

March 9, 1937.

J. WEIMONT

2,073,507

PRICE TAG MARKING MACHINE

Filed Aug. 9, 1934

4 Sheets-Sheet 2

Fig. 3.

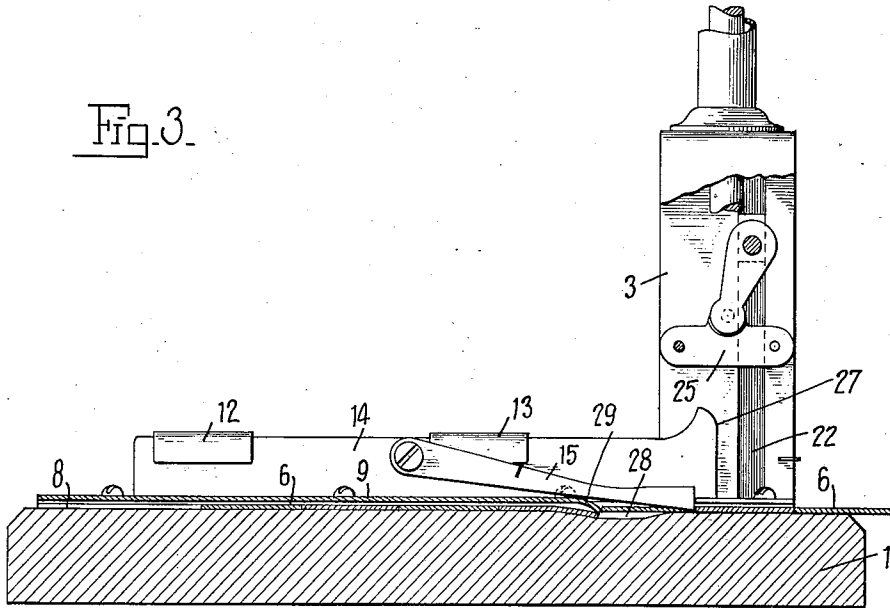
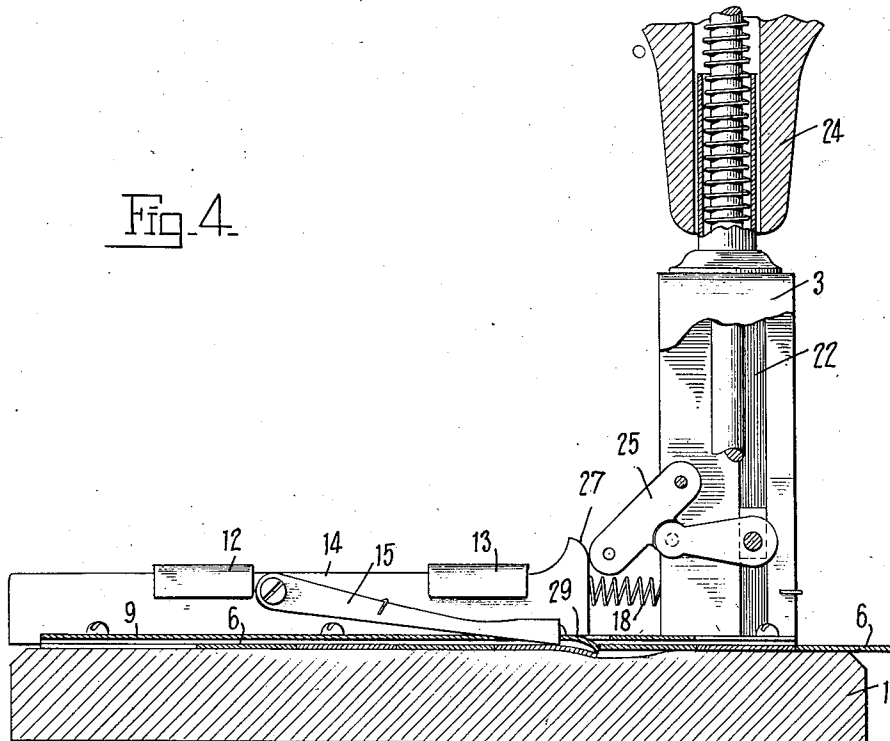


Fig. 4.



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Fig. 5.

