April 10, 1951 W. M. FITZGERALD 2,548,715

PAPER CARRIER FOR TYPEWRITERS

Filed Dec. 20, 1948 2 Sheets-Sheet 1

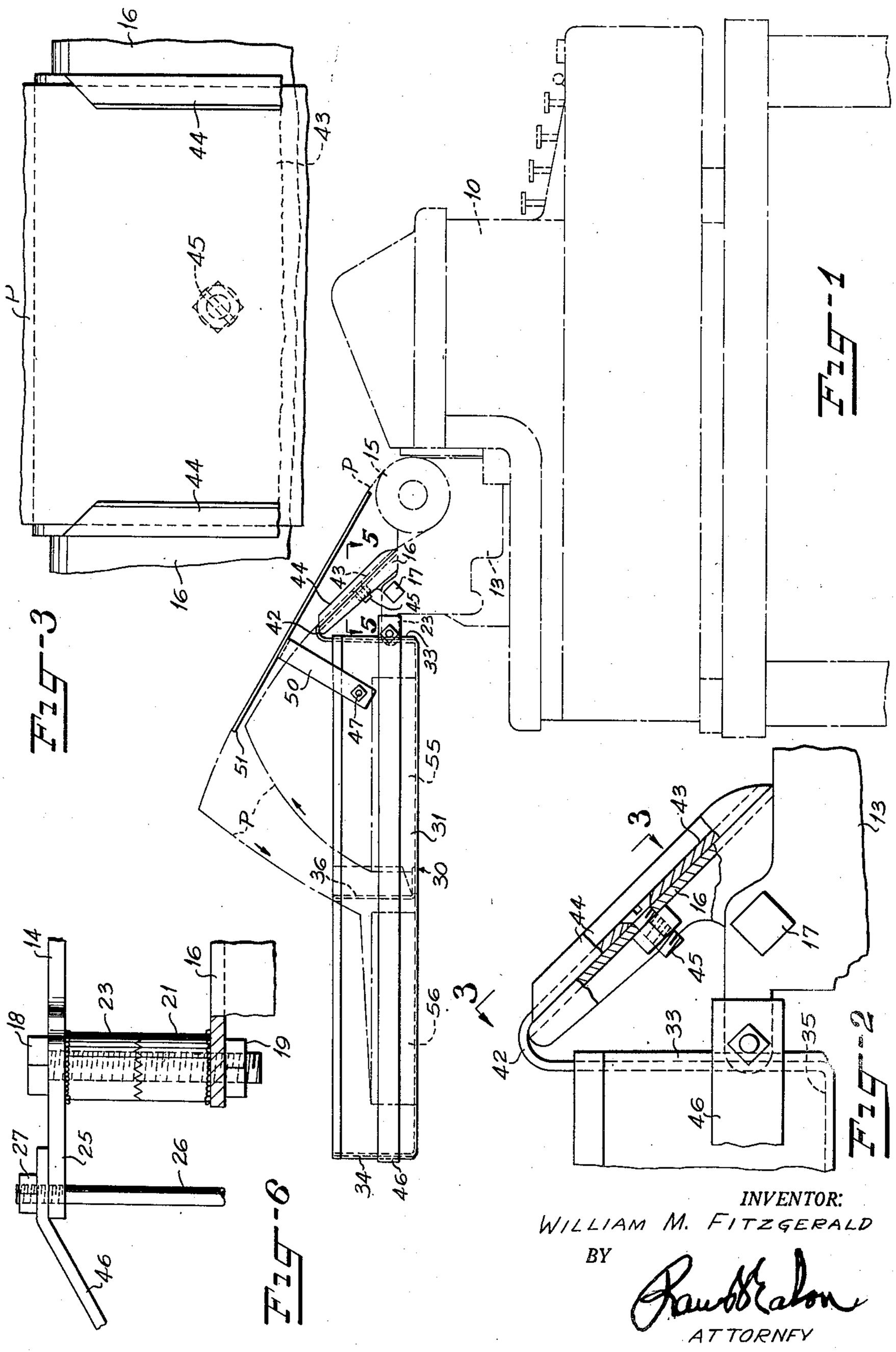

Fig-1

Fig-3

Fig-2

Fig-6

INVENTOR:
WILLIAM M. FITZGERALD
BY
Rawlins Baldwin
ATTORNEY

April 10, 1951 W. M. FITZGERALD 2,548,715

PAPER CARRIER FOR TYPEWRITERS

Filed Dec. 20, 1948 2 Sheets-Sheet 2

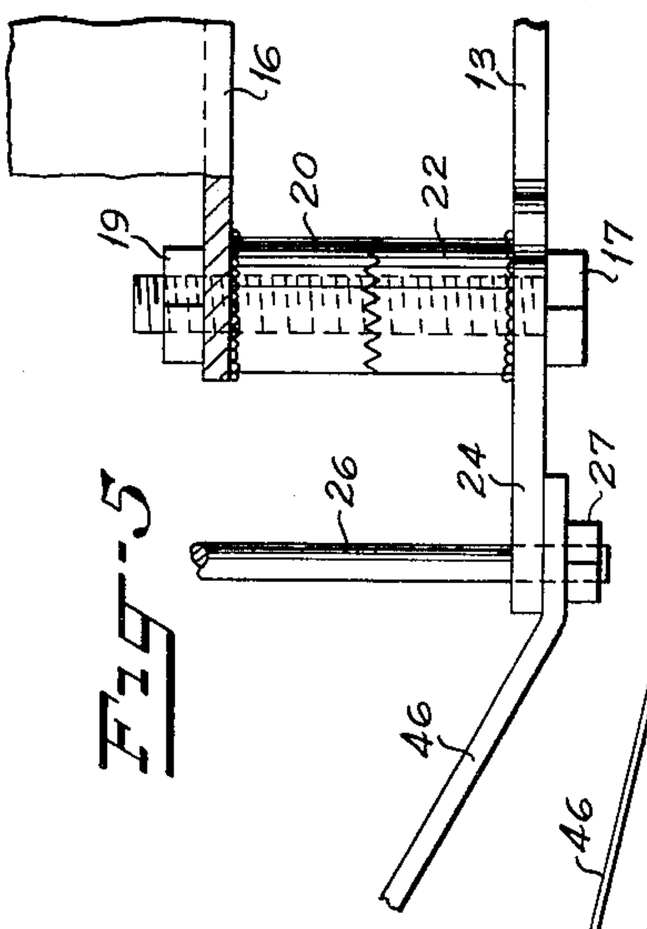

Fig-5

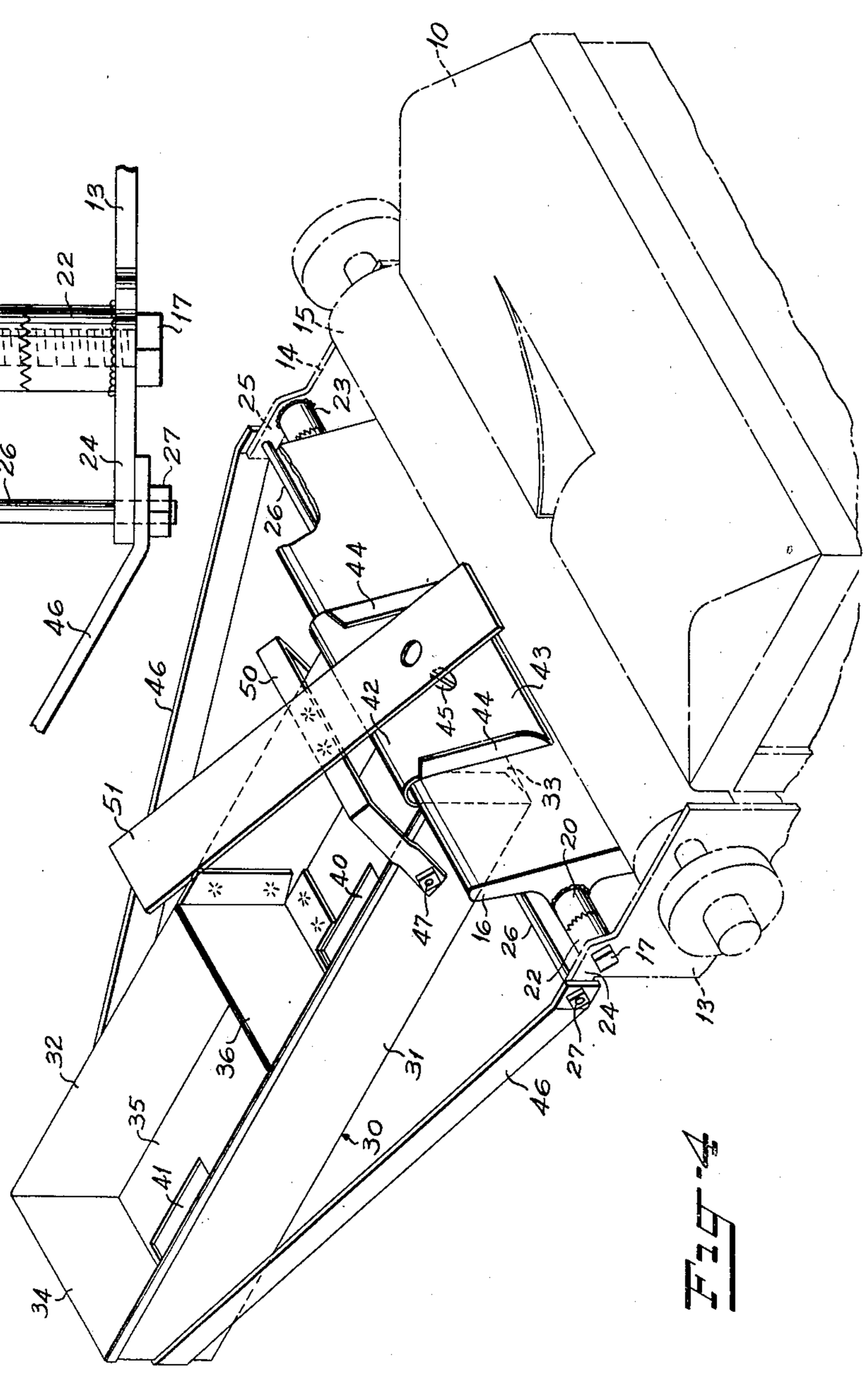

Fig-4

WILLIAM M. FITZGERALD,
INVENTOR.

BY Rowe & Eaton

ATTORNEY

Patented Apr. 10, 1951

2,548,715

UNITED STATES PATENT OFFICE

2,548,715

PAPER CARRIER FOR TYPEWRITERS

William M. Fitzgerald, Sanford, N. C.

Application December 20, 1948, Serial No. 66,225

6 Claims. (Cl. 197—133)

1

This invention relates to improvements in typewriting machines, billing machines and the like, and more especially to a container for holding a supply of inter-connected paper sheets or bills and means for connecting the container to the billing machine adjacent the feed roller or platen of the billing machine.

An object of the invention is to provide a container having a transverse partition therein thus dividing the container into forward and rearward compartments and to provide means for connecting the container to the conventional platen carriage of a billing machine or a typewriter and to provide means for directing interconnected sheets of paper from the forward compartment of the container to the platen of the billing machine and then to provide other means for directing the typed sheets from the platen of the billing machine to the rearward compartment.

