

(No Model.)

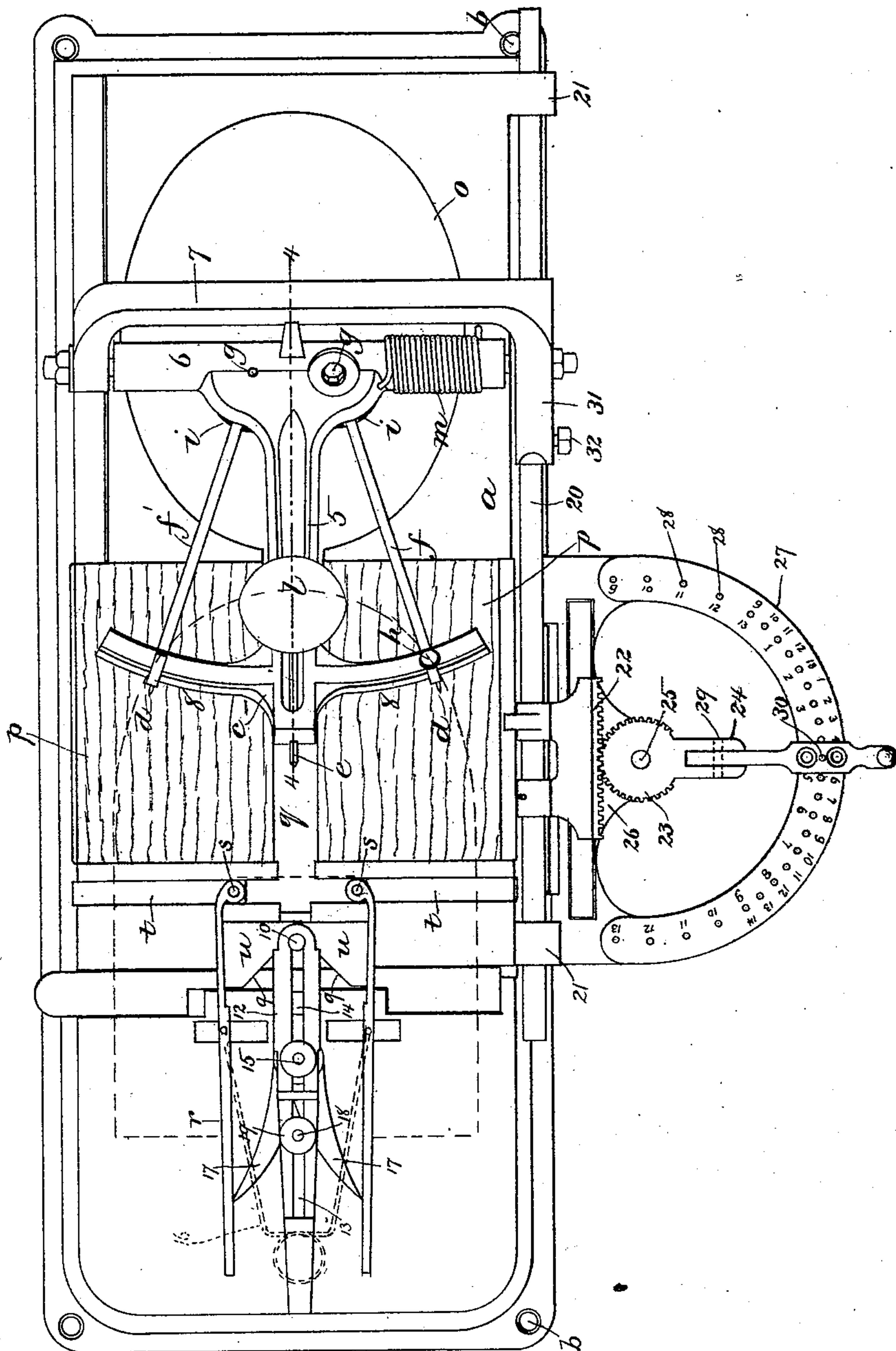
3 Sheets—Sheet 1.

J. F. ROGERS.
VAMP MARKING MACHINE.

No. 454,987.

Patented June 30, 1891.

FIG 1



WITNESSES
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A. D. Hammon

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Wright Brown Horsely
Atty.

(No Model.)

