

Dec. 21, 1954

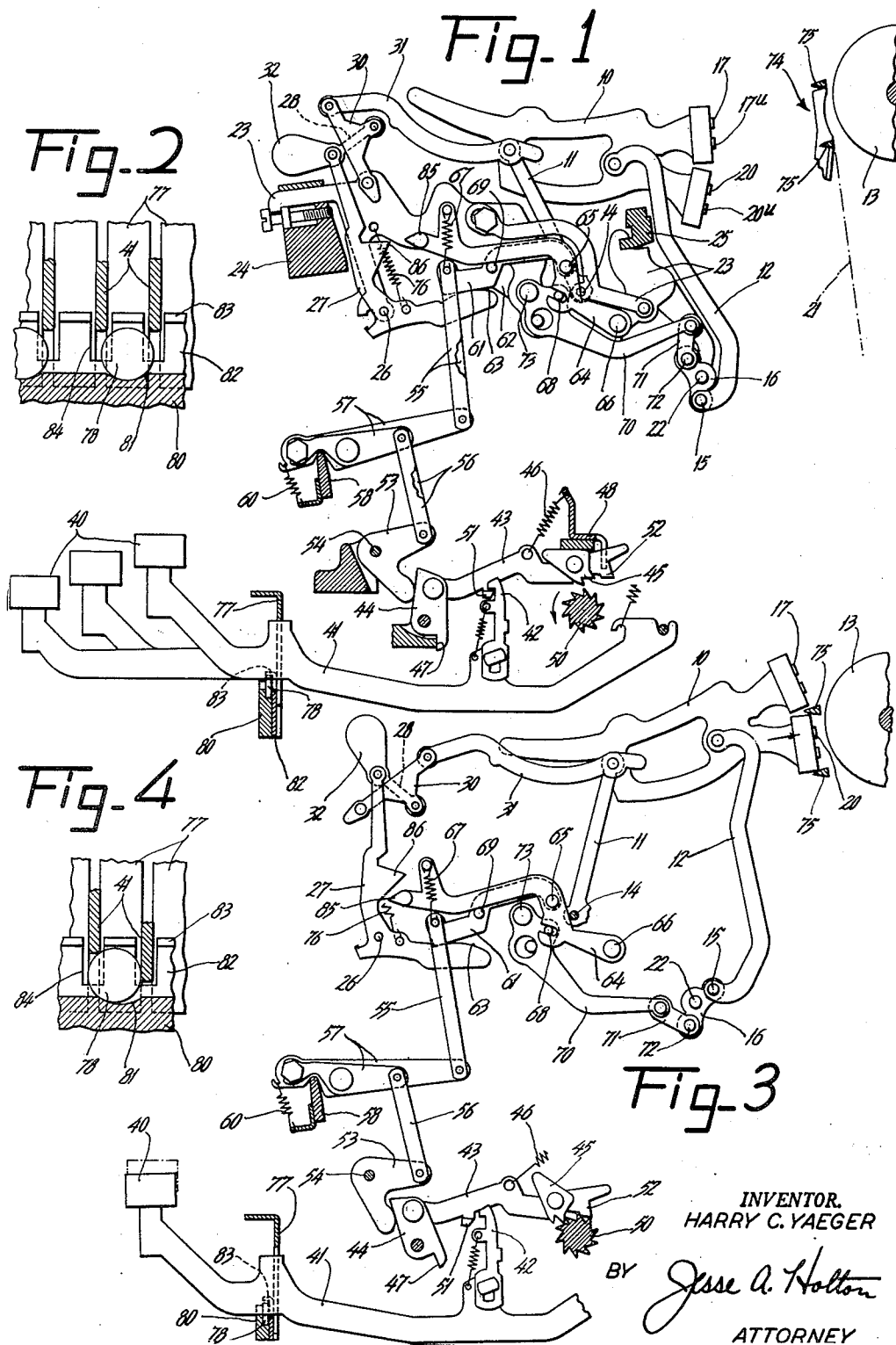
H. C. YAEGER

2,697,503

TYPE CARRIER TRAVEL CONTROL

Filed Dec. 27, 1951

3: Sheets-Sheet 1



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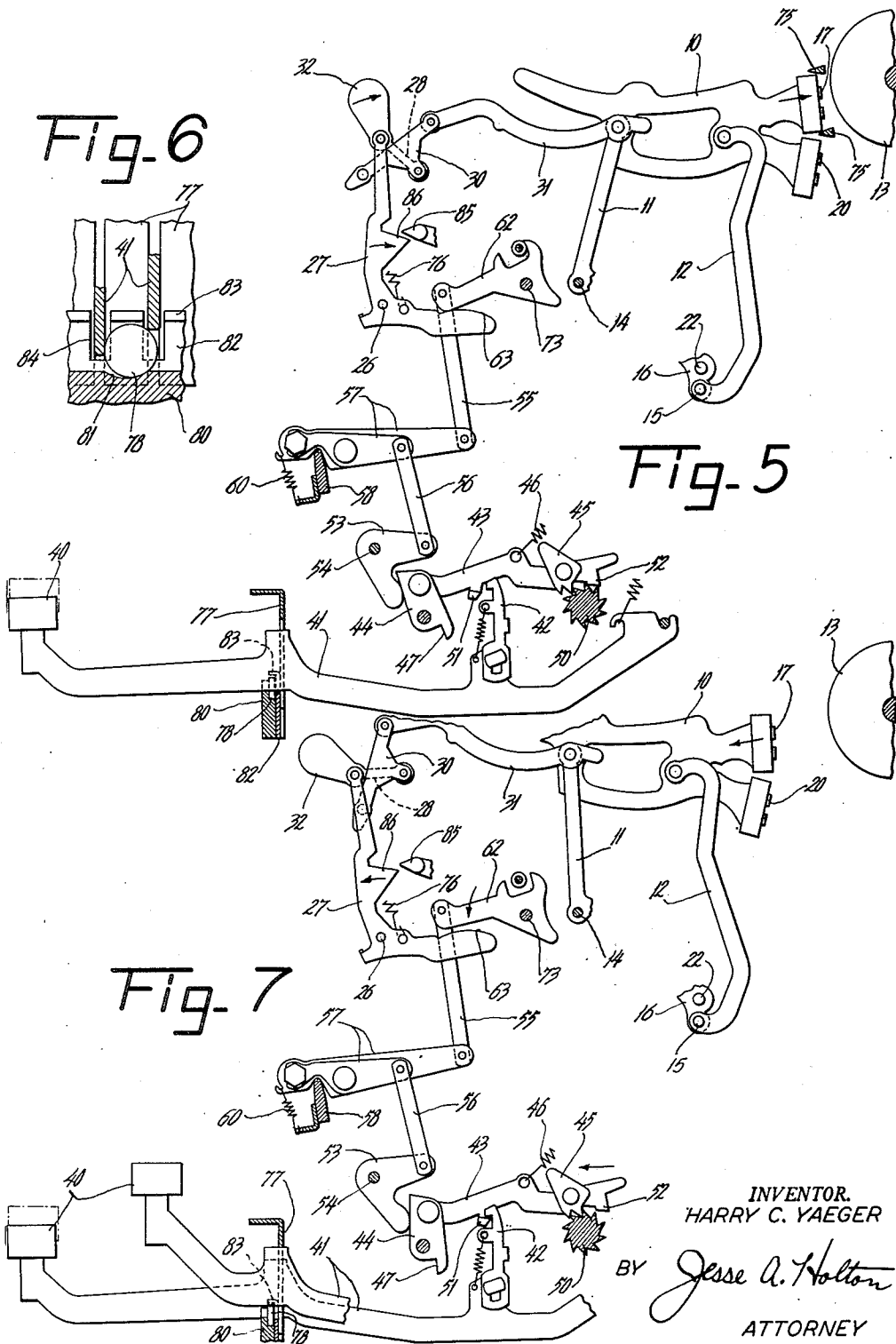