Some of the objects of the invention having been stated, other objects will appear as the description proceeds, when taken in connection with the accompanying drawings, in which—

Figure 1 is a side elevation of the apparatus attached to a typewriter or billing machine;

Figure 2 is an enlarged view of the central portion of Figure 1 with parts broken away and parts shown in section;

Figure 3 is a plan view of the structure shown in Figure 2 and is taken substantially along the line 3—3 in Figure 2;

Figure 4 is an isometric view looking at the top of Figure 1 with parts broken away;

Figure 5 is an enlarged plan view with parts in section showing the means for locking the conventional paper guide means of the carriage in a desired attitude for applying the invention thereto and is taken substantially along the line 5—5 in Figure 1;

Figure 6 is a view similar to Figure 5 but showing locking means on the other end of the carriage.

Referring more specifically to the drawings numeral 10 indicates a typewriter, billing machine or the like, having a conventional laterally movable carriage, the opposite ends of which are defined by end plates 13 and 14 which rotatably support a conventional platen 15 and also support the conventional guide member 16. In the conventional machine, the guide 16 is oscillatably supported by having spacer sleeves at each end thereof loosely mounted on bolts 17 and 18, each having a nut 19 thereon, and the guide member 16 is normally urged to a fixed attitude relative to the platen 15 by conventional spring means,

2

not shown. In the present invention, the guide member 16 has collars 20 and 21 welded to the ends thereof, the outer end of each being serrated. Mating collars 22 and 23 are loosely mounted on the bolts 17 and 18 respectively, and their outer ends are welded to the proximate sides of members 13 and 14 to secure the paper guide 16 in a fixed attitude relative to the end members 13 and 14 (Figures 4 and 5).

The end plates 13 and 14 usually have rearwardly extending ears 24 and 25, respectively, integral therewith and which are connected by a transverse rod 26 which extends between the ears and slidably penetrates the ears 24 and 25 and has a nut 27 on each end thereof to secure the rod 26 to the ears 24 and 25.

The numeral 30 broadly designates a container having side walls 31 and 32, end walls 33 and 34, a bottom 35 and a transverse partition 36 which divides the container 30 into forward and rearward compartments. The bottom 35 has openings 40 and 41 therein which communicate with the forward and rearward compartments respectively of the container 30. The front end 33 of the container 30 extends upwardly beyond the upper edge of the side walls 31 and 32 and is bent as at 42 thus forming a downwardly and forwardly sloping portion 43 having upwardly and inwardly bent flange portions 44 at its opposite edges for guiding the paper from the forward compartment beneath the platen 15, as will be later described.

The center of the angularly disposed portion 43 is slidably penetrated by a flush head bolt 45 which also slidably penetrates the guide member 16 thus securing the container 30 to the paper guide 16. It will be noted in Figure 2 that the front end wall 33 bears against the transverse rod 26 to assist in supporting the container 30 in a substantially horizontal position.

A strap member 46 is spot welded to the rear end wall 34 and the opposite ends of the strap member 34 extend forwardly and outwardly against the outer surfaces of ears 24 and 25 and are penetrated by the opposite ends of the rod 26. Nuts 27 on each end of rod 26 confine the forward ends of the strap 46 in position.

Secured by any suitable means, such as by bolts 47, only one of which is shown, to the remote sides of the side walls 31 and 32 and extending upwardly and forwardly at an angle from the same is an inverted substantially U-shaped support 50 to which an angularly disposed guide plate 51 is spot welded intermediate its ends, which serves to guide the paper P after it passes

beneath the platen 15, over the front compartment and into the rear compartment.

It will be noted in Figures 1 and 4 that this guide plate 51 extends to a point closely adjacent the platen 15 and is disposed at an angle substantially tangent to the upper forward circumference of the platen 15. Interconnected manifolded sheets of paper P extend from a suitable batch 55 of interconnected paper sheets placed in the forward compartment of the container 30 and the paper sheets P extend upwardly and pass beneath the inturned portions 44 and are thus guided over the angularly disposed portion 43 of the front wall 33 which directs the paper sheets P to the platen 15 beneath which they pass and are typed in a conventional manner. Now, as the platen 15 is rotated in a step-by-step manner, the paper sheets P pass along the upper surface of the angularly disposed guide member 51 and these paper sheets P, having been transversely creased before being placed in the forward compartment of the container 30, will fall into the rearward compartment of the container 30 substantially as shown in Figure 1 and will thus present a batch of interconnected sheets indicated at 56.

