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O. AEBI

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MARGIN STOP POSITION INDICATOR FOR TYPEWRITERS

Filed July 22, 1949

2 SHEETS—SHEET 1

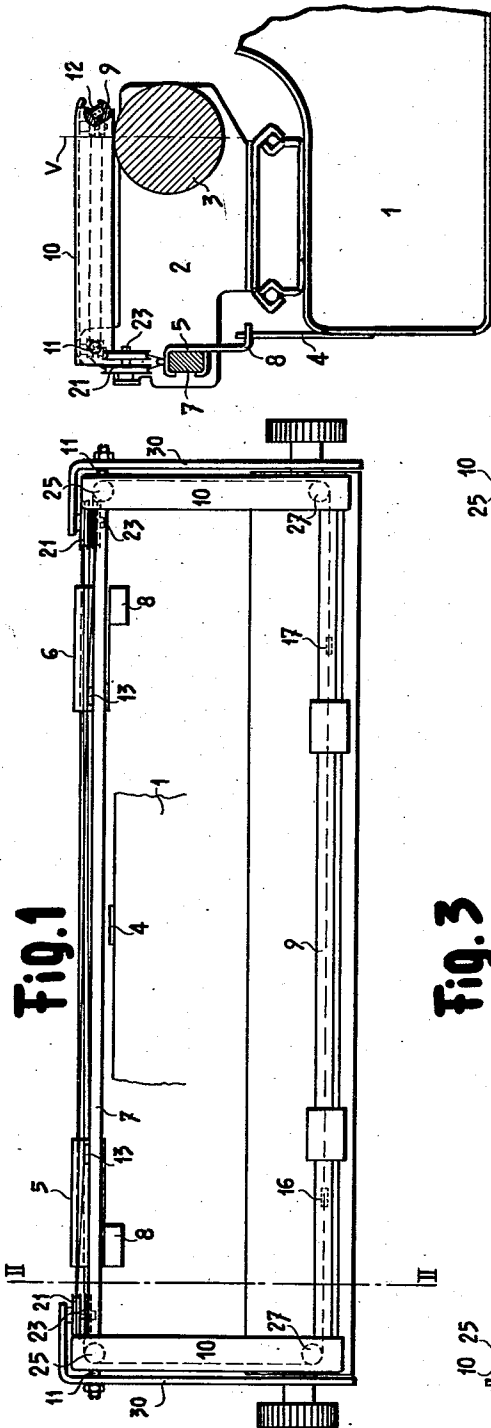


Fig. 1

Fig. 2

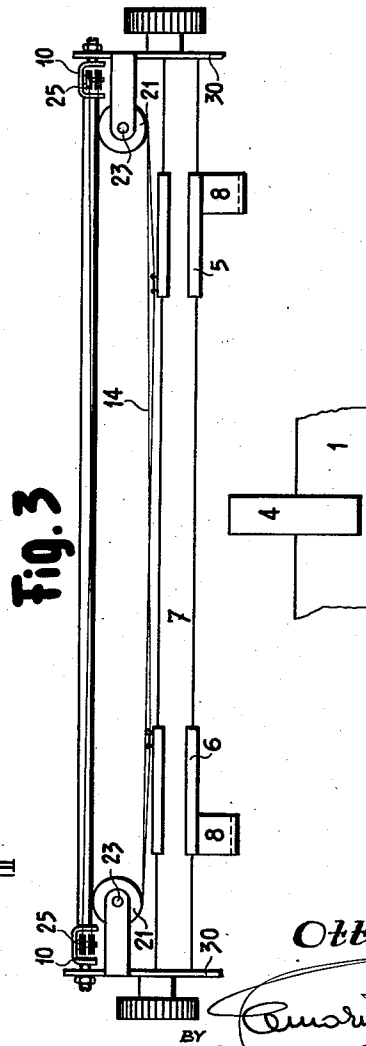


Fig. 3

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2 SHEETS—SHEET 2

Fig. 6

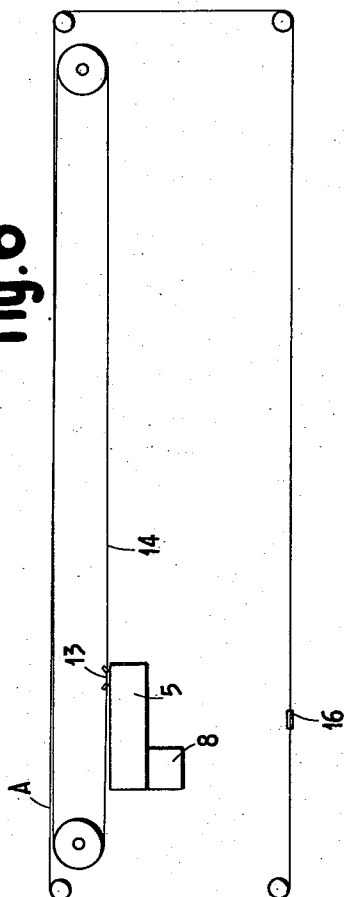


Fig. 4

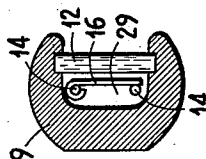
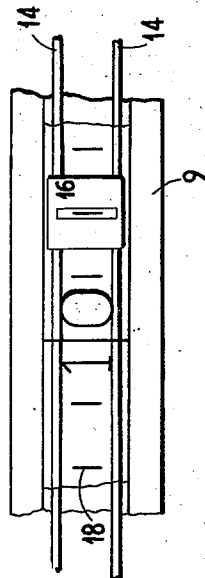


Fig. 5



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MARGIN STOP POSITION INDICATOR FOR
TYPEWRITERS

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6 Claims. (Cl. 197—63)

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Typewriters are generally provided with margin regulating devices defining the length of the line of typing and its position relatively to a sheet of paper placed on the platen. In the majority of modern machines these margin regulating devices are generally provided with a central stop secured to the framework of the typewriter, and two movable margin stops movable along a guide carried by the carriage of the machine and located behind the platen. The margin stops, co-operating with the central stationary stop, determine the amplitudes of movement of the carriage to the right and left. Thus the margin stops define the length of the line of typing and its position relatively to the paper placed on the platen.

The margin regulating devices are generally completed by a device for locking the typing set in operation by one of the margin stops coming into contact with the central stop. Further, a release device, actuated by a key, enables the limits fixed by the margin stops to be passed without modifying the position of the latter. The setting of the margin stops may be effected either by direct manual actuation of the margin stops, or (in the case of automatic margin stops) by the action of the springs after placing the carriage in position and releasing the margin stop by an actuating key, for movement in one direction, or by releasing the margin stop and then actuating it by moving the carriage in the other direction.

