Feb. 17, 1925. 1,526,310

E. E. BARNEY

TYPEWRITING MACHINE

Filed April 7, 1923 2 Sheets-Sheet 1

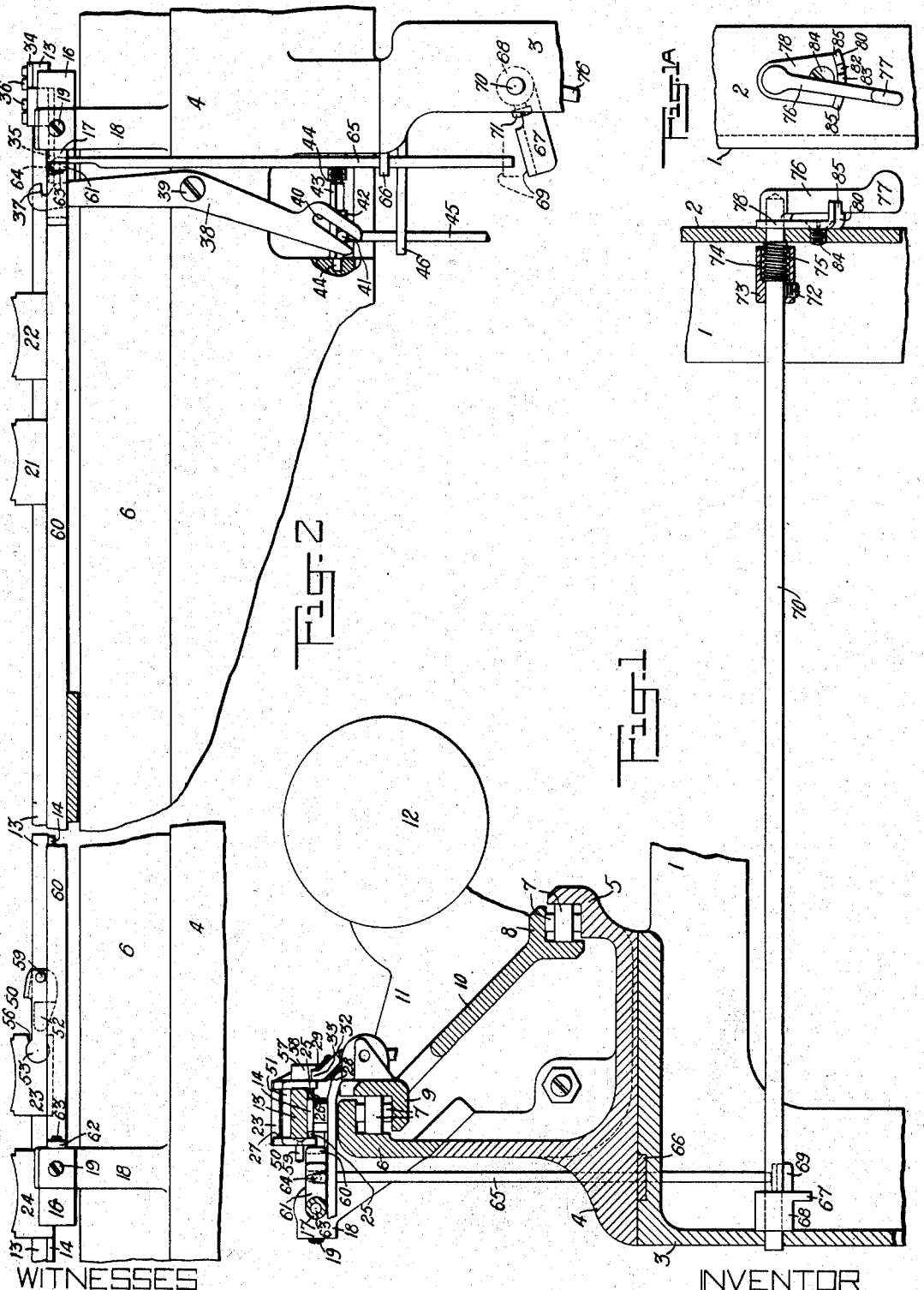


Fig. 1A

WITNESSES

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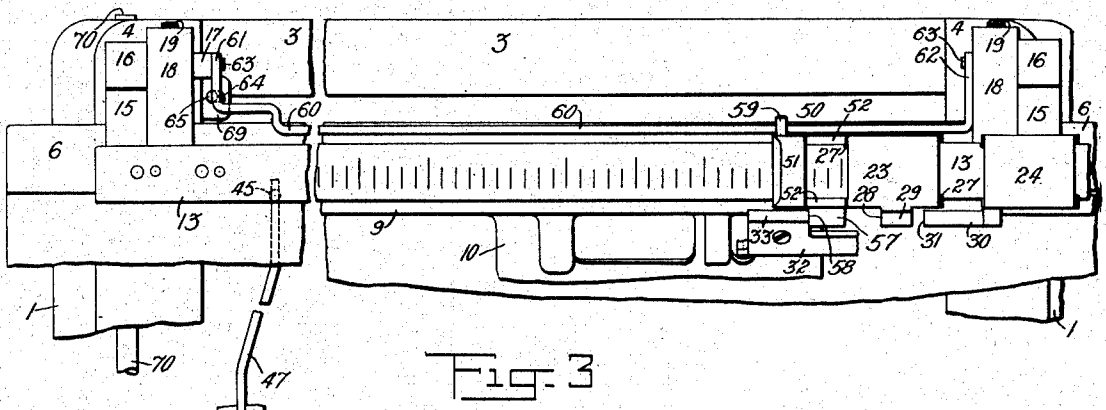
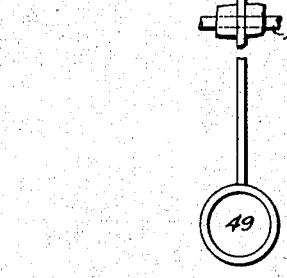


Fig. 3



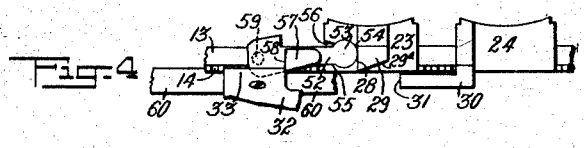


Fig. 4

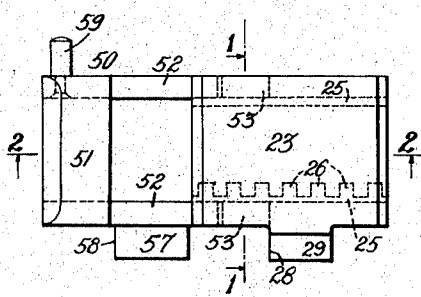


Fig. 7

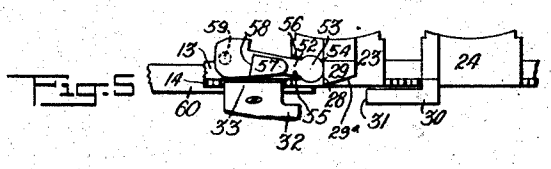


Fig. 5

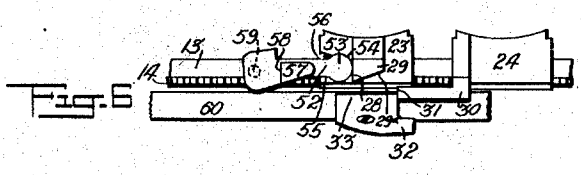


Fig. 6

