

Nov. 26, 1929.

P. KÄPPLER

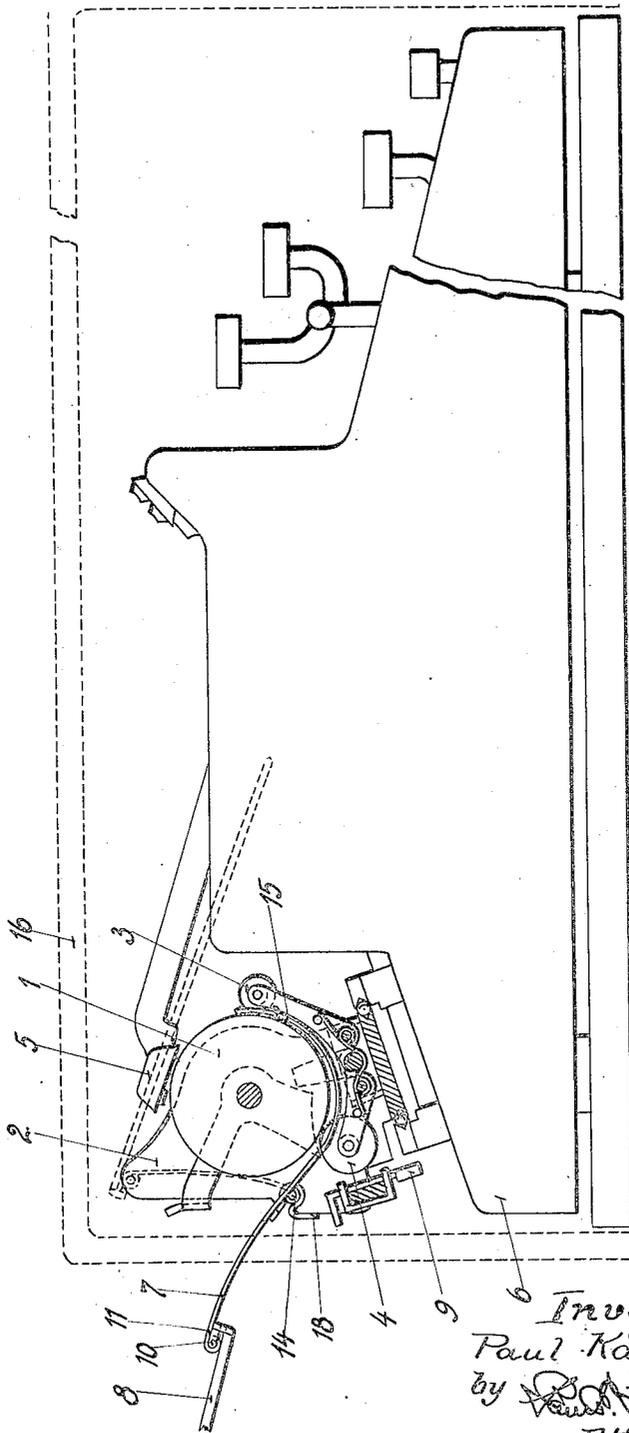
1,737,162

PAPER GUIDING ARRANGEMENT FOR TYPEWRITERS AND LIKE MACHINES

Filed Nov. 4, 1927

2 Sheets-Sheet 1

Fig. 1.



