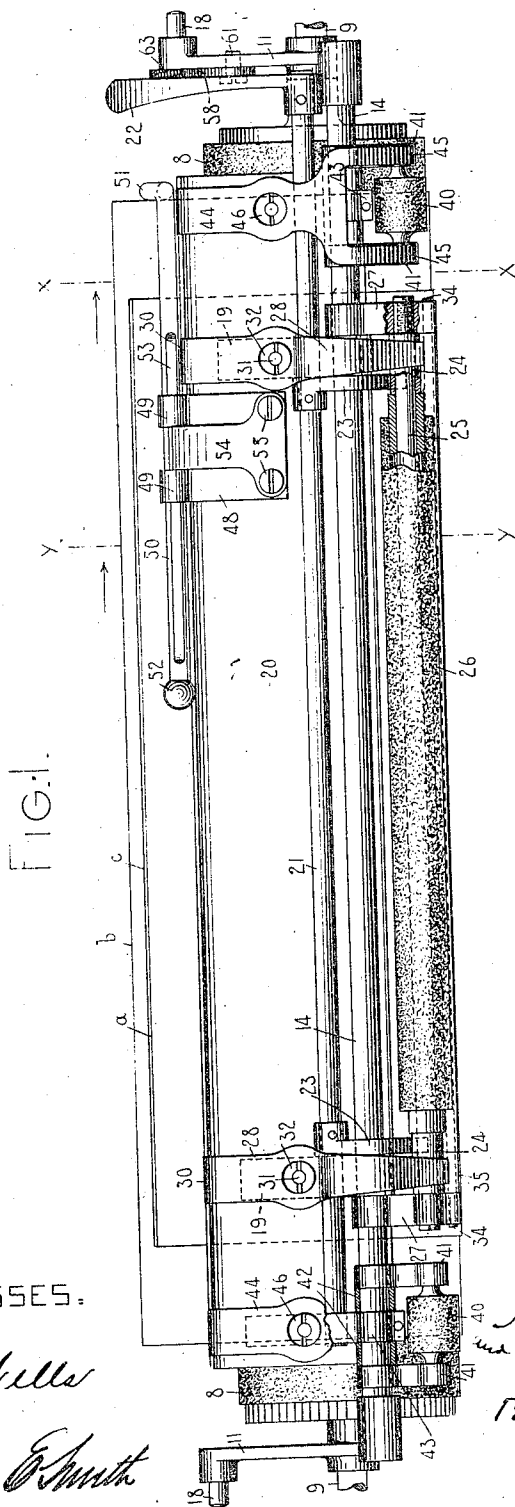


981,974.

A. T. BROWN & A. J. BRIGGS.
TYPE WRITING MACHINE.
APPLICATION FILED OCT. 29, 1904.

Patented Jan. 17, 1911.

2 SHEETS—SHEET 1.



WITNESSES.

E. M. Wells

Charles E. Smith

INVENTORS

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By Jacob Feltel

THEIR ATTORNEY

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2 SHEETS—SHEET 2.

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FIG. 2.

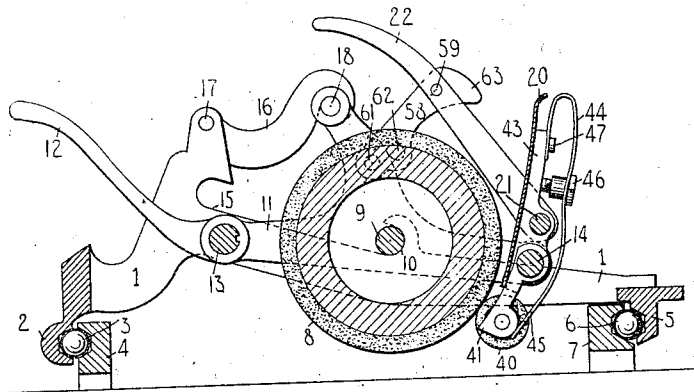


FIG. 3.

