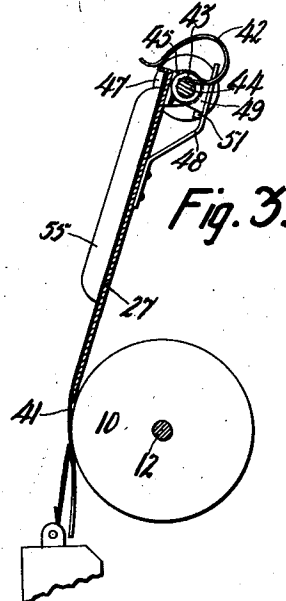
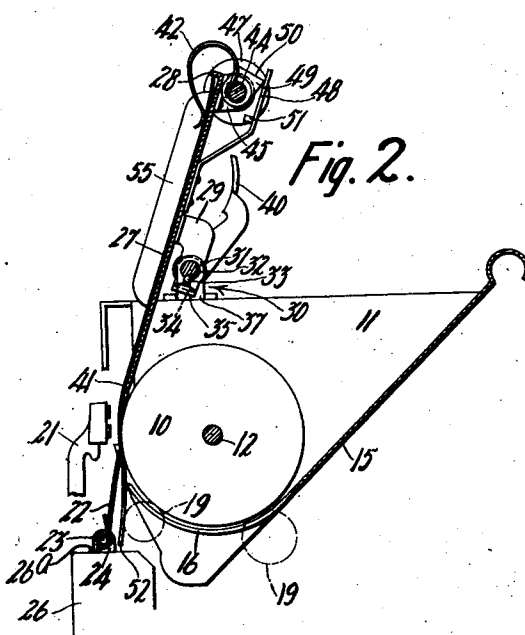
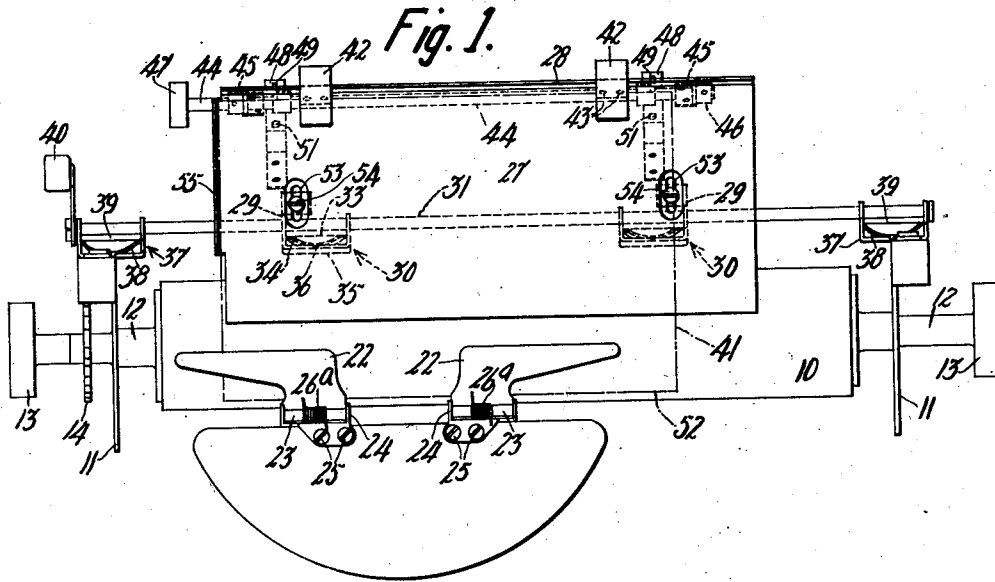


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J. A. B. SMITH
TYPEWRITING MACHINE
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TYPEWRITING MACHINE.

Application filed September 22, 1923. Serial No. 664,171.

The invention relates to work-positioning tables for typewriting machines; that is to say, to tables with leading-edge gages thereon for automatically determining a setting for a work-piece, with respect to the printing line on the platen, such that typewriting on the work-piece will take place at a given line-position thereon. In certain kinds of work, a one-line entry is all that is required. The operator has merely to set his leading-end gage according to the line-position for the entries; and then, one after another, to insert the work-pieces to the gage, making the typing thereon, and withdraw the work-pieces.

