(No Model.) 2 Sheets—Sheet 1.

A. HEIM.

MACHINE FOR ATTACHING ADDRESS LABELS.

No. 512,295. Patented Jan. 9, 1894.

Fig. 1.

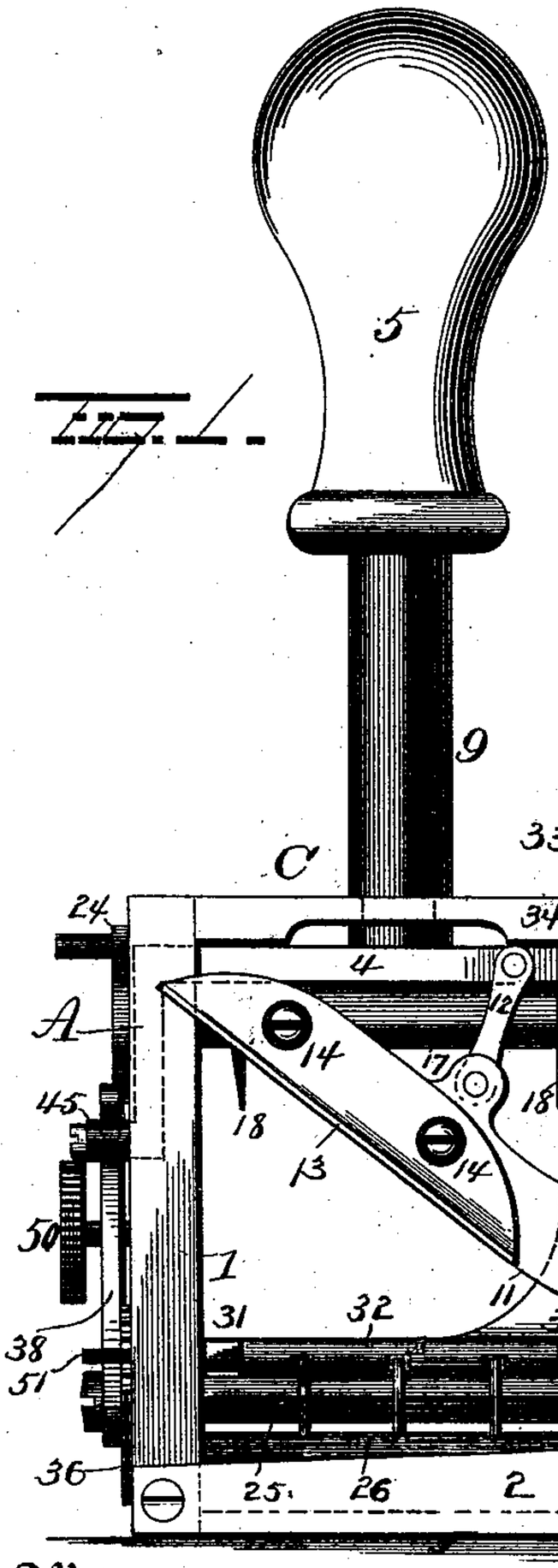
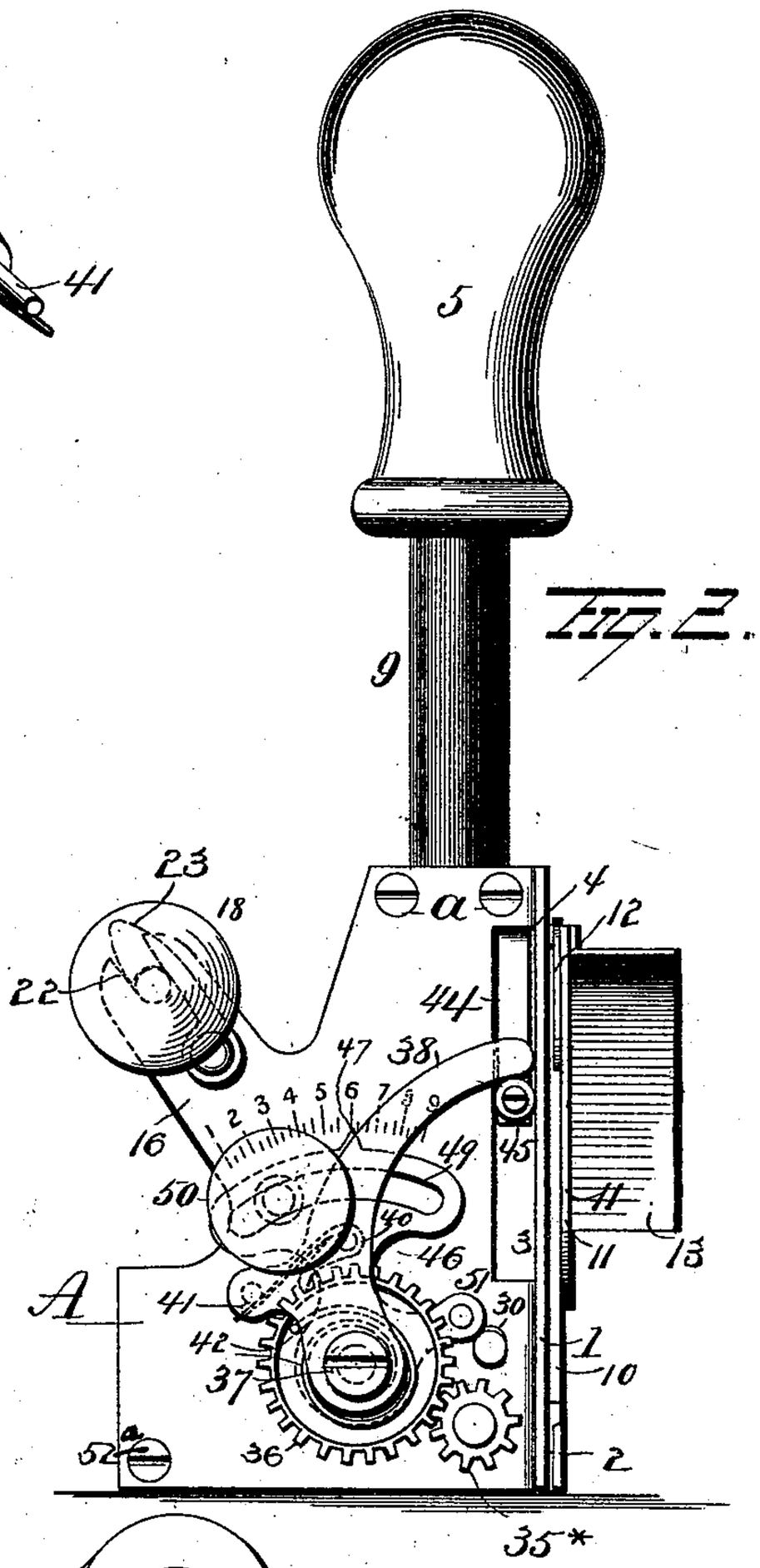