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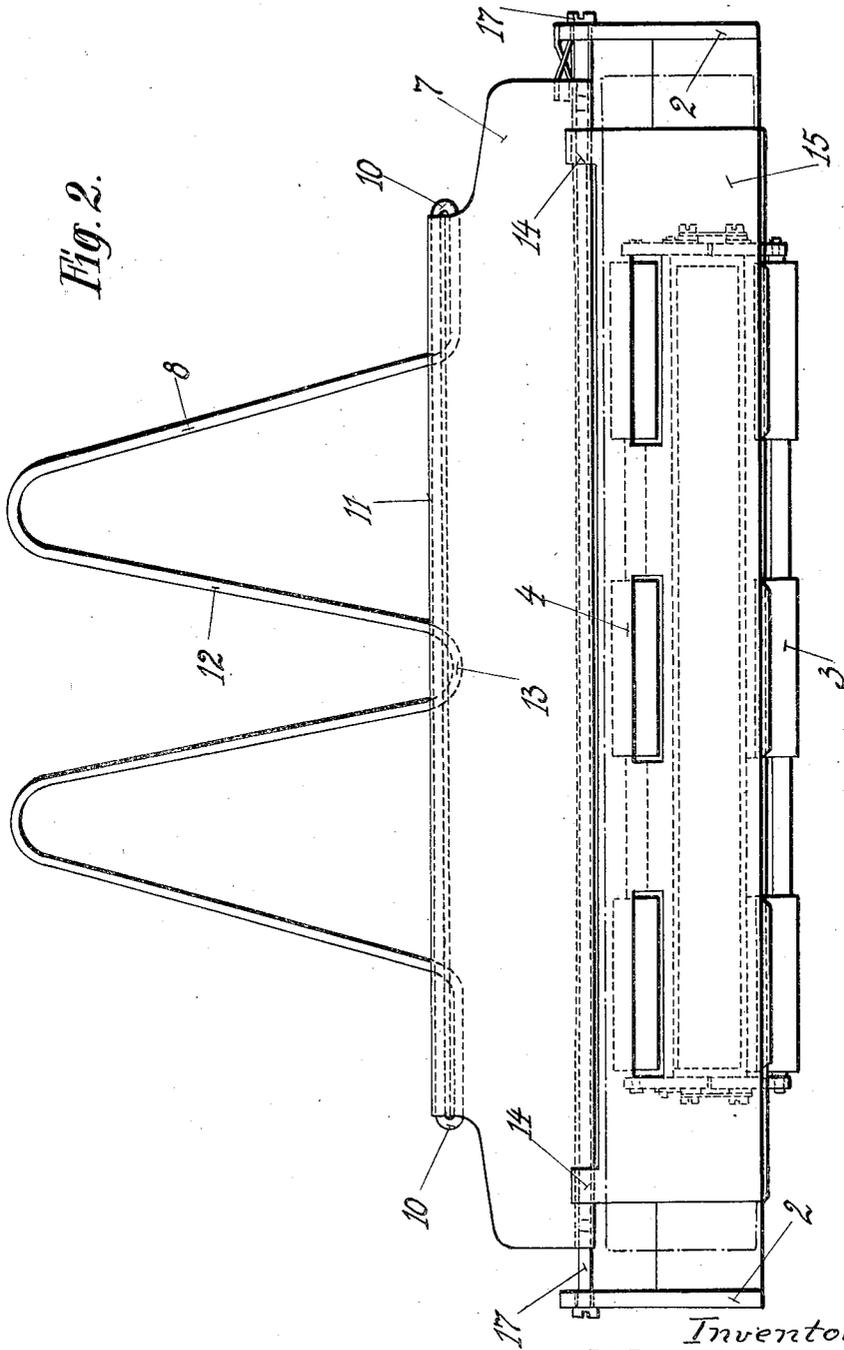


Fig. 2.

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UNITED STATES PATENT OFFICE

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PAPER-GUIDING ARRANGEMENT FOR TYPEWRITERS AND LIKE MACHINES

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This invention relates to paper guiding arrangements for typewriters and like machines. Heretofore it has been usual to guide the paper around the roller platen by means of two abutting plates, one of which is a bent plate shaped to fit the roller platen and usually of thin nickel-plated metal and the other a flat or substantially flat and stronger plate obliquely and upwardly directed and usually lacquered. The flat plate is also partly removable or movably attached. In order to reduce the weight of the flat plate and yet keep the typewritten sheet clearly visible and in order also to prevent the sheet from catching in the shift mechanism and margin stops of the typewriter, the oblique flat plate is usually extended by the addition of a so called paper holder of light construction.

In portable typewriters or like machines intended to be contained in a case of the smallest possible dimensions, the above described paper guiding arrangements cannot be employed, because this materially increases the dimensions of the machine. It is usual therefore in portable typewriters and the like to omit the flat plate completely and to attach a paper holder, which can be erected into position for use, to the bent guide plate. Apart from the fact that such typewriters look incomplete and require several knobs for manipulation, the typewritten sheets are not sufficiently supported and guided.

The present invention has for its object to overcome the aforesaid drawbacks and for this purpose the three parts forming the paper guide, viz the curved guide plate, the paper rest and the paper holder are so jointed or interconnected together by means of hinges or pivots situated below the path of the paper that the paper rest and holder can be folded in unison around the roller platen. By this arrangement an efficient paper guiding arrangement is provided without the machine requiring to be of larger dimensions than usual. Moreover according to the invention the paper holder which is formed of wire is provided with a central inward bend or tongue, whose tip fits beneath the outer edge of the paper rest and thus provides for

efficiently guiding narrow sheets without any obstruction.

In order that the invention may be more clearly understood, reference is hereinafter made to the accompanying drawings illustrating a preferred construction of my invention and whereon:

Fig. 1 is a fragmentary side view of the machine partly in section and showing the case dotted.

Fig. 2 is a plan view of the paper guide.

The roller platen 1 and the paper feed rollers 3 and 4 are mounted as usual on the carriage 2. The type 5 is of the front stroke type, that is to say, it strikes the roller platen 1 at a point in front of the central vertical plane of the platen. It will be apparent that the rear edge of the carriage 2 and machine frame 6 would determine the rear limits of the typewriter in the absence of any protruding paper guiding arrangement.