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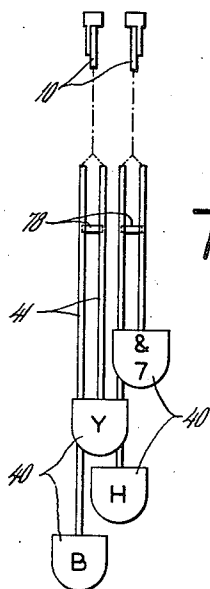
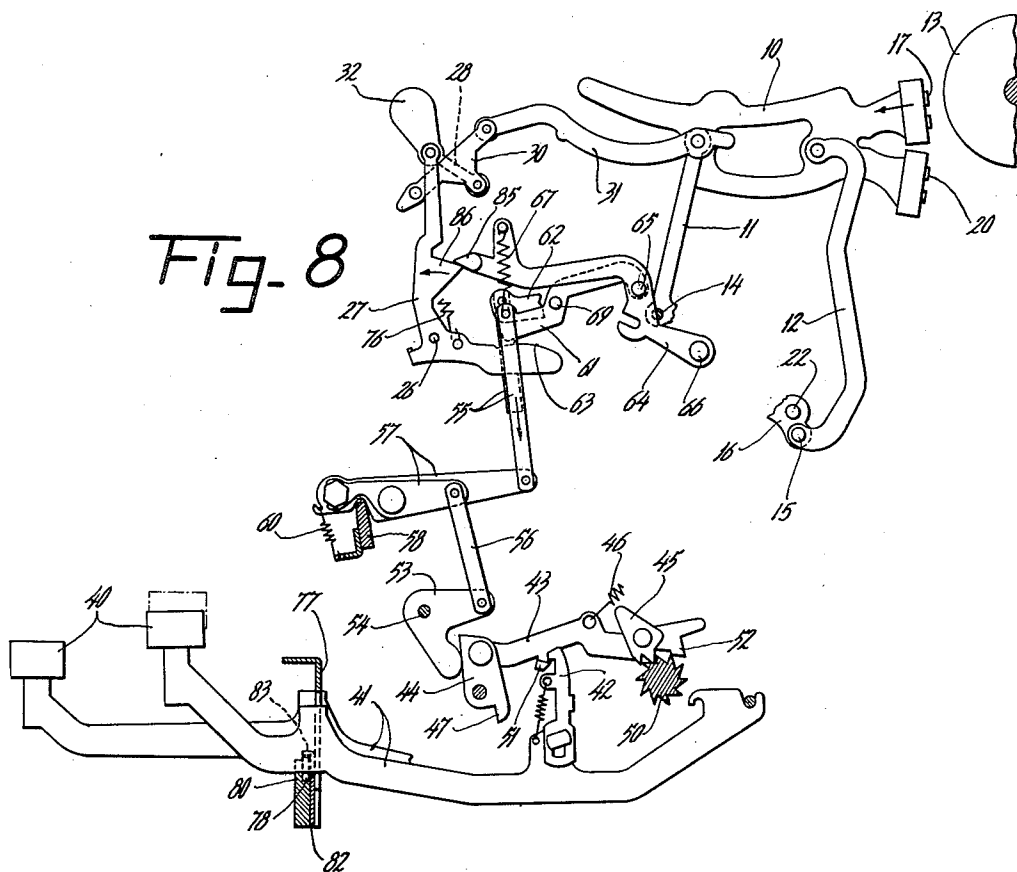
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TYPE CARRIER TRAVEL CONTROL