Fig. 2.



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(No Model.) 2 Sheets,—Sheet 2.

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MACHINE FOR ATTACHING ADDRESS LABELS.

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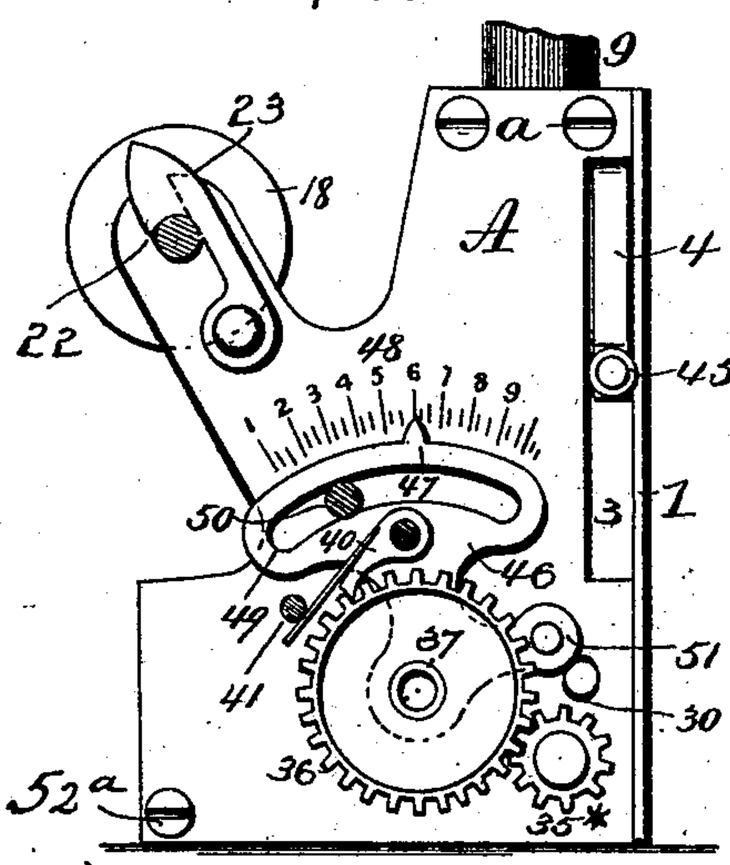

FIG. 4.