The marking of the position of each margin stop is effected by moving the carriage up to its two extreme positions or by marking their positions by means of a graduated scale facing them and of which the graduations correspond with another graduated scale placed in proximity to the line of typing.

These various marker devices are in current use at the present time, but have the disadvantage of not enabling the user to take into consideration easily the positions occupied by the margin stops because these are placed behind the platen. Some manufacturers have endeavoured to obviate this disadvantage by placing the margin stop guide in front of the line of typing. However, this solution involves constructional arrangements which destroy the satisfactory visibility of the typing and the appearance of the typewriter.

The present invention has for its object a typewriter provided with margin stops adjustable in position along a guide arranged behind the platen and defining the stroke of the carriage carrying

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the platen and which tend to obviate the disadvantage referred to by the fact that each margin stop is connected mechanically to a member indicating its position, movable relatively to a graduated scale arranged parallel to the platen and in front of a vertical plane passing through the axis of the platen and in such a manner as to be visible simultaneously with the line of typing.

One form of construction of the typewriter is shown diagrammatically and by way of example in the accompanying drawings, wherein:

Fig. 1 is a plan view of the carriage carrying the platen and a portion of the framework of the typewriter; only the members necessary for the clear understanding of the invention are shown.

Fig. 2 is a partial view in section of the typewriter on the line II—II of Fig. 1.