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2,697,503

TYPE CARRIER TRAVEL CONTROL

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9 Claims. (Cl. 197—17)

This invention relates to typewriting machines in general, and more particularly to such machines embodying noiselessly printing, pressure-active type carriers of the kind that are power-operable under control of two type keys, differentially to travel in two paths for directing one or another of two different character types to a printing point.

To be acceptable to a typist, a typewriting machine today must be capable of high speed and easy operation.

In connection with machines of the kind to which this invention relates, a great obstacle to high-speed operation has been experienced in view of the fact that each type carrier has two different character keys related thereto, and that depending on the operation of one or the other of such keys the movement of the type carrier must be different to direct one or another type to the printing point. Also, in approaching the printing point, the active type must meet a type guide in proper registration, that is, damaging clash of the type faces with such type guide must be avoided. In the face of these conditions, capability for high-speed operation demands that a type carrier may be picked up on a new typing stroke to type by either one of its two types while it has not yet fully restored from a preceding typing stroke in which either type may have been active. On the other hand, picking up of the type carriers for new typing movements before their full return can be practiced safely only within certain limits inasmuch as in the new typing stroke the type carrier must be availed of the opportunity to move appropriately to direct the proper type to the printing point.

Other difficulties contribute to the complexity of the problem, and it is the broad object of the invention to provide in the face of all these difficulties, an efficiently operative power-driven machine of the kind stated, capable of operation at high typing speed.

It is an additional object of the invention to guard efficiently against all misoperation of the type carriers which might result in damage to the mechanism, and particularly also the type faces.

Also an object is to provide efficient means facilitating the operation of the same type carrier to type by the two different character types thereon in fast succession and yet in an efficiently controlled manner to avoid damaging conflict of the types with the type guide.

Still other objects and features of the invention will be apparent upon consideration of the detailed description which follows, as the description is read in the light of the accompanying drawings.