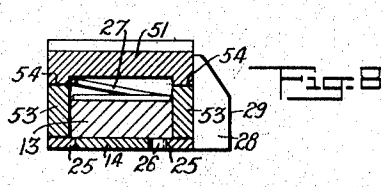


Fig. 8

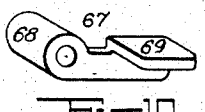


Fig. 10

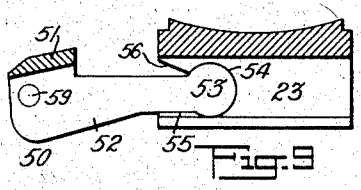


Fig. 9

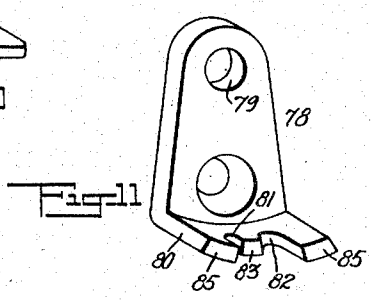


Fig. 11

WITNESSES

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Patented Feb. 17, 1925. 1,526,310

UNITED STATES PATENT OFFICE.

EDWIN E. BARNEY, OF NEW ROCHELLE, NEW YORK, ASSIGNOR TO REMINGTON TYPEWRITER COMPANY, OF ILION, NEW YORK, A CORPORATION OF NEW YORK.

TYPEWRITING MACHINE.

Application filed April 7, 1923. Serial No. 630,435.

