

May 26, 1942.

H. L. PITMAN

2,284,017

TYPEWRITING MACHINE

Filed April 19, 1939

3 Sheets-Sheet 1

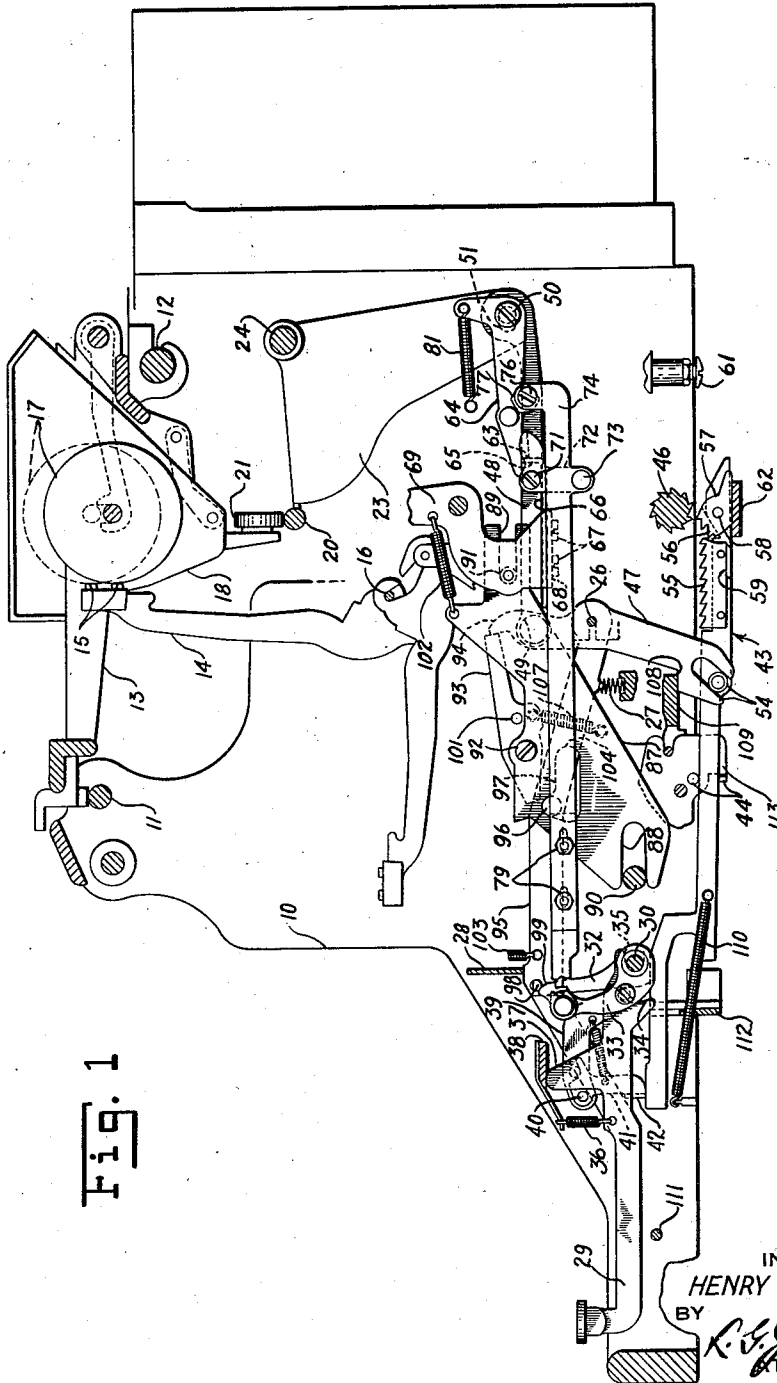


Fig. 1