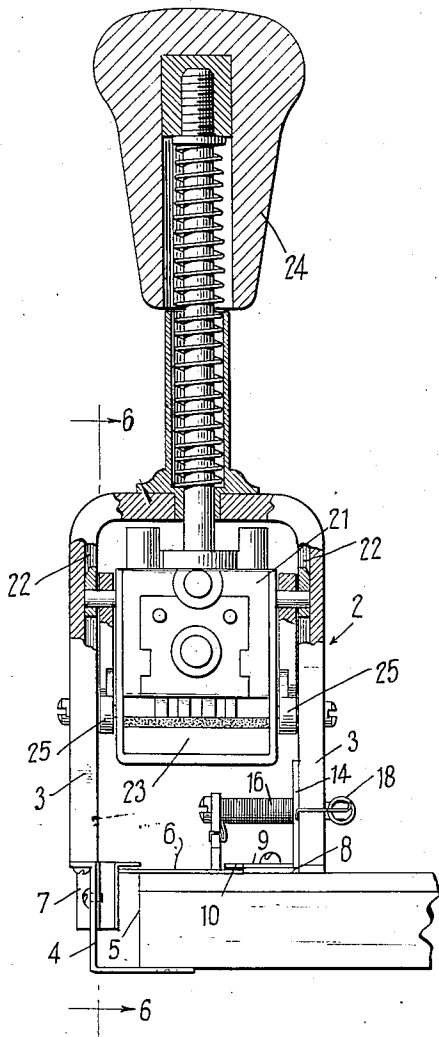


Fig. 6.

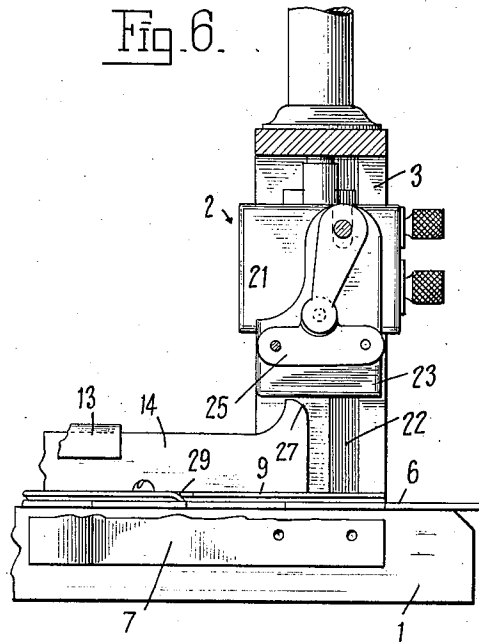
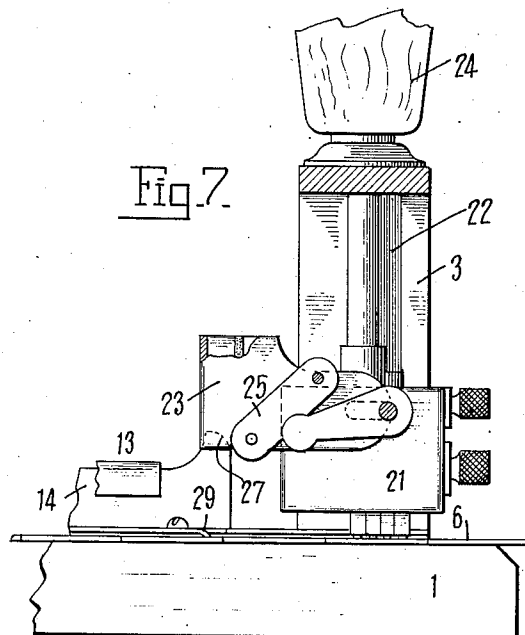


Fig. 7.