To all whom it may concern:

Be it known that I, EDWIN E. BARNEY, citizen of the United States, and resident of New Rochelle, in the county of Westchester and State of New York, have invented certain new and useful Improvements in Typewriting Machines, of which the following is a specification.

My invention relates to carriage stop mechanism for typewriting machines and its chief object is to provide new and improved mechanism of the character specified. More specifically, one object is to construct, mount and control the stop devices that determine the margin of the work sheets so as greatly to facilitate varying the margin, enabling indenting and paragraphing to be accomplished more quickly and easily than heretofore.

To the above and other ends which will hereinafter appear my invention consists in the features of construction, combinations of devices and arrangements of parts hereinafter described and particularly pointed out in the claims.

My invention will be described in detail in connection with the accompanying drawings wherein—

Figure 1 is a fragmentary front-to-rear vertical sectional view showing the upper part of a typewriting machine embodying my invention, parts of the machine not necessary to a full understanding of the invention being omitted.

Figure 1ª is a fragmentary front elevation of parts shown in Fig. 1.

Figure 2 is a fragmentary rear elevation of the upper part of the said machine.

Figure 3 is a fragmentary plan view showing the margin stop devices, their mounting and the stop controlling devices.

Figure 4 is a fragmentary front elevation of the stop devices related as in Fig. 3.

Figures 5 and 6 are views corresponding to Fig. 4 but showing different relationships of the stops.

Figure 7 is a plan view on an enlarged scale of certain of the stop devices detached.

Figures 8 and 9 are vertical sectional views taken respectively on the section lines 1—1 and 2—2 in Fig. 7 and looking in the direction of the arrows at said lines.

Figures 10 and 11 are enlarged perspective views of details.

Referring first to Figs. 1, 2 and 3, the main frame of the machine comprises perforated side plates or frames 1 which terminate at the front and rear in inwardly bent flanges 2 and 3. The side frames are connected at the rear and front by cross members not herein shown. Secured to the tops of the side frames 1 at the rear of the machine is an angular bed plate 4 having a vertical portion and a horizontal portion, the horizontal portion being extended to provide a grooved trackway or rail 5. Secured to the vertical portion of the bed plate is a grooved bar or trackway 6. The trackways 5 and 6 co-operate through anti-friction rollers 7 with a traveling platen carriage, said carriage comprising an inclined rear plate composed of parallel grooved bar-like portions 8 and 9 which are connected by cross webs 10. Extending forward from the plate 8—10 at its ends are end bars 11 which rotatively support a cylindrical platen 12 with the front face of which the type bars (not shown) are adapted to co-operate.

Carriage stop devices heretofore provided for limiting the to-and-fro movements of the above described traveling platen carriage are fully disclosed in a patent to Barr and Barney #1,447,639 granted March 6, 1923. Said carriage stop devices comprise a stop bar 13 having a narrower toothed bar 14 secured to its under face. The end portions of the rack bar 13, 14 are fixed to rearwardly extending arms 15 provided with eyes 16 which bear on pivot pins 17 extending laterally outward from ears 18 integral with the track bar 6, said pivot pins being adjustably secured to said ears by set screws 19, the construction providing a pivotal mounting for the rack or stop bar 13, 14, said bar normally being supported from the stationary track bar 6 but being adapted to be swung up away from the bar 6. Adjustably mounted on the bar 13, 14 are a plurality of stop or contact devices, four of such devices being shown and numbered 21, 22, 23, 24. These devices are alike in construction as to their body portions but differ as to their contact or stop portions. Each stop device fits loosely on the stop bar and its bottom is cut away to provide gibs or lip portions 25 that contact with the under side of the bar 13 where it projects beyond the front and back edges of the rack 14. The front