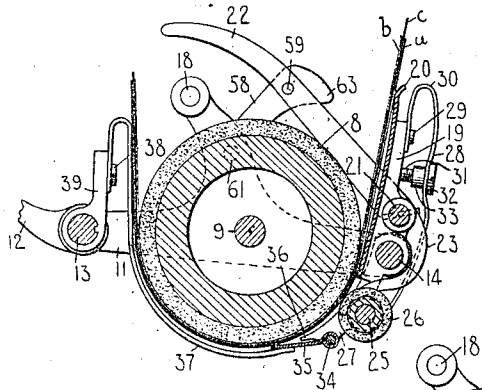


FIG. 5.

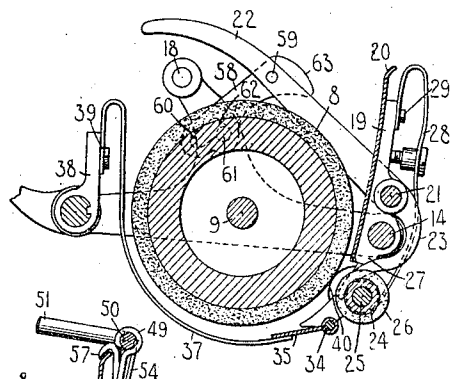
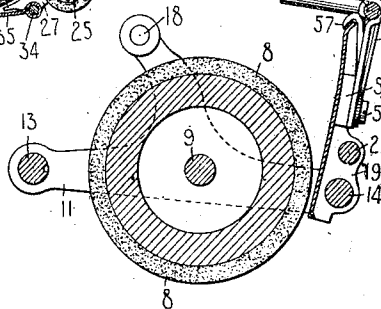


FIG. 4.



WITNESSES:

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UNITED STATES PATENT OFFICE.

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BRIGGS ASSIGNOR TO SAID BROWN.

TYPE-WRITING MACHINE.

981,974.

Specification of Letters Patent.

Patented Jan. 17, 1911.

Application filed October 29, 1904. Serial No. 230,581.

To all whom it may concern:

Be it known that we, ALEXANDER T. BROWN and ARTHUR J. BRIGGS, citizens of the United States, and residents of Syracuse, in the county of Onondaga and State of New York, have invented certain new and useful Improvements in Type-Writing Machines, of which the following is a specification.

Our invention relates to typewriting machines and the main object of said invention is to provide simple and efficient means for doing what is known as condensed record work, as will hereinafter more clearly appear.

To the above and other specific ends which will appear in the following description, our invention consists in features of construction, arrangements of parts and combinations of devices to be hereinafter described and claimed.

In the accompanying drawings wherein like reference characters indicate corresponding parts in the various views, Figure 1 is a rear elevation of a platen and platen frame, together with the various features of our invention shown as applied thereto; the view having certain of the parts broken away. Fig. 2 is a transverse sectional view of a platen, platen frame and carriage, the section being taken on the line $x-x$ of Fig. 1 and looking in the direction of the arrow at said line. Fig. 3 is a like view of the same taken on the line $y-y$ of Fig. 1 and looking in the direction of the arrow at said line, and with the side edge guide omitted. Fig. 4 is a transverse sectional view also taken on the line $y-y$ of Fig. 1 and looking in the direction of the arrow at said line and with the paper guide and feed devices omitted and the side edge guide shown in operative position. Fig. 5 is a view which corresponds to Fig. 3, except that the movable paper feed devices are shown thrown and locked out of action.

While we have shown our invention applied to a Smith Premier machine, or so much thereof as may be necessary in order to illustrate our invention, it should be understood that the invention may be employed in the various styles of typewriting machines.