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4 Sheets-Sheet 4

Fig. 8

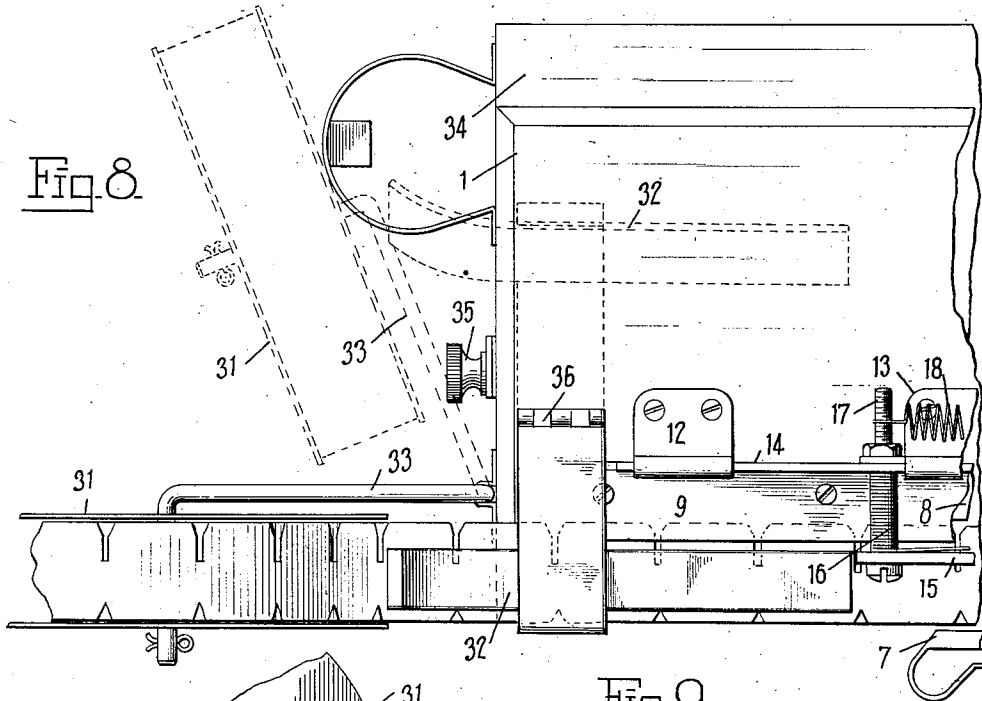


Fig. 9

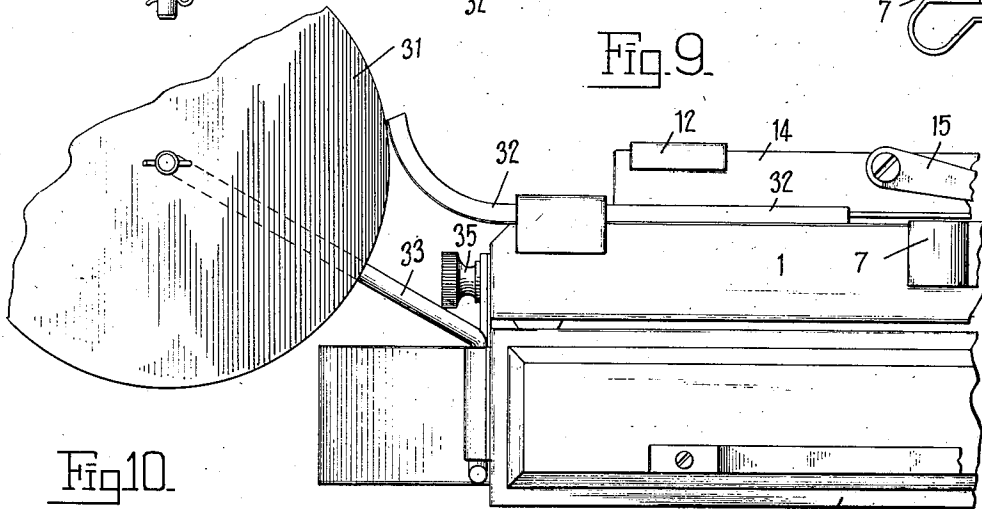
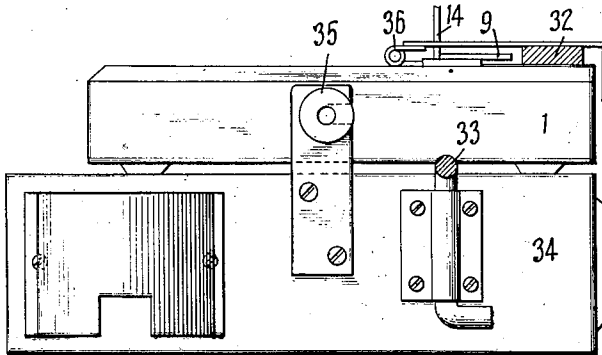


Fig. 10



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PRICE TAG MARKING MACHINE

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Application August 9, 1934, Serial No. 739,079

4 Claims. (Cl. 101—287)

This invention relates to machines for printing strips of price tags and the like. Such machines are commonly referred to in the art as "marking machines."

