L. A. WERNERY.

TYPE WRITING MACHINE.

APPLICATION FILED OCT. 27, 1915.

1,268,521. Patented June 4, 1918.

FIG. 1.

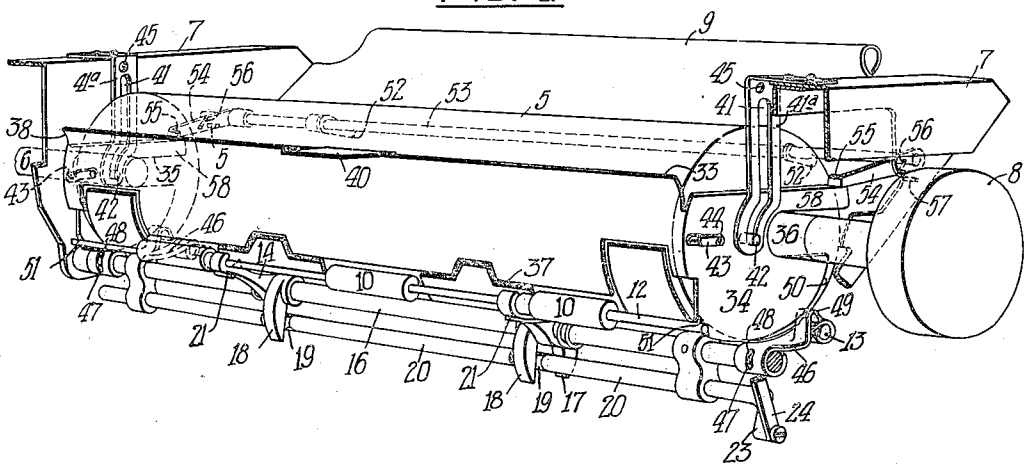


FIG. 4.

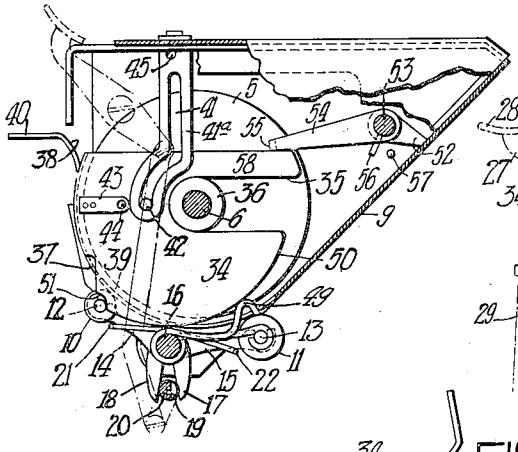


FIG. 3.

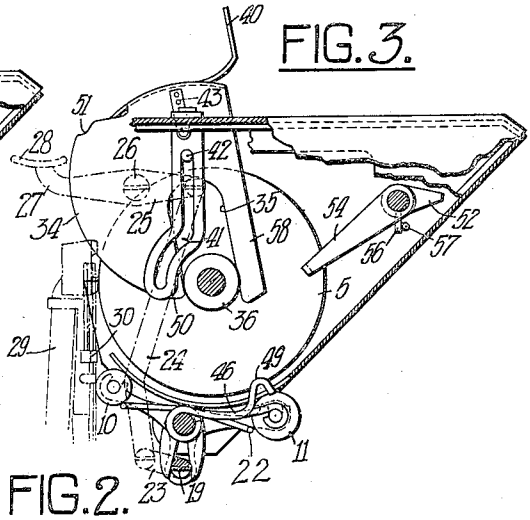
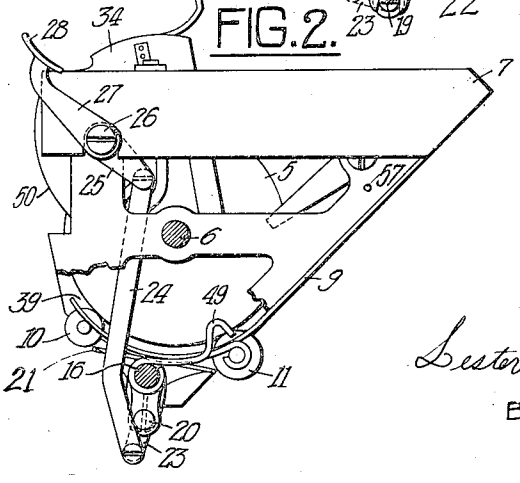


FIG. 2.