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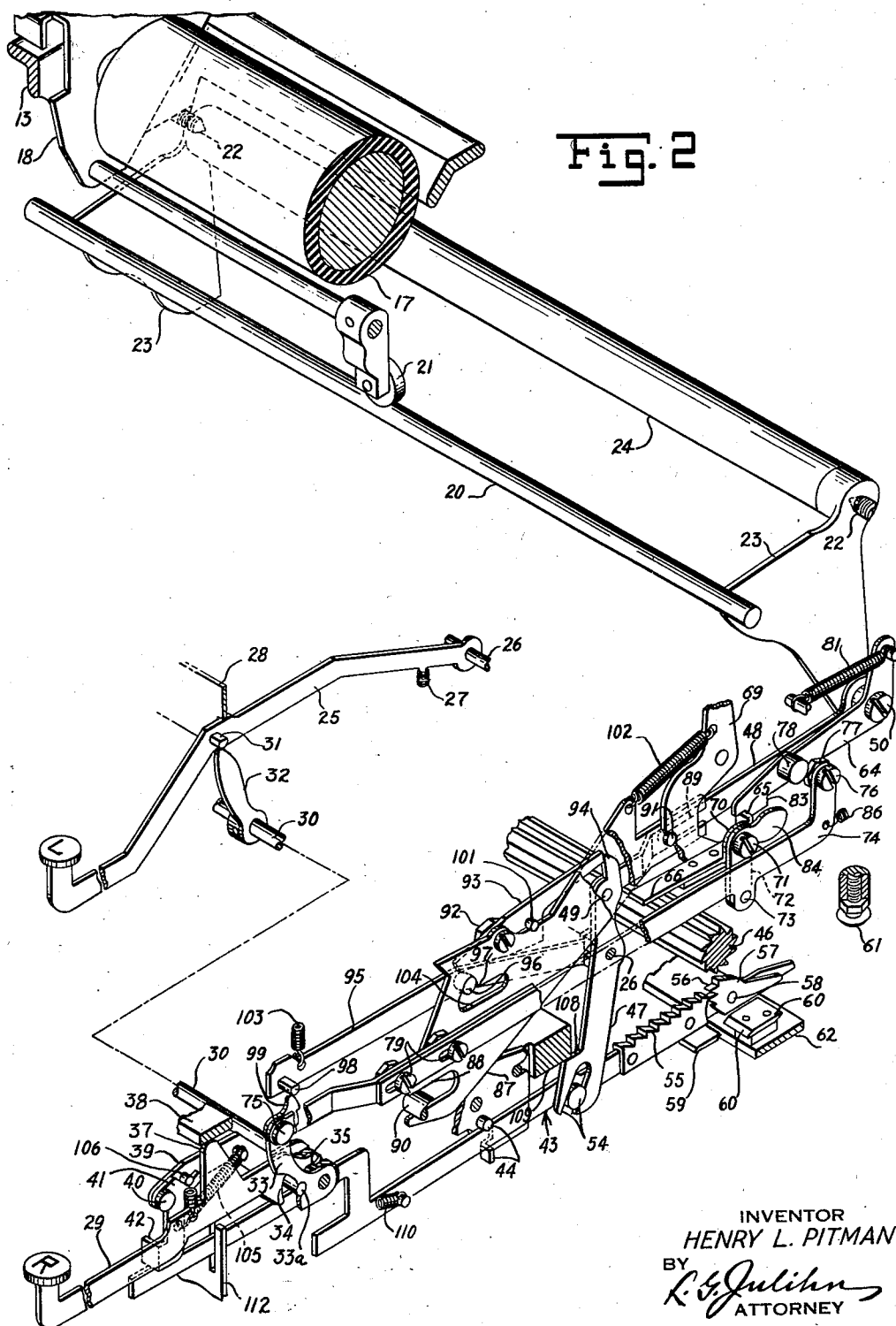
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TYPEWRITING MACHINE