5 In retail stores, such as department stores, it is the practice to print price and other indicia on price tags, and a number of automatic machines have been devised and are in common use for this purpose. Some of these machines
10 are power driven, and are frequently large and costly. Other machines are operated by hand, but are designed for use in stores having a large volume of business where they are subjected to more or less constant use, and are built to with-
15 stand such use over a long period of time. Such machines customarily include means for feeding, printing and severing tags from strips. See, for example, Laencher Patent No. 1,837,450 dated December 22, 1931.

20 Other machines in the nature of hand operated stamping machines (see Pannier Patent No. 1,030,120, dated June 18, 1912) have been used extensively by small stores, but have been inconvenient for use in connection with the strips of
25 tags which are supplied by tag manufacturers, for use with the automatic machines.

It is an object of the present invention to provide a machine combining a hand stamping machine of the type referred to with a simple tag
30 strip feeding mechanism, so as to provide a machine having many of the advantages of the larger, more expensive machines, but available to small stores whose business does not warrant the purchase of the larger machines.

35 Other objects and advantages of the invention will appear hereinafter.

A preferred embodiment of the invention selected for purposes of illustration is shown in the accompanying drawings, in which,
40 Figures 1 and 2 are plan views with the printing mechanism removed in order to illustrate the feed mechanism.

Figures 3 and 4 are sections on the lines 3—3 and 4—4 of Figures 1 and 2 respectively.
45 Figure 5 is an end view illustrating the printing mechanism, partly in section.

Figures 6 and 7 are sections on the line 6—6 of Figure 5, Figure 6 showing the printing mechanism in its normal position of rest, Figure 7 showing the printing mechanism in printing position.

Figure 8 is a plan view of one end of the machine, illustrating attachments which may be
55 used for handling gum labels.

Figure 9 is a front elevation of the same, and Figure 10 is an end elevation of the same.

Referring to the drawings, the machine comprises a base 1 having a printing mechanism 2 mounted thereon, the printing mechanism illustrated being of the hand stamping type disclosed in Pannier Patent No. 1,030,120. One leg of the U-shaped member 3 of the printing mechanism is secured to the upper face of the base 1, while the other leg is secured to a bracket 4 which is spaced from the front face 5 of the base in order to provide room for the ticket strip 6 which overhangs the base as illustrated in Figures 1, 2 and 5. The tag strips illustrated in the drawings are of the "pinless" type, but the machine is also adapted to handle stapled tags or pin tickets and string tags, in which case the staples or strings are able to move through the space between the face 5 and the bracket 4.

Mounted on the bracket 4 is a resilient guide member 7 which serves to hold the ticket strip in place as it is fed through the machine as hereinafter described. Mounted on the base 1 is a guide strip 8 toward which the tag strips are pressed by the member 7, and mounted immediately above the guide strip is a strip 9 having an edge portion 10 which overhangs the guide strip 8, and covers the inner edge of the tag strip as illustrated in Figures 1, 2 and 5.

Also mounted on the base 1 are a pair of guide members 12 and 13 which engage and support the upper edge of a slide 14 forming part of the tag strip feeding mechanism. The slide 14 carries the pawl 15 which is pivotally mounted thereon, which said pawl is yieldingly held in contact with the ticket strip by means of the torsion spring 16 surrounding the bolt 17 on which the pawl is mounted. The slide is normally held in the position illustrated in Figures 1 and 3 by the spring 18 but can move to the position illustrated in Figures 2 and 4 when actuated by the printing mechanism as hereinafter described.

Inasmuch as the printing mechanism illustrated is of a type which is well known in the art, and since no claim is made to the printing mechanism per se, it will not be described in detail herein, except with reference to the manner in which the said printing mechanism is employed to operate the feeding mechanism.