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TYPE-WRITING MACHINE.

1,268,521. Specification of Letters Patent. Patented June 4, 1918.

Application filed October 27, 1915. Serial No. 58,095.

To all whom it may concern:

Be it known that I, LESTER A. WERNERY, a citizen of the United States, residing in Brooklyn borough, in the county of Kings, city and State of New York, have invented certain new and useful Improvements in Type-Writing Machines, of which the following is a specification.

The present invention relates to work-pieces guiding and feeding means for type-writing machines, especially for so-called front-stroke machines in which the type-bars strike on the front of the platen, usually through a type guide fixed at the printing point, and in which there are feed rolls below the printing line, and a shelf at the rear of the platen extending down and around the same to lead the work-pieces to the feed rolls, whence the line-space feed of the work-piece carries it up and out of the machine at the front thereof.

It is often desirable, to introduce the work-piece bottom edge first at the front of the machine, and, when it is in the machine, to back it down and around the platen from the front of the machine to printing position.

It is an object of the present invention to provide an efficient and simple guide, whereby a work-piece may be introduced at the front of the machine, or backed or moved in counter line-space feed direction around the platen. It is an object to have the guide of such a nature that it will not interfere with any of the parts or with the usual operations of a standard machine. A feature of the invention is to have a guide of the character stated, which, when in effective position, may form in effect a continuation of the usual bottom paper-guide, so that the work-piece may be passed onto the latter. It is a feature of the invention that the front guide is movable, so that, except when it is desired to use the same, it may be thrown away from the printing line and from the parts adjacent thereto; and so that when in use, it may lie directly across the printing line in the form of a plate which, preferably flaring to a mouth above the printing line, follows the curve of the platen down past the printing line as far as may be desired to guide the work-piece past parts with which it might otherwise interfere. It is a feature of the invention to provide means for shifting the guide between effective and ineffective positions, such that when the guide is moved to effective position, the usual feed rolls are automatically thrown from the platen to remove the same from the path of the work-piece. A further feature of the invention is that the feed rolls may be thrown to and from the platen in the ordinary way without movement of the guide from its ineffective or writing position. Another object of the invention is to provide a gage which, by engaging the bottom edge of the work-piece, determines a printing position therefor, after the work-piece has been backed around the platen a sufficient distance. A feature of this gage is that it is normally out of the path of the work-piece so as not to interfere with the ordinary feed of the latter into the machine from the rear; and another feature of the gage is that its movements between effective and ineffective positions may be controlled by the corresponding movements of the work-piece guide. Another feature of the invention is that the guide, when in its normal or writing position, may serve as a means for deflecting in desired direction the leading ends of work-pieces fed out of the machine at the top thereof.

In the preferred form of the invention, the guide is a plate which extends from end to end of the platen, and is curved in general conformity to the curve of the platen. It is supported by ears which engage the platen axle to swing around the same between an ineffective position in which the guide is well clear of the platen at a distance above the printing line, to an effective position in which the guide embraces at and below the printing line. Fixed cams on the platen carriage, by engagement with the ears, and in conjunction with the platen axle, control the linear movement of the guide to and away from the platen, and also the rotary movement of the guide around the platen. The ears carry cams which, when the guide moves around the platen to effective position, throw off the feed rolls, and lugs on the same ears operate the gage which determines the printing position of the work-piece.

Other features and advantages will hereinafter appear.