lip portion of each stop device is toothed as indicated at 26 to correspond with the teeth of the rack 14. Each stop device carries a wire spring 27 bent to a Z-shape and which is arranged under the top portion of the stop and has its ends co-operating with the sides of said top portion to prevent displacement of the spring. The spring 27 tends to expand and constantly to maintain the teeth 26 engaged with the teeth of the rack 14, thus fixing the stop in set position on its support. Downward pressure on the stop overcomes the spring and disconnects the stop teeth from the rack bar, enabling the stop to be adjusted lengthwise on said rack bar and reset. The top of the bar 13 is preferably formed with a scale to facilitate adjustment of the stop devices. The stop devices 21 and 22 are arranged at the left-hand end portion and the stop devices 23 and 24 at the right-hand end portion of the bar 13, 14. The device 21 is provided with contact portions for operating the bell mechanism and line lock mechanism of the machine while the device 22 constitutes the final line lock and end stop. The devices 23 and 24 at the right constitute carriage arresting stops, usually called respectively the first and final margin stops. The member or device 23 has a stop face 28 formed by the left-hand side of a lug 29 which projects forward at the front side of the device 23, the under side of said lug being inclined as indicated at 29^a to provide a cam. The device 24 is provided with a leftward extension 30 terminating in a final stop face 31. Co-operative with the frame stop devices 21, 22, 23, 24, is a carriage carried contact or stop device 32 which is pivoted to the front of the carriage bar 9 and has an upstanding lug or contact portion 33. In the patented construction, when the carriage is returned from left to right to begin a new line, it will be arrested by contact of the carriage stop lug 33 with the stop face 28 of the first margin stop 23, which determines the normal margin. In order that the carriage may be returned further to the right, means are provided for moving the stop face 28 out of the path of the stop lug 33 so that the carriage may be moved until arrested by the contact face 31 of the second margin stop 24, thus changing the marginal point of arrest of the carriage. The displacement of the stop face 28 to vary the margin is effected by key actuated means which operates on the stop bar 13, 14. Said means comprise a plate 34 having a finger or extension 35 and secured by screws 36 to the left-hand end portion of the stop bar 13, the free end of said finger being adapted to be engaged by a cam device or slot 37 formed in the upper arm of a lever 38 pivoted at 39 to the rear face of the bed plate 4. The lower arm of said lever 38 is also formed with a cam device or slot 40 which co-operates with a pin 41 projecting rearward from the arm or plate 42 of an angular member which further comprises a cross arm 43 provided with pintles 44 having stationary bearings. The member 42, 43 is constantly spring pressed downward and is adapted to be engaged by the top of a vertically arranged push rod 45 which near its upper end is guided in a perforated stationary plate 46. The lower end of the push rod 45 is pivotally connected to a key lever 47 having a stationary pivot 48 and which extends forward at the left-hand side of the keyboard, being provided at its front end with a key or button 49. On pressing said key, the lever 47 will be actuated to slide the rod 45 upward in its guide, causing its upper end, which is contiguous to the arm 42, to swing the latter upward on its pivots in opposition to its spring, lifting the pin 41. The upward movement of said pin will be transmitted through the cam slot 40 to the lever 38, swinging said lever on its pivot, causing the cam 37 to push upward against the finger 35, thereby swinging the stop bar 13, 14 on its pivots 17 from the normal lower position as illustrated in Figs. 1, 3–5 to the lifted position illustrated in Fig. 6. This movement of the stop bar carries with it all the stop devices thereon and the stop face 28 will be raised out of the path of the carriage stop 33, permitting the carriage to be moved towards the right until arrested by the stop face 31, this stop face being so positioned that the lifting of the stop bar will not raise it far enough to clear the path of the carriage contact or stop 33. On releasing the key 49 after the carriage has been thus arrested, the parts will drop back towards normal position, and as thereafter the carriage is moved leftward, the cam or inclined edge 29^a of the lug 29 will be acted against by the carriage stop 33 lifting the stop 23 and the stop bar 13, 14 slightly so as not to obstruct or prevent leftward movement of the carriage. As soon as the lug 33 clears the cam face 29^a, it will permit the stop 23, the stop bar 13, 14 and the other stops mounted thereon to drop back under the force of gravity to normal position. It will be understood that the key 49 is also effective to release the carriage after it has been arrested during its leftward movement by the stop 21 so as to enable additional characters to be written at the end of a line. As thus far described, the construction and mode of operation of carriage stop mechanism corresponds with the disclosures of the aforesaid Patent #1,447,639.

In the described construction as well as in other prior constructions, it is necessary to actuate the margin release key for every line whose margin is to be changed, and whenever there was a considerable number of successive lines having the altered mar-