In the construction shown the paper rest 7 is interconnected with the usual curved guide plate 15 by hinges 14 and is pivoted to the carriage 2 by means of end journals 17. The paper holder 8 is pivotally mounted by its doubled ends 10 in a beading 11 formed at the outer edge of the paper rest 7. By this construction the paper holder 8 and paper rest 7 can be folded into the position indicated in dotted lines in Fig. 1 so that they do not in the least or only to a very slight extent protrude beyond the rear limit of the typewriter formed by the carriage 2, the margin stops 9 and the machine frame 6. The carrying case 16 may then be given the shape likewise shown in dotted lines.

It will of course be understood that the journal pins 17 might be replaced by continuous hinge pins. The paper rest 7 in the construction shown is connected with a stop 18 which is mounted on the journal pin 17 and has a projection which rests against the carriage 2 when said paper rest is in operative position.

The arrangement herein described is also very conveniently adapted for the manipulation of the margin stops 9, these being readily accessible after folding the paper holder 8 and paper rest 7 over the roller platen 1.

The paper holder 8 is preferably of substantially M-shape as shown in Fig. 2 so that it is of a springy nature and its bent ends 10 can be readily inserted in the beading 11 of the paper rest 7 by allowing the ends 10 to spring apart. Similarly, by contracting the wire paper holder 8, its ends 10 can be readily withdrawn from the beading 11 of the paper rest 7. The paper holder 8 is usually retained in the machine and is merely moved into the dotted position when the typewriter is not in use or is contained in its transport case.

It is inadvisable to construct the paper holder 8 of sheet metal and to hinge it to the paper rest 7 on account of the increased weight which this would involve. It is therefore usual to construct the paper holder of wire or light rods, but such holders as heretofore constructed have usually either been insufficient to properly support wide paper sheets or obstructed the proper passage of narrow sheets or post cards. The wire paper holder 8 illustrated in the drawings obviates both these faults inasmuch as it extends almost over the whole breadth of the paper sheet and is also provided with a central support or tongue 12 for narrow sheets or post cards, the tip 13 of the central tongue resting behind the beading 11 of the paper rest 7, so as to prevent any obstruction to the gliding of the sheet or card from the paper rest 7 to the paper holder 8.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is:—

1. Paper guiding means for typewriters and like machines having a roller platen comprising, a curved paper guide plate, a paper rest hinged to the guide plate so as to be foldable against the rear of the platen and a paper holder hinged to the paper rest so as to be foldable downwardly and forwardly over the platen.

2. In a paper guiding means for typewriting and similar machines, the combination with a machine frame and its carriage, a platen roller mounted on the carriage, and a paper guide plate, of a paper rest and a paper holder normally lying in the rear of the platen and in an upwardly and rearwardly inclined plane, said rest being jointed at its front to the rear of the guide plate and said holder being jointed at its front to the rear of the rest, thereby adapting said rest and holder to be folded in a forward direction respectively against and over upon the platen.

3. In a paper guiding means for typewriting and similar machines, the combination with a machine frame and its carriage, a platen roller mounted on the carriage, and a paper guide plate of a paper rest having its forward edge journaled at its ends to the carriage and hinged between its ends to the rear

edge of the guide plate so as to adapt said rest to fold against the rear of the platen, and a paper holder hinged at its front edge to the rear edge of the rest so as to be foldable forwardly over the top of the platen.

4. In a paper guiding means for typewriting and similar machines, the combination with a machine frame and its carriage, a platen roller mounted on the carriage, and a paper guide plate, of a paper rest having its forward edge journaled at its ends to the carriage and hinged between its ends to the rear edge of the guide plate so as to adapt said rest to fold against the rear of the platen, a stop upon the carriage to limit the downward and rearward movement of the rest, and a paper holder hinged at its front edge to the rear edge of the rest so as to be foldable forwardly over the top of the platen.

5. In a paper guiding means for typewriting and similar machines, the combination with a machine frame and its carriage, a platen roller mounted on the carriage, and a paper guide plate, of a paper rest hinged at its forward edge to the paper guide plate so as to be foldable against the rear of the platen and provided at its rear edge with a hollow bead, and a paper holder provided with resilient elements having hinge members engaging said bead and provided with a stop member intermediate said hinge members and engageable beneath said bead.

6. In paper feeding means for typewriting and similar machines, a frame, a carriage mounted below the level of the top of the frame and adjacent to but in advance of the rear end of the frame, a platen on the carriage, a paper guide plate on the carriage, a paper rest hinged at its front edge to the rear edge of the guide plate so as to be foldable forwardly to a substantially vertical position between the plane of the rear end of the frame and the platen, and a paper holder hinged at its front edge to the rear edge of the paper rest so as to be foldable, when said paper rest is folded, downwardly and substantially within the horizontal plane of the highest portion of the machine frame.

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