

Oct. 19, 1937.

E. D. BOISSELIER

2,096,086

PAPER FEEDING MEANS FOR TOY TYPEWRITERS

Filed June 29, 1936

Fig. 1.

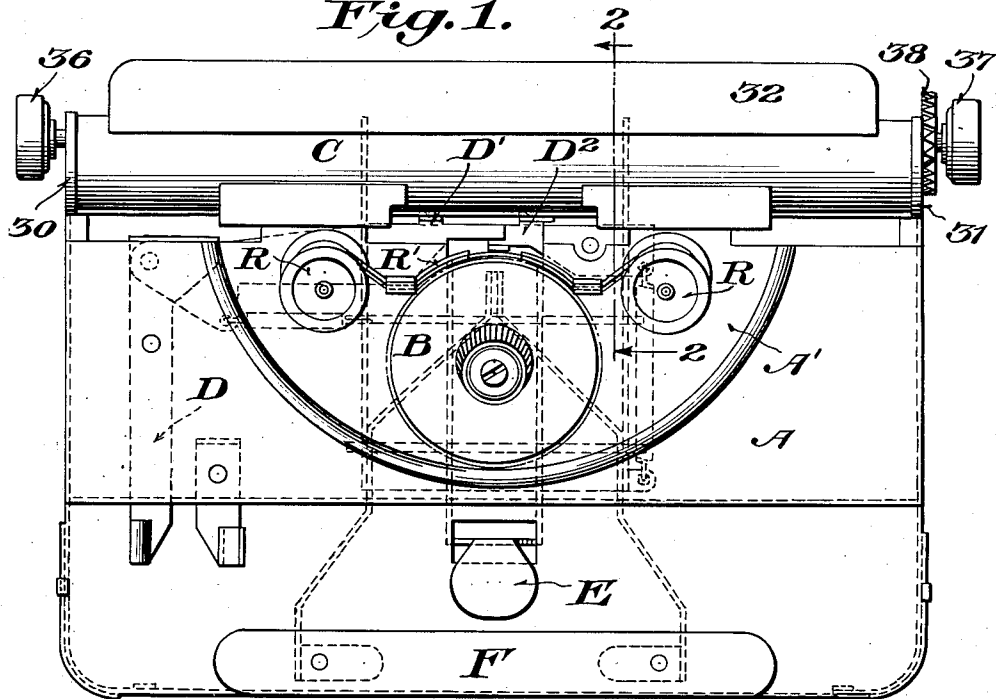


Fig. 2.

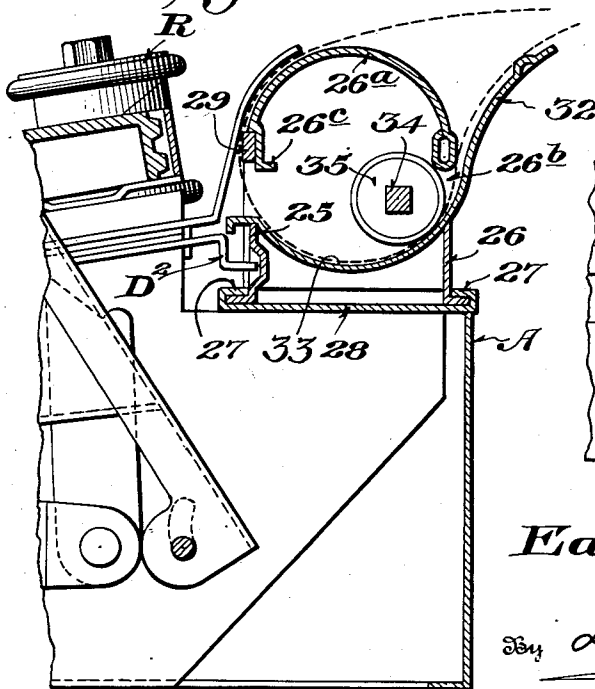
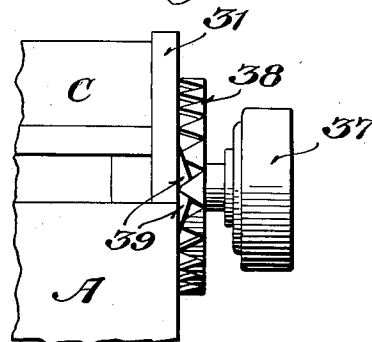


Fig. 3.



Inventor

Earl D. Boisselier,

By

D. P. Welch

Attorney

UNITED STATES PATENT OFFICE

2,096,086

PAPER FEEDING MEANS FOR TOY TYPE-
WRITERS

Earl D. Boisselier, Glen Ellyn, Ill.

Application June 29, 1936, Serial No. 87,990

4 Claims. (Cl. 197—127)

This invention relates to toy typewriters of the type used both for educational purposes and amusement of juveniles.

A primary object of the invention is to provide a novel platen and platen carriage structure which greatly facilitates the manipulation of the paper, while at the same time materially reducing the cost of manufacture of this portion of the toy without sacrificing any of the necessary advantages incident to providing a positive and reliable paper feeding means which also affords an adequate base to back up the paper for absorbing type impact.

A further object of the invention is to provide a novel platen and platen carriage structure of the type referred to in my co-pending application, Serial No. 57,985, filed January 7, 1936, of which the present case is a division.

With the foregoing and other objects in view which will become more fully apparent as the nature of the invention is better understood, the same consists in the novel features of construction, combination, and arrangement of parts hereinafter more fully described, illustrated in the accompanying drawing and defined in the appended claims.

