May 9, 1950 E. MILLER 2,506,934

PAPER FEEDING MECHANISM FOR TYPEWRITERS

Filed Nov. 18, 1947 2 Sheets-Sheet 1

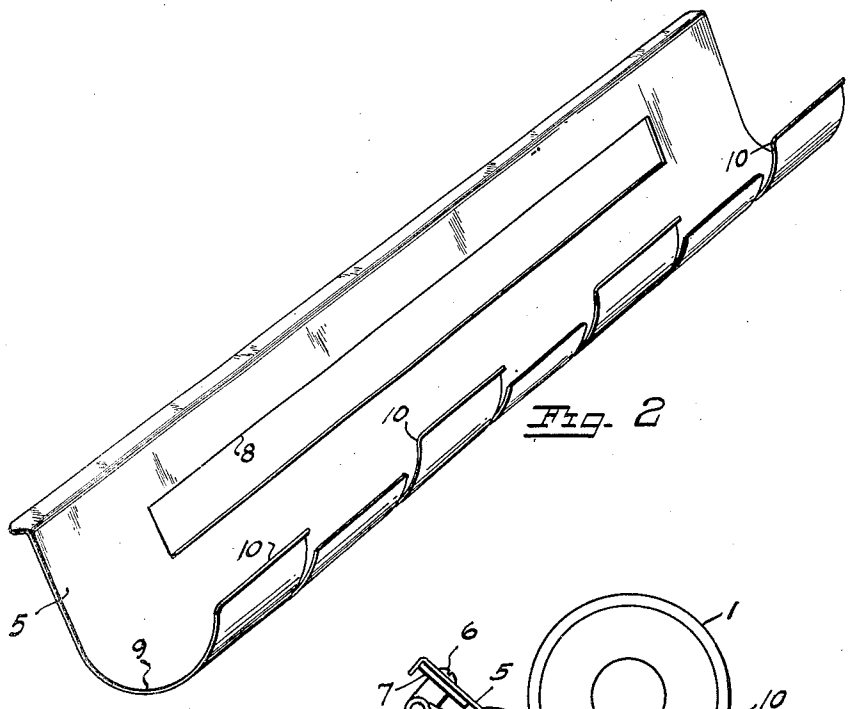


Fig. 2

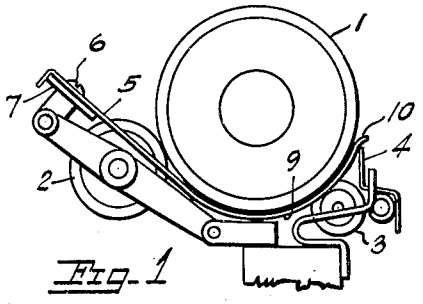


Fig. 1

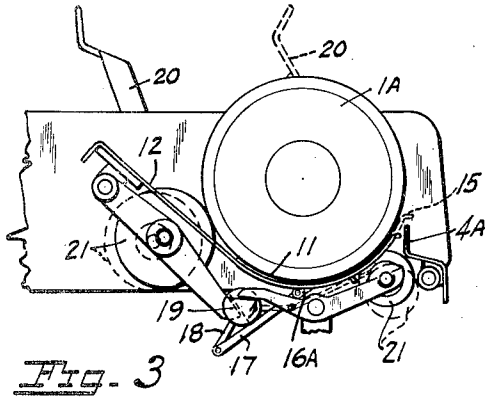


Fig. 3

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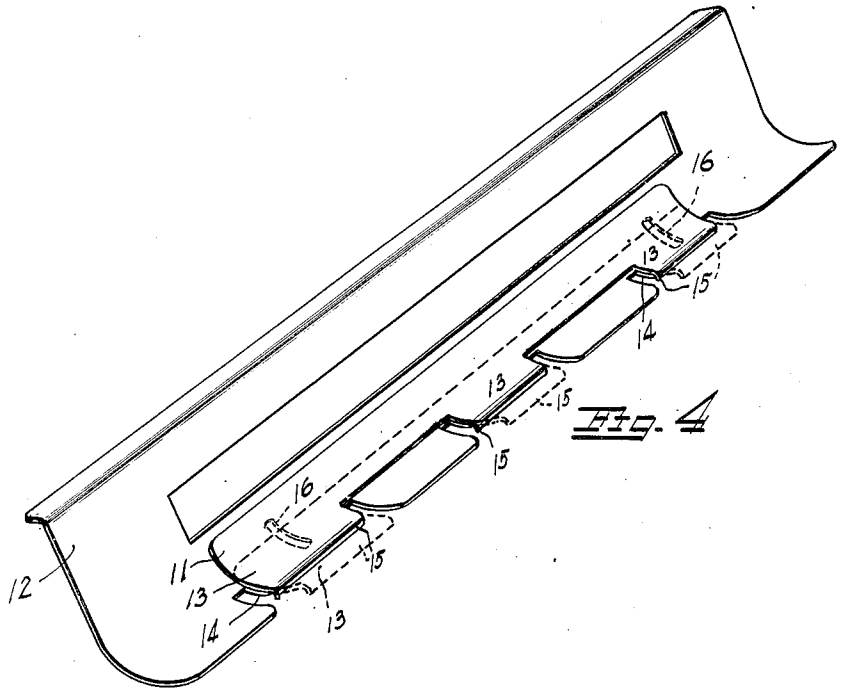


FIG. 4

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UNITED STATES PATENT OFFICE

2,506,934

PAPER FEEDING MECHANISM FOR TYPEWRITERS

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Application November 18, 1947, Serial No. 786,657

1 Claim. (Cl. 197—127)

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This invention relates to improvements in typewriters and more especially to paper feeding mechanisms therefor.