The bills or cards are conveniently inserted at the front of the machine down over the work-table and then set for writing at the desired line-position by bringing the upper edge of the work-piece to the gage.

In the patent granted to me No. 1,378,627, a short bill is placed upon the collating table and thrust up beneath spring clips and against the gage, the bottom edge of the bill reaching just below the printing point of the platen, and the clips holding the work-sheet on the table during the typing operation. In some cases, however, it is desired not to write the single line so close to the bottom edge of the sheet, and hence the sheet must be positioned with considerable of its lower portion below the printing line. This lower portion may hang down from the platen in front of the usual paper-guide, instead of being tucked in between a paper-guide and the platen. Accordingly, the leading-edge gage is so placed that when the work-sheet is set up against the gage, its lower end hangs down in front of the platen, as far as there is room for it. According to the present invention, such a sheet is inserted bottom end first down behind the wing-scales, which usually extend in front of the platen, and then the top edge of the sheet is set up against its gage; and the sheet-holding clips are mounted so that they can be cast off from the table temporarily, so that the operator may merely stick the sheet down between the platen and the wing-scales, and then press its upper end back against the collating table and set it up against the gage, and then swing the clips over again

onto the sheet to hold it during typing operations. This overcomes awkwardness, delay and trouble which would otherwise occur in inserting the long sheet in the machine described in said patent, owing to the sheet being in the form of a card, and not readily bent nor readily caught under the clips in said patent.

The work-piece can simply have its lower edge passed beneath the paper-fingers by downward movement while held in upright position, and then the upper portion is simply pressed against the upright supporting table with the upper edge brought against the top marginal stop against the gage, the spring fingers having been previously thrown back by the operating member clear of the table that will permit such manipulation of the sheet. This can be done without bending the work-sheet and the spring fingers are returned to press the sheet against the collating or supporting plate.

Other features and advantages will hereinafter appear.

In the accompanying drawings,

Figure 1 is a front view of the platen-carriage and certain associated parts of a typewriting machine embodying the present invention; the clips being shown in effective position.

Figure 2 is a view, in side elevation, partly cross-sectional, of the mechanism shown in Figure 1; the clips again being shown in effective position.

Figure 3 is a view similar to Figure 2, except that the platen-frame is not shown, and that the clips are in their released or ineffective position.

The platen 10 is journaled in the end walls 11 of the platen-carriage by means of a shaft 12, and is rotatable by the usual hand-knobs 13 and line-space mechanism, of which the ratchet-wheel 14 on the shaft 12 forms a part. On the carriage is also the usual paper-table 15, having an apron-extension 16, the latter being provided with openings to accommodate the pressure-rolls 19. The printing-position at the front of the platen is indicated by a type-bar 21; wing-scales 22 being shown at either side of the printing-position. The wing-scales are on shafts 23, journaled in brackets 24,

secured by screws 25 to a segment-plate 26 on the main frame; and springs 26^a press the wing-scales toward the platen.

At the front of the platen-frame, above the platen, is a gage-table 27; the gage being formed by an offset 28 on the upper edge thereof. The gage-table is supported by arms 29, forming part of U-shaped brackets 30, carried on a shaft 31. The shaft 31 passes through both legs of each of the U-shaped brackets 30, and is grooved longitudinally as shown at 32, Figure 2, to receive longitudinal-disposed cylindrical pins 33, which latter are held in the groove 32 by means of leaf-springs 34; the leaf-springs 34 being seated on the cross-pieces 35 of the brackets and being held thereto by ears or detents 36, turned from the edges of the springs over the side edges of the brackets. It follows that, when the shaft 31 is rocked, the brackets 30 and consequently the gage-table 27 is rocked with it. The shaft 31 is supported on the side plates 11 of the platen-frame by means of brackets 37, which may be in every respect similar to the brackets 30; the brackets 37 being, however, fixed against movement on the platen-frame. Springs 38, similar to the springs 34, hold cylindrical pins 39 in the slot 32 of the shaft 31, so that the shaft is held against accidental rotary movement with the gage-table. By means of a finger-piece 40, fast to the shaft 31, however, the shaft may be rotated against the action of the springs 38; the latter yielding when force is applied to the finger 40, so that the lock-pins 39 ride out of the slot 32. By means of the finger-piece 40, the gage-table may therefore, when it is so desired, be thrown back and away from the platen to an ineffective position.