gin it has been common for operators temporarily to re-set the margin stop, by hand, changing it back to the first position when the normal margin was to be resumed. In order to do away with this setting and resetting of margin stops or the alternative of actuating the margin release key for each line of writing, I have provided new and improved mechanism whereby the actuation of a key is effective to alter the margin and change the point of arrest of the carriage, the carriage being arrested in this new position each time it is returned from left to right until the key again is actuated, this second actuation re-establishing the former margin and position of arrest. To this end I provide a supplemental carriage arresting or margin stop which preferably is connected to and adjustable with the so-called first margin stop 23 along a common support lengthwise of the carriage, in the present instance the supplemental stop being movably mounted on said stop 23. The supplemental stop together with the stop 23 is shown detached in Figs. 7–9, said supplemental stop being designated as a whole by the numeral 50. The body of staid stop 50 is formed of a single piece and comprises a cross portion or yoke 51 which fits over the top of the stop bar 13 and is provided with arms 52 which are angularly disposed to the top of the portion 51, said arms extending rightward at the front and rear sides of the stop bar 13, 14 which is loosely embraced thereby. The arms 52 terminate at their free ends in circular heads 53 which fit rotatively in corresponding bearing openings indicated at 54 formed in the front and rear sides of the stop 23, thus permanently connecting the stops 50 and 23. The bearing openings 54 have entrances or mouths at the left through which the arms 52 pass. The bottom edge 55 of each of these mouths is substantially horizontal and the corresponding upper edge 56 of the mouth is inclined upward toward the left, the two edges 55 and 56 providing in effect a flaring opening or mouth affording a limited pivotal movement of the stop member 50 on the stop member 23. The carriage-arresting stop member or device 50 is provided with a projection or lug 57 which is fixed to and projects forwardly from the front arm 52, the lug 57 acting as an arresting stop proper in conjunction with the carriage stop 33, the left-hand face 58 of said stop lug 57 acting as a contact face that co-operates with the right-hand face of the stop lug 33. The stop 50 will be adjusted lengthwise of its support 13, 14 along with the stop 23, the teeth 26 of the latter co-operating with the teeth of the rack 14 to maintain both stops 23 and 50 in set position on their support.

Means are provided for switching the carriage arresting stop 50 or moving it up and down so as to render it operative and inoperative, without however altering its adjusted position on the stop bar 13, 14, said means being preferably key actuated and comprising a train of devices independent of the regular carriage arresting stops and their support 13, 14. Said train includes a pin 59 fixed to and projecting rearwardly from the rear arm 52 of the stop 50 near its left-hand end, and overlying the bar 60 of a bail which is arranged behind the stop bar 13 and parallel therewith, the end portions or side arms 61 and 62 of said bail being bent or off-set rearward from the bar 60 and being pivoted on pins 63 which are secured in the pins 17 and project inwardly therefrom towards the middle of the machine. Pivotally suspended at 64 from the left-hand arm 61 is a rod 65, the lower end portion of which passes through a hole in a stationary guide plate 66, said arm being adapted to slide up and down through said guide plate. To move said arm up and down and actuate the bail 60—62 there is provided an arm 67 shown detached in Fig. 10, said arm being provided with a perforated hub portion 68 and a bent-over lip or contact 69. The hub 68 fits over the rear end of a rock shaft 70 and is fixedly secured thereto by a set screw 71 so that the arm 67 which is in effect a crank arm extends radially from said rock shaft towards the right, the contact 69 underlying the rod 65 which it is adapted to actuate. The rock shaft 70 extends fore and aft of the machine at the left-hand side and its end portions take bearings in the front flange 2 and the rear flange 3 of the left-hand side plate 1. The crank arm 67 is mounted on the rock shaft forward of the flange 3 and may prevent rearward displacement of the rock shaft. Just behind the front flange 2 there is secured on the rock shaft 70 by a set screw 72 a collar or thimble 73 having at its front end a depression or seat indicated at 74 which houses a wire spring that is coiled around the shaft 70 and is confined between the bottom of its seat 74 and the rear face of the flange 2. The spring 75 tends constantly to expand and press the rock shaft 70 longitudinally rearward in its bearings, normally maintaining the front rim of the collar 73 slightly separated from the flange 2. The front end portion of the shaft 70 projects forward through and outside of the flange 2 and has secured to it a crank arm, switch or handle 76 that extends downward and terminates in a finger piece or key 77 in proximity to the left-hand side of the regular keyboard of the machine. A detent plate 78 is arranged between the arm 76 and the front face of the flange 2, said detent plate being perforated at 79 near its upper end to afford a passage-way for

