

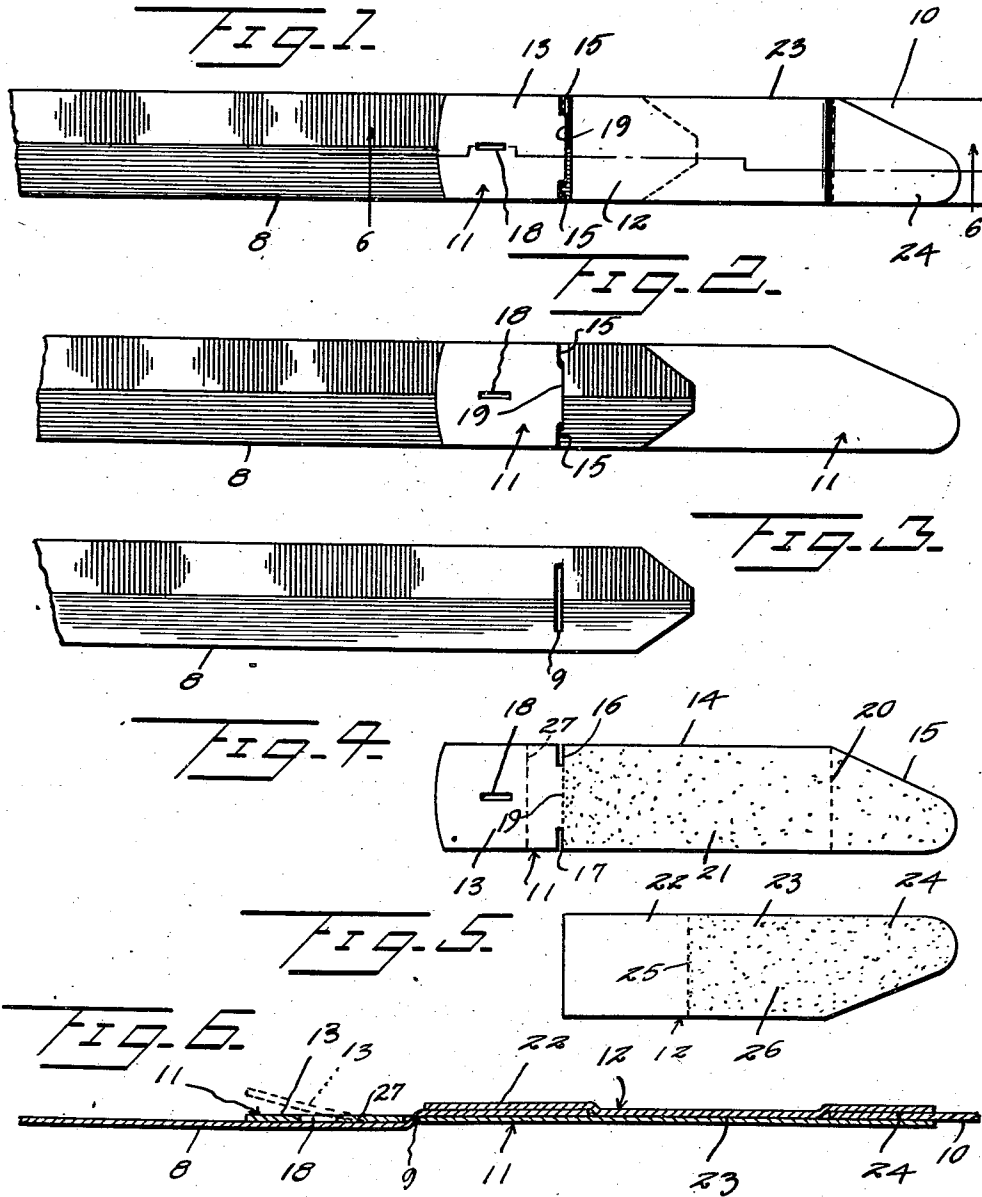
March 17, 1942.