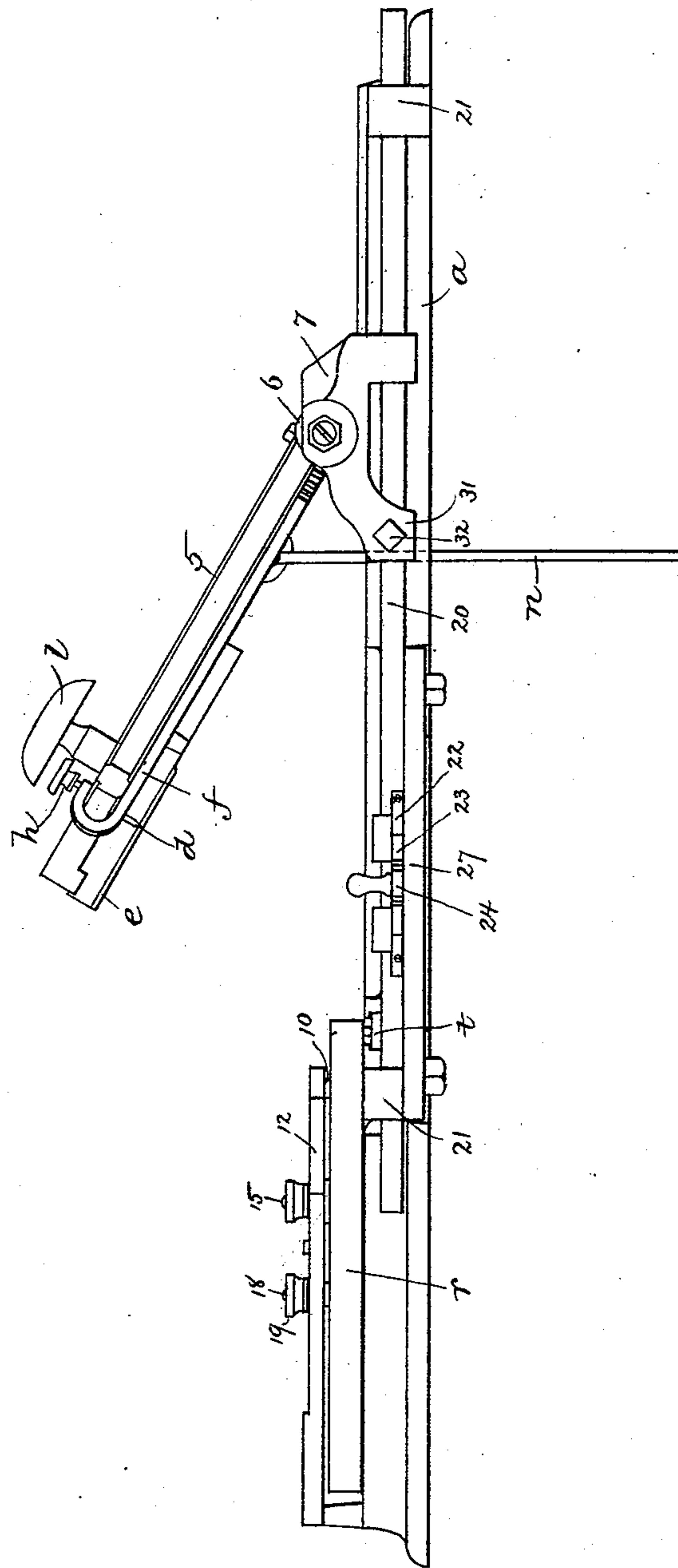
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VAMP MARKING MACHINE.

No. 454,987.

Patented June 30, 1891.