In the accompanying drawings,

Figure 1 is a view in perspective of the

invention as applied to the platen carriage of an Underwood typewriting machine.

Fig. 2 is a view in end elevation of the parts shown in Fig. 1, the feed-roll releasing mechanism being also shown, and all parts being in normal or writing position.

Fig. 3 is a view similar to that of Fig. 2, except that the feed rolls have been thrown to position for the insertion of a work-piece.

Fig. 4 is a view similar to that of Fig. 3, except that the paper guiding and gaging means of the present invention are also in position for insertion of a work-piece.

Referring to the drawings, the platen 5 is shown as mounted in the usual way on an axle 6, journaled in the side pieces 7 of the platen carriage, and having hand wheels 8 on the ends thereof, by means of which the platen may be turned in line-space and reverse directions. On the carriage is also the usual paper shelf 9 over which the paper is fed in the printing operation from the rear of the platen, downward around the platen, and upward to the printing line. Front and back feed rolls 10 and 11 are mounted on rods 12 and 13, respectively; the rod 12 being carried by bell cranks 14 and the rod 13 by bell cranks 15, all of which bell cranks are carried by a shaft 16 on which they are adapted to be rocked. Between the arms 17 of the bell cranks 14 and the arms 18 of the bell cranks 15 are flats or cams 19 on a rock-shaft 20. Springs 21 and 22 attached to the shaft 16 bear upon the bell cranks, and resiliently hold the feed rolls to the platen or to a work-piece thereon, and hold the arms 17 and 18 to the flats 19. To permit of easy insertion and withdrawal of a work-piece, the rolls 10 and 11 are shiftable away from the platen, by means of the flats or cams 19, when the shaft 20 is turned; and to turn the shaft 20, there is a crank 23 on the latter, connected by a link 24 to an arm 25, fast to a rock-shaft 26. The shaft 26 has fast thereto an arm 27 carrying a finger-piece 28 by means of which the rolls 10 and 11 are moved to and from the platen, according to the direction of movement of the finger-piece. At the printing point, is shown a type-bar 29, and a type guide and ribbon carrier guide 30. The mechanism thus far described is that usually found in Underwood typewriting machines.

The present invention has been stated to relate to means for facilitating the insertion of the work-piece, from the front of the machine, in the direction reverse to the line-space feed thereof, so that it may be more quickly positioned for writing, in certain instances, than when led in over the table 9 in the usual way. The plate or apron 33, which serves as the means whereby the work-piece is guided when it is thus introduced from the front of the platen, is carried by plates 34, preferably integral therewith, which plates extend to the platen axle, and have slots 35 therein by means of which they have a sliding and rotary bearing on the hubs 36 of the platen. The normal position of the guide 33 is shown in Fig. 3 in which it is turned up out of the way to permit of writing on the work-piece. In Fig. 4, however, it is shown as having been moved down between the type guide and the platen until its lower edge 37 is just opposite to and alined with the forward edge of the paper shelf 9, so that the guide 33 then forms in effect a continuation of the shelf 9, up and past the printing line where it is flared out at 38 to form a mouth into which the work-piece may be introduced. By reason of this flare, the work-piece is led from a mouth, which is easily found, to the narrow and otherwise less easily found passage 39 between the forward edge of the shelf 9 and the platen. It is thus also led past the type guide, ribbon vibrator, and other parts which might render the passage 39 not easily accessible. A finger piece 40 serves as means for moving the guide 33 between Fig. 3 and Fig. 4 positions.