Now directing the attention to the drawings,

Figure 1 is a side elevation illustrating in normal rest position a single type carrier along with its operating and controlling mechanism,

Figure 2 is a fractional front elevation depicting in normal condition a lock mechanism associated with two keys which are related to the same type carrier, such lock mechanism permitting operation of only one of the two keys at a time,

Figure 3 is a side elevation similar to Figure 1, but the type carrier is shown power-actuated and nearing the printing point in a path of operation to type by a lower type,

Figure 4 is a front elevation similar to Figure 2, but the illustrated lock mechanism is in a condition congruent with Figure 3,

Figure 5 is a side elevation similar to Figure 3, the

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type carrier being shown power-actuated and nearing the printing point in a path to type by an upper type,

Figure 6 is similar to Figure 4 but the lock mechanism is in a condition congruent with Figure 5,

Figure 7 is a side elevation illustrating a type carrier as having partially restored from a power operation instituted by one type key, and further illustrating another power operation instituted by another key and about to pick up the partially restored type carrier on a new typing stroke in a different path,

Figure 8 is similar to Figure 7, but illustrates the action of a safety feature, whereby in the event the two keys associated with the same type carrier are operated too closely in succession, harmful clash of the type carrier with a type guide will be avoided,

Figure 9 is a schematic plan view of pairs of related type keys and key-locking elements.

Referring now to Figure 1, there is shown a central type carrier 10 supported on a front and a rear guide arm, respectively numbered 11 and 12, to travel rearwardly against a platen 13. The front guide arm 11 has a permanently located lower pivotal point 14, whereas the rear guide arm 12 has a lower pivotal point 15 which is on a bell crank 16 elevatable thereby from the position seen in Figure 1 to that seen in Figure 3.

Assuming that the type carrier 10 is operated toward the platen with the pivotal point 15 located as in Figure 1, then a type 17 thereon will travel as in Figure 5, toward a printing point on the platen common to all type carriers 10. To cause another type 20 on the carrier to move to said printing point, the pivotal point 15 is caused to be elevated by the bell crank 16 as the type carrier is given the operating stroke, in a manner to be hereinafter explained. The types 17 and 20 are lower case types and there are also upper case types 17^u and 20^u but it suffices to describe the invention only in reference to typing by the types 17 and 20.

The type carrier 10 shown in the drawings is a central one of an arcuate system which is centered about a theoretical line 21, the various type carriers being arranged in divergent planes radiating from said line.

The pivot 14 of the guide arm 11 and also a pivot 22 for the bell crank 16 are both provided on a composite hanger element 23, all these hangers being convergent on the line 21 and being appropriately supported in arcuate segmental members 24 and 25.

For operation of the type carrier 10, each hanger 23 has pivotally supported thereon as at 26 a bell crank 27. At operation of the bell crank 27, by means of a link 28 acting on a toggle comprising two links 30 and 31, the related type carrier 10 is first driven toward the platen 13 at quickly accelerated pace. The bell crank 27, the link 28 and the toggle links 30, 31 are so organized and dimensioned that when the type carrier 10 approaches the platen, the speed thereof is rapidly decelerated. Meanwhile, an energy storing weight member 32 movably associated with the link 28 reaches maximum acceleration just before the type carrier 10 contacts the platen, and at the same time the bell crank 27, as will be brought out later, ceases to be power-actuated. The final movement of the type carrier 10 thereafter follows under the force of the momentum attained by the accumulator 32, at great leverage and pressure, noiselessly.

Each type carrier 10 is power-actuated responsive to either one of two related type keys 40. Said type keys are provided on spring restored key levers 41 having each an upreaching hook element 42. Above each key lever 41, extending parallel thereto in the same general plane, is a power actuator 43 in the form of a link which is pivotally attached at its front end to an upright arm 44. At its rear each actuator 43 carries pivotally thereon a snatch pawl 45. The arms 44 normally engage abutments 47 and springs 46 urge the actuators 43 rearwardly to the limits of said abutments and upwardly against a crossbar structure 48. Below the snatch pawls 45 of the actuators, normally clear thereof, there extends transversely of the machine a toothed power shaft 50 driven constantly in the direction of the indicated arrow when the machine is in use. The hook-ends of the elements 42 each normally overlie a lug 51 on the related actuator 43. Upon de-

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pression of any key lever 40, the hook-end of its associated element 42, by downward action on the lug 51, lowers the actuator 43 for its snatch pawl 45 to mesh with the power shaft 50. The teeth of the power shaft 50, in a manner well known in the art, then first turn the snatch pawl 45 limitedly on the actuator to the extent of about one tooth and then move the pawl with the actuator forwardly. In the course of the effected movement, a tail 52 on the actuator 43 rides into the path of one of the teeth on the power shaft 50; and there results automatically an upward displacement of the actuator which will free its snatch pawl 45 from the power member. After dissipation of the momentum acquired by the actuator 43 and connected parts, the actuator is pulled by its spring 46 rearwardly to its normal, idle position seen in Figure 1. The motion which each actuator 43 imparts to its related arm 44 is transmitted by rolling lever contact to a bell crank 53, the various bell cranks being pivotally carried on the machine on a transverse rod 54. Each of the bell cranks 43, through the intermediary of a link 56 and a component lever 57, is operative on a link 55. The said component levers 57 have pivotal association with a bar 58 and are laterally spaced in a manner not shown. For return of each component lever 57 and the parts linked thereto, the said levers 57 have each associated therewith a return spring 60. For every type carrier 10 the machine includes an arm 61 and also an arm 62, the former being shown in Figures 1, 3 and 8 and the latter being shown in Figures 5 and 7, and each of said arms 61, 62 being operable by one of the power actuators 41 through one of the links 55.