H. MANN

2,276,324

CLEAN TIP FOR TYPEWRITER RIBBONS

Filed Feb. 6, 1941



Inventor

Hessina Mann

By

Kimmel & Crowell
Attorneys

UNITED STATES PATENT OFFICE

2,276,324

CLEAN TIP FOR TYPEWRITER RIBBONS

Hessina Mann, New Brunswick, N. J., assignor to
Phillips Ribbon & Carbon Co. Inc., Rochester,
N. Y., a corporation of New York

Application February 6, 1941, Serial No. 377,736

3 Claims. (Cl. 197-172)

This invention relates to a clean tip for typewriter ribbons.

The invention aims to provide, in a manner as hereinafter set forth, a means to facilitate the renewing of a typewriter ribbon, easily, speedily, correctly and reducing to a minimum the soiling of the fingers during the renewing operation.

The invention further aims to provide, in a manner as hereinafter set forth, a clean tip for a typewriter ribbon capable of being expeditiously secured to a terminal portion of a new ribbon and releasably secured to a terminal portion of an old ribbon when it is desired to renew a typewriter ribbon.

The invention further aims to provide, in a manner as hereinafter set forth, a clean tip for typewriter ribbons which is simple in its construction and arrangement, strong, durable, compact, thoroughly efficient in its use, and inexpensive to manufacture.

Embodying the aims aforesaid and others which may hereinafter appear, the invention consists of the novel construction, combination and arrangement of parts as will be more specifically referred to and illustrated in the accompanying drawings wherein is shown an embodiment of the invention, but it is to be understood that changes, variations and modifications may be resorted to which fall within the scope of the invention as claimed.

In the drawing:

Figure 1 is a front elevation of an end terminal portion of a new ribbon and an end terminal portion of an old ribbon, showing the adaptation therewith of a clean tip, in accordance with this invention, during the renewal operation,

Figure 2 is a rear elevation of an end terminal portion of a new ribbon showing the adaptation therewith of a clean tip, in accordance with this invention, and with the other element of the clean tip not shown,

Figure 3 is a fragmentary view in front elevation of an end terminal portion of a new ribbon provided with means correlating with an element of the tip for connecting them together,

Figure 4 is a rear elevation of the coupling element of the tip,

Figure 5 is a front elevation of the protecting element of the tip, and

Figure 6 is a section on line 6-6, Figure 1.

With reference to the drawing, the end terminal portion of a new ribbon is indicated at 3 and it is provided in close proximity to its free end with a transverse slot 9. An end terminal portion of an old ribbon is indicated at 10.

The clean tip includes a coupling element, generally indicated at 11 and a protecting element, generally indicated at 12.

The element 11 preferably will be constructed of fabric of tape-like form and it includes an inner end portion 13, an intermediate portion 14, and a tapered end portion 15. The portion 13 merges into the portion 14 and adjacent the point of mergence the element 11 is formed with a pair of oppositely extending notches 16, 17 disposed transversely with respect to the body of element 11 and opening at its lengthwise edges thereof. The portion 13 on its longitudinal median is formed with a slot 18 spaced from the free end of the portion 13 and the point of mergence between the portion 13 and the portion 14. The element 11 between the notches 16, 17 is scored, as at 19. The element 11 at the point of mergence of the portions 14, 15 is provided with a transverse score 20. The portion 14 is of longitudinal contour and of greater length than the portions 13, 15. The portion 13 is of substantially rectangular contour and corresponds in width to the width of the portion 14. The rear face of the element 14 is provided with a cementitious coating 21, which extends from the score 19 to the free end of the portion 15. The notches 16, 17 correlate with the slot 9 for connecting the element 11 to the end portion 8 of the new ribbon. In this connection it will be stated that the portion 13 of the element 11 is bent upon itself to reduce its width and then extended through the slot 9, after which the said bent portions assume the position shown in Figures 1 and 2, and the rear face of the ribbon is pressed firmly to cementitious strip on front face of portion 13, whereby the end terminal portion 8 of the new ribbon is connected to the element 11.

When the end portion 13 of the element 11 is connected to the terminal portion 8 of the new ribbon, said end portion 13 opposes the inner face of the terminal portion 8, as is shown in Figure 6, and that part of the terminal portion 8 outwardly with respect to the slot 9 is arranged on and secured to the rear face of the element 11 by a portion of the cementitious material 21. The notches 16, 17, when the element 11 is secured to the terminal portion 8, permit of the terminal portion 13 being bent upon itself, so as to extend through the slot 9.