The table 27 has a pair of vertical slots 53 in it, and is held to the brackets 30 by means of headed set-screws 54, which pass through the slots into the brackets. The table may therefore be adjusted up and down on the brackets, so as to set the gage in position for typing at a desired line-position on the work-pieces, and so as to true the same with respect to the printing-line. A forward offset flange 55 on the left-hand edge of the table serves as a side-margin gage for the work-piece.

For holding a work-piece 41 in gaged position on the table 27, a pair of spring-clips 42 is provided. These clips are secured by rivets 43 to a rock-shaft 44, journaled in brackets 45, riveted to the rear of the table 27 at the upper edge thereof. Collars 46, secured to the shaft 44, hold the latter against longitudinal displacement. The shaft may be turned by means of a finger-wheel 47, on the left-hand end thereof, to throw the clips between Figure 2 and Figure 3 position. It will be noted that the clips

are bent or curled so that, in their effective, Figure 2, position, they rise from the rear of the table over the upper edge thereof, and thence turn inward to the front face of the table below the gage 28. For holding the clips 42 yieldingly against the front face of the table, when in effective position, a pair of spring-fingers 48 is provided, one for each clip. These fingers are secured to the rear of the table and are offset rearwardly behind blocks 49, fast to the shaft 44. Forward pressure of the spring-finger 48 against the block 49 tends to turn the shaft 44 in such direction as to press the clips to the front of the table, in the Figure 2 position. On the other hand, when the finger-piece 47 is turned to rotate the shaft 44, so as to throw the clips 42 to ineffective, Figure 3, position, the blocks 49 present a square face 50 to the springs 48; and the latter, by pressure against such square faces, hold the clips in Figure 3 position against accidental displacement. Stop-pins 51 on the springs 48 determine the Figure 3 position of the clips and prevent overthrow of the same.

It will be noted that, in the construction such as shown in Figure 2, downward movement of a work-piece on front insertion of the same over the table 27 is limited by the position of the segment-plate 26; that is to say, when the lower edge 52 of the work-piece strikes the upper surface of the plate 26, further downward movement of the work-piece, without folding or bending is prevented. Such limitation of the downward movement of the work-piece to a printing-position necessarily limits the area on the work-piece on which typing may be effected. If the clips 42, therefore, were permanently in Figure 2 position, so that the upper edge of the work-piece had first to be placed below the clips, and then brought up, without bending, under the same to the gage, the length of the work-piece would not be greater than the distance from the lower edge of the clips to the top of the plate 26. Where, however, as in the present structure, the clips are movable to a position above the gage, the work-piece may be set with its upper edge directly under the gage in the first instance, and the length of the work-piece may be a length determined by the distance between the gage and the top of the plate 26. The structure herein disclosed, therefore, permits of the convenient use of longer work-pieces, and allows for a wider typing area on the work-pieces, than would be the case if the clips were permanently in Figure 2 position.

It will be, of course, understood that the work-pieces may be of any length provided the lower edges thereof are turned onto the apron and guided rearward around the platen. It will also be understood that the

present structure does not exclude the insertion of work-pieces downward around the platen, from the rear to the front thereof, if such use of the machine is desired. For work in which an entry on a single line is all that is required, the work is more expeditiously handled by front insertion of the work-pieces; the work-pieces being held, with but a slight bend therein, by means of the wing-scales 22, below the printing-line, and by means of the clips 42, at their upper margins, above the printing-line.

Variations may be resorted to within the scope of the invention, and portions of the improvements may be used without others.

Having thus described my invention, I claim:

1. In a typewriting machine, a platen, a gage-table, a top marginal work-piece gage on the gage-table, a paper-finger mounted behind the table, extending around the upper edge of the table to the front face of the table, below the gage, and means whereby the finger may be moved into and out of engagement with the front face of the table.