The arms 61, 62 related to each type carrier 10 are disposed alongside of each other generally in the plane of the related type carrier, and each such arm by rolling lever contact with a rolling face 63 provided on the related bell crank 27 is capable of operating the latter about its pivotal point 26, thereby to drive the related type carrier toward printing position in the manner hereinbefore stated.

It will now be seen that each type carrier 10 is power operable by two related power actuators 43, one such actuator causing type carrier operation through the lever 61 and the other causing operation through the lever 62. Ordinarily, whenever the lever 62 is operated, the pivotal point 15 for the type carrier guide arm 12, see Figure 5, is in and remains in the lower position seen in Figure 1, so that the upper type 17 will move to typing position. Also, ordinarily, whenever the lever 61 is operated the same moves unitarily with a lever 64 whereon it is pivotally carried at 65. Said lever 64 pivots on a pin 66 provided on the hanger 23 and is ordinarily caused to move unitarily with the lever 61 in view of a spring 67 which has anchorage oppositely on the levers 61 and 64, a pin 69 on the lever 61 affording an abutment for the lever 64 under the tension of said spring 67 to bear against. By a pin-and-slot association at 68 the lever 64 is in control of an arm 70 which together with a link 71 constitutes a toggle, said link 71 having an articulation with the bell crank 16 at 72. The arm 70 lies in the general plane of its related type carrier and is pivotally carried on the hanger 23 as at 73.

The rest positions of the just described parts are as in Figure 1. Ordinarily whenever the actuator 43 is operated which is in train with the lever 62, the pivotal point 15 for the type carrier guide arm 12 is in its lower position as in Figures 1 and 5 and consequently the upper type 17 will move to the typing point. Also ordinarily whenever the actuator 43 is operated which is in train with the lever 61, then the latter through the connection of the spring 67 causes the lever 64 to move unitarily therewith, thereby to actuate the arm 70 and to impart through the link 71 a movement to the bell crank 16 which will shift the pivotal point 15 of the type carrier guide link 12 to the position seen in Figure 3. It follows thus that during such actuation of the type carrier 10 the pivotal point 15 is shifted upwardly with the result that the lower type 20 will be directed toward the printing point.

From Figures 3 and 5, it will also be observed that although the bell crank 27 is still accelerating, the type carrier is rapidly decelerating because of the link 28 folding downwardly and because of the toggle 30, 31 straightening. Whether the type carrier is operated by the lever 61 or the lever 62, respectively as seen in Figures 3 and 5, the active actuator 43 becomes automatically disengaged as the type carrier approaches very closely the

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platen 13 and the toggle 30, 31 approaches a straight condition. In the showings in these figures, the tails 52 of the actuators 43 are on the point of being forced upwardly by the teeth of the power roll and in the next instant the actuator pawl 45 will be forced clear of the power roll 50. Printing thereafter by the type 17 or the type 20 occurs under the force of the momentum stored in the momentum accumulator 32 which continues its movement at high speed and mechanical leverage advantage, as may be easily appreciated from Figures 3 and 5. If the operation is in accordance with the showing of Figure 3 the hesitancy of the actuator and parts leading to the pivot 15 of the type carrier guide arm 12 will keep the type carrier 10 on the proper course at least until the imprint has occurred. Moreover, at the time the type carrier 10 reaches either the position seen in Figure 3 or Figure 5, where the power-drive ceases, the active type head has already entered a type guide 74, and the type carrier 10 will thereby be constrained to keep its movement in the appropriate path. Said type guide is of a structure conventional in the commercial Underwood Noiseless typewriter and includes two vertically spaced tapered lips 75. After the force of the momentum accumulator 32 has been spent in pressing the type carrier against the platen 13, a spring 76 associated with the bell crank 27 restores the parts leading from the latter to the type carrier, the other parts being restored by the springs 46 and 60.

