Dec. 19, 1950 H. M. VON DUYKE 2,534,391

PAPER SUPPLY AND RECEIVING TRAY
FOR STENOGRAPHIC TYPEWRITERS
Filed Nov. 5, 1947

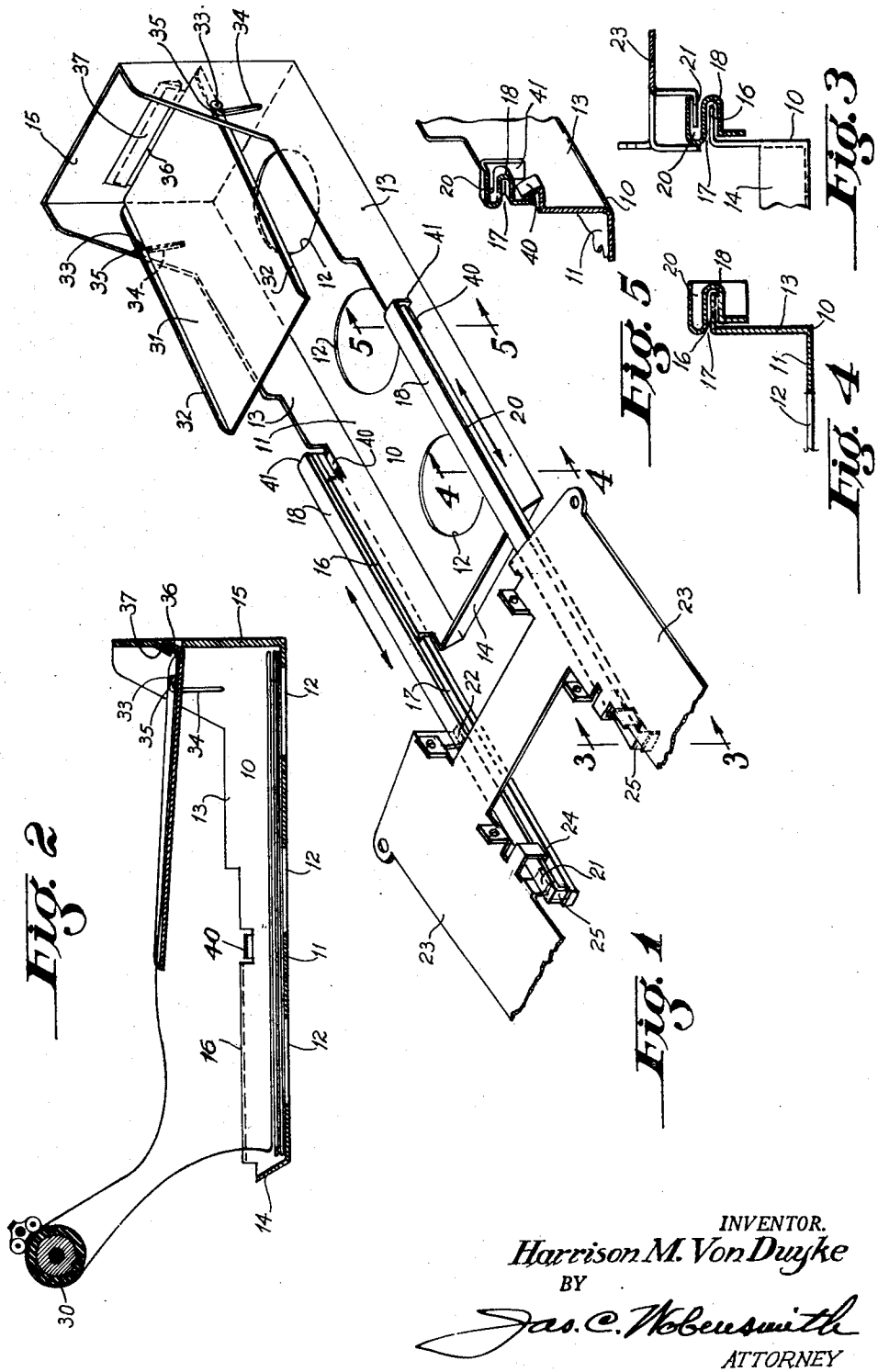


Fig. 1

Fig. 2

Fig. 3

Fig. 4

Fig. 5

INVENTOR.
Harrison M. Von Duyke
BY
Jas. C. Hobensmith
ATTORNEY

Patented Dec. 19, 1950 2,534,391

UNITED STATES PATENT OFFICE

2,534,391

PAPER SUPPLY AND RECEIVING TRAY FOR STENOGRAPHIC TYPEWRITERS

Harrison M. Von Duyke, Wilmington, Del., assignor to New Dictatype Company, Incorporated, Wilmington, Del., a corporation of Delaware

Application November 5, 1947, Serial No. 784,254

7 Claims. (Cl. 197—133)

1

This invention relates to paper supply and receiving trays for stenographic typewriters, and it relates more particularly to an improved form of device adapted to hold a supply of fan folded paper in strip form, so constructed and arranged as to cause the paper strip, after the same has passed over the platen of the typewriter, to be refolded and deposited on an upper shelf of the device.