2. In a typewriting machine, a platen, a gage-table, a top marginal work-piece gage on the gage-table, a paper-finger mounted behind the table, extending around the upper edge of the table to the front face of the table, below the gage, and means whereby the finger may be moved away from the front face of the table to a position above the gage.

3. In a typewriting machine, a platen, a gage-table, a top marginal work-piece gage on the gage-table, a paper-finger mounted behind the table, extending around the upper edge of the table to the front face of the table, below the gage, a rock-shaft journaled at the rear of the table, means for securing the paper-finger to the rock-shaft, and means for turning the rock-shaft to move the finger into and out of engagement with the front face of the table.

4. In a typewriting machine, a platen, a gage-table, a top marginal work-piece gage on the gage-table, a paper-finger mounted behind the table, extending around the upper edge of the table to the front face of the table, below the gage, a rock-shaft journaled at the rear of the table, means for securing the paper-finger to the rock-shaft, means for turning the rock-shaft to move the finger into and out of engagement with the front face of the table, and means for moving the rock-shaft to throw the finger from the table to a position above the gage.

5. In a typewriting machine, a platen, a gage-table, a top marginal work-piece gage on the gage-table, a paper-finger mounted behind the table, extending around the upper edge of the table to the front face of the table, below the gage, a rock-shaft journaled in brackets on the rear upper edge of the

table, means for securing the paper-finger to the rock-shaft, and means for turning the rock-shaft to move the finger into and out of engagement with the front face of the table.

6. In a typewriting machine, a platen, a gage-table, a top marginal work-piece gage on the gage-table, a paper-finger mounted behind the table, extending around the upper edge of the table to the front face of the table, below the gage, a rock-shaft journaled at the rear of the table, means for securing the paper-finger to the rock-shaft, means for turning the rock-shaft to move the finger into and out of engagement with the front face of the table, means for moving the rock-shaft to throw the finger from the table to a position above the gage, a block or finger on the rock-shaft, and a spring-finger secured to the rear of the table and bearing against the block or finger on the rock-shaft to exert a rotary stress on the rock-shaft for resiliently holding the paper-finger to the front of the table.

7. In a typewriting machine, a platen, a gage-table, a top marginal work-piece gage on the gage-table, a paper-finger mounted behind the table, extending around the upper edge of the table to the front face of the table, below the gage, a rock-shaft journaled at the rear of the table, means for securing the paper-finger to the rock-shaft, means for turning the rock-shaft to move the finger into and out of engagement with the front face of the table, means for moving the rock-shaft to throw the finger from the table to a position above the gage, a block or finger on the rock-shaft, and a spring-finger secured to the rear of the table and bearing against the block or finger on the rock-shaft to exert a rotary stress on the rock-shaft for resiliently holding the paper-finger to the front of the table, the block or finger on the rock-shaft being so shaped that, when the paper-finger is in ineffective position, the pressure of the spring-finger against such block or finger on the rock-shaft will hold the paper-finger in ineffective position against accidental displacement.

8. In a typewriting machine, a platen, a gage-table, a top marginal work-piece gage on the gage-table, a paper-finger mounted behind the table, extending around the upper edge of the table to the front face of the table, below the gage, a rock-shaft journaled at the rear of the table, means for securing the paper-finger to the rock-shaft, means for turning the rock-shaft to move the finger into and out of engagement with the front face of the table, means for moving the rock-shaft to throw the finger from the table to a position above the gage, a block or finger on the rock-shaft, a spring-finger secured to the rear of the table and bearing against the block or finger on the rock-shaft

to exert a rotary stress on the rock-shaft for against accidental displacement, and a stop resiliently holding the paper-finger to the on the spring-finger for determining the in- 10
front of the table, the block or finger on the effective position of the paper-finger, and
rock-shaft being so shaped that, when the for preventing overthrow of the rock-shaft
5 paper-finger is in ineffectual position, the on movement of the paper-finger to ineffectual
pressure of the spring-finger against such position.
block or finger on the rock-shaft will hold
the paper-finger in ineffectual position

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