The guide 33 is guided in its movements, not only by the coöperation of the slots 35 with the axle hubs 36, but also by cam slots 41, in plates 41^a, one of which latter is fixedly attached to each end piece 7 of the platen carriage, and each of which slots 41 engages a pin 42 carried by the opposing supporting plate 34 of the guide 33. The cam slots 41 are so shaped that downward pressure on the guide 33, causes the lower edge thereof to move, first, more or less directly to the printing line, between the platen and the type guide, and then to swing around in a path defined by the curvature of the platen, until it finally comes to rest in Fig. 4 position, which may be determined by engagement of the pins 42 with the lower end walls of the slots 41. The reverse movement of the guide, (from Fig. 4 to Fig. 3 positions), may be determined by contact of the pins 42 with the upper end walls of the cam slots 41; and the guide may be locked in Fig. 3 position during the writing operation by means of spring detents in the form of springs 43, each secured to one of the guide supports 34, and having a tooth 44 adapted to enter a hole 45 in the opposing fixed cam plate 41^a.

In order that when the guide 33 is set in Fig. 4 position, a work-piece may be inserted without interference from the feed rolls 10 and 11, these rolls may be shifted from the platen by means of the key, as indicated in Fig. 3; or, they may be automatically shifted from the platen, during the guide-setting operation, by the following means. Mounted on the shaft 16 are two arms 46, each capable of rocking movement on the shaft, limited by

a pin 47 which passes into the shaft through slots 48 in the bearings of the arms, and which holds the arms against longitudinal movement on the shaft. These arms 46 engage the rod 13 which carries the back feed rolls 11. The arms 46, which may be of sheet metal, each have a piece 49 turned upward out of the same to form a lug or tooth which lies in the path of a cam surface 50 on the opposing guide-supporting plate 34. As the guide 33 moves from Fig. 3 to Fig. 4 position, the cams 50 strike the lugs 49 and rock the arms 46 with the back feed rolls, to remove the latter from the platen, without turning the shaft 20 or moving the other mechanism controlled by the key 28. The cams 50 likewise, and in the same operation, throw the front feed rolls 10 from the platen, but here the cams 50 act by direct engagement with the front roll-carrying rod 12 (see Fig. 4). This action of the cams 50 is against the tension of the springs 21 and 22, which tend to hold the rolls to the platen, and which return the rolls to the platen when the guide 33 is returned to writing position. The tension of the springs 21 may be utilized to provide a snap lock for temporarily holding the guide 33 in effective, (Fig. 4), position; and, to this end the cams 50 are recessed at 51 to provide seats in which the rod 12 is snapped by the springs 21, to hold the guide 33. The shape of the cams 50 is such, however, that the rod 12 rides out of the recesses 51 when pressure is applied to return the guide 33 to writing position. It will be noted that the feed rolls 10 and 11 are shiftable to and from the platen by means of the key 28 without involving movement of the guide 33 from its normal ineffective position, whenever work-pieces are to be released or inserted in the usual manner. It will also be seen that the guide 33 when in its normal position may serve as a means for deflecting in desired direction, work-pieces fed upward from the platen at the front thereof, and for preventing such work-pieces from falling forward.

A gage for alining the work-piece in a predetermined position at the printing line, upon introduction of the work-piece over the guide 33, may also be provided. This gage is shown as a stop or stops 52 normally removed from the paper shelf 9, to permit of movement of the work-pieces over the latter from the rear of the platen, but which, when the guide 33 is moved to effective position (see Fig. 4), are thrown against the paper shelf 9, to arrest a work-piece inserted from the front when the bottom or rear end of the work-piece reaches the gage. The gage 52 is shown as comprising two arms or blades fast to a rock-shaft 53, to which shaft are also fast two arms 54, each having an offset 55 in the path of one of the cam plates 34. The weight of the arms 54 causes the gage normally to assume Fig. 3 position, determined by the engagement of pins 56 on the shaft 53 with fixed stops 57 on the end pieces 7 of the platen carriage. When the guide 33 is moved to effective (Fig. 4) position, shoulders 58 on the plates 34 strike the offsets 55 of the arms 54 to rock the shaft 53, thus throwing the gage 52 against the shelf 9 in the path of the work-piece to be guided into the machine, from the front thereof, over the guide 33 and shelf 9. On return of the guide 33 to Fig. 3 position, the arms 54 drop and throw the gage upward from the shelf 9.