It will be noted that, when so desired, one finger may be inserted in either of the openings 40 or 41 in the bottom 35 of the container 30 for raising the blocks of paper sheets 55 and 56, respectively, for removing the same from the forward or rearward compartments of the container 30.

This apparatus is especially useful in typing long distance telephone statements, but it is to be understood that the width and length of the container 30 and the width of the guide member 43 may be varied to suit various widths and lengths of paper stock.

In the drawings and specification there has been set forth a preferred embodiment of the invention, and although specific terms are employed, they are used in a generic and descriptive sense only, and not for purposes of limitation, the scope of the invention being defined in the claims.

I claim:

1. In combination with a typewriter having a laterally moving carriage provided with a platen and a paper guide, a container secured to and solely supported by the laterally movable carriage for containing an elongated sheet of paper, guiding means on the container extending over the paper guide and secured thereto for directing sheets of paper to the platen, and second guiding means secured to the container and disposed above the first guiding means for directing the paper from the platen back to the container.

2. In combination with a typewriter having a laterally movable carriage thereon provided with a platen and a paper guide, said carriage also having a transverse rod at its rearmost end, a container having an angularly bent portion at its front end which conforms to the angle of the paper guide, means securing the angularly bent portion to the paper guide, whereby the front end of said container will abut against the transverse rod on the carriage, and reinforcing means extending from the rearmost end of said container and secured to the opposite ends of said carriage to thus assist in supporting the container in a substantially horizontal position relative to the typewriter.

3. In combination with a typewriter having a carriage and a rotatable platen and a guide member mounted in the carriage, means for securing the guide member to the carriage in fixed relation thereto, a container, means for securing the container to the guide member, said container having a transverse partition therein thus dividing the container into forward and rearward compartments, one compartment for containing a supply of interconnected sheets of paper and the other compartment for receiving the typed sheets, and an angularly disposed guide plate connected to said container and disposed above the same for directing the interconnected paper sheets from the platen of the typewriter to the rearward compartment.

4. In a structure according to claim 3, said container having openings in its bottom communicating with each of said compartments to facilitate removal of the contents of each compartment.

5. A typewriter having a platen and a paper guide mounted in a carriage having a to and fro movement laterally of the typewriter, a tray having front and rear compartments secured to and solely carried with the carriage, one of said compartments being adapted to contain an elongated sheet of manifolded paper, guiding means secured to the front compartment of the tray and extending over the paper guide and secured thereto for guiding the leading end of the sheet of paper beneath the platen, and the other compartment being adapted to receive the sheet of paper and second guiding means secured to the front compartment and disposed above the first-named guiding means for engaging the lower surface only of the writing material and guiding the same from the platen to the other compartment.

6. In a writing machine having a platen mounted in a carriage having a to and fro movement and said carriage having a guide member therein, a container secured to said guide member, means for securing the guide member in the carriage comprising sleeves integral with opposite ends of the guide member and the remote ends of the sleeves being serrated, said carriage having sleeves secured therein, the proximate ends of said last-named sleeves being serrated for engaging the remote ends of the first-named sleeves, and a bolt penetrating the sleeves at each end of the guide member and the sleeves in the carriage for securing the guide member in a fixed attitude relative to the carriage and thus securing the container in a fixed attitude relative to the carriage.

WILLIAM M. FITZGERALD.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
1,286,820	Sorensen	Dec. 3, 1918
2,216,081	Kniehahn et al.	Sept. 24, 1940