FIG 2



WITNESSES
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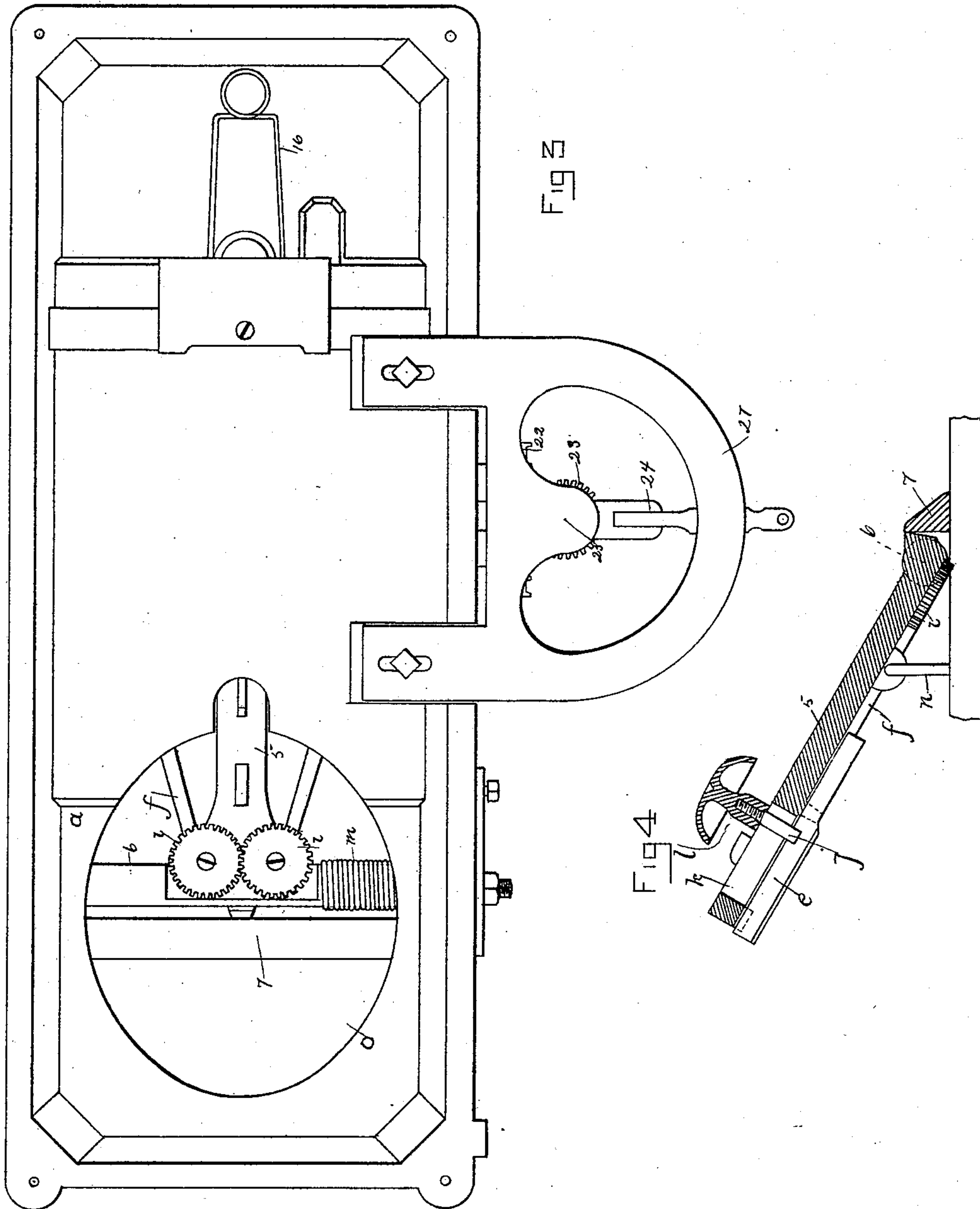
(No Model.)

3 Sheets—Sheet 3.

J. F. ROGERS.
VAMP MARKING MACHINE.

No. 454,987.

Patented June 30, 1891.



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UNITED STATES PATENT OFFICE.

JOHN F. ROGERS, OF BELFAST, MAINE.

VAMP-MARKING MACHINE.

SPECIFICATION forming part of Letters Patent No. 454,987, dated June 30, 1891.

Application filed September 23, 1890. Serial No. 365,920½. (No model.)

To all whom it may concern:

Be it known that I, JOHN F. ROGERS, of Belfast, in the county of Waldo and State of Maine, have invented certain new and useful
5 Improvements in Vamp-Marking Machines, of which the following is a specification.

This invention relates to machines for marking the toe portions of the vamps of boot and shoe uppers to indicate the proper position of the cap which is applied to the exterior of the
10 vamp at the toe portion; and it has for its object to provide a machine capable of being adjusted to any and all sizes of vamps and adapted to accurately mark the vamp of any
15 size to which it may be adjusted.

To these ends the invention consists in the improvements, which I will now proceed to describe and claim.