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

Having thus described my invention, I claim:

1. In a typewriting machine, a cylindrical platen, means for guiding a work-piece onto and around the platen in direction of line-space feed thereof, type bars adapted to strike the work-piece at a fixed line on the path of movement of the work-piece around the platen, and means shiftable around the platen, across said printing line, adapted, when across the printing line, to guide the work-piece to printing position on the platen in direction reverse to the direction of the line-space feed of the work-piece.

2. In a typewriting machine, a cylindrical platen, means for guiding a work-piece onto and around the platen in direction of line-space feed thereof, type bars adapted to strike the work-piece at a fixed line on the path of movement of the work-piece around the platen, and a continuous plate shiftable around the platen, across said printing line, adapted, when across the printing line, to guide the work-piece to printing position on the platen in direction reverse to the direction of the line-space feed of the work-piece.

3. In a typewriting machine, the combination with a rotatably-mounted platen to support a work-piece, printing mechanism including type-bars effective at a common printing point for printing characters thereon, means for causing relative lateral movement between said platen and said printing point to determine the printing line, means effective on rotation of said platen for feeding said work-piece across said printing line, and means for guiding said work-piece to and around said platen in regular line-spacing direction, of a reverse feed-guide, shiftable, with respect to said printing line, from a normal non-feeding position, at a distance therefrom, to a feeding position, effective for guiding a work-piece across said printing line, in a direction the reverse of that of regular line-spacing, to a working position around the platen and between the same and said first-mentioned guiding means, and means for guiding said reverse feed-guide in

its movements between its normal and effective feeding positions.

4. In a typewriting machine, the combination with a rotatably-mounted platen to support a work-piece, printing mechanism including type-bars effective at a common printing point for printing characters thereon, means for causing relative lateral movement between said platen and said printing point to determine the printing line, means effective on rotation of said platen for feeding said work-piece across said printing line, and means for guiding said work-piece to and around said platen in regular line-spacing direction, of a reverse feed-guide shiftable around said platen from a normal non-feeding position at a distance from said printing line to a feeding position, effective for guiding a work-piece across said printing line, in a direction the reverse of that of regular line-spacing, to a working position around the platen and between the same and said first-mentioned guiding means, and means for guiding said reverse feed-guide in its movements between its normal and effective feeding positions.

5. In a typewriting machine having front strike types, a platen, and means interposable between the types and platen for guiding a work-piece onto the platen in counter-line-space direction.

6. In a typewriting machine having front strike types, a platen, and a continuous plate interposable between the types and platen for guiding a work-piece onto the platen.

7. In a typewriting machine, the combination with a rotatably-mounted platen to support a work-piece, printing mechanism including type-bars effective at a common printing point for printing characters thereon, means for causing relative lateral movement between said platen and said printing point to determine the printing line, means effective on rotation of said platen for feeding said work-piece across said printing line, and means for guiding said work-piece to and around said platen in regular line-spacing direction, of a reverse feed-guide movable with respect to said platen to and from a feeding position, effective for guiding a work-piece across said printing line, in a direction the reverse of that of regular line-spacing, to a working position around the platen and between the same and said first-mentioned guiding means, and means for guiding said reverse feed-guide in its movements to and from said effective feeding position.

8. In a typewriting machine, the combination with a rotatably-mounted platen to support a work-piece, printing mechanism including type-bars effective at a common printing point for printing characters thereon, means for causing relative lateral movement between said platen and said printing point to determine the printing line, and means effective on rotation of said platen for feeding said work-piece across said printing line, of a reverse feed-guide movable with respect to said platen to and from a feeding position, effective for guiding a work-piece across said printing line, and between said printing mechanism and said platen, in a direction the reverse of that of regular line-spacing, and means for guiding said reverse feed-guide in its movements to and from said effective feeding position.