the shaft 70 which bears therein. As best appears from Fig. 11, the lower end of the plate 78 is bent forward at an angle of the body portion so as to form a slightly curved horizontally disposed ledge 80 that is cut out or notched to provide seats or depressions 81 and 82 which are separated by a lug 83. The plate 78 is secured to the front face of the flange 2 by a headed screw 84. The tension of the spring 75 maintains the rear edge of the switch or arm 76 seated in one or another of the depressions or notches 81 and 82, thus locking the shaft 70 in one or another of two predetermined positions. The sides of the lug 83 are beveled or inclined to facilitate the disengagement of the arm 76 and its swinging or switching movements. Sidewise pressure applied to said arm will cause it to co-operate with the contiguous inclined side of the lug 83 which will act as a cam to overcome the spring 75 and force the shaft 70 forward in its bearings until the arm 76, disengaging from one notch, passes over the top of the lug 83 and will be forced down into engagement with the other notch by the action of the spring 75, thus re-locking the shaft 70. The sides 85 of the ledge 80 project so far forward that they will always act as limiting stops to prevent excess switching movements of the arm 76 even should the shaft 70 be drawn forward to the limit of its movement. It will be apparent that when the shaft 70 is rocked by the key 77 so as to swing the crank arm 67 upward, the contact 69 will engage with the lower free end of the rod 65 and will push the rod 65 upward through its guide plate 66, swinging the bail 60—62 upward on its pivots 63 and causing it to act against the pin 59 to swing or switch the stop device 50 upward on its pivots, thus moving said stop from the Fig. 4 to the Fig. 5 position, the latter being its inoperative position where its stop face 58 is out of the path of the carriage stop 33. Conversely, a reverse turning movement of the shaft 70 will cause a lowering or swinging down of the crank arm 67—69, permitting the bail bar 60 to fall and release the stop 50 which will return to the Fig. 4 position through the force of gravity, its downward swing being limited by contact of the yoke or U-shaped cross portion 51 with the top of the stop bar 13.

The present form of my invention was particularly designed to facilitate indenting, as it is called, and the operation of the mechanism will be briefly explained in connection with this character of typewritten work. Normally the parts may be assumed to be in the positions illustrated in Fig. 5 wherein the stop device 50 is inoperative and the left-hand margin of the work sheet will be determined normally by the arrest of the carriage through the co-operation of the carriage carried stop 32, 33 with the abutment 28 of the stop 23. When it is desired to write outside of the margin as thus determined, the key 49, as heretofore, is operated to rock the stop bar 13, 14 and the stops thereon, including the stop 50, upward from the Fig. 5 to the Fig. 6 position, thus rendering the stop 23 inoperative and permitting further rightward movement of the carriage until arrested by the stop face 31, as in Fig. 6. On releasing the key 49 the stop bar 13 and the stop 50 together with the other stops will return to the Fig. 5 position and the next following arrest of the carriage when moving rightward will be effected by the stop face 28. The carriage arresting operations as thus far described are the same as in the prior construction. When, however, it is desired to indent several successive lines or write inside the margin as determined by the arresting stop 23, the switch key 77 is pressed sidewise, unseating the arm 76 from the depression 82, said arm being swung leftward and caused to engage in the seat 81, thus rocking the shaft 70 to swing the crank arm 67—69 down to the Fig. 2 position and releasing the rod 65 and the bail 60—62, which the latter permits the stop 50 to drop down to the effective or operative position as illustrated in Figs. 1–4. The stop face 58 of the lug 57 is thus lowered across the path of the carriage stop lug 33 so that on the next return of the carriage from left to right it will be arrested by the contact of the lug 33 with the stop face 58 as in Fig. 4, at a predetermined distance in advance of its normal position of arrest as determined by the stop face 28. In the present instance the distance between the stop faces or abutments 58 and 28 is equal to five letter spaces, the result being that the next line of writing will be indented or set in five spaces to the right of the normal margin on the work sheet, and that this indented margin will be continued as long as the stop face 58 is allowed to remain down in operative position. For a paragraph the stop face is kept down for a single line only. When the indented writing has been completed, it is only necessary to actuate the key or finger piece 77 as before described so as to rock the shaft 70 in the reverse direction to lift the crank arm 67—69 and cause the bail bar 60 to press upward on the pin 59 and swing or switch the indenting stop 50 up to the inoperative position as in Fig. 5, said stop being locked up by co-operation between the arm 76 and the notch 82, which thus act as detent devices for the said stop.