The protecting element 12 consists of a strip of fabric of tape-like form and it includes an inner end portion 22, an intermediate portion 23 and an outer end portion 24. The portion 22

merges into the portion 23 and the latter merges into the portion 24. The portion 22 is substantially rectangular as well as the portion 23. The portion 23 is tapered. The element 12 conforms in contour to that part of the element 11 extending from the notches 16 to the free end of the portion 15. At the point of mergence of the portions 22 and 23 the element 12 is scored, as at 25. The inner face of the element 12, which may be termed the forward or front face thereof, with respect to the element 11 is formed with a body of cementitious material 26 which extends throughout such face from the score 25 to the free end of the portion 24.

It will be assumed that the clean tip is in the position shown in Figure 2 and attached to the terminal portion 8 of the new ribbon and when so positioned the clean tip is ready for change of ribbons in a machine.

By running off all but about a foot of the old ribbon on the right old spool, one is able to release the right spool, keeping the old ribbon threaded through all the slots and ribbon bars. The spool is then drawn to the left, placing it on a flat surface where attaching the new ribbon to the old ribbon may be carried out. It will be stated that the element 12 is removably mounted on the element 11, prior to the renewing operation. The old ribbon 10 is then secured by the cementitious material 21 to the element 11, such as is shown in Figure 6, and by pressing down on the old ribbon smoothness will be insured. Now one rewinds the right old spool, drawing clean tip and new ribbon carefully first through the right hand slot, second through the ribbon bar where type strikes, third through the left hand slot always keeping the new spool at the level of the spindle until excess ribbon is rewound and then it may be placed in its correct position in the right hand spindle. Next, remove the right hand old ribbon spool by drawing it to the left. It will be added that the old ribbon is also secured by the protecting element 12 to the element 11, such as shown in Figure 6.

After the removal of the right hand old ribbon spool by drawing it to the left, the element 12 is removed and the old ribbon pulled off of element 11. The element 11 is folded back on itself on score 20; this will give one a tab to pull the new ribbon to lock or catch in slot 18 into the hook of the empty spool, which is then inserted on the left hand spindle. That portion of element 11 outwardly of the terminus of the portion 8 from the point 27 (shown in Figure 6) is then

cut-off after which the machine can be used for rewinding the ribbon.

What I claim is:

1. A clean tip for facilitating the renewing of a typewriter ribbon comprising a coupling element formed of a flexible body of tape-like form having means intermediate its ends adapted to connect it against both faces of an end terminal portion of a ribbon, said body having one face formed with an adhesive coating extending from said means to one end and with a longitudinal slot disposed between said means and the other end thereof, and a protecting element formed of a flexible body of tape-like form provided on a portion of one face thereof with an adhesive coating for detachably connecting it to the said face of the other of said bodies and in overlapping relation with respect to a part of said terminal portion, the said adhesive coatings providing means for detachably connecting said elements to an end terminal portion of another typewriter ribbon.

2. A clean tip for facilitating the renewing of a typewriter ribbon comprising in combination the end terminal portion of a typewriter ribbon formed with a transverse slot, a flexible coupling element of tape-like form having oppositely disposed spaced endwise aligned notches transversely thereof correlating with said slot for connecting said element and terminal portion together in overlapping relation, said element having one face formed with an adhesive coating extended from said notches to one end thereof, and a flexible protecting element provided on one face with an adhesive coating for detachably connecting it to the said face of the coupling element and in overlapping relation with respect to a part of said terminal portion, the said adhesive coating providing means for detachably connecting said elements to an end terminal portion of another typewriter ribbon.

3. In a clean tip for facilitating the renewing of a typewriter ribbon, in combination, an end terminal portion of a typewriter ribbon formed with a transverse slot, a flexible coupling element of tape-like form provided between its transverse median and one end with a pair of oppositely disposed endwise aligned spaced notches opening at the lengthwise edges of said element, said element being extended through said slot and having the edges of said notches arranged against opposite faces of said portion, and said element having one of its faces between said notches and said end provided throughout with an adhesive coating.

HESSINA MANN.