Of the accompanying drawings, forming a
20 part of this specification, Figure 1 represents a top plan view of a vamp-marking machine embodying my improvements. Fig. 2 represents a side elevation of the same. Fig. 3 represents a bottom plan view, and Fig. 4
25 represents a section on the line 4 4 of Fig. 1.

The same letters and figures of reference indicate the same parts in all the figures.

In the drawings, *a* represents a supporting-bed, which is preferably made in a single
30 piece or casting, and is provided with screw-holes *b* to permit its attachment to a bench or table.

c represents a holder or carrier for the vamp-marking devices, the latter being two
35 pointed spurs *d d*, adapted to prick small holes in a vamp supported by the bed *a*, and a central blade *e*, located between the spurs *d d* and adapted to make a crease along the center of the vamp, the marks thus made enabling the operator to accurately place the
40 toe-cap upon the vamp, the central mark enabling the operator to center the vamp in applying it to the top or quarters of the upper.

The marker holder or carrier *c* is here shown
45 as a lever 5, projecting from a rock-shaft 6, which rock-shaft is mounted to turn on bearings in a slide or carriage 7, which is movable lengthwise, as hereinafter described, and segmental arms 8 8, extending laterally in opposite
50 directions from the swinging end of the lever 5, as shown in Fig. 1.

The spurs *d d* are affixed to two levers *f f'*, which are pivoted at their inner ends at *g g* to

the base or inner end of the lever 5 and are curved at their outer ends so as to partially
55 embrace the guide-arms 8 8, as shown in Figs. 1 and 2, the outer ends of the said levers *f f'* bearing upon the upper sides of said guide-arms. To the inner ends of the levers *f f'* are affixed two gears *i i*, meshing with each
60 other, as shown in Fig. 3. Said gears cause the levers *f f'* to move simultaneously in opposite directions when lateral pressure is applied to either lever, so that in adjusting the levers to vary the distance between the spurs
65 *d d* and adapt said spurs to vamps of different widths it is only necessary for the operator to take hold of one lever and move it to the desired distance from the center marker
70 *e*, the other lever and the spur thereon being moved by the described connection between the levers an equal distance in the opposite direction. The levers and the spurs *d* thereon are thus kept equidistant from the central
75 marker *e* and adjusted simultaneously, so that they can be quickly adjusted to position to mark any desired size of vamp. The segmental guiding-arms 8 8 are concentric with the pivots *g g* of the levers, so that the curved ends of the levers move freely upon the guide-
80 arms without binding or crowding thereon.

The lever *f* is provided at its outer end with a set-screw *h*, which is arranged to bear upon the upper side of the arm 8, on which it moves, and thereby directly secure the lever *f* to said
85 arm, and at the same time indirectly secure the lever *f'* in position upon its guiding-arm through the gearing that connects the two levers.

The center marker *e* is adjustable longitudinally of the holder or carrier *c* by means of a screw-threaded stud *j*, affixed to said marker and projecting through a slot *k* in the lever 5, and a nut *l*, engaged with the upper
90 end of the stud *j*, said nut when turned down upon the upper side of the lever 5, causing the marker *e* to bind closely against the under side of said lever in a manner which will be easily understood. The marker *e* can therefore be caused to extend over more or less of
100 the upper surface of the vamp to be marked.

The marker holder or carrier is normally held in the raised position shown in Figs. 2 and 4 by a spring *m* on the rock-shaft 6, one end of said spring being secured to the bed *a* and
105 the other end to the inner end of the lever 5.

When the operator desires to impress the marking devices upon the vamp, he depresses the carrier or holder *c* by means of a treadle (not shown) connected with the lever 5 by a rod *n*, said rod passing through an enlarged opening *o* in the bed *a*.