The principal object of the present invention is to provide an improved form of tray for holding a supply of fan-folded paper, and for receiving the same on an upper shelf thereof after the paper passes over the platen of the typewriter.

A further object of the invention is to provide a device of the character aforesaid, which may be positioned under the operating parts of the typewriter when the same is not in use, but which may be quickly and easily brought to operative position when required.

A further object of the invention is to provide a device of the character aforesaid, which is so constructed and arranged as to insure the proper refolding of the paper after the same has passed over the platen.

The nature and characteristic features of the present invention will be more readily understood from the following description, taken in connection with the accompanying drawing forming part hereof, in which:

Figure 1 is a perspective view of a paper tray embodying the main features of the present invention, the same being shown in a distended or operative position, but without any paper shown therein;

Fig. 2 is a longitudinal sectional view of the tray illustrating the same in operative relationship with the platen of a typewriter;

Fig. 3 is a transverse section taken approximately on the line 3—3 of Fig. 1;

Fig. 4 is a similar view, the section being taken approximately on the line 4—4 of Fig. 1; and

Fig. 5 is a fragmentary perspective view, partly in section taken on the line 5—5 of Fig. 1.

It should, of course, be understood that the description and drawing herein are illustrative merely, and that various modifications and changes may be made in the structure disclosed without departing from the spirit of the invention.

Referring to the drawing, in the particular embodiment of the invention therein shown, 10 is a base tray having a bottom or floor portion 11 in which a plurality of holes 12 are located. The holes 12 not only serve to eliminate the collection of dirt in the tray, but also to assist

2

in removing any portions of the paper pad which may be left in the tray, or which it may be necessary to remove therefrom.

The base tray 10 is provided with side walls 13 and a wall 14, at the front end, which is relatively low, there being no necessity for a high wall at both ends of the tray. The rear end of the tray is provided with a higher wall 15.

The side walls 13 are each provided with wings 16 which are slidably mounted in grooves 17 provided in the side rails 18 on each side of the device.

The side rails 18 are also provided with grooves 20 which are engaged by suitable lugs 21 and 22 provided by bending suitable portions of the base plate 23 of the typewriter machine.

The base plate 23 is also provided with lugs 24, which extend into the grooves 17 of the side rails 18 and serve, in conjunction with the downwardly bent portions 25 at the forward ends of the rails 18, as stops to limit the rearward extension of the tray and its associated parts.

Also, at the rear end of each rail 18, the metal is bent downwardly and over the ends of the grooves 18, as at 41, to serve as a stop for limiting the outward extension of the tray beyond its proper operative location. The stop may be readily obtained by the termination of the wings 16 at the proper locations, but it is preferred to shape the metal of the side walls 13 of the base tray so that the lug-like portions 40 thereof extend around on the outside of the vertical portion of the side rails, and in this manner the parts will be held together without likelihood of disengagement through rough handling of the device.

The shelf for receiving the paper, after it has passed over the platen 30 of the typewriter machine, comprises a plate 31 having relatively low side walls 32. Each of the side walls 32 has a pin 33 extending sidewise near the rear end thereof. The pins 33 extend through slots 34 in the side walls 13 of the base tray 10. The slots 34 are shaped to provide offsets 35 near the top so that when the shelf 31 is brought to the proper operative position, the pins 33 will be seated in the offsets 35.

The shelf 30 is also provided at its rear end with an upwardly projecting portion 36 which is adapted to extend into a slot provided by means of a portion 37 of the rear wall 15 of the base tray 10 being bent inwardly as shown in Figs. 1 and 2 of the drawing.

The foregoing arrangement is such that not only will the shelf 31 be held in the proper position by the coaction of the pins 33 with the slots 34, as well as the coaction of the portion 36 with

the bent portion 37, but said portions 36 and 37 will also serve to form a clamp for gripping the edge of the paper strip at the beginning of the use of a new pad of paper.

Initially, a pad of fan-folded paper strip will rest in the base tray 10, and the base tray as well as the slides 18 will have been pushed under the operating parts of the typewriter.

Whenever it is desired to use the typewriter machine, the base tray 10 will first be pulled rearwardly to the fullest extent, the final position being limited by stops 24 and 25 at the front ends of said rails 18, and the stops 40 and 41 at the rear ends of said rails.