It will be seen that by my invention there is provided in combination with a traveling carriage and a carriage arresting stop, means controlled by two separate keys for throwing said arresting stop into and out of use,

the two keys in the present instance being the keys 49 and 77, the former throwing the stop 58 to the Fig. 6 position and the latter key, 77, throwing said arresting stop 58 to the Fig. 5 position; that one of the keys, as 49, is effective to throw a plurality of carriage arresting stops, as 58 and 28, into and out of use, the other key, as 77, being effective to throw certain only of the arresting stops, as the stop 58, into and out of use; that two carriage arresting stops are connected together so that they may be simultaneously adjusted along their support or bar, thus always maintaining the same interval between their arresting faces or contacts, said contacts, however, being relatively movable so that one may be thrown into and out of use without changing its set location or disturbing the other stop, the two arresting stops being alternatively co-operative with the carriage carried stop; that the carriage arresting stops in the present instance are frame stops as contrasted with traveling stops mounted on the carriage; that by the present construction the choice of three predetermined arresting positions is provided by the stops, 50, 23 and 24; that the members 50 and 23 provide in effect a two-part stop, one part, 23, interlocking with the support 13, 14, and the other part 50 being switchable into and out of use; and that means are provided for at will rendering effective either of two stops having a permanent pivotal connection.

It is of course to be understood, that the invention may be made use of in other ways than the one above described by way of example; and that various changes of construction may be effected without departing from the invention.

What I claim as new and desire to secure by Letters Patent is:—

1. In a typewriting machine, the combination of a traveling carriage, a carriage arresting stop, and means controlled by two separate keys for throwing said stop into and out of use.

2. In a typewriting machine, the combination of a traveling carriage, a plurality of carriage arresting stops, a key for throwing said stops into and out of use, and a second key for throwing certain only of said stops into and out of use.

3. In a typewriting machine, the combination of a traveling carriage, a stop bar, a carriage arresting stop thereon, means for moving said stop bar to throw said stop into and out of use, and means for throwing said stop into and out of use while said stop bar remains quiescent.

4. In a typewriting machine, the combination of a traveling carriage, a stop bar, a plurality of stops mounted thereon, means for controlling said stop bar to throw said stops together into and out of operative position, and means independent of said stop bar for throwing certain of said stops into and out of operative position.

5. In a typewriting machine, the combination of a traveling carriage, two carriage arresting stops, one pivotally supported by the other, a key for moving said stops bodily together, and a separate key for pivotally moving one stop on and independently of the other stop.

6. In a typewriting machine, the combination of a traveling carriage, a stop bar, two carriage arresting stops, mounted on said stop bar and connected together so that they may be simultaneously adjusted along said stop bar, means for moving said stop bar to throw both stops into and out of operative position, and a separate key for moving one of said stops relatively to the other and independently of said stop bar.

7. In a typewriting machine, the combination of a traveling carriage, a carriage arresting stop adjustable to vary the position of arrest of the carriage, and a key having a stationary support and effective at any point in the travel of the carriage to throw the arresting stop into and out of operative position.

8. In a typewriting machine, the combination of a traveling carriage, a stop bar, a carriage arresting stop adjustable along said stop bar to vary the position of arrest of the carriage, and a key separate from said stop and independent of said stop bar for throwing said stop into and out of use, said stop remaining either in its position of use or in its position of disuse when moved thereto by said key until said key is again actuated.

9. In a typewriting machine, the combination of a traveling carriage, a stop bar, a carriage arresting stop adjustable on said stop bar to vary the point of arrest of the carriage, and means for switching said stop into and out of use without disturbing its adjusted position on said stop bar, said means comprising a switch key mounted independently of said stop, and a train of connections from said key to said stop.

10. In a typewriting machine, the combination of a traveling carriage, a stop bar, a carriage arresting stop adjustable on said stop bar to vary the point of arrest of the carriage, a key separate from said stop and independent of said stop bar for switching said stop from effective to ineffective position, and detent devices for locking said stop in ineffective position.

11. In a typewriting machine, the combination of a traveling carriage, a carriage arresting stop adjustable to vary the position of arrest of the carriage, and a key having a stationary support and effective when actuated to switch said stop into operative

position, said stop remaining in operative position until said key again is actuated automatically when said key is actuated.

12. In a typewriting machine, the combination of a traveling carriage, a platen thereon, a stop bar in the vicinity of the platen, a margin stop thereon, a switch key for said margin stop disposed in the vicinity of the keyboard of the machine, and connections between said key and said stop, said key operating alternately to throw said stop out of use at one actuation and into use at the next actuation.

13. In a typewriting machine, the combination of a traveling carriage, a margin stop effective to arrest the carriage, a second margin stop, and a key in the vicinity of the keyboard for switching one of said margin stops into and out of use without affecting the position of the other margin stop.

14. In a typewriting machine, the combination of a traveling carriage, and a pair of margin stops permanently connected together but relatively movable to vary the marginal position of arrest of the carriage.

