

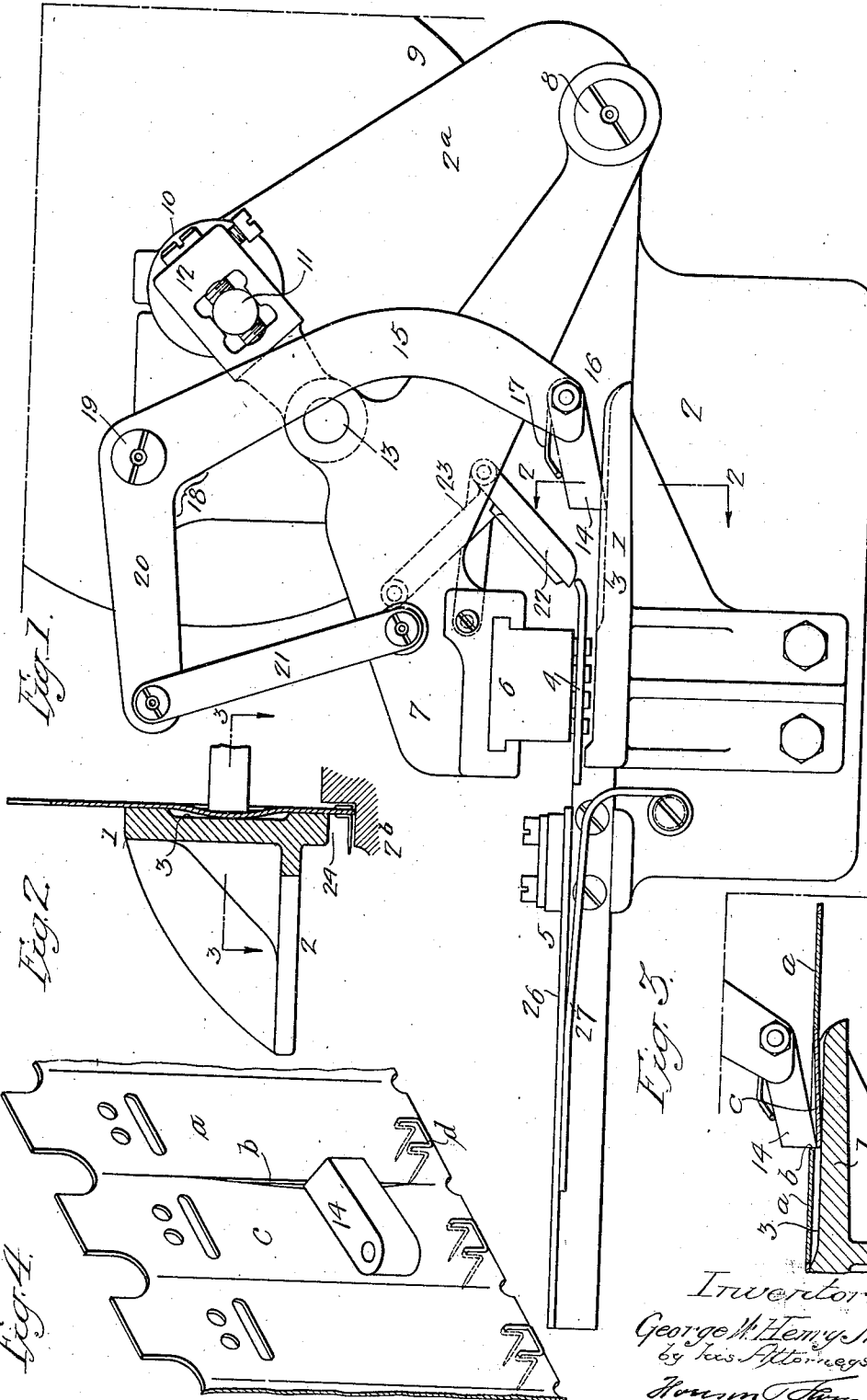
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PROCESS OF FEEDING TAGS AND LIKE ARTICLES AND MECHANISM THEREFOR

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PROCESS OF FEEDING TAGS AND LIKE ARTICLES AND MECHANISM THEREFOR

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My invention relates to certain improvements in methods of feeding tag-strips in machines for printing tags and similar articles.

The tag-strip consists, in the present instance, of a series of tags connected at each edge but entirely separated at the center.

