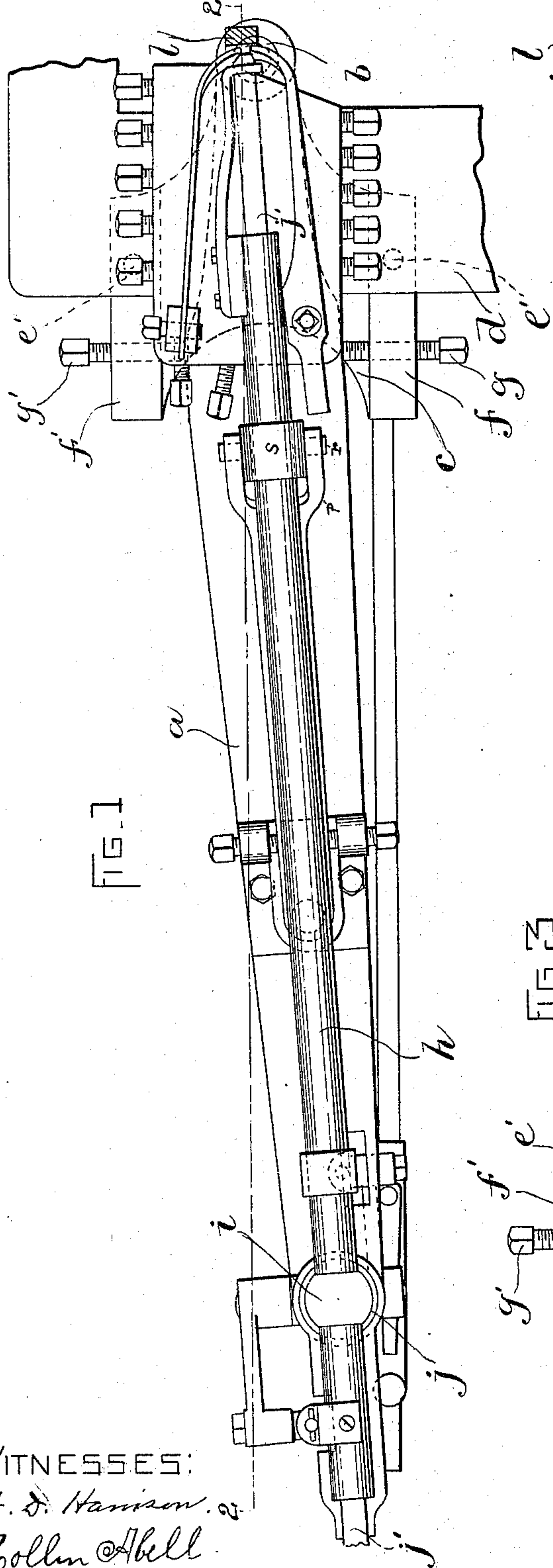


FIG. 1

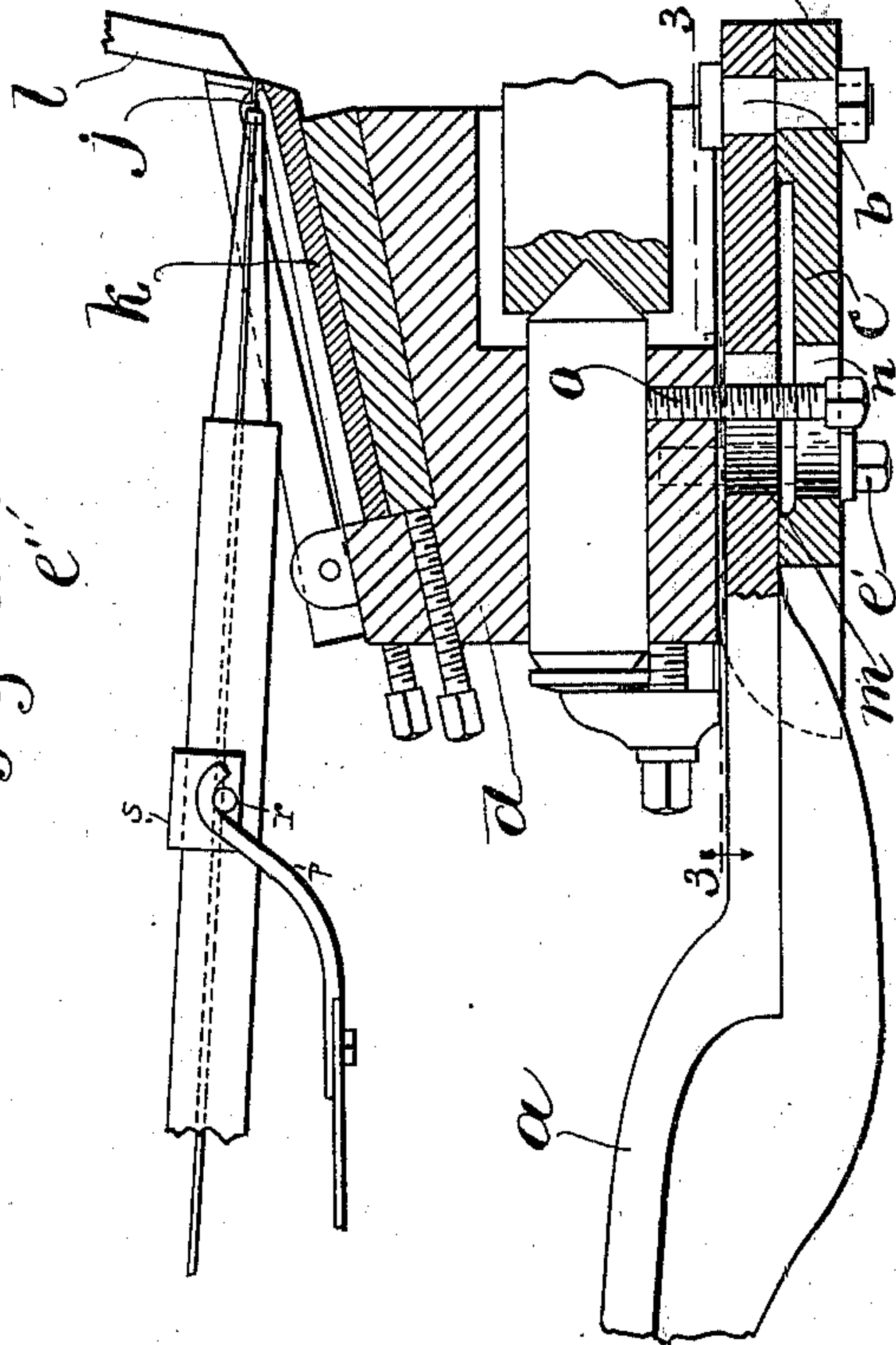


FIG. 2

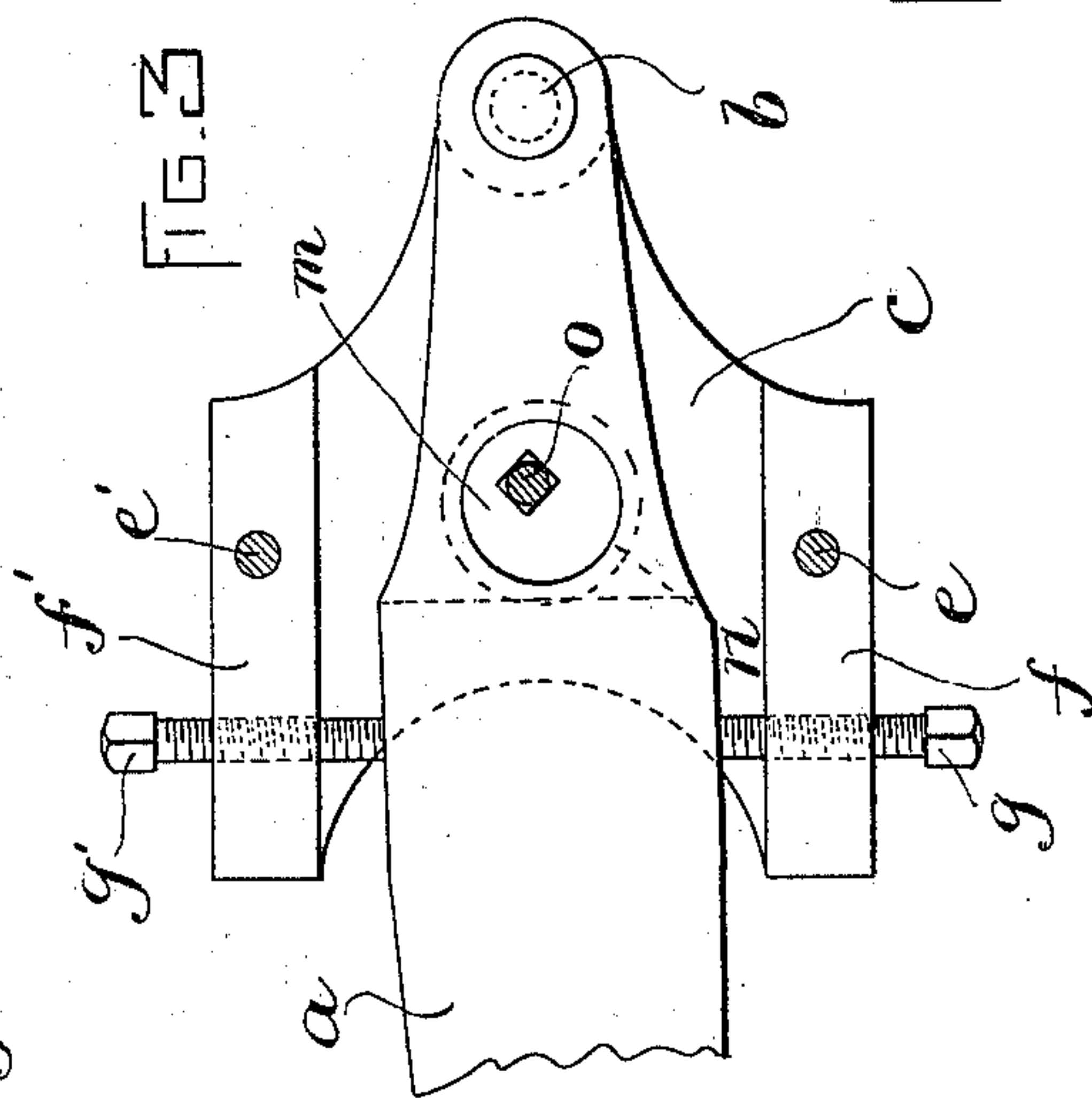


FIG. 3

WITNESSES:

A. D. Harrison.
Rollin Abell.

INVENTOR:

Geo. H. Ryan
by Wright Brown & Quincy
Atty.

UNITED STATES PATENT OFFICE.

GEORGE H. RYAN, OF BROCKTON, MASSACHUSETTS, ASSIGNOR OF TWO-THIRDS TO BARROWS & GREELY AND GEORGE V. SCOTT, OF SAME PLACE.

MACHINE FOR MAKING TACKS.

SPECIFICATION forming part of Letters Patent No. 559,542, dated May 5, 1896.

Application filed October 14, 1895. Serial No. 565,560. (No model.)

To all whom it may concern:

Be it known that I, GEORGE H. RYAN, of Brockton, in the county of Plymouth and State of Massachusetts, have invented certain new and useful Improvements in Machines for Making Tacks, of which the following is a specification.

This invention relates to machines for making tacks, of the class in which a metallic strip or blank is fed to the cutters through a carrier, to which is preferably given a semirotary movement, and such as described in my copending application of even date herewith. It has been the practice heretofore in machines of this class to support the carrier through which the metallic strip or blank is fed upon a boom, which is secured rigidly to the frame of the machine which supports the cutters, and when it was desired to change the taper of the tack or to change the angles of the cutting edges of the cutters relatively to the blank it was accomplished by adjusting the cutters themselves relatively to the strip. This adjusting of the cutters is a nice operation and requires the consumption of a great deal of time. Hence the object of my invention is to obviate the necessity of adjusting the cutters by the provision of means for adjusting the carrier itself relatively to the cutters, so that I may by a simple operation insure that any desired taper may be given to the tacks.