The carriage comprises the carriage frame 1 which has a forward grooved bar or rail 2 that coöperates with anti-friction balls 3, which are likewise received in a grooved rail

4 supported on the top plate of the machine. The rear of the carriage is also provided with a grooved rail or bar 5 that coöperates with anti-friction balls 6 received in a grooved rail 7 supported on the top plate of the machine, so that the carriage is supported on ball bearings and is adapted to travel from end to end of the machine. A platen 8 is secured to a platen shaft 9, the extending ends of which are received in bearings 10 in the carriage frame when the platen is in its normal position. The shaft 9 is journaled in end plates 11 of a platen frame, one of said end plates having a forwardly extending arm or finger 12 and longitudinal bars 13 and 14 are connected to the end plates. The shaft 9 is adapted to slide along the guiding bearings 15 when the finger piece 12 is turned back so as to expose the last written line on the sheet. This turning action of the platen and frame to expose the writing is facilitated by hook-like links 16 pivoted at 17 to the carriage, the rear ends of the links coöperating with studs 18 projecting laterally from the end plates of the platen frame. The construction thus far described constitutes a portion of the well-known Smith Premier machine.

The rod 14 constitutes a support for bearing blocks 19 to which a paper table 20 is secured. The bearing blocks are apertured to provide journal bearings for the reception of a rock shaft 21 which is provided at one end with a crank arm or finger 22 that projects forwardly as indicated in Fig. 2. This rock shaft 21 has depending fingers 23 secured thereto and curved as represented in Figs. 2 and 3 in order to pass around the bar 14 and to coöperate with the forward side of sleeves 24 that are carried by a spindle or shaft 25 of a central paper feed roller 26, the fingers 23 being located near each end of the roller 26 as indicated in Fig. 1. The ends of the shaft 25 are received in bearing openings in arms 27 that extend downwardly from the bar 14 on which they are loosely mounted. A spring 28 bears at its free end against each of the sleeves 24 and each spring is secured at one end, as indicated at 29, to one of the bearing blocks 19 and is bent to form a loop 30. A screw threaded spindle 31 projects from each block 19 and extends at its rear end through an opening in the associated spring 28. A headed nut 32 coöperates with each screw

spindle and the contracted portion 33 of the associated nut likewise extends through the opening in its spring. By these means an adjustment of the tension of each spring 28 may be effected by an adjustment of the associated nut 32 on its threaded spindle 31, so that the spring tension exerted upon the main feed roller 26 may be varied at will and an independent adjustment at each end of the feed roller 26 may be effected.

Each of the arms 27 extends beyond the point where the shaft 25 is journaled therein, so as to provide a bearing for a pin 34 on which a paper plate 35 is journaled. The ends of the arms 27 terminate in fingers or abutments 36 which limit the movement of the paper plate 35 in one direction relatively to the arms so that when the feed roller 26 is moved away from the platen, as indicated in Fig. 5, the paper plate 35 will likewise be removed from contact with the platen or the paper thereon. Suitable spring paper guide fingers 37 extend at their rear ends over the vibratory paper plate 35 and are secured at their forward ends, as at 38, to adjustable slides 39. It will be seen that these paper guides are likewise removed from contact of the platen or the paper thereon when the arm 22 is depressed and the feed roller 36 is moved away from the platen.

At each end of the paper feed roller 26 is situated a feed roller 40, that is journaled in depending fingers or arms 41 loosely mounted on the bar 14 and are spaced apart thereon by spacing sleeves 42 on each side of a securing block or ear 43 that is riveted or otherwise secured to the paper table and is apertured to constitute a bearing for the rock shaft 21. Each of the terminal feed rollers 40 coöperates with the platen near an end thereof and is at all times pressed against the platen by a spring 44 similar to the springs 28, and which is mounted and has its tension adjusted in a like manner. Thus each of the springs 44 is bifurcated at its lower end so as to form arms 45 that bear against the hanger arms of a terminal feed roller 40, whereas an adjusting nut 46 similar to the nuts 32 previously described, coöperates with each spring to effect an adjustment thereof. The upper end of each spring 44 is secured to an associated block 43 by a pin or other securing means 47.