The bed *a* is provided with blocks *p p* of wood or other comparatively yielding material under the point where the marking devices act upon the vamp, said blocks preventing injury to the marking-spurs, which would take place if the spurs came in contact with a metal surface in penetrating the vamp. Between the blocks *p p* is another block *q* of yielding rubber or other material, which is comparatively elastic. Said block *q* being arranged over the marker *e* and intended to permit the vamp to yield under the pressure of said marker, so that the latter will not make too deep and permanent a crease in the vamp, it being desirable to have the marker *e* make only a faint crease, which will not be visible in the completed boot or shoe.

r r represent two adjustable guides or gages supported by the bed *a* and arranged to bear against the inner edges of the recess in the rear portion of the vamp. The forward ends of said levers are pivoted at *s s* to slides *t t*, which are adapted to move in guides or ways in the bed *a*, crosswise of the latter. On the inner sides of said guides are formed wings *u u*, having beveled rear edges *9 9*, which bear against a stud or pin 10, affixed to an adjustable slide or bar 12, said bar being provided with a longitudinal slot 13, which receives a fixed guiding-stud 14, projecting upwardly from the bed *a*, and a fixed pin 15, which also projects upwardly from the bed, said stud and pin holding the bar 12 in a position parallel with the sides of the bed, and permitting said bar to be moved lengthwise of the bed. When said bar is moved forward or toward the marked holder *c*, its stud 10, bearing against the beveled edges *9* of the wings *u*, forces the said wings and the guides *r* to which they are attached outwardly in opposite directions, thus increasing the distance between the guides *r*, the slides *t t* moving outwardly in opposite directions in their guides or ways. When the bar 12 is moved backwardly in the opposite direction, the guides *r* are pressed inwardly by a spring 16, which is located under the bed and is engaged with the guides *r* by means of its upwardly-bent ends, the tendency of said spring being to press the guides *r* inwardly toward the bar 12.

The guides *r* may be caused to assume various inclinations, so as to conform to the shape of the sides of the recess in the vamp by means of the levers 17 17, which are mounted to turn upon the stud 15, and extend outwardly from said stud so that their swinging ends bear on the inner sides of the guides *r r*, as shown in Fig. 1. Said levers may be adjusted by means of a movable stud 18, which passes through the slot 13 in the

bar 12, and is provided with a clamping-nut 19, whereby it may be secured to the bar 12 at any point within the range of its adjustment in the slot 13.

The levers 17 17 bear against the stud 18, as indicated in Fig. 1, so that by moving said stud forward the swinging ends of the levers will be forced outwardly, thus swinging the rear ends of the guides *r r* outwardly, while by moving the said stud in the opposite direction the levers are allowed to be forced inwardly by the pressure of the spring 16, and thus permit the rear ends of the guides *r r* to approach each other.

The guides *r r* and substantially the means above described for adjusting and securing the same are shown in Letters Patent No. 429,389, granted to me June 3, 1890, the principal departure from the construction shown in the above patent being the slides *t t*, to which the forward ends of the guides *r r* are pivoted, said slides giving the guides a more substantial support at their forward ends than the arrangement shown in the said patent, in which no such support is provided, the guides being shown in said patent as pivoted to the swinging ends of the levers corresponding to the levers 17, here shown. It will be seen that the employment of the slides *t t* enables me to dispense with a positive connection between the levers 17 and the guides, so that the adjustment of said levers does not change the longitudinal position of the guides *r r*. The spring that presses the guides *r r* inwardly is shown in my other patent as located above the bed, while in this case the said spring is located below the bed, and is therefore out of the way and protected from injury.

The slide or carriage 7, supporting the bearings of the rock-shaft that supports the marker-carrier, is movable toward and from the guides *r r*, as in my former patent; but in this case I have provided improved means for adjusting said carriage and the marker-carrier, which means I will now proceed to describe. To one end of the carriage 7 is affixed a rod 20, which is fitted to slide in guides 21 21 on the bed *a*. To said rod is affixed a rack 22, with which engages a pinion 23, formed on a lever 24. Said pinion is mounted to oscillate upon a stud or pivot 25, affixed to an ear 26 on the bed *a*. It will be seen that by moving the pinion 23 by means of the lever 24 in one direction or the other the carriage 7 and the marker-carrier will be moved toward or from the vamp-guides *r r*, as the case may be.

27 represents an indicator, which determines the position the lever 24 should occupy to adjust the marker-carrier to any given size of vamp. Said indicator is a segmental bar or plate having a series of orifices 28, which orifices are concentric with the stud or pivot 25, upon which the pinion 23 turns. The lever 24 is composed of two sections, the inner one of which is formed on the pinion 23, while

the outer one is pivoted at 29 to the inner, and is provided with a pin 30, adapted to enter either of the orifices 28, and thereby engage the lever with the indicator in as many positions as there are orifices in the indicator. Each orifice 28 is accompanied by a number impressed upon the indicator, each number giving the size of the upper to which the markers are adjusted by the movement of the lever 28 into engagement with the orifice. For example, if it is desired to adjust the markers to a vamp of the No. 8 size the lever 24 is moved into engagement with the orifice marked 8, and so on. Some of the orifices are marked to indicate one series of sizes, as for men's and boys' boots, and the other a different series of sizes, as for ladies' and misses' shoes.