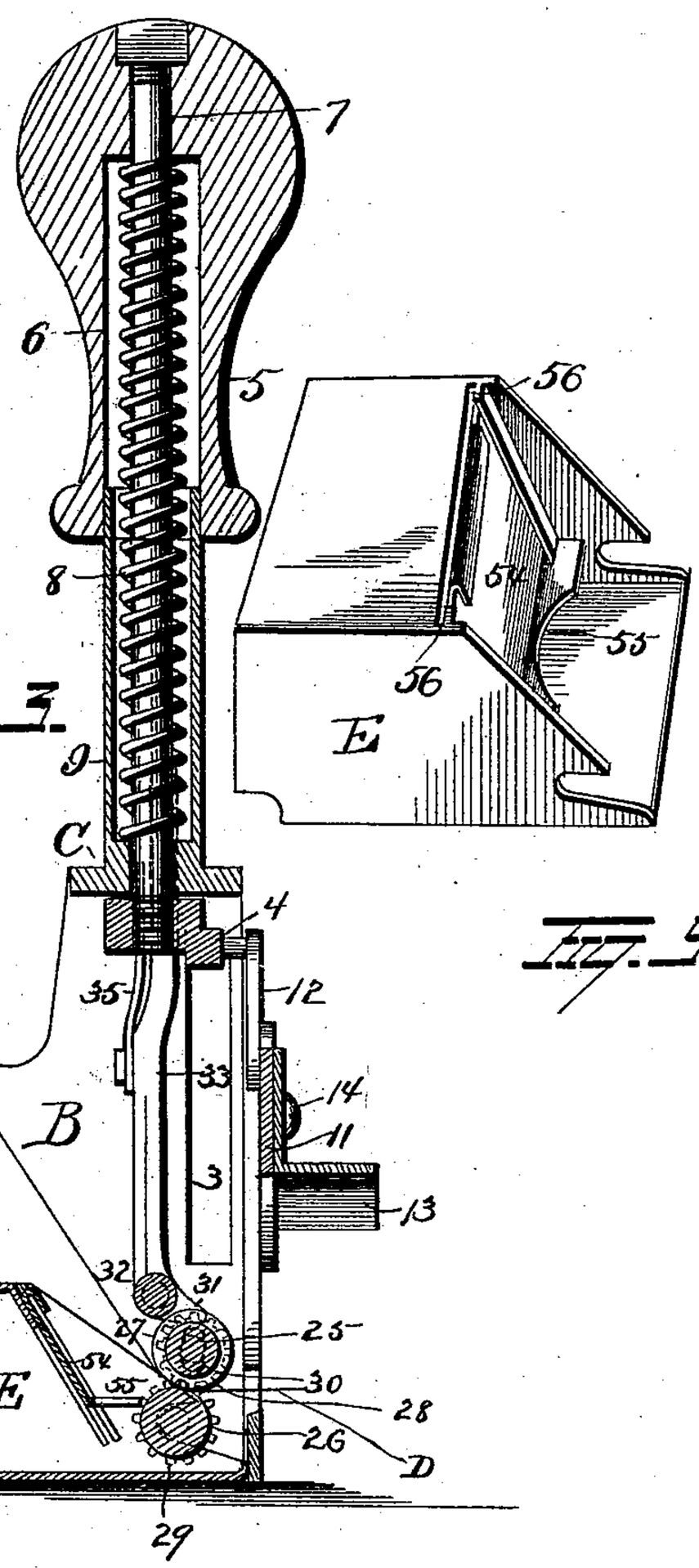

FIG. 3.

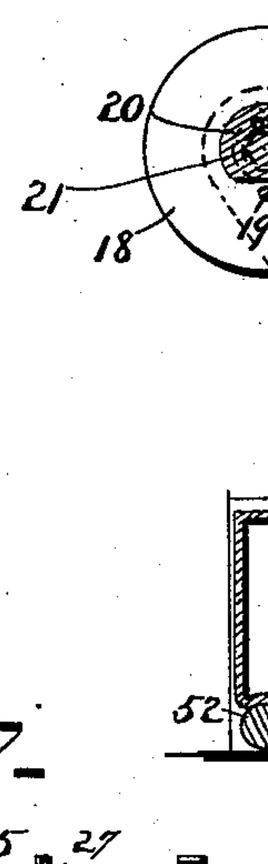

FIG. 5.

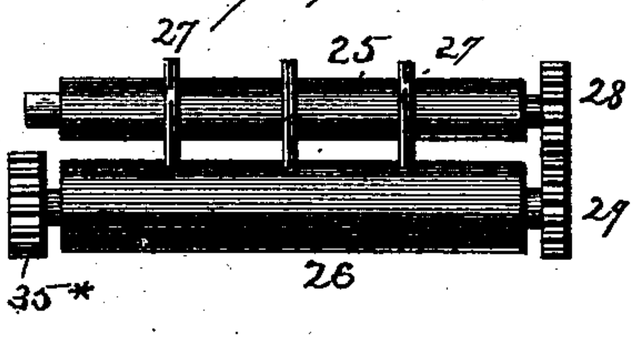

FIG. 7.

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UNITED STATES PATENT OFFICE.

ADAM HEIM, OF BROWNSVILLE, INDIANA, ASSIGNOR OF SEVEN-SIXTEENTHS TO GEORGE W. HEIM, OF SAME PLACE.

MACHINE FOR ATTACHING ADDRESS-LABELS.

SPECIFICATION forming part of Letters Patent No. 512,295, dated January 9, 1894.

Application filed June 6, 1892. Serial No. 435,766. (No model.)

To all whom it may concern:

Be it known that I, ADAM HEIM, of Brownsville, in the county of Union and State of Indiana, have invented certain new and useful Improvements in Machines for Attaching Address-Labels; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to an improvement in machines for attaching address labels and it consists in certain novel features of construction and combinations of parts which will be hereinafter described and pointed out in the claims.

In the accompanying drawings, Figure 1 is a side elevation. Fig. 2 is a front elevation. Fig. 3 is a transverse section, and Figs. 4, 5, 6 and 7 are details.

A and B represent front and rear plates and C the top of the machine. These parts are secured together by screws *a*, *a*, or similar devices whereby a rigid frame is formed for the machine. The plates A and B are bent laterally forming flanges 1, 1 and to the latter the rigid blade 2 of the cutters is secured so that the plates A and B at this point are held together securely by the blade. Immediately in rear of the flanges 1, 1, narrow vertical slots 3, 3, are formed and in these slots the ends of a reciprocating plunger 4 are guided. Connected with this plunger is the handle 5. The handle is bored out as at 6 and in it a threaded bolt 7 of less diameter than the bore is located thus leaving a space around the bolt. A spiral spring 8 surrounds this bolt and bears on the top C whereby to throw the handle upward and as the threaded end of the bolt is screwed into a hole in the plunger the plunger is likewise held upward normally so that to depress the latter it is simply necessary to push down upon the handle, the tension of the spring being sufficient to raise both handle and plunger as soon as the operator releases the handle or removes the pressure applied thereon. A sleeve 9 projects unwardly from the top around the spring into the bore of the handle. In this way the spring and bolt are concealed and the spring is protected.