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3 Sheets-Sheet 2



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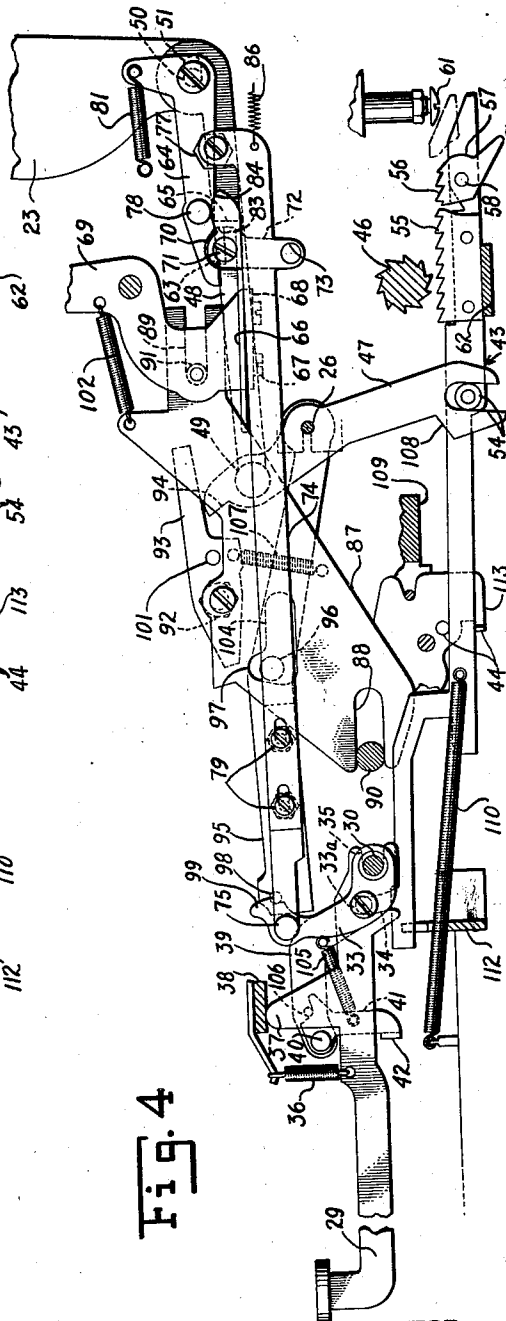
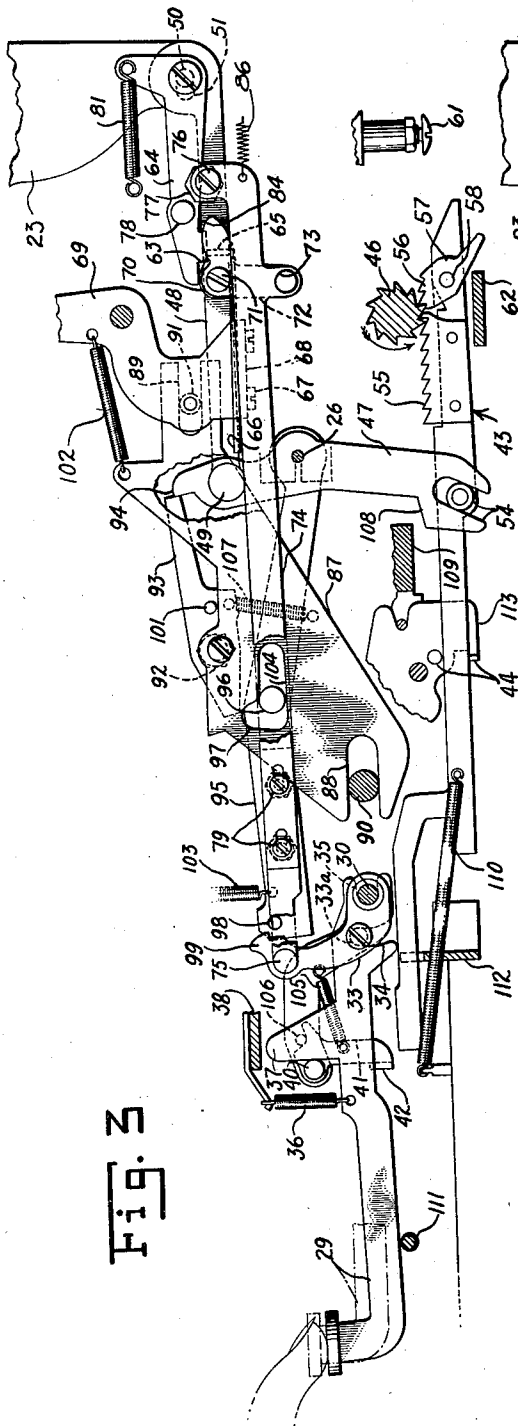
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TYPEWRITING MACHINE

Filed April 19, 1939

3 Sheets-Sheet 3



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2,284,017

TYPEWRITING MACHINE

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Application April 19, 1939, Serial No. 268,767

17 Claims. (Cl. 197—73)

This invention relates to typewriting machines and more particularly to their case shifting mechanisms.

An object of the invention is, generally, to provide improved means responsive to operation of the case shift key for effecting the case shifts.

The case shift may be transient as for merely typing the initial letter of a word in capital or upper case. The case shift may also be sustained, by bringing case-shift-lock mechanism into play, as for typing successive characters in upper case or capitals.

Another object of the invention is to enable the typist to control at will, conveniently and expeditiously, a transient case shift or a sustained case shift. To this end the invention relieves the typist of the necessity of operating or selecting secondary or alternative keys such as a case-shift-lock key and, as is necessary in certain prior machines, a case-shift-release key.

The determination of transient or sustained case shift may be accomplished, as will hereinafter appear, by a simple difference in manipulations of one and the same case shift key. Thus, a depression and immediately following release of the case-shift key by the typist's finger may determine a sustained case shift. The same key may be redepressed and immediately released for ending the sustained case shift and effecting return to lower case condition.

For a transient case shift the typist may operate this same shift key as is done ordinarily, that is, by depressing the case shift key preparatory to typing one upper case character and then releasing the key to effect return to lower case condition when said upper case character has been typed.

The invention employs a power drive as distinguished from manual effort for moving the case shiftable part, which in the present instance is a case shiftable platen frame.

Another feature of the invention is in a correlation of the power drive with the before mentioned features of simple case shift key operation.

Still another object of the invention is to carry it out by simple, inexpensive and reliably operating mechanisms and, moreover, to make such mechanisms readily applicable to existing designs of typewriting machines.

A typewriter usually has two case shift keys on opposite sides of the keyboard so that either the left hand or right hand of the typist may effect the case shift. The invention deals with having either one of such two keys operative as above

described for determining a transient or sustained case shift.