It will be seen that the indicator enables the operator to quickly adjust the marker-carrier for any size of vamp, it being only necessary to move the lever to the orifice bearing the number of the size of the vamp to be marked.

The carrier 7 is adjustably secured to the rod 20 by means of a socket 31, formed on the carriage, said rod passing through said socket, and a set-screw 32, passing through one side of the socket and bearing against the rod. The rod is preferably provided with a series of marks or graduations to guide the operator in adjusting the carriage 7 upon the rod when it is desired to effect an independent adjustment of the carriage.

I claim—

1. In a vamp-marking machine, the combination, with a work-supporting bed, of a marker holder or carrier movable toward and from said bed, two spurs or markers movable toward and from each other on the said holder, and connecting mechanism, substantially as described, between said markers, whereby either marker when moved in one direction is caused to move the other in the opposite direction at the same time, as set forth.

2. In a vamp-marking machine, the combination, with a work-supporting bed, of a marker holder or carrier movable toward and from said bed, said holder having two segmental guiding-arms, two levers pivoted to the carrier on centers with which the said arms are concentric, the swinging ends of said levers being engaged with the guides and provided with spurs or markers, and intermeshing gears affixed to the pivoted ends of the levers, whereby both levers are caused to move simultaneously in opposite directions when pressure is applied to either lever, as set forth.

3. In a vamp-marking machine, the combination, with a work-supporting bed, of a marker holder or carrier movable toward and from said bed, said holder having two segmental guiding-arms, two levers pivoted to the carrier on centers with which the said arms are concentric, the swinging ends of said

levers being engaged with the guides and provided with spurs or markers, intermeshing gears affixed to the pivoted ends of the levers, and means for directly securing one of said levers to the guide-arm on which it moves, and thereby fixing both levers in any position to which they may be adjusted, as set forth.

4. In a vamp-marking machine, the combination, with the supporting-bed, of the slides *t t*, movable crosswise of said bed in ways formed therein, the vamp-guides *r r*, pivotally connected at their forward ends to said slides, and means for adjusting said guides, as set forth.

5. In a vamp-marking machine, the combination of the supporting-bed, the elastic block *q* inserted therein, the marker-carrier movable toward and from the bed, and the central marker *e*, arranged over the elastic block and adapted to bear on the vamp over said block, the latter furnishing a yielding support for the vamp under the marker, as set forth.

6. In a vamp-marking machine, the combination, with the supporting-bed and a marker-carrier adjustably mounted on said bed, of a rack connected with the marker-carrier, a gear or pinion pivotally connected to the bed and meshing with said rack, a lever affixed to said pinion and adapted to adjust the marker-carrier by turning the pinion on its pivot, and an indicator whereby the lever may be set or adjusted to adapt the marker-carrier to different sizes of vamps, as set forth.

7. In a vamp-marking machine, the combination, with the supporting-bed and a marker-carrier adjustably mounted on said bed, of a rack connected with the marker-carrier, a gear or pinion pivotally connected to the bed and meshing with said rack, a lever affixed to said pinion and adapted to adjust the marker-carrier by turning the pinion on its pivot, said lever having a tooth or projection 30, and an indicator consisting of a fixed segmental bar having a series of orifices adapted to engage said tooth, and thereby lock the lever and marker-carrier in different positions, as set forth.

8. In a vamp-marking machine, the combination of a supporting-bed, a slide or carriage movable thereon, a marker-carrier pivotally connected with said carriage, a rod secured to the carriage and movable in guides on the bed, a rack attached to said rod, a pinion pivoted to the bed and meshing with said rack, an operating-lever on said pinion having a tooth or projection, and an indicator affixed to the bed and provided with a series of numbered holes arranged to engage the tooth on the operating-lever, as set forth.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 10th day of September, A. D. 1890.

JOHN F. ROGERS.

Witnesses:

JOS. WILLIAMSON, Jr.,
C. F. COBBETT.