It is one of the principal objects of the invention to provide a paper deflector for conveniently presenting typewriting paper, envelopes, and the like, to the typewriter platen for engagement therewith, from the front side of the platen in addition to the conventional means already provided for presenting paper to the rear of the platen.

Another important object of the invention is the provision of a mechanism of this character which is of simple efficient and inexpensive construction and which may be readily installed on any make of typewriter without interfering with the operating mechanism thereof and without obscuring any of the tabulating scales or other stop indicating graduations arranged forwardly of the platen.

These and other objects will appear as my invention is more fully hereinafter described in the following specification, illustrated in the accompanying drawings and finally pointed out in the appended claim.

In the drawings:

Figure 1 is an end elevation of a conventional typewriter platen and bail feed rollers associated therewith, and showing a paper deflector applied thereto in accordance with my invention.

Figure 2 is a perspective view of a paper deflector made in accordance with my invention.

Figure 3 is an end elevation of a modified form of the invention.

Figure 4 is a perspective view of the paper deflector shown in end elevation in Figure 3.

Referring now more particularly to the drawings.

In Figure 1, reference numeral 1 indicates a typewriter platen having operatively engaged therewith, conventional bail feed rollers 2 and 3.

Attached to the typewriter in advance of the platen is the usual front scale 4 extending the full length of the platen.

My new and improved paper deflector consists of a plate 5 secured as at 6 to the conventional points of attachment 7 on the typewriter. The plate is formed with an elongated slot 8 to provide operating space for one of the bail feed rollers 2 in its rolling contact with the platen. The lower end of the plate 5 is curved upwardly, in conformity with the periphery of the platen as at 9 and its uppermost edge is curved outwardly as at 10 to provide a convenient space to serve as a slot for presenting paper or envelopes for engagement with the platen by means of the other bail feed rollers 3.

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In the modified form of the invention illustrated in Figures 3 and 4, the paper deflector consists of a plate 11 curved in conformity with and placed upon the lower curved portion of the conventional paper deflector 12. The outer edge of the plate 11 is formed with projections 13 which overlie the projections 14 of the plate 12 and are turned downwardly as at 15 at their outer edges as shown. The plate 12 is slotted as at 16 and the plate 11 is provided with projections 16A which extend through the slots and are connected by links 17 with arms 18 secured to a shaft 19. The shaft is rotatable by an actuating lever 20 which is standard equipment on a typewriter for moving the bail feed rollers 21 into and out of rolling contact with the platen 1A. As the lever 20 is moved from the full line to the dotted line position shown in Figure 3 the shaft 19 rotates in a counterclockwise direction as indicated by the arrow applied to it. This motion of the shaft through the media of the arms 18, links 17, and projections 16A moves the plate 11 from its full line position to the dotted line position shown in Figures 3 and 4. Thus by one movement of the lever 20 the bail feed rollers 21 are moved away from the platen 1A to provide space for the free passage of the plate 11 from its retracted to its extended position as shown. In the extended position the curved outer edges 15 of the projections 14 are elevated into position above and slightly in advance of the scale 4A in front of the platen. The projections 14 with their curved edges 15 form a guide for feeding paper to the platen from the front thereof as in the form of the invention shown in Figures 1 and 2.

The invention is particularly useful in dealing with stapled papers and documents which would otherwise have to be detached so that individual sheets could be presented to the rear of the platen in the usual manner. With my invention, individual sheets of bound paper may be engaged with the platen along their lower edges and moved through the typewriter from the bottom toward the top of the sheet.

While I have shown a particular form of embodiment of my invention, I am aware that many minor changes therein will readily suggest themselves to others skilled in the art without departing from the spirit and scope of the invention. Having thus described the invention, what I claim as new and desire to protect by Letters Patent is:

In a typewriter having a platen and a set of

bail feed rollers in rolling contact therewith, a paper deflector for directing paper between the platen and said bail feed rollers, said deflector consisting of a plate disposed rearwardly of the platen and extending the full length thereof and having its lower portion curved in conformity with the periphery of the platen, the outer edge of the plate terminating in projections of irregular lengths, a second curved plate slidably mounted on the first mentioned plate and having one of its edges terminating in spaced projections overlapping certain of the projections in the first mentioned plate and having their outer marginal edges turned outwardly, a rotatable rod operable from the exterior of the typewriter for moving said bail feed rollers out of contact with the platen, and means interconnecting said rod with said second plate for moving the second plate forwardly with respect to the first mentioned plate whereby the projections on said second plate will be positioned outwardly from the projections in the first mentioned plate to form a guide for directing paper to the platen as aforesaid from the forward side of the platen.

ELENOR MILLER.

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