It will now be observed that immediately following an operation of the type carrier in which the pivot 15 for the guide arm 12 has been raised, and well before the type carrier approaches restored position, the next operation of the same type carrier for typing by the upper type 17 may be started. However, such next operation must follow sufficiently late for the pivot 15 to have an opportunity to locate properly in its lower position before the type 17 reaches the type guide 74, as otherwise the type would clash with the latter. Also following an operation of the type carrier with the pivot 15 located in the lower position seen in Figures 1 and 5, the next operation of the same type carrier for typing by the lower type 20 may be started well before full return of the type carrier. In such sequence of operation the type carrier 10, in order to have appropriate opportunity to direct properly the type 20 to the printing point, must recede first from the type guide sufficiently to execute thereafter a properly directed movement.

An operator fingering the type keys 40 with a reasonable rhythm would not be apt ordinarily to operate two keys related to the same type carrier too quickly in succession in either order to deprive the type carrier in each instance of the opportunity to travel appropriately for the appropriate type to enter the type guide. In this connection it should be observed that the means whereby the position of the pivotal point 15 is raised for typing by the type 20 may safely start to do its work over an appreciable range in the return movement of the type carrier from the preceding typing operation by either of the types 19 or 20. Similarly an operation to type by the upper type 17 may be safely started over an appreciable range in the return movement of the type carrier after typing by either of the types 17 or 20.

Operation of the type carriers under control of the keys 40 at reasonably regular intervals however cannot be depended upon, and the invention provides efficient safety features to assure the safe operation of the type carrier 10 at all times. As will become evident hereinafter, these safety features in no manner interfere with the operation of the keys at a rhythmic pace usual with a reasonably experienced operator. Said safety devices include in association with each two related type key levers 41, a device illustrated in Figures 1, 2, 4 and 6, which permits operation of only one of the two related keys 40 at one time. The key levers 41 are guided in vertical slots of a conventional comb plate 77 and as will be appreciated from Figure 1, they are spring-urged upwardly to bear normally against the upper limits of said slots. Below the key levers 41, contiguous to and extending along said comb plate 77, there is an elongate cage structure for rolls 78, said structure comprising a long bar 80 upon a generally longitudinal recess of which there lies between each pair of related key levers, normally centered therebetween, one of said rolls 78. The diameter of each roll 78 is somewhat larger than the space between the key levers 41, and each of said rolls lies normally centered upon a concave

face 81. The said cage, besides the bar 80, includes a plate 82 having a top flange 83 overlying the rolls 78 with some clearance. The cage structure 80, 82 has transverse clearance slots 84 for the key levers 41 to descend thereinto, freely. Operation of either key lever 41, see Figures 4 and 6, will displace the roll 78 laterally to block the other key against operation. It follows thus that two keys 40 related to the same type carrier can never be operated at the same time and further that before either of such keys is operable, the other key must first be released and must have restored. There are no rolls between adjacent keys 40 related to different type carriers, wherefore only one roll 78 is displaced at operation of any of the keys 40, and wherefore in proper operation of the keys the roll offers no noticeable resistance to key operation. After release of each key the roll 78 falls by its own weight into the central position seen in Figure 2 and the other key consequently becomes liberated for operation. The described key blocking mechanism ordinarily prevents too closely successive operations of the power actuators 43 because by the time any operated key is released and the related other key becomes actuatable, the type carrier is well on its way to restored position, capable of being picked up and directed safely for the proper type to enter the type guide 74.

Furthermore to make too rapid successive operations of related keys 40 even more unlikely, they are preferably provided two key blanks apart as is diagrammatically illustrated in Figure 9. The stated relative location of the keys 40 makes it very difficult to operate any two related keys in objectionably close succession.

However, all this does not completely eliminate the possibility of operating two related keys in an extraordinary, freak or unconventional manner in such quick succession that the type carrier may not be availed of the opportunity to approach the type guide 74 with one or the other type 17 and 20 appropriately in registration therewith. To insure complete safety of operation, that is to make impossible damaging clashes of the type carriers 10 with the type guide 74, there are provided additional safety means. Such means include on each bell crank 27 an angular projection 86 and on each lever 64 a pointed broad nose 85 facing normally toward said projection 86 as in Figure 1.

In response to key depressions appropriately spaced in time, the nose 85 will either stay in the position seen in Figure 1 or will be drawn down to the position seen in Figure 3, the top face of the projection 86 as shown in Figure 5 moving under the nose 85 if the same stays, and the rear face of the projection 86 moving over the nose 85 if the latter is drawn down as seen in Figure 3. The said top and rear faces of the projection 86 are correlated to the nose 85 so that one or the other of such faces contacts the nose automatically only at the end of the final pressure movement of the type carrier 10. Under all circumstances when the point of the projection 86 advances past the point of the nose 85, either under or over it, there is assurance that either the type head embodying the type 17, or the type head embodying the type 20 will enter between the type guide lips 75.