The rear of the paper table has a bracket 48 secured thereto and this bracket is bifurcated to form two arms, each of which has a bearing 49 therein for the reception and longitudinal adjustment of a bar 50 which constitutes a support for the side edge paper guide 51 that extends from one end of the bar and at right angles thereto and projects forwardly over the upper edge of the paper table and at right angles to the plane of the paper as it is introduced into the ma-

chine. The end of the bar opposite the side edge guide has a ball or finger piece 52 to facilitate a longitudinal adjustment of the bar and guide and to prevent the bar from being slid entirely out of its bearings. One side of the bar is flattened as indicated at 53 and a leaf spring 54 extends into the bifurcated portion of the bracket and bears at its free end against the flattened portion of the bar. This leaf spring is secured in place by screws 55 which likewise secure the bracket to the paper table or to a block 56 on the rear face thereof. The so-called bifurcated portion of the bracket 48 has a forwardly extending central arm or finger that is turned at its upper end to form the hook-like portion 57 which extends over the top edge of the paper table as represented in Fig. 4. This side edge guide is preferably located at the left-hand end of the platen and constitutes a gage or guide by which the left-hand side edge of the paper or certain sheets introduced into the machine may bear, in order to determine the position of said sheet or sheets in the machine, as will hereinafter more clearly appear.

The arm or finger 22 has a gravity latch 58 pivoted thereto at 59 and the lower end of this latch has an elongated slot 60 therein and into which projects a pin 61 secured to the platen frame. The slot 60 connects at its upper end with a laterally extending slotted portion 62 in which the pin is likewise adapted to be received as indicated in Fig. 5 in order to lock the arm 22 in the depressed position and thereby maintain the central feed roller 26, and the parts controlled by the movement thereof, away from the platen. The latch 58 is provided with a tail piece 63 by means of which the locking engagement between the latch and pin may be effected, as indicated in Fig. 5. Thus, for instance, a mere depression on the arm 22 will result in moving the feed roller 26, the paper plate 35 and the paper fingers 37 away from the platen and the gravity of the latch 58 will tend to maintain the pin within the elongated slot 60 so that when the arm 22 is released the parts will immediately be restored to their normal positions with the feed roller 26 bearing against the platen or the paper thereon. When, however, a downward pressure is exerted on the tail piece 63 of the gravity latch, it results in a depression of the arm 22 in order to move the feed roller 26 and associated parts away from the platen. This same downward movement exerted on the tail piece of the latch, tends to turn it on its pivot 59 so that at the full extent of the depression of the arm 22 the slot 62 will be brought opposite the pin 61 and the pin will be seated in said slot so as to lock the parts against the tension of the springs 28 which tend to restore the parts to normal

position. In this manner the feed roller 26 and the paper devices associated therewith will be locked away from the platen, thus enabling the operator to employ both hands to make such changes in the disposition of the sheets as may be necessary. When the operator desires to release the feed roller 26 from its locked position, it is merely necessary to exert a slight downward pressure on the arm 22. Then the latch 58 will drop to its normal position with the pin 61 seated in the slot 60 and the parts are then free to be restored to normal position upon the release of the arm 22.

It will be observed that the feed rollers 26 and 40 are in substantial alignment longitudinally of the platen and are situated at that side of the platen where the paper is introduced into the machine; that the feed roller 26 is intermediate of the terminal feed rollers 40 and coöperates with the middle portion of the platen; that both the feed rollers 26 and 40 receive the paper directly from the paper table and with the platen form a bight into which the paper is directed by the paper table; that these feed rollers are situated between the point of introduction of the paper into the machine and the printing line; and that the central feed roller may be moved toward and away from the platen independently of the feed rollers 40 by an actuation of the arm 22.

In addition to the mechanism thus far described, it should be understood that the machine is provided with the usual detent mechanism (not shown) for the platen, to prevent an overthrow thereof and an accidental displacement of the platen from the line space position to which it is moved.