The foregoing and other objects, features and advantages will be apparent from the following description of an illustrative operative embodiment of the invention.

In the accompanying drawings:

Figure 1 is a cross sectional side view of a typewriting machine including mechanisms embodying the invention.

Figure 2 is a perspective of the mechanisms embodying the invention, some of the parts being broken away and sectioned to bring out details clearly.

Figure 3 is a partly sectioned side elevation showing the relative positions of the parts during a case shifting operation when the key is held depressed.

Figure 4 is a partly sectioned side elevation showing the relative positions of the parts consequent to operation and release of the key for a sustained case shift.

The typing machine framework 10 has front and rear rails 11, 12 for a typing carriage 13. Type bars 14 having lower and upper case type 15 are actuatable about a fulcrum 16 to print against a revoluble platen 17 journaled in a frame 18. Said frame 18 is movable up and down in the typing carriage 13 for case shifting the platen relatively to the types 15. A shift rail 20, engaging a roller 21 on the platen frame 18, is movable up and down in that it is part of a frame rockable about pivots 22 in the framework and comprising side plates 23 and a tie rod 24.

Left hand and right hand case shift keys L and R, respectively, are on opposite sides of the keyboard. The key L is on a shift lever 25 that has a fulcrum rod 26 in the framework and that is normally upheld by a spring 27 against the top of its guide slot in a front comb plate 28. The shift lever 25 has a pin 31 to engage a cam arm 32 fixed to a transverse rock shaft 30. The key R is on a shaft lever 29 connected to said rock shaft 30 which is journaled in the framework.

An arm 33 fixed to said rock shaft 30 has a wrist pin 33^a engaging a downwardly open slot 34 of the right shift lever 29. Said lever 29 also has a horizontal rearwardly open slot 35 for embracing the rock shaft 30. The relatively transverse slots 34, 35 provide for articulating the right shift lever 29 to the pin 33^a and the rock shaft 30. The top of the slot 34 and the wrist pin 33^a form a one-way connection by which depression of the right shift lever 29 from normal position rocks the shaft 30 counter-clockwise. A spring 36

urges the right shift lever 29 to normal position in which a nose 37 of said lever 29 abuts a stop 38 on the framework.

The rock shaft 30 may be rocked counter-clockwise by depressing the left shift lever 25, the latter having a one-way connection, comprising the pin 31 and cam arm 32, to said shaft 30.

An arm 39 is fixed to said rock shaft 30 and has pivoted thereto at 40 a dog 41 having a lateral tab 42 for engaging a coupling bar or rack 43 to rock the latter counter-clockwise of Figure 1 about a fulcrum support 44 on the framework. The coupling rack 43 is thus rocked for engaging its teeth with a continuously power driven toothed snatch roll 46 journaled in the framework. The resulting stroke of the coupling rack or actuator 43 toward the rear of the machine rocks the shift rail frame 20, 23, 24 clockwise of Figure 1 to lift the platen frame 18 to place the platen 17 in the dotted line or upper case position, Figure 1. The connections for this purpose include a lever 47 and a pull link 48 pivoted thereto at 49. Said pull link 48 has a lost motion connection, comprising a stud 50 on the plate 23 and a slot 51 in the link, to said frame 20, 23, 24. Said lever 47 is fulcrumed on the rod 26 in the framework and has a pin-and-cam slot connection 54 to the coupling rack 43.

The coupling rack 43 is driven in an extensive stroke by the snatch roll 46 so that rotation of the latter through a comparatively large angle is taken to effect at moderate speed the power case shift of the frame 20, 23, 24, and the platen frame 18. Said coupling rack 43, therefore, has an extensive series of rack teeth 55 that supplement the leading teeth 56 which are embodied in a piece 57 pivoted to the coupling rack at 58.

The feature of thus extensively driving a coupling rack such as 43 is disclosed in my co-pending application Serial No. 266,995 filed April 10, 1939. Said co-pending application also discloses devices for keeping the coupling rack in engagement with the snatch roll during its extensive rearward drive. Said devices include a fin 59 on the coupling rack and a keeper plate 60 over which the fin 59 rides in the rearward snatch-roll-driven stroke of the coupling rack. Said fin will have passed beyond said plate 60 by the time the coupling rack 43 is deflected downwardly by engagement with an abutment 61 on the framework to disconnect said coupling rack from the snatch roll at the end of the case shift. In the return stroke of the coupling rack 43, its fin 59 may pass under said plate 60 which is supported upon a cross bar 62 of the framework.