Now assuming that a type carrier 10 is restoring after typing by the type 17, as illustrated in Figure 8, and further assuming that the nose 85 is still overlying the angular projection 86 when a newly instituted typing stroke for typing by the type 20 the lever 61 meets the still restoring bell crank 27, then the top face of the projection 86 will not give the nose 85 an opportunity to move down as it should. Obviously, since the nose 85 cannot move down, the lever 61 in being power actuated will not be able to draw the lever 64 therewith, wherefore the spring 67 is idly distended. The restoring bell crank 27 of course becomes reversed in motion by the bell crank 61 and will again drive the type carrier 10 to the printing point. Since in this stated operation the lever 64 is blocked against movement by the nose 85 encountering the top face of the angular projection 86, it follows that the pivotal point 15 for the type carrier guide arm 12 will be prevented from shifting upwardly. The operated type carrier 10 will thus be directed for it to enter the type guide 74 in a position so that the type 17 will print instead of the type 20. Operation of the type carrier 10 in this manner, however, occurs rarely and is due to freak fingering of the keyboard, the point of importance being that in such operation the type carrier enters the type guide in one of two positions of registration

therewith and damage to the mechanism, and particularly also damage to the type faces, is avoided.

A similar safety condition prevails if the type carrier 10 is returning after typing by the lower type 20 and if in the accompanying spring-urged restoration of the lever 61 the nose 85 has not yet had an opportunity to rise past the edge of the projection 86 before the lever 62 in a too closely instituted new typing stroke contacts the returning bell crank 27 to operate it. In this particular situation, the rear face of the angular projection 86 will cammingly act on the nose 85 to move the lever 62 down. Thus the rear end of the lever 64 moves the bell crank 16 again to raise the pivotal point 15 for the type 20 instead of the proper type 17 to enter the type guide 74. Thus in this situation also a wrong character is typed but damage to the mechanism and the type faces is avoided. Also this stated operation is due to freak fingering of the keyboard and will occur very rarely.

In respect to these stated improper typing operations, it should be observed that although the bell crank 16 may not be fully in one of its two extreme positions at the time the type 17 or the type 20 approaches the type guide 74, the path of approach of such types is nevertheless sufficiently accurate for the type to enter the type guide in the position as controlled by the angular projection 86 and the nose 85. This is because as both extreme positions of the bell crank 16 are approached, a relatively large movement of the lever 64 has relatively little influence on the elevation of the pivotal point 15 of the type carrier guide link 12.

The angular projection 86 is arranged to stand normally away from the nose 85 as much as is possible to permit the returning type carrier to be reversed in motion as early as possible under condition of proper determination of the typing path of the type carrier 10.

It is evident that the described safety features do in no manner encumber the free and speedy operation of the type carriers 10 through the varied paths so long as the type keys are operated with reasonable rhythm. Thus the machine is operable at the highest typing speed possible for the nature of the typing mechanism it embodies.

While only one embodiment of the invention has been shown and described, it is to be understood that the invention is susceptible of modification and change and comprehends other constructions and details without departing from the spirit of the invention.

What is claimed is:

1. In a typewriting machine having a type carrier operable to type at a printing point and having means to direct the type carrier variably to type at said printing point by one or another of two types thereon, two type keys, means responsive to said type keys to actuate the type carrier, a member operated responsive to only one of said keys, means impositively operable by said member to control said directing means for said type carrier to type by a particular one of said types, and means operated responsive to both of said keys and cooperative with said impositively operable means to block the latter against operation in any actuation of the type carrier which is responsive to said one of said keys if the type carrier in its return from an actuation responsive to the other one of said keys is picked up before a certain point of return is reached.

2. In a typewriting machine having a series of type carriers operable to type at a common printing point and having means individual to each type carrier to direct it variably to type at said printing point by an upper or a lower type thereon, two type keys related to each one of said type carriers, means responsive to one or the other of said keys related to each type carrier to power actuate the latter, said responsive means including a member power-actuated in response to only said one of said keys and a second member power-actuated in response to either of said keys, means impositively operable by the first said member to control said directing means for said type carrier to type by a particular one of said types, and means controlled by the said second member and cooperative with said impositively operable means to block its operation in any power actuation of the type carrier responsive to said one of said keys if the type carrier in its return from an actuation responsive to the other of said keys is picked up before a certain point of return is reached.

3. In a typewriting machine having a type carrier operable to type at a printing point and having means to

direct the type carrier variably to type at said printing point by one or another of two types thereon, two type keys, a separate power device responsive to each key to power-actuate the type carrier, a member power-actuated by either power device to transmit actuating motion to the carrier, means impositively operatable by one of said power devices to control said directing means for said type carrier to type by a particular one of said types, and means controlled by said power devices and cooperative with said impositively operatable means to block its operation in any power actuation of the type carrier by said one power device if the type carrier in its return from a power actuation by the other power device is picked up before a certain point of return is reached.