In the operation of the instrumentalities heretofore described for condensed record work, and as an example of one form of such work, it may be assumed that it is desired to write the bills on a so-called bill sheet or bill head *a*; that it is desired at the same time to provide a carbon copy of such bill on a so-called condensed "record sheet" *b*; a carbon sheet *c* being interposed between the "bill" and "record sheets" in order that the items or matter written upon the "bill head" may be transferred to the "record sheet." In the present instance it will be observed that the bill sheet *a* is narrower than the record sheet *b* and that the position of the comparatively wide record sheet in the machine may be determined by the side edge guide.

The bill sheet and carbon sheet are confined to the action of the central feed roller 26, whereas the terminal feed rollers 40 do not bear on the bill and carbon sheets but bear on and coöperate with the record sheet only. All three sheets being introduced into the machine and placed in the machine in the manner described, the operator may

write the date, name and item upon the bill sheet or bill head and this written matter will also be produced upon the record sheet through the interposed sheet of carbon. After writing the last line of the bill, the operator may operate the line-feed mechanism to bring a fresh line of the record sheet to the printing point. The operator may then depress the arm 22, thus moving the feed roller 26 and the associated paper guiding devices away from the platen, and the parts may be locked in the released position by applying pressure on the tail piece 63 of the latch. The release of the feed roller 26 in the manner described wholly releases the bill and carbon sheets so that they may be readily removed from the machine, without turning the platen and independently of the record sheet which is still clamped in place in the machine by the terminal feed rollers 40 which coöperate therewith. A second bill sheet and carbon sheet may now be inserted into the machine until the first line to be written on is brought to the printing point. The feed roller 26 may then be released by a slight downward pressure on the arm 22, and the second bill may then be written and duplicated and removed from the machine. A number of bill sheets may be written and duplicated on the record sheet. This may continue indefinitely or until the record sheet is filled, when a new record sheet, bill sheet and carbon may be introduced, and the operation continued as heretofore described. It will be seen that in this manner a so-called "condensed record" may be kept of the bills written on the machine by using a single short carbon sheet and that there is no necessity for making cumbersome records by occupying undue space between the different items on the record sheet corresponding to the printed headings on the different bill sheets, or of keeping a separate duplicate sheet for each bill that is filled in on the machine, and that copies in condensed form may be readily made during the operation of writing bills on the machine.

While we prefer to employ narrow carbon sheets corresponding substantially to the width of the bill sheets so that the carbon may be removed with each bill sheet as it is written, we may, nevertheless, employ a carbon sheet corresponding substantially to the width of the record sheet, in which case the carbon sheet would not be removed with each bill sheet as heretofore described, but would be maintained in the machine with the record sheet and fed forward with the record sheet as the latter is advanced with each new bill sheet.

It will be understood that during the time when the bill sheet is being removed independently of the record sheet, the platen is maintained against accidental displacement by the usual detent mechanism (not

shown). Any suitable leading edge stops may be employed to arrest and square the sheets as they are introduced into the machine.

5 While we have shown and described a single central feed roller 26, it should be understood nevertheless, that this roller may be divided so as to provide a plurality of
10 main feed rollers instead of a single feed roller 26 and that various other changes may be made without departing from the spirit of our invention. For example, some other form of pressure device may be used instead of the feed rollers 40.

15 What we claim as new and desire to secure by Letters Patent, is:—

1. In a typewriting machine, the combination of a platen, a plurality of feed rollers that cooperate with the platen and form
20 with the platen the bight into which the paper is directed when it is first introduced into the machine, certain of these feed rollers being movable to and from the platen independently of the remainder, and means
25 for effecting this movement.

2. In a typewriting machine, the combination of a platen, a cooperating main feed roller, terminal feed rollers in substantial
30 alinement with said main feed roller, the main feed roller being movable toward and from the platen independently of said terminal feed rollers, and hand actuated means for effecting the above described movement of the main feed roller.