9. In a front-strike typewriting machine, a revoluble platen, a work-piece guide having a normal, writing position above the printing line at the front of the platen, and means for throwing said guide to a position in front of the platen in which work-pieces to be written may be slid over it past the printing line and thence down and around the platen from the front thereof, to printing position.

10. In a front-strike typewriting machine, a revoluble platen, a work-piece guide having a normal, writing position above the printing line at the front of the platen, and means for throwing said guide to a position in front of the platen in which work-pieces to be written may be slid over it past the printing line and thence down and around the platen from the front thereof to printing position, said guide in all positions thereof being out of contact with the platen.

11. In a front-strike typewriting machine, a revoluble platen, a work-piece guide having a normal, writing position above the printing line at the front of the platen, and means for throwing said guide to a position in front of the platen in which work-pieces to be written may be slid over it past the printing line and thence down and around the platen from the front thereof to printing position, said guide in said normal position acting as a deflector for work-pieces fed upwardly from the printing line.

12. In a front-strike typewriting machine, a revoluble platen, a work-piece guide having a normal, writing position above the printing line at the front of the platen, and means for throwing said guide to a position in which it crosses the printing line and follows the face of the platen downward with a passage therebetween through which a work-piece may be passed to printing position from the front of the platen.

13. In a front-strike typewriting machine, a revoluble platen, a work-piece guide having a normal, writing position above the printing line at the front of the platen, means for throwing said guide to a position in which it crosses the printing line and follows the face of the platen downward with a passage therebetween through which a work-piece may be passed to printing position from the front of the platen, and a gage

for determining the printing position of the work-piece introduced through said passage.

14. In a front-strike typewriting machine, a revoluble platen, a work-piece guide having a normal, writing position above the printing line at the front of the platen, means for throwing said guide to a position in which it crosses the printing line and follows the face of the platen downward with a passage therebetween through which a work-piece may be passed to printing position from the front of the platen, and a shelf over which work-pieces may be fed to the platen from the rear thereof, said shelf being substantially a continuation of said movable guide when the latter is thrown to position for guiding work-pieces.

15. In a front-strike typewriting machine, a revoluble platen, a work-piece guide having a normal, writing position above the printing line at the front of the platen, means for throwing said guide to a position in which it crosses the printing line and follows the face of the platen downward with a passage therebetween through which a work-piece may be passed to printing position from the front of the platen, a shelf over which work-pieces may be fed to the platen from the rear thereof, said shelf being substantially a continuation of said movable guide when the latter is thrown to position for guiding work-pieces, and a gage at the shelf for determining the printing position of work-pieces introduced over said movable guide.

16. In a front-strike typewriting machine, a revoluble platen, a work-piece guide having a normal, writing position above the printing line at the front of the platen, means for throwing said guide to a position in which it crosses the printing line and follows the face of the platen downward with a passage therebetween through which a work-piece may be passed to printing position from the front of the platen, a shelf over which work-pieces may be fed to the platen from the rear thereof, said shelf being substantially a continuation of said movable guide when the latter is thrown to position for guiding work-pieces, and a gage at the shelf for determining the printing position of work-pieces introduced over said movable guide, said gage being movable from the shelf to permit of passage of work-pieces over the latter when said movable guide is in normal or writing position.

17. In a front-strike typewriting machine, a revoluble platen, a work-piece guide having a normal, writing position above the printing line at the front of the platen, means for throwing said guide to a position in which it crosses the printing line and follows the face of the platen downward with a passage therebetween through which a work-piece may be passed to printing position from the front of the platen, and a gage for determining the printing position of the work-piece introduced through said passage, said gage having a connection whereby it is thrown to operative position by said guide when the guide is moved into work-piece-guiding position.

18. In a front-strike typewriting machine, a platen carriage, a platen journaled in the carriage, a work-piece-guiding plate extending lengthwise of the platen and curved in general conformity with the printing surface of the latter, means for holding the plate in normally ineffective position above the printing line at the front of the platen, and means for swinging the plate from said normal position to a position in which it embraces the platen from the printing line downwardly and serves as a guide to the platen for work-pieces introduced at the front of the platen between the plate and platen.