A preferred and practical embodiment of the invention is shown in the accompanying drawing in which:—

Fig. 1 is a top plan view of the improved typewriter construction illustrating the application of the present invention.

Fig. 2 is an enlarged detail vertical sectional view taken on the line 2—2 of Fig. 1.

Fig. 3 is an enlarged detail view of the ratchet means for feeding the writing paper step by step before the impression means.

Similar reference characters designate corresponding parts throughout the several figures of the drawing.

In the embodiment shown in the drawing, the present device includes a casing designated generally as A, having a central raised wall portion A¹ for supporting the ribbon rollers R in such a position that the ribbon R¹ may be pressed rearwardly by the type wheel unit B toward the platen device designated generally as C. For the purpose of effecting the feeding and release of the platen device C, suitable manually controlled lever means D is provided. The latter means is located at one side of the type wheel unit B, as will be apparent from Figure 1, so that it may be manipulated by the left hand of the typist while the type wheel unit B may be operated by the fingers of the typist's right hand. To that

end, the type wheel unit B is controlled by two separate keys E and F respectively for actuating the type wheel unit and effecting the printing of small letters and capital letters, as desired, by the mere act of depressing the selected key.

The platen carriage C is advanced longitudinally step by step by the toothed feeding means D¹ and the holding means D² both of which are controlled by the lever D. When the lever D is moved toward the right (Fig. 1) the platen carriage is advanced the space of one letter. When it is desired to return the carriage to starting position the lever D is moved to the left thereby to release D¹ and D².

Referring now to the platen carriage C, it may be pointed out that the same preferably comprises the front and rear walls 25 and 26 respectively whose lower ends are flanged outwardly to be frictionally guided in the inturned channel portions 27 of a guide member 28 carried by the rear of the casing A. The rear wall 26 may be continued upwardly and bent into substantially arch-shaped formation as indicated at 26a, and is preferably provided at its rear side with a paper receiving slot 26b. The front edge is also bent to provide a reinforced channel-like longitudinal platen member receiving seat 26c. A strip or band of hard rubber or its equivalent 29 is arranged at the front edge of the reinforced seat portion 26a of the carriage element, thereby to provide a platen surface for receiving type impact imposed on the paper overlying the platen. The ends of the front and rear carriage walls 25 and 26 and the arched top wall 26a are closed by the cap members 30 and 31 respectively (Figure 1). Within the housing provided by the construction just described, there is provided a paper feeding and guiding member which has a portion 32 projecting outwardly through the slot 26b to receive and guide the paper into the slot and also has an interior guiding surface 33 for directing the paper upwardly between the top edge of the front wall 25 and the reinforced seat portion 26c which carries the platen strip 29. The end walls 30 and 31 of the carriage have journaled therein a shaft 34 which is located within the housing afforded by the rear and top walls of the carriage. This shaft is provided with rollers 35 which are preferably made of rubber and are intended to frictionally grip a paper sheet (shown in dotted lines) passing over the guide portions 32 and through the opening 26b. The portions of the shaft 34 which project beyond the end caps 30 and 31 are respectively provided with operating knobs 36 and 37. Any suitable means may be

provided to facilitate step-by-step rotation of the feed rollers 35 to obtain proper line spacing of a sheet of paper advanced by said feed rollers. For example, the knob 37 may be provided with a serrated disk 38 having resilient fingers for cooperation with a lug 39 on the cap 31.

Without further description it is thought that the features and advantages of the invention will be readily apparent to those skilled in the art, and it will of course be understood that changes in the form, proportion and minor details of construction may be resorted to, without departing from the spirit of the invention and scope of the appended claims.

I claim:—

1. In a toy typewriter, a casing, typing means carried by said casing, a hollow sheet metal carriage slidable on the casing, said carriage being of substantially inverted U-shape in cross section and having paper inlet and outlet slots in the rear and the front walls thereof, respectively, a platen strip carried by the front wall of said carriage adjacent to the slot in said wall, a paper guiding wall separate from said carriage engaged with the front wall of said carriage walls and extending from said front wall through the slot in the carriage rear wall and upwardly and rearwardly from the carriage rear wall, and a roller within the carriage cooperating with said paper guiding wall to advance a sheet of paper through said slots and over said platen strip.

2. In a toy typewriter, a casing having guide channels, a hollow sheet metal carriage of sub-

stantially inverted U-shape in cross section including an arched top wall and front and rear walls, the latter walls having bottom flanges engaged in the channels of the casing to slidably mount said carriage on said casing, the rear and front walls of said carriage having paper inlet and outlet slots, respectively, a platen strip carried by the front wall above the slot in said front wall, a paper guiding wall separate from the carriage walls engaged with the carriage front wall adjacent to the bottom of the slot in said front wall and extending from said carriage front wall through the carriage to and through the bottom portion of the slot in the carriage rear wall and thence upwardly and rearwardly with respect to said carriage rear wall, a roller within said carriage cooperating with said paper guiding wall to advance a sheet of paper through the slots in the front and rear carriage walls and over said platen strip, and typing means carried by the casing for cooperation with said platen strip.

3. A toy typewriter as set forth in claim 2 in which the rear wall of the carriage is bent upon itself at the top of the slot in said rear wall to reinforce and stiffen said wall at the top of the slot therein.

4. A toy typewriter as set forth in claim 2 in which the paper guiding wall is downwardly curved in cross section between the carriage front and rear walls to form in effect a bottom continuation of the arched top portion of the carriage.

EARL D. BOISSELIER.