35 3. In a typewriting machine, the combination of a platen, a central main feed roller, a feed roller to either side of said central main feed roller, said central feed roller being movable toward and from the
40 platen independently of said side feed rollers, and hand actuated means for moving the central feed roller as above described, all of said feed rollers being at the introductory side of the platen.

45 4. In a typewriting machine, the combination of a platen, a paper table, a plurality of feed rollers to which the paper is directed by the paper table, certain of said feed rollers being movable independently
50 of others toward and away from the platen, and hand actuated means for moving certain of said feed rollers as above described.

5. In a typewriting machine, the combination of a platen, a paper table, a releasable central main feed roller which receives
55 the paper from said paper table, a feed roller at either side of said central feed roller and on the same side of the platen, and hand actuated means for moving said central feed roller toward and away from
60 the platen independently of the feed rollers to either side of said central feed roller.

6. In a typewriting machine and mechanism for doing condensed record work, the
65 combination of a platen, cooperating paper

feed devices located between the point of introduction of the paper and the printing line, and hand actuated means for moving certain of said paper feed devices toward and away from the platen independently
70 of the others, whereby certain sheets may be wholly disengaged and withdrawn from the machine while another or other sheets may be clamped in the machine by paper feed devices that are not thrown out of
75 operation.

7. In a typewriting machine and mechanism for doing condensed record work, the combination of a platen, cooperating paper feed rollers located between the point of
80 introduction of the paper and the printing line, and hand actuated means for moving certain of said paper feed rollers toward and away from the platen independently of the others, and thereby wholly releasing
85 the paper which was clamped by said released feed roller or rollers, whereby certain sheets may be withdrawn from the machine while another or other sheets may be clamped in the machine by paper feed rollers that are not thrown out of operation.

8. In a typewriting machine, the combination of a platen, feed rollers near the ends of said platen, a releasable intermediate main feed roller in substantial alinement
90 with said feed rollers near the ends of the platen, and hand actuated means for moving said intermediate feed roller toward and away from the platen independently of the said feed rollers near the ends of
100 the platen.

9. In a typewriting machine, mechanism for condensed record work comprising in combination, a platen, feed rollers near the ends of said platen, an intermediate main
105 feed roller in substantial alinement with said feed rollers near the ends of the platen, hand actuated means for moving said intermediate feed roller toward and away from the platen independently of the said feed
110 rollers near the ends of the platen, and means for locking said intermediate feed roller in the released position.

10. In a typewriting machine, mechanism for condensed record work comprising in
115 combination, a platen, a plurality of feed rollers that cooperate with the platen and form with the platen the bight into which the paper is directed when it is first introduced into the machine, means for affording
120 a movement of certain of said feed rollers toward and away from the platen independently of the others, and means for locking said movable feed roller or rollers in the released position.

11. In a typewriting machine, mechanism for condensed record work comprising in combination, a platen, a plurality of cooperating feed rollers at the introductory
125 side of the platen, hand actuated means for

effecting a movement of certain of said feed rollers toward and away from the platen independently of other of said feed rollers, and means for locking said movable feed roller or rollers away from the platen.

12. In a typewriting machine, mechanism for condensed record work comprising in combination, a platen, a cooperating main feed roller, terminal feed rollers in substantial alinement with said main feed roller, hand actuated means for affording a movement of the main feed roller toward and away from the platen independently of said terminal feed rollers, and means for automatically locking said movable main feed roller away from the platen when said hand actuated means are operated.

13. In a typewriting machine, the combination of a platen, a central feed roller adapted to feed and retain in the machine a comparatively narrow sheet of paper, terminal feed rollers that are in substantial alinement longitudinally of the platen with said central feed roller and are adapted to retain in the machine a comparatively wide sheet of paper, hand actuated means for moving said central feed roller toward and away from the platen independently of said terminal feed rollers and thus retaining or releasing said narrower sheet of paper without affecting said broader sheet, and means for locking said central feed roller away from the platen.