For latching the shift rail frame 20, 23, 24 in lower case position, a shoulder 63 of a detent or latch arm 64 pivoted on the stud 50 of said frame engages an upstanding detent lip 65 of a bar 66 adjustably secured by screws 67 upon a platform 68 bent laterally from a bracket 69 which may be supported by the framework. An upturned ear 70 of said bar 66 has pivoted thereto at 71 a pendent link 72 to which is pivoted at 73 a link 74 extending forwardly to a pivotal connection 75 with the arm 33 that is fast on the rock shaft 30.

A hexagon nut eccentrically and, therefore, adjustably secured to the link 74 by a screw 76 constitutes a cam 77 that is normally immediately behind a companion stud or roller 78 on the latch arm 64 so that forward movement of said link 74 immediately raises said latch arm 64 clear of the lip 65 to release the shift rail frame

20, 23, 24. The counter-clockwise rocking of the shaft 30 effected by depressing either one of the case shift levers 25, 29, effects this forward movement of the link 74 for unlocking the shift rail frame. For adjusting its length, the link 74 may be made in two overlapping sections having adjustable slot and screw connections 79.

When the shift rail frame 20, 23, 24 has become rocked to upper case position, its latch arm 64, urged by a spring 81, anchored to the framework, is permitted to drop to place a latching shoulder 83 thereof in front of the lip 65. Said lip 65 thus cooperates with said latch arm 64 to detent said shift rail frame in upper case position, as in Figure 4, to maintain the platen 17 in upper case position.

At the Figure 4 forward position of the latch arm 64, its stud 78 is over a horizontal lift arm 84 that is made integral with the pendent link 72 and thus has become depressed by the forward displacement of the link 74. This forward displacement of the link 74 is maintained as long as the typist's finger keeps either one of the shift levers, 25, 29, depressed and correspondingly keeps the shaft 30 and its link-controlling arm 33 turned to the Figure 3 position.

When the typist's finger is taken off the depressed shift lever, the latter returns to normal position by means of its spring and concomitantly the shaft 30, urged by a suitable spring 86 which may be applied to the link 74 as in Figure 4, returns to normal position. The rearward return of the link 74 to normal position rocks the lift arm 84 counter-clockwise to raise the latch arm 64 clear of the lip 65. It results that the shift frame 20, 23, 24 and the platen frame 18 return to lower case position by gravity. With return of the shift rail frame to normal position, the coupling rack 43 also returns forwardly to normal position and concomitantly the lever 47 and link 48 also return to normal positions.

It will be apparent from the description thus far given that maintenance of the platen in upper case position to which it has been power shifted by means of the snatch roll 46 depends on keeping either shift lever, 25 or 29, depressed by the typist's finger. This mode of operation is usually employed when the shift to upper case is to be maintained only transiently as for writing only one character in upper case.

For effecting a shift to upper case and sustaining such shift as for writing successive characters in upper case, the typist merely depresses either shift lever, 25 or 29, momentarily as by giving it a simple downward tap. This tap, followed by immediate release and restoration of the operated shift lever, is nevertheless effective to rock the coupling rack 43 into engagement with the snatch roll 46 so that there results immediately a snatch roll driven rearward stroke of said coupling rack and, correspondingly, the lever 47 is immediately turned counter-clockwise. The mechanism for sustaining the case shift is as follows.

A cam plate 87 has guide slots 88, 89 for fore-and-aft movements on supports comprising a stud or rod 90 on the framework and a stud 91 on the bracket 69. A pivot nut 92 eccentrically and therefore adjustably secured to said cam plate 87 by a screw carries an arm 93 against a rear end of which a finger 94 of the lever 47 bears so that the counter-clockwise rocking of said lever moves said cam plate 87 forwardly.

A latch lever 95 extends forwardly from the fulcrum rod 26 in the framework and has a

roller or stud 96 which in the normal positions of the parts, Figures 1 and 2, occupies a cam notch 97 of the cam plate 87. Said latch lever 95 has a pin 98 for engaging a latch hooked cam end 99 of the arm 33 of the rock shaft 30.

By a small initial portion of its snatch-roll-driven counter-clockwise movement, the lever 47 moves the cam plate 87 correspondingly forward a small distance owing to the engagement of the lever finger 94 with the cam plate arm 93, the latter being stopped as at 101, Figure 3, against clockwise rotation on the cam plate 87. By this forward movement of the cam plate 87 to the Figure 3 position, its cam notch 97 engages the stud 96 of the latch lever 95 to depress the latter about the fulcrum rod 26. By such depression of the latch lever 95, its pin 98 engages and rocks the arm 33, and the shaft 30, counter-clockwise to draw the link 74 forwardly so that the cam nut 77 on said link lifts the latch arm 64 on the shift rail frame clear of the lip 65. This enables the further counter-clockwise movement of the lever 47, acting through the link 48, to rock the shift rail frame to upper case position. Until the latch arm 64 is lifted by the link cam 77 clear of the lip 65, the accompanying forward movement of the link 48 has no effect on the shift rail frame owing to the lost motion connection 50, 51 of said link to said frame.