An upwardly and rearwardly projecting arm 10 forming a continuation of blade 2 has pivoted to its outer end a movable blade 11. The shape of this pivoted or movable blade is substantially the same as the blade 2 and its arm 10, the object of thus pivoting at one side and above the cutting edge of the rigid blade being to insure a shearing contact between the blades as they come together. This blade is operated by means of a link 12 which is pivotally connected with the plunger and the pivoted blade so that as the plunger moves the blade moves, the link being provided to allow for the curved arc which the pivoted blade follows. The pivoted blade is furnished with a laterally projecting flange 13 which constitutes a tab press, it being adapted to press the label upon the article to be labeled as fast as they are severed from the strip. This tab press may be removably secured to the pivoted blade by screws 14, 14 or equivalent means as shown.

D represents the printed strip from which the labels are cut as they are required. The strip is wound on a reel or spool 15 and this reel or spool is removably and revolubly supported in arms 16, 16, projecting laterally from the plates A and B. The reel or spool consists of a spindle preferably flattened as at 17 on one side, having the circular flanges 18, 18, at its ends and provided with a bar 19 opposite and slightly removed from the flattened side of the spindle, and between this rod or bar 19 and the flattened face on the end of the strip is inserted to hold it from slipping as it is wound around the reel or spool. A small spiral spring 20 forces the reel or spool endwise with sufficient pressure to afford enough friction to prevent the strip from pulling off too rapidly. In order to readily insert or remove the reel or spool one of the arms 16 is provided with a hole 21 to receive one end of the spindle and the other with an open slot 22 to receive the opposite end of the spindle, and in order to lock the reel in a hook shaped catch 23 it is pivoted in position to swing over this spindle to retain it in the slot. To facilitate in reeling the strip a crank 24 is provided at one end. The opposite end of the strip is passed between a pair of feed rollers 25 and 26 which feed it to the knives

in proper widths. The lower roller 26 is preferably plain while the upper one 25 is provided with annular ribs or rings 27 adapted to engage the strip and hold it at these points against the lower roller. On corresponding ends the rollers are provided with pinions 28 and 29 which are intergeared so that the rollers turn together and motion is imparted from the lower one to the upper one. The upper roller is journaled in vertical slightly elongated slots 30, 30 which admit of the upper roller being raised a trifle to allow the strip to be inserted between them. This upper roller is held in a depressed position and in contact with the lower roller by means of the shoes 31, 31, projecting from the rock shaft 32. An arm 33 projecting upwardly from this rock shaft extends through a slot 34 in the top C and a spring 35 secured to this arm and bearing at one end at an end of the slot normally rocks the rock-shaft to force the shoes down against the upper feed roller 25. So in order to insert the strip the operator forces this arm in the opposite direction as far as the slot 34 will allow. This affords sufficient space between the feed rolls for the paper to be slipped through easily.