14. In a typewriting machine, mechanism for condensed record work comprising in combination, a platen, a central main feed roller, a feed roller to either side of said central main feed roller, hand actuated means for moving the central feed roller toward and away from the platen independently of the said feed rollers to either side thereof, and means for locking said central main feed roller away from the platen when said hand actuated means are operated.

15. In a typewriting machine and mechanism for doing condensed record work, the combination of a platen, cooperating paper feed rollers located between the point of introduction of the paper and the printing line, hand actuated means for moving certain of said paper feed rollers toward and away from the platen independently of the others and thereby wholly releasing the paper which was clamped by said released feed roller or rollers, whereby certain sheets may be withdrawn from the machine while another or other sheets may be clamped in the machine by the paper feed rollers that are not thrown out of operation, and means for locking said released feed roller or rollers in the released position.

16. In a typewriting machine and mechanism for doing condensed record work, the combination of a platen, feed devices that cooperate with the platen near the ends

thereof and which are adapted to cooperate with a "record" sheet before the leading edge thereof reaches the printing line, an intermediate main feed device that is adapted to cooperate with a "bill sheet" narrower in width than said "record sheet" and before the leading edge of the "bill" sheet reaches the printing line, and hand actuated means for moving said intermediate feed device toward and away from the platen independently of said feed devices that cooperate with the "record sheet," whereby the "bill" sheet may be inserted or withdrawn independently of the "record" sheet.

17. In a typewriting machine and mechanism for doing condensed record work, the combination of a platen, feed rollers that cooperate with the platen near the ends thereof and which are adapted to cooperate with a "record sheet" before the leading edge thereof reaches the printing line, an intermediate main feed roller that is adapted to cooperate with a "bill sheet" narrower in width than said "record sheet" and before the leading edge of the "bill" sheet reaches the printing line, hand actuated means for moving said intermediate feed roller toward and away from the platen independently of said feed rollers that cooperate with the "record sheet", and means for locking said intermediate feed roller away from the platen.

18. In a typewriting machine, the combination of a platen, a plurality of cooperating feed rollers at the introductory side of the platen, said rollers adapted to retain a plurality of sheets of paper, hand actuated means for effecting a movement of certain of said feed rollers toward and away from the platen independently of other of said feed rollers, whereby one sheet of paper may be released without releasing another, and a side edge guide to determine the position of certain of the sheets relatively to certain of said feed rollers.

19. In a typewriting machine, the combination of a platen, a cooperating main feed roller, terminal feed rollers in substantial alinement with said main feed roller, hand actuated means for affording a movement of the main feed roller toward and away from the platen independently of said terminal feed rollers, and an adjustable side edge guide to determine the position of certain of the sheets relatively to said terminal feed rollers.

20. In a typewriting machine, the combination of a platen, a central main feed roller, terminal feed rollers that are in substantial alinement longitudinally of the platen with said central feed roller, hand actuated means for moving said central feed roller toward and away from the platen independently of said terminal feed rollers, and a side edge guide.

21. In a typewriting machine, the combination of a platen, a paper table, a plurality of feed rollers to which the paper is directed by the paper table, hand actuated means for moving certain of said feed rollers toward and away from the platen independently of the others, and a side edge guide.

22. In a typewriting machine and mechanism for doing condensed record work, the combination of a platen, cooperating paper feed devices located between the point of introduction of the paper and the printing line, hand actuated means for moving certain of said paper feed devices toward and away from the platen independently of the others, whereby certain sheets may be withdrawn from the machine while another or other sheets may be clamped in the machine by paper feed devices that are not thrown out of operation, and a side edge guide.

23. In a typewriting machine and mechanism for doing condensed record work, the combination of a platen, feed rollers that cooperate with the platen near the ends thereof and which are adapted to cooperate with a "record sheet" before the leading edge thereof reaches the printing line, an intermediate main feed roller that is adapted to cooperate with a "bill sheet" narrower in width than said "record sheet" and before the leading edge of the "bill sheet" reaches the printing line, hand actuated means for moving said intermediate feed roller toward and away from the platen independently of said feed rollers