Fig. 3 is a partial rear view of the typewriter.

Figs. 4 and 5 are detail views to a larger scale.

Fig. 6 is a diagram of the path traversed by the connecting member connecting one of the margin stops to its indicating member.

According to the accompanying drawing, the typewriter is provided with a framework 1 and a movable carriage 2, carrying the platen 3. The framework is provided with a central stationary stop 4, co-operating with stop members 8 secured to margin stops 5 and 6, adjustable in position along a guide 7 carried by the carriage. The latter is also provided with a scale bar 9, carried by two arms 10, each pivoting on a pivot 11 secured in each of the lateral walls 30 of the carriage. The bar 9 and the axis of the pivots 11 are located parallel to the platen 3.

The margin stops are each formed by a part sliding on the guide 7 and carrying, on the one hand, a finger 8, co-operating with the stationary stop 4 and, on the other hand, a driving member 13 attached to an endless cable 14 (Fig. 6) passing over pulleys and through the interior of the scale bar. Each cable 14 carries an indicating member 16, 17 respectively, sliding in the interior of the said bar 9 and opposite a graduated scale 18 carried by the latter (Fig. 5). The graduated scale is thus arranged parallel to the platen 3 in front of a vertical plane *v* passing through the axis of the platen.

Each endless cable 14 passes on the one hand over pulleys 21, rotating on spindles 23 secured to a part of the carriage and on the other hand over pulleys 25 and 27 carried by the arms 10. The bar 9 (Figs. 4 and 5) has a groove 29 provided over its entire length and open on the face of the bar located opposite the typist. The groove is closed by a glass 12 or other trans-

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parent closure member. The glass carries the scale 18 of which the divisions correspond to the pitch of typing and indicate the positions of the indicating members corresponding with each position of the margin stops.

The operation of the device described is as follows:

When the typist moves one or other of the margin stops 5 and 6, this entrains in a movement its indicating member 16 or 17, of which the position is easily capable of being marked on the graduations 18 and indicates to the typist the position occupied by the margin stop.

On examination of the drawing, it will be seen readily that by reason of the fact that the axis of the pivots 11 coincides practically with the runs A of each circuit (Fig. 6) no derailment can take place, even when actuating the margin stops in the raised position of the scale 9.

Finally the arms 10 preferably have in cross section a section in the form of a square enabling the cables 14 to be disassembled as shown in the accompanying drawings.

A form of construction has been described above by way of example and with reference to the accompanying drawing, but it will be understood that all the members and devices described may be replaced directly by their equivalents.

I claim:

1. In a typewriter, a margin regulating device, comprising, a frame, a carriage slidable on the frame and including a platen, a stop on the frame, a pair of margin stops guided on the carriage and each carrying a finger for cooperation with the stop, a scale bar mounted on the carriage parallel to the platen and visible simultaneously with the line of typing and formed with a groove, and a pair of indicators each connected with a margin stop and movable over the bar in the groove thereof.

2. The device according to claim 1, wherein the connection between each margin stop and its indicator is flexible.

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3. The device according to claim 1, wherein the scale bar groove is closed by a member of transparent material.

4. In a typewriter, a margin regulating device, comprising, a frame, a carriage slidable on the frame and including a platen, a stop on the frame, a pair of margin stops guided on the carriage and each carrying a finger for cooperation with the stop, a scale bar mounted on the carriage parallel to the platen and visible simultaneously with the line of typing and formed with a groove, and a pair of indicators each flexibly connected with a margin stop and movable over the bar in the groove thereof.

5. The device according to claim 4 and also comprising a transparent member closing the groove and carrying graduations forming the scale.

6. In a typewriter, a margin regulating device, comprising, a frame, a carriage slidable on the frame and including a platen, a stop on the frame, a pair of margin stops guided on the carriage and each carrying a finger for cooperation with the stop, a scale bar mounted on the carriage parallel to the platen and visible simultaneously with the line of typing and formed with a groove, a transparent member closing the groove and carrying graduations and forming the scale, and a pair of indicators each connected with a margin stop and movable over the bar in the groove thereof.

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