The feed rollers are rotated to feed the strip by the following means: A pinion 35* is secured on the forward end of the lower feed roller 26 and a larger toothed wheel 36 is revolubly supported on a pin 37 so that the teeth of the large wheel are in engagement with the teeth of the pinion 35*. An arm 38 pivoted on this pin 37 has one or more spring actuated or spring pawls 40, the spring or springs of this pawl or pawls bearing against a pin 41, the function of the pawl or pawls being to engage teeth on the large wheel 36 when the arm rises to its normal position and thus turn the wheel and consequently the roller 26 and roller 25. A spring 42 connected with the arm 38 tends to force the latter downward and a depending arm 44 on the adjacent end of the plunger has a roller 45 thereon upon which the curved end of arm 38 rests so that the latter is carried to its normal or elevated position by the plunger as the latter rises and as the plunger is depressed the spring 42 causes the arm 38 to swing downward and thus follow it. When the arm 38 swings downward the pawl or pawls 40 ride over the teeth of wheel 36 to take a new hold, the wheel at that time remaining immovable but when the arm 38 moves upward the wheel is moved a distance corresponding to the length of vibration of the arm. The length of these vibrations are regulated by the following means, the object being to regulate the width of the labels. A plate 46 is mounted on the pin 37. This plate is provided with a pointer 47 adapted to point to a scale 48 on the front plate A. This plate has a curved elongated slot 49 formed in the arc of a circle whose center is the pin 37 and a thumb screw 50 extends through this slot into plate A and is adapted to be turned to lock the plate in different positions. A stop 51 projects from the plate in position to be struck by arm 38 when the latter swings downward so that length of swing or vibration of this arm depends entirely upon the position of the stop and the position of the stop is changed by changing the position of the plate 46 relative to the scale. In this way the labels may be cut-off in wide or narrow strips as desired.

E is a paste box. This is constructed to fit between the front and rear plates A and B one end being fitted to the trunnions of the lower roller 26 and its opposite end formed with a recess or notch in which a bar 52 extending from one plate A to plate B is secured. This bar is preferably held in place by a screw 52^a at each end. A set screw 53 holds the box in place. The end of the box adjacent to the feed rollers is provided with a slide door 54 which may be raised or lowered to regulate the supply of paste and this door is cut away as at 55 at its lower edge to permit the paste to pass out freely. The ends of the side door are held in guides 56, 56. The mouth of the paste box is in such position that the lower side of the strip is supplied with paste as fast as it is required and just before the labels are cut off from the main strip and pressed upon the paper or article to be labeled. The paste box may be removed by unscrewing set screw 53 and then forcing the box up over bar 52 and then it is easily withdrawn. The box is inserted in a reverse manner and secured in place by means of the set screw 53 as above stated.

The device is simple, easily supplied and manipulated, and effectually performs its functions and while for the most part I prefer to adhere to the construction shown and described, it is obvious that slight changes might be resorted to without departure from the spirit and scope of my invention and hence I do not wish to limit myself to the exact construction herein set forth, but,

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

1. The combination with a frame and plunger, of feed rolls, gearing for operating these rolls, a vibratory arm having means thereon for locking it to a part of the gearing as it vibrates in one direction, an adjustable stop to regulate the length of vibration of the vibratory arm said stop projecting from a plate pivoted at one side of the frame and an arm extending from the plunger to the vibratory arm, substantially as set forth.

2. The combination with a pair of feed rolls, and gear wheels, of a spring actuated arm, means for actuating the arm in the direction opposite to the action of the spring, and a pivoted plate having a stop thereon, adapted to be normally engaged by the arm and means for locking this pivoted plate in various positions, substantially as set forth.

3. The combination with a frame, having a scale thereon, of a pair of feed rolls inter-

geared whereby one is driven by the other, a vibratory arm for communicating intermittent motion to said rolls, a pivoted plate having a stop thereon, said plate slotted and provided with a pointer adapted to operate in connection with the scale, and a set screw for locking the plate in position, substantially as set forth.

4. The combination with a pair of feed rolls, one vertically movable and revolubly supported in vertical elongated slots, of a rocking shaft having presser shoes, and spring for holding said shoes yieldingly in contact with the vertically movable shaft, substantially as set forth.

5. The combination with a pair of feed rolls, one vertically movable and revolubly supported in vertical elongated slots, of a rock shaft having presser shoes adapted to engage the vertically movable shaft, an arm connected with this shaft, and a spring for rocking the shaft so that the shoes are held yieldingly against the shaft, substantially as set forth.

6. The combination with a frame, of a paste box having an open side and a slide for opening and closing this open side, a shoulder formed in the box, a bar located in this shoulder and means for holding this rod or bar in place, substantially as set forth.

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

ADAM HEIM.

Witnesses:
GEO. W. SHOWALTER,
SAMUEL WINTERS.