19. In a front-strike typewriting machine, a platen carriage, a platen journaled in the carriage, a work-piece-guiding plate extending lengthwise of the platen and curved in general conformity with the printing surface of the latter, means for holding the plate in normally ineffective position above the printing line at the front of the platen, and means for swinging the plate from said normal position to a position in which it embraces the platen from the printing line downwardly, and serves as a guide to the platen for work-pieces introduced at the front of the platen between the plate and the platen, said plate having its upper edge flared out from the platen to form, in conjunction with the latter, when the plate is in effective position, a mouth above the printing line through which work-pieces may be passed down to a more constricted passage between the plate and the platen at and below the printing line.

20. In a front-strike typewriting machine, a platen carriage, a platen journaled in the carriage, a work-piece-guiding plate extending lengthwise of the platen and curved in general conformity with the printing surface of the latter, an ear extending from said plate to the platen axle for supporting said platen, and a cam on the carriage cooperating with said ear to guide said plate between said ineffective position and an effective position in which the plate embraces the platen at and below the printing line, with free passage for work-pieces between the plate and the platen.

21. In a front-strike typewriting machine, a platen carriage, a platen journaled in the carriage, a work-piece-guiding plate extending lengthwise of the platen and curved in general conformity with the printing surface of the latter, an ear extending from said plate to the platen axle for supporting

said plate, and a cam on the carriage cooperating with said ear to guide said plate between said ineffective position and an effective position in which the plate embraces the platen at and below the printing line, with free passage for work-pieces between the plate and the platen, said ear being slotted to have both linear and rotary movement on the platen axle, and said cam being shaped to guide said plate, first, to the platen from its ineffective position in which it is removed therefrom, and thence around the platen to its effective guiding position.

22. In a front-strike typewriting machine, a platen carriage, a platen journaled in the carriage, a work-piece-guiding plate extending lengthwise of the platen and curved in general conformity with the printing surface of the latter, an ear extending from said plate to the platen axle for supporting said plate, a cam on the carriage coöperating with said ear to guide said plate between said ineffective position and an effective position in which the plate embraces the platen at and below the printing line, with free passage for work-pieces between the plate and the platen, and a spring detent for holding the plate to the carriage in said normally ineffective position.

23. In a front-strike typewriting machine, a platen carriage, a platen journaled in the carriage, a work-piece-guiding plate extending lengthwise of the platen and curved in general conformity with the printing surface of the latter, an ear extending from said plate to the platen axle for supporting said plate, a cam on the carriage coöperating with said ear to guide said plate between said ineffective position and an effective position in which the plate embraces the platen at and below the printing line, with free passage for work-pieces between the plate and the platen, and a gage movable by said ear into the path along which are moved the work-pieces introduced at the front of the platen by means of said guide, whereby the work-pieces may be arrested in a predetermined printing position.

24. In a front-strike typewriting machine, a revoluble platen, feed rolls adapted to bear thereon below the printing line, a work-piece guide between which and the platen work-pieces may be introduced at the front of the platen and passed downwardly closer to the platen and around the platen to printing position when the guide is in effective position, means for shifting said guide between its effective position and a position in which it is normally removed from the printing line, and means connected with said guide for throwing said feed rolls from the platen when the guide is moved to its effective position.

25. In a front-strike typewriting machine, a revoluble platen, feed rolls adapted to bear thereon below the printing line, a work-piece guide between which and the platen work-pieces may be introduced at the front of the platen above the printing line and passed downwardly around the platen to printing position when the guide is in effective position, means for shifting said guide between its effective position and a position in which it is normally located entirely above the printing line and at a distance from the platen, and means connected with said guide for throwing said feed rolls from the platen when the guide is moved to its effective position.