Referring particularly to Figures 3, 4, 5 and 7, the printing apparatus comprises a reciprocating printing head 21 mounted to slide in the guideways 22, and a swinging ink pad 23 connected by links to the printing head in such manner that as the printing head is moved to
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printing position by depressing the plunger 24, the ink pad 23 is swung from the position illustrated in Figure 6 to the position illustrated in Figure 7. During this movement, it will be observed that the links 25 which are pivotally connected to the swinging ink pad carrier 23 move through an arc of approximately 135 degrees. In order that the feed mechanism may be actuated by the printing mechanism, the slide 14 is mounted in such manner that the edge 27 of the slide is engaged by one of the links 25 during its movement, so that as the printing head is depressed to print the strip, the slide is retracted from the position illustrated in Figures 3 and 6 to the position illustrated in Figures 4 and 7. Upon return of the printing head to its normal position of rest as illustrated in Figures 3 and 6, the slide 14 is returned to its normal position by the spring 18. The amplitude of movement of the slide 14 is greater than the width of the individual tickets of the strip, so that the feed pawl is enabled to engage a new tag on each successive movement of the printing head as hereinafter described.

The base 1 is provided with a depression 28 below the point where the tag strip is engaged by the pawl 15 for feeding purposes, and the strip 9 is provided with a prong 29 bent downwardly so as to depress the leading edge of one of the tags below the level of the trailing edge of the next preceding tag as illustrated in Figures 3 and 4. Thus when the slide 14 is moved to the position illustrated in Figure 4, the trailing edge of one tag is in position for engagement by the pawl 15 so that as the slide advances from the position illustrated in Figure 4 to the position in Figure 3, the tag strip is fed forward one tag width. As matter of convenience, the guide member 13 is arranged to serve as a limit stop for the travel of the slide, and the engagement of the bolt 17 with the guide 13 limits the feeding movement of the pawl in such manner that the tag is always fed to the proper position for printing.

The machine illustrated in Figures 1 to 7 inclusive is adapted for handling individual strips of price tags of determinate length, but it is sometimes desired to use such machines for feeding and printing gummed labels which are usually sold in rolls of indeterminate length.

In the machine illustrated in Figures 8 and 9 attachments suitable for handling gummed labels are illustrated as applied to the machine. The said attachments include a reel 31 for supporting a roll of gummed labels, and a weight 32 which serves as a brake to prevent the labels from moving backwardly when the feed pawl is retracted. The said reel is preferably mounted on a bracket 33 which is pivotally connected to the type box 34. The said type box may be secured to the base 1 by bolts 35. Thus when the ma-

chine is not being used for printing gummed labels, the reel 31 can be swung out of the way.

The weight 32 is pivotally mounted on the base 1 by means of the hinge 36 in order that it also may be swung out of the way when strips other than gummed labels are being printed. Preferably the said weight is curved as illustrated, in order to serve as a guide for the labels.

It will be understood that the invention may be variously modified and embodied within the scope of the subjoined claims.

I claim as my invention:

1. Apparatus for printing tag strips, comprising, in combination, printing mechanism including a reciprocating printing head, a swinging ink pad, and connections between the two such that the ink pad is swung out of engagement with the printing head as the latter is moved to printing position, strip feeding mechanism, and means engaged by said connections to operate said strip feeding mechanism.

2. Apparatus for printing tag strips, comprising, in combination, printing mechanism including a reciprocating printing head, a swinging ink pad, and connections between the two such that the ink pad is swung out of engagement with the printing head as the latter is moved to printing position, strip feeding mechanism, means engaged by said connections to retract said strip feeding mechanism as the printing head is moved to printing position, and resilient means connected to said feeding means for advancing the same as the printing head is moved away from printing position.

3. Apparatus for printing tag strips, comprising, in combination, printing mechanism including a reciprocating printing head, a swinging ink pad, and connections between the two including a pivoted link, said connections being such that the ink pad is swung out of the path of the printing head as the latter is moved to printing position, strip feeding means having a cam surface adapted to be engaged by said pivoted link to retract said feeding means when said printing head is advanced toward printing position, and resilient means to advance said feeding means as said printing head is retracted, from printing position.

4. Apparatus for printing tag strips, comprising, in combination, a base, a hand stamp having a frame having two legs, one of said legs being secured directly to said base and the other of said legs being spaced from the upper edge of said base, and a bracket connecting said other leg to the bottom of said base, means for guiding said tag strips between said legs with one edge of the strip overhanging the edge of the base, and means actuated by said hand stamp for feeding said tag strips.

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