To these ends my invention consists in an improved tack-machine in which the carrier is capable of lateral adjustment; and it also consists in pivoting the boom upon which the carrier is operatively mounted in such manner upon the frame that it may be moved to and firmly held in any position to which it is desirable to adjust it.

The invention likewise consists in arranging the pivot for the boom in the vertical plane of the end of the bed-knife, so that when the boom is swung laterally to vary the shape of the point of the tack the displacement or independent movement of the tack-blank on the bed-knife is reduced to a minimum and there is no liability of moving the blank off from the bed-knife; and it further consists

of the various details of construction and arrangement of the various parts and features of a tack-machine, all of which I shall now proceed to describe with particularity, and set forth in the appended claim.

Reference is to be had to the accompanying drawings, forming a part of this specification, and to the letters marked thereon, the same letters of reference indicating the same parts or features, as the case may be, wherever they occur.

Of the drawings, Figure 1 is a plan view of a portion of a tack-machine embodying my invention. Fig. 2 is a partial longitudinal section of the same. Fig. 3 is a sectional plan view on the line 3 3 of Fig. 2.

Referring to the drawings, it will be seen that I employ a boom *a*, which is similar in shape to those now in general use, and upon which the tubular carrier *h* is mounted. The inner end of the boom is pivoted by a bolt *b* to a plate *c*, forming a part of the main or bed frame upon which the cutters and other operative parts of the machine are mounted. It has a rearwardly-extending portion *c'*, through which the pivot-bolt *b* passes, and two parallel side flanges *f f'*, through which the fastening-bolts *e e'* pass to secure it to the frame of the machine, there being two adjusting-bolts *g g'*, passing laterally through the side flanges *f f'* to adjust the boom to and hold it in any position. Thus it will be seen that the boom has a long surface upon which it is supported, it being held from displacement by the under surface of the frame *d* and the side flanges *f* and *f'*.

Upon the boom is mounted, as aforesaid, the tubular carrier *h*, through which is fed the strip or blank *j* of material from which the tacks are cut. The carrier is provided with a ball *i*, resting upon a socket *j'* in a standard (not shown) on the outer end of the boom. The inner end of the tube is maintained in place by a spring-yoke *p*, mounted on the boom and having its arms resting upon laterally-extending pins *r* on a saddle *s* straddling the carrier, and by the strip or blank *j'* resting on a bed-knife *k* on the frame *d*. *l* is a cutting-knife, arranged to move in planes

at an angle to the shear edge of the bed-knife *k* and cut the strip or blank *j'* into tack-blanks. The carrier is actuated by devices mounted on the boom, but as this forms no part of
 5 this present invention, hence I shall not describe it.

It will be observed that the axial line of the pivot connecting the boom with the frame is in the vertical plane of the shear edges of the
 10 bed-knife, and hence when the boom is adjusted laterally, to vary the shape or taper of the tack, the strip or blank moves but a short distance and is in no danger of its being moved off from the bed-knife.

15 The boom and the carrier can be adjusted laterally between the side flanges *f f'*, so as to be secured at any desirable angle to the straight dotted line in Fig. 2, (which is at right angles to the sheared edge of the knife *k*.) Thus
 20 a convenient and effective adjustment may be secured.

The openings *m n* (shown in the boom and the supporting-plate) are for convenience in admitting of manipulation in the set-screw *o*

to contact with mechanism connected with 25 the heading or gripping device of the machine.

What I claim is—

In combination, with a tack-machine of ordinary type, a supporting-plate secured to the frame and having upwardly-extending 30 flanges provided with set-screws, a boom pivotally secured to said plate, and adapted to be adjusted radially thereon, the axial line of the pivot being in the vertical plane of the sheared edge of the bed-knife whereby the blank 35 or strip of material from which the tack is cut may be presented to the cutting-knives at the proper angle, substantially as and for the purpose set forth.

In testimony whereof I have signed my 40 name to this specification, in the presence of two subscribing witnesses, this 18th day of September, A. D. 1895.

GEORGE H. RYAN.

Witnesses:

A. D. HARRISON,
 C. F. BROWN.