If a sustained or prolonged case shift is desired, either one of the shift levers 25, 29 will have been given a downward tap and will have been immediately returned to normal position by its spring 27 or 36. In that event the latch hook 99 of the arm 33 latches, under the urge of the link spring 86, over the pin 98 of the depressed latch lever 95. This keeps the latch lever 95 down and in position to hold the arm 33, and hence the link 74, sufficiently forward so that the lift or releaser arm 84 is sufficiently below the stud 78 of the shift rail frame latch arm 64 to permit said arm 64 to drop finally into latching engagement with the lip 65, as in Figure 4, to sustain the completed case shift.

Before the snatch-roll-driven counter-clockwise stroke of the lever 47 is completed its finger 94, moving downwardly as well as forwardly, slips off the arm 93 on the cam plate 87 wherefore the latter becomes restored rearwardly by a spring 102 to normal position, Figure 4, in which it is stopped by the stud 91. This restoration of the mover or cam plate 87 brings its cam notch 97 back over the stud 96 of the depressed and latched lever 95 so that eventually the latter may rise to normal position again.

For terminating the sustained or latched upper case condition in which the parts are as in Figure 4, the typist merely depresses and immediately releases either one of the shift levers 25, 29. Such depression of either shift lever rocks the shaft 30 counter-clockwise sufficiently to move the latch hook 99 off the pin 98 of the latch lever 95 so that the latter becomes restored by a spring 103 to normal position in which it abuts the top of its guide slot in the comb plate 28. Release, by the typist's finger, of the operated shift lever, following its depression to release the latch lever 95, permits the rock shaft and its arm 33 to return clockwise to normal position under the pull of the spring 86 on the link 74, said link concomitantly moving rearwardly to normal position. By such spring-urged rearward movement of the link 74, the releaser arm 84, connected thereto, is lifted to raise the shift rail frame latch arm 64 clear of the lip 65 to cause the shift

rail frame, and the platen frame 18, to return to normal or lower case positions as by gravity.

Referring again now to a transient case shift, for which the typist's finger keeps either shift lever depressed, as in Figure 3, it is to be noted that this keeps the latch hook 99 sufficiently forward of the pin 98 on the latch lever 95 so that said hook cannot latch down said latch lever. Said latch lever 95 in that event is merely depressed idly by the forward movement of the cam plate 87 and becomes restored again when said cam plate 87 becomes restored consequently to its above described release from the finger 94 of the counter-clockwise driven lever 47. A horizontal slot 104 in the cam plate 87 enables the latter to be moved forwardly relatively to the latch lever stud 96 at least up to the point at which said cam plate becomes released from the lever finger 94.

In the instant machine, the coupling rack 43 is so connected to the shift rail frame 20, 23, 24 that said rack after it has become disengaged from the snatch roll 46 by encounter with the abutment 61 remains rearwardly positioned as in Figure 4 as long as the shift rail frame is in upper case position. Thus, depression of either shift lever 25, 29 to release said shift rail to return to lower case does not entail an idle stroke of the coupling rack 43 by the snatch roll inasmuch as the front end of said coupling rack is out of operative range of the dog 41 on the arm of the rock shaft 30. Should either shift lever happen to be depressed so that the tab 42 of said dog 41 is in the path of the forward end of the forwardly returning coupling rack 43, the latter will merely turn said dog clockwise about its pivot and upon restoration of the operated shift lever, the dog, urged by a spring 105, will turn back to normal position against a stop 106 on the arm 39.

As the lever 47 rocks clockwise back to normal position, its finger 94 may idly rock the overlying arm 93 counter-clockwise on its pivot 92 until said arm 93, urged by a spring 107, drops to place its rear end in front of said finger again as in Figure 3. In the returned or normal position, Figure 1, of said lever 47, a shoulder 108 thereof stops against an abutment 109 on the framework. A draw spring 110 anchored to the framework tends to rock the coupling rack 43 clockwise about its fulcrum support 44 and thus tends to keep said coupling rack normally disengaged from the snatch roll 46. For its snatch roll driven stroke and return stroke, said coupling rack 43 is slidably movable endwise on said fulcruming support 44. The framework may have stops 111 for limiting the down strokes of the shift levers 25, 29. The cam plate 87 may have suitable lateral guides such as flanges or collars, not shown, on its supporting studs 90, 91. The coupling rack 43 is laterally guided by a comb plate 112 on the framework and by the lever 47 and by a bracket 113 that includes the fulcruming support 44, said bracket being on the framework.