The object of the present invention is to feed such a tag-strip forward, one tag at a time, by bending one tag out of line with the preceding one to expose the edge of said preceding tag, which edge is to be engaged by a reciprocating feeder.

In the accompanying drawings:

Fig. 1 is a plan view of sufficient of a tag-strip printing machine to illustrate my invention;

Fig. 2 is a transverse sectional view on the line 2-2, Fig. 1;

Fig. 3 is a sectional plan view on the line 3-3, Fig. 2; and

Fig. 4 is a diagrammatic perspective view showing the engagement of a tag-strip by the feeding pawl.

The printing machine may be of any suitable type. The platen 1 is attached to the base 2, and in the platen is a longitudinal recess 3 of sufficient depth to allow a tag to be bent out of line so as to expose the edge of an adjoining tag, as clearly shown in Fig. 4.

4 is a guide frame between which and the platen the tag-strip is fed, and beyond the platen 1 is a guide 5 consisting of two plates 26 and 27, between which the strip passes after being printed.

6 is a printing chase in which type is located. This chase is detachably secured to a lever 7 which is pivoted at 8 and is actuated by power-driven mechanism to cause the type to make an impression upon a tag which is located directly under the chase.

9 is a power-driven wheel mounted in the part 2^a of the base, and on the shaft 10 is a crank-pin 11 adapted to a connecting rod 12 which is connected at 13 to the lever 7, so that as the wheel is turned the lever will be moved towards or from the platen. Other means of operating this lever may be used

without departing from the essential features of the invention.

14 is a feed pawl, which is so shaped as to engage the edge *b* of a tag *a* of the strip shown in Fig. 4, so as to feed the strip forward a given distance, the distance, in the present instance, being the width of a tag.

The pawl 14 is pivoted to an arm 15 of a lever 18 at 16, and on the pivot 16 is a spring 17 which tends to force the pawl against the platen 1, the spring being of such tension that it will press that portion of the tag against which it bears into the groove 3.

In the diagram shown in Fig. 4, *c* is a tag which is pressed out of alignment by the pawl, so as to expose the edge *b* of an adjoining tag *a*.

The lever 18 is pivoted at 19 to the frame of the machine, while the arm 20 of the lever is connected by a link 21 to the lever 7, so that as the lever 7 is moved from the platen 1, the pawl 14 will be moved forward, feeding the tag-strip a distance equal to the width of the tag, so as to present a tag in position to be printed on the next movement of the lever 7.

22 is an inking pad pivoted to the frame and connected by a link 23 to the lever 7, so that as the lever is moved away from the platen, the inking pad will be moved into position to ink the strip, and as the lever is moved towards the platen the pad will be withdrawn.

The tag-strip, in the present instance, is of the design clearly shown in Fig. 4, and each tag of the strip has a staple *d* which is at right angles to the face of the tag, so that as the strip is fed into the machine, the tag rests in the portion 2^b of the base, the prongs of the staple passing through the channel 24 between the lower portion of the platen 1 and the portion 2^b of the base, as clearly shown in Fig. 2. The tag-strip can be mounted in any suitable reel at one side of the machine, and the wheel 9 can be driven from an electric motor or other source of power.

In operation, the tag is fed into the machine until it has passed the pawl, when the machine is then set in motion, and as the pawl reciprocates it will press one tag of the strip out of

alignment and into the recess of the platen and will engage the edge of the preceding tag, feeding the tag forward a given distance, in the present instance the distance being the
5 width of one tag.

After the printing operation, the pawl is retracted past the edge of the tag previously bent out of alignment, pressing the next tag out of alignment, and on the forward move-
10 ment the pawl will again feed the strip forward by contacting with the edge of a tag.

I claim:—

1. The process herein described of feeding tag-strips and the like in a printing machine,
15 in which the strip is partly severed by transverse slits, said process consisting in bending a portion of the tag-strip between the slits so as to expose the edge of an adjoining section, and then feeding the strip forward by a
20 feeding device which bears against the exposed edge of the strip directly in advance of the section which is bent out of alignment.

2. The process herein described of feeding tag-strips in a tag-printing machine, the tag-
25 strip being partially severed transversely the width of the tag, said process consisting in pressing a section of the tag out of alignment so as to expose the edge of an adjoining tag-strip section to a feeding means, and moving
30 said feeding means forward by pressure exerted against the exposed edge of the strip.

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