The shelf 31 is now manually brought to the proper operative position with the pins 33 seated in the offsets 35 of the slots 34, and the upwardly extending portion 36 at the rear of shelf 31 is brought into engagement with the bent-in portion 37 of the rear wall 15 of the base tray 10.

The end of the paper is then fed around the platen 30 in the usual manner, after which the front end of the paper is gripped between the parts 36 and 37, the front end of the shelf being raised slightly so that there will be sufficient space to permit the insertion of the end of the paper between the bent-up portion 36 of shelf 31 and the bent-in portion 37 of the rear wall 15. The paper having been so inserted, the front end of the shelf 31 is lowered to operative position, and the paper will then be firmly gripped between the said parts 36 of shelf 31 and 37 of wall 15.

From then on the operation is automatic, and as the paper is fed around the platen from the supply in the tray, it will automatically refold itself on the shelf 31, this action occurring by reason of the initial gripping of the front end of the first sheet of the paper and the overhang of a sufficient portion of the refolded pad to cause the refolding to occur at the front end of the shelf 31.

The device has been found in practice to operate satisfactorily and much better than the devices heretofore available for a similar purpose.

I claim:

1. In combination with the frame of a typewriter machine, a device of the character described comprising a paper holding tray slidably mounted with respect to said frame, and a shelf adapted to be initially in a lowered position within the tray, but adapted to be raised to operative position, means for holding said shelf in operative position, and means associated with said shelf for gripping the starting end of the paper.

2. In combination with the frame of a typewriter machine, a device of the character described comprising a paper holding tray slidably mounted with respect to said frame, and a shelf adapted to be initially in a lowered position within the tray, but adapted to be raised to operative position, and means for holding said shelf in operative position including a portion at the rear of the shelf engaging a complemental portion of the tray.

3. In combination with the frame of a typewriter machine, a device of the character described comprising a pair of rails slidably mounted with respect to said frame, a paper holding tray slidably mounted with respect to said rails, and a shelf adapted to be initially in a lowered position within the tray, but adapted to be raised to an operative position, and means for holding said shelf in operative position including a portion at the rear of the shelf engaging a complemental portion of the tray.

4. In combination with the frame of a typewriter machine, a device of the character described comprising a pair of rails slidably mounted with respect to said frame, a paper holding tray slidably mounted with respect to said rails, said tray comprising a bottom portion, side walls, a low front wall, and a higher rear wall, and a shelf adapted to be initially in a lowered position within the tray, but adapted to be raised to an operative position, and means for holding said shelf in operative position including an upwardly extending portion at the rear of the shelf engaging a complemental portion of the rear wall of the tray, said last named portions also being adapted to grip the starting end of the paper.

5. In combination with the frame of a typewriter machine, a device of the character described comprising a pair of rails slidably mounted with respect to said frame, a paper holding tray mounted with respect to said rails, said tray comprising a bottom portion, side walls, a low front wall, and a higher rear wall, and a shelf adapted to be initially in a lowered position within the tray, but adapted to be raised to an operative position, means for supporting said shelf in such operative position including pins on each side of the shelf extending through suitably shaped slots in the side walls of the tray, and a portion at the rear of the shelf engaging a complemental portion of the rear wall of the tray.

6. In combination with the frame of a typewriter machine, a device of the character described comprising a pair of rails slidably mounted with respect to said frame, a paper holding tray slidably mounted with respect to said rails, said tray comprising a bottom portion, side walls, a low front wall, and a higher rear wall, and a shelf adapted to be initially in a lowered position within the tray, but adapted to be raised to operative position, means for supporting said shelf in such operative position including pins on each side of the shelf extending through suitably shaped slots in the side walls of the tray, and an upwardly extending portion at the rear of the shelf engaging a complemental portion of the rear wall of the tray.

7. In combination with the frame of a typewriter machine, a device of the character described comprising a pair of rails slidably mounted with respect to said frame, a paper holding tray slidably mounted with respect to said rails, said tray comprising a bottom portion, side walls, a low front wall, and a higher rear wall, and a shelf adapted to be initially in a lowered position within the tray, but adapted to be raised to operative position, means for supporting said shelf in such operative position including pins on each side of the shelf extending through suitably shaped slots in the side walls of the tray, and an upwardly extending portion at the rear of the shelf engaging a complemental portion of the rear wall of the tray, said last named portions also being adapted to grip the starting end of the paper.

HARRISON M. VON DUYKE.

REFERENCES CITED

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

UNITED STATES PATENTS

Number	Name	Date
1,252,890	Ebelhare et al.	Jan. 8, 1918
1,841,932	Bourquin	Jan. 19, 1932
1,954,834	Smith	Apr. 17, 1934