26. In a front-strike typewriting machine, a revoluble platen, feed rolls adapted to bear thereon below the printing line, a work-piece guide between which and the platen work-pieces may be introduced at the front of the platen above the printing line and passed downwardly around the platen to printing position when the guide is in effective position, means for shifting said guide between its effective position and a position in which it is normally located entirely above the printing line, and a cam carried by said guide for throwing said feed rolls from the platen when the guide is moved to its effective position.

27. In a front-strike typewriting machine, a revoluble platen, feed rolls adapted to bear thereon below the printing line, a work-piece guide between which and the platen work-pieces may be introduced at the front of the platen above the printing line and passed downwardly around the platen to printing position when the guide is in effective position, means for shifting said guide between its effective position and a position in which it is normally located entirely above the printing line and at a distance from the platen, an ear on which said guide is supported for swinging movement, and a cam carried by said ear adapted to engage said rolls to throw the latter from the platen when the guide is swung to effective position.

28. In a front-strike typewriting machine, a revoluble platen, front and rear feed rolls adapted to bear thereon below the printing line, a work-piece guide between which and the platen work-pieces may be introduced at the front of the platen above the printing line and passed downwardly around the platen to printing position when the guide is in effective position, means for shifting said guide between its effective position and a position in which it is normally located entirely above the printing line and at a distance from the platen, an ear on which said guide is supported for swinging movement, and a cam carried by said ear adapted to engage said rolls to throw the latter from the platen when the guide is swung to effective position.

29. In a front-strike typewriting machine, a revoluble platen, a work-piece guide between which and the platen work pieces may be introduced at the front of the platen and passed downwardly around the platen to printing position when the guide is in effective position, means for shifting said guide between its effective position and a position in which it is normally removed from the printing line, and a gage, controlled by said guide and shiftable into and out of the path of the work-piece as said guide moves to and from effective position, for determining the printing position of the work piece.

30. In a front-strike typewriting machine, a revoluble platen, feed rolls adapted to bear thereon below the printing line, a work-piece guide between which and the platen work-pieces may be introduced at the front of the platen and passed downwardly around the platen to printing position when the guide is in effective position, means for shifting said guide between its effective position and a position in which it is normally removed from the printing line, means connected with said guide for throwing said feed rolls from the platen when the guide is moved to its effective position, and means for throwing said feed rolls from the platen while said guide remains in its normal ineffective position.

31. In a front-strike typewriting machine, a revoluble platen, feed rolls adapted to bear thereon below the printing line, a work-piece guide between which and the platen work-pieces may be introduced at the front of the platen and passed downwardly closer to the platen and around the platen to printing position when the guide is in effective position, means for shifting said guide between its effective position and a position in which it is normally removed from the printing line, means connected with said guide for throwing said feed rolls from the platen when the guide is moved to its effective position, and a shelf over which work-pieces may be guided down around the platen from the rear and which, when said movable guide is in effective position, forms a continuation of the guiding surface presented by said movable guide for feed of the work-pieces from the front of the machine.

32. In a front-strike typewriting machine, a revoluble platen, feed rolls adapted to bear thereon below the printing line, a work-piece guide between which and the platen work-pieces may be introduced at the front of the platen and passed downwardly around the platen to printing position when the guide is in effective position, means for shifting said guide between its effective position and a position in which it is normally removed from the printing line, means connected with said guide for throwing said feed rolls from the platen when the guide is moved to its effective position, a shelf over which work-pieces may be guided down around the platen from the rear and which, when said movable guide is in effective position, forms a continuation of the guiding surface presented by said movable guide for feed of the work-pieces from the front of the machine, and a gage pivoted above said shelf and adapted to be thrown onto the latter by said movable guide, when the latter is shifted to effective position, for determining the printing position of a work-piece introduced from the front of the platen.

LESTER A. WERNERY.

Witnesses:
W. O. WESTPHAL,
ARTHUR A. JOHNSQN.