It will be seen now that case shifting is easily and expeditiously controllable by the typist through the medium of either one of the simple shift levers 25, 29. A simple downward tap upon and immediate release of either shift lever by the typist's finger effects a shift to upper case and determines maintenance of the upper case shift. Further, a simple finger tap upon and immediate release of either shift lever results in restoration of the parts to lower or normal case position. For a shift to upper case and transient

maintenance thereof, the typist depresses either shift lever 25 or 29 and the resulting upper case shift may be maintained only so long as the typist's finger keeps the shift lever depressed, say, while typing only one upper case character inasmuch as release of the shift lever after typing said character causes restoration of the parts to normal or lower case position. For these several features of case shift control there are only two shift levers, right and left, and either one of these may even be omitted except that it is desired to enable the typist to control the case shift by using optionally either the right hand or the left hand.

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

What is claimed is:

1. In a typing machine, the combination of a shiftable part, a shift key, power means, responsive to movement of said key to operated position, to shift said part, said shifted part tending to return to normal position, a detent operative to maintain said part in shifted position, a releasing device tending to respond to return of said key from said operated position to release said part from said detent, and means conditioned by the shifting of said part, depending on immediate return of the key from operated position, to disable said releasing device, whereby to determine sustained maintenance of said part in shifted position.

2. In a typing machine, the combination of a shiftable part, a shift key, power means, responsive to movement of said key to operated position, to shift said part, said shifted part tending to return to normal position, a detent operative to maintain said part in shifted position, a releasing device tending to respond to return of said key from said operated position to release said part from said detent, and means and a holding latch therefor conditioned concomitantly with the shifting of said part, depending on immediate return of the key from operated position, to disable said releasing device to determine sustained maintenance of said part in shifted position, said latch being operatively connected to said key and being trippable, to release said last-named means, by a second movement of said key to operated position whereby to render said releasing device responsive to the return of said key following said second movement.

3. In a typing machine, the combination of a shiftable part, a shift key, power means, responsive to movement of said key to operated position, to shift said part, said shifted part tending to return to normal position, a detent operative to maintain said part in shifted position, a spring-urged releaser having a one-way operative connection to said key so as to be retracted when the latter is in operated position and to be spring moved to release said part from said detent when said key is returned to normal position, and a latch element operatively connected to said part and releaser so as to be moved with the shift of said part to move said releaser to retracted position and coincidentally interlock with and hold said releaser in retracted position independently of said key if said key is immediately returned from operated position.

4. In a typing machine, the combination of a shiftable part, a shift key, power means, responsive to movement of said key to operated position, to shift said part, said shifted part tending to return to normal position, a detent operative

to maintain said part in shifted position, a spring-urged releaser having a one-way operative connection to said key so as to be retracted when the latter is in operated position and to be spring moved to release said part from said detent when said key is returned to normal position, and a latch element operatively connected to said part and releaser so as to be moved with the shift of said part to move said releaser to retracted position and coincidentally interlock with and hold said releaser in retracted position independently of said key if said key is immediately returned from operated position, said releaser being disengageable, by means of said connection, from said latch element by a second movement of said key to operated position so as to be effective to release said part in response to the return of said key following said second movement.

5. In a typing machine, the combination of a shiftable part, a shift key, power means responsive to movement of said key to operated position to shift said part, said part tending to return to normal position, a detent operative to maintain said part in shifted position, and means acting differently under control of said key according to immediate or delayed return of said key from its operated position to determine, respectively, non-release or release of said part from said detent through such return of said key.

6. In a typing machine, the combination of a shift key, a part shiftable from a normal position by power in response to movement of said key to operated position, said part tending to return to normal position, a detent operative to maintain said part in shifted position, a spring-urged releaser held retracted by said key when the latter is in operated position and moved by its spring to release said part from said detent when said key is returned to normal position, and means controllable differently by said key according to immediate or delayed return of said key from its operated position to block or permit, respectively, the movement of the retracted releaser by its spring to release said part from said detent.

7. In a typing machine, the combination of a shift key, a part shiftable from a normal position by power in response to movement of said key to operated position, said part tending to return to normal position, a detent operative to maintain said part in shifted position, a releasing device movable to ineffective position by movement of said key to operated position and responsive to return of said key from said operated position to release said part from said detent, a latch element movable to move said releasing device to ineffective position and coincidentally to interlock with and hold said releasing device in ineffective position if said key has been returned to normal position immediately after its movement to operated position, and a mover actuatable for so moving said latch element, said mover having a disconnectible operative connection with said part so as to be actuated and then become automatically disconnected from said part during the shift of said part, said connection becoming effective again by the return of said part to normal position, means being provided to disengage said interlocked latch element and releasing device at will.