4. In a typewriting machine having a type carrier operable from rest position to enter a type guide in two different positions to type by either a lower or an upper type, the combination with a lever that is operatable to actuate the type carrier, of two independently operable arms to operate said lever, means dependent on the operation of one or the other of said arms to direct the type carrier during operation to enter said type guide in one or the other of said two positions, and means including an element controlled by said lever to control said directing means to direct said type carrier, at operation of either one of said arms following the operation of the other one, to enter the type guide in the same position as in the first operation if the lever in its return following operation by the first operated arm is picked up by the other arm before a certain point in the return of said lever is reached.

5. In a typewriting machine having a type carrier operable from rest position to enter a type guide in two different positions to type by either a lower or an upper type, the combination with a lever that is operatable to actuate the type carrier, of two independently operable arms to operate said lever, means dependent on the operation of one or the other of said arms to direct the type carrier during operation to enter said type guide in one or the other of said two positions, and means including an angular projection on said lever and a pointed nose operated by said directing means and controlled by said angular projection to direct said type carrier, at operation of either one of said arms following the operation of the other one, to enter the type guide in the same position as in the first operation if the lever in its return following operation by the first operated arm is picked up by the other arm before a certain point in the return of said lever is reached.

6. In a typewriting machine having a type carrier operable from a retired position to enter a type guide in two different positions to type either by an upper or a lower type thereon, means actuatable to operate said type carrier, two type keys, means responsive to operation of either of said keys to power-actuate said actuatable means to operate the type carrier to type, means controlled by said keys to direct the type carrier to enter the type guide in one or another of said two positions depending on which of the two keys is operated, and means operatively connected with said directing means and controlled by the said actuatable means to control said type carrier in the second of two closely successive power operations caused by successive operations of the said two keys to enter the type guide in the same position as in the first one of such two power operations, providing the type carrier in the second of such two power operations is picked up before the same from the first operation has restored to a certain point.

7. In a typewriting machine having a type carrier operable from a retired position to enter a type guide in two different positions to type either by an upper or a lower type thereon, means to operate said type carrier, com-

prising two normally idle power actuators, means to activate said actuators selectively for single operating strokes, means controlled by said actuators to direct said type carrier to enter the type guide in one or another or said two positions depending on which of the actuators is activated, and means controlled by said type carrier operating means and cooperative with said directing means to control said type carrier in the second of two closely successive power operations caused by successive activations of the two actuators to enter the type guide in the same position as in the first one of such two power operations, providing the type carrier in the second of such two power operations is picked up before the same from the first operation has restored to a certain point.

8. In a typewriting machine having a series of type carriers individually operable from diverse rest positions to enter a type guide at two different elevations to type either by an upper or a lower type thereon, the combination with an actuatable means for every type carrier, of two type keys, means responsive to operation of either of said keys to power-actuate the actuatable means to operate the type carrier to type, means controlled by said two keys to direct the type carrier to enter the type guide in one or another of said two elevations depending on which of the two keys is operated, means individual to the two keys related to each type carrier to lock either of such keys against effective operation in response to the operation of the other, whereby to some degree very closely successive power operations of any type carrier under control of the two keys related thereto are avoided, and individual means operatively connected with each directing means and controlled by the actuatable means to control the type carrier in the second of two closely successive power operations caused by successive operations of the two keys to enter the type guide at the same elevation as in the first one of such two power operations, providing the type carrier in the second of such two power operations is picked up before the same from the first operation has restored to a certain point.

9. In a typewriting machine having a type carrier operable from a rest position to enter a type guide in two different positions to type either by an upper or a lower type thereon, means actuatable to operate said type carrier, two normally idle power actuators for the actuatable means, means to activate said actuators selectively, means ordinarily to direct said type carrier to enter the type guide in one of said two different positions in response to activation of one actuator and ordinarily to direct said type carrier to enter the type guide in the other of said positions in response to activation of the other actuator, and means associated with said directing means to control it to direct said carrier to enter into the type guide, in an actuation of either actuator following the actuation of the other, in the same position as controlled in the first actuation, providing the type carrier in its return from the first actuation is picked up by the activation of the second actuator before the type carrier from the first actuation has restored to a certain point, said control means comprising a member resiliently operable by operation of one of the actuators, to control said directing means to direct the carrier to enter the type guide in one particular position, and means movable by said actuatable means to hold said resiliently operable means against operation.

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