15. In a typewriting machine, the combination of a traveling carriage, a stop support, a carriage arresting stop on said support, a key, a train of connections between said key and said support for throwing said stop into and out of arresting position, a second key, and a train of connections between said second key and said stop independent of said support for throwing said stop into and out of operative position.

16. In a typewriting machine, the combination of a traveling carriage, a carriage arresting stop, and two separate keys, one effective at each actuation to move said stop temporarily out of use, the other key being effective to lock said stop out of use as long as desired.

17. In a typewriting machine, the combination of a traveling carriage, a carriage carried stop, and a pair of stops mounted on the frame of the machine and permanently connected together, said permanently connected stops being alternatively co-operative with said carriage carried stop.

18. In a typewriting machine, the combination of a traveling carriage, a stop thereon, a co-operating frame stop, and means controlled by two separate keys mounted independently of each other for throwing said frame stop into and out of use.

19. In a typewriting machine, the combination of a traveling carriage, a stop mounted to travel therewith, a plurality of co-operating stops supported on the frame of the machine, a key for throwing said frame stops into and out of use, and a second key for throwing certain only of said frame stops into and out of the path of said carriage stop.

20. In a typewriting machine, the combination of a traveling carriage, a stop thereon, a co-operating stop on the frame of the machine, means controlled by two separate keys for throwing said frame stop into and out of use, and detent devices co-operative with one of said keys to maintain it locked in either of two positions.

21. In a typewriting machine, the combination of a traveling carriage, a stop mounted to travel therewith, a plurality of co-operating stops supported on the frame of the machine, a key operated switch for throwing certain only of said frame stops into and out of the path of said carriage stop without disturbing certain other of said frame stops, and detent devices co-operative with said switch to maintain it locked in both positions to which it may be thrown.

22. In a typewriting machine, the combination of a traveling carriage, a stop thereon, a stop bar movably supported on the frame of the machine, a second stop on said stop bar, means for moving said stop bar to move said stops into and out of the path of said carriage stops, and separate means independent of said stop bar for throwing said second stop into and out of the path of said carriage stop.

23. In a typewriting machine, the combination of a traveling carriage, a stop thereon, a stop bar movably supported on the frame of the machine, a second stop on said stop bar, means for moving said stop bar to move said stops into and out of the path of said carriage stops, a third stop adapted to be rendered effective by the operation of said means, and separate means independent of said stop bar for throwing said second stop into and out of the path of said carriage stop.

24. In a typewriting machine, the combination of a traveling carriage, a stop thereon, a stop bar movably supported on the frame of the machine, a second stop on said stop bar, a third stop thereon, means for moving said stop bar to carry the first and second stops out of use for rendering the third stop effective, and separate means for controlling said second stop independently of said stop bar.

25. In a typewriting machine, the combination of a traveling carriage, a stop bar, a carriage arresting stop thereon, a co-operating stop, means for switching said arresting stop on said stop bar into and out of position for contact with said co-operative stop, and locking devices for said carriage arresting stop independent of said stop bar.

26. In a typewriting machine, the combination of a traveling carriage, a two-part stop, a co-operating stop, and a stop rack bar on which said two-part stop is mounted, one part interlocking with said rack bar and the other part being provided with an arresting face and being switchable to render said

arresting face ineffective while the interlocking part of the stop remains engaged with said rack bar.

27. In a typewriting machine, the combination of a traveling carriage, a toothed stop bar, a spring pressed margin stop adjustable on said stop bar, and a second margin stop having a permanent pivotal connection with said spring pressed stop.

28. In a typewriting machine, the combination of a traveling carriage, a toothed stop bar, a spring pressed margin stop adjustable on said stop bar, a second margin stop having a permanent pivotal connection with said spring pressed stop, and means for controlling said second margin stop independently of said spring pressed stop so as to vary the margin.

29. In a typewriting machine, the combination of a traveling carriage, a toothed stop bar, a spring pressed margin stop adjustable on said stop bar, a second margin stop having a permanent pivotal connection with said spring pressed stop, and means for rendering either stop effective at will.

30. In a typewriting machine, the combination of a traveling carriage, a toothed stop bar, a spring pressed margin stop adjustable on said stop bar, a second margin stop having a permanent pivotal connection with said spring pressed stop, means for controlling said second margin stop independently of said spring pressed stop so as to vary the margin, and separate margin controlling means effective on both of said stops through said stop bar.

Signed at the borough of Manhattan, city of New York, in the county of New York and State of New York, this 5th day of April, A. D. 1923.

EDWIN E. BARNEY.

Witnesses:

CHARLES E. SMITH,

E. M. WELLS.