8. In a typing machine, the combination of a shiftable part, a shift key, a power driver, actuating means movable in a power stroke by said driver at operation of said key to move said part from a normal position to a shifted position, said

part tending to return to normal position, two detent members interlockable in two different relative positions to lock said part in normal position or shifted position, and means responsive to movement of said actuating means to disengage one detent member from the other preparatory to shifting said part, said actuating means having a lost motion operative connection to said part so that an initial portion of the power movement of said actuating means effects disengagement of said detent members before said part is moved by said actuating means, one of said detent members having an operative connection with said disengaging means and becoming free of said latter operative connection when said part becomes shifted so as to permit said detent members to cooperate to maintain said part in shifted position, means being provided to disengage said detent members for return of said part to normal position.

9. In a typing machine, the combination of a shiftable part, a shift key, a power driver, actuating means movable in a power stroke by said driver at operation of said key to move said part from a normal position to a shifted position, said part tending to return to normal position, two detent members interlockable in two different relative positions to lock said part in normal position or shifted position, and means responsive to movement of said actuating means to disengage one detent member from the other preparatory to shifting said part, said actuating means having a lost motion operative connection to said part so that an initial portion of the power movement of said actuating means effects disengagement of said detent members before said part is moved by said actuating means, one of said detent members having an operative connection with said disengaging means and becoming free of said latter operative connection when said part becomes shifted so as to permit said detent members to cooperate to maintain said part in shifted position, and means operative under control of said key to disengage said detent members for return of said part to normal position.

10. In a typing machine, the combination of a shiftable part, a shift key, a power operable driver, an actuator linked to said part and engageable with said driver by the movement of said key to operated position, said actuator becoming disengaged from said driver upon having effected a shift of said part from normal position, a detent operative to maintain said part in shifted position, a releaser held retracted by said key when the latter is in operated position, a spring urging said releaser to disengage said shifted part from said detent when said key is returned to normal position, a latch element operatively connected to said actuator and releaser so as to be moved to move said releaser to retracted position and coincidentally to interlock with and hold said releaser in retracted position independently of said key if said key is returned immediately to normal position, said key in its operated position holding said releaser from interlocking with said latch element, and means effecting return of said latch element to normal position if it does not interlock with said releaser.

11. In a typing machine, the combination of a shiftable part, a shift key, a power mechanism responsive to movement of said key to an operated position to shift said part from a normal position to a shifted position, and a lock mechanism controlled partly by said key and partly by said power mechanism to effect and determine sustained or transient maintenance of said part in shifted position in correspondence to immediate or delayed return of said key from its operated position.

12. In a typing machine, the combination of a shiftable part, a shift key, means, including a power-device, to shift said part by power from a normal position to a shifted position as a result of movement of said key to operated position, and a lock mechanism controlled partly by the shifting of said part by said means and partly by said key, to effect and determine sustained or transient maintenance of said part in shifted position in correspondence, respectively, to immediate or delayed return of said key from its operated position.

13. In a typewriter; a shiftable part, a shift key, power mechanism to shift said part as a result of operation of said key, and shift-lock mechanism controlled partly by said key and partly in concomitance with the shift of said part by said power mechanism to determine maintenance of said part in shifted position or restoration of said part in accordance with immediate or delayed return of said key from an operated position.

14. In a machine of the character described, the combination of a shiftable part, a shift key, power mechanism responsive to movement of said key to operated position to shift said part, said part tending to return to normal position, a detent to maintain said part in shifted position, a releaser tending in response to return of the key, to release said part from said detent, a block, and a connection between said part and block whereby said block is interposed automatically, in accompaniment with the shifting movement of said part, to disable said releaser if the key has been immediately returned, said connection being constructed so as to be automatically disrupted when the block has been interposed so that the block is capable of returning and hence failing to disable said releaser if the return of the key is delayed.

15. In a case shift mechanism, the combination of a case-shiftable part, a case-shift key, power mechanism enabled by movement of said key to operated position to shift said part, said part tending to return to normal position, a detent to maintain said part in shifted position, a releaser tending in response to the return of said key to release said part from said detent, and means controlled partly by the shifting movement of said part and partly by said key so as to disable said releaser or to permit said releaser to function, depending, respectively, on immediate or delayed return of said key.

16. In a case shift mechanism, the combination of a case-shiftable part, a case-shift key, power mechanism enabled by movement of said key to operated position to shift said part, said part tending to return to normal position, a detent to maintain said part in shifted position, a releaser tending in response to the return of said key to release said part from said detent, and means controlled partly by the shifting movement of said part and partly by said key so as to disable said releaser or to permit said releaser to function, depending, respectively, on immediate or delayed return of said key, provision being included for re-enabling said disabled releaser at will for consequent release of said shifted part from said detent.

17. In a machine of the character described, the combination of a case-shiftable part, a shift-key, a power-driver, an actuator connected to said part and operable by said key to connect it with said driver for resulting movement of said actuator to case-shift said part, means effective, depending on immediate return of said key, to

detent said part in shifted position and to control said actuator to prevent its engagement by said key at a second operation of said key, and means responsive to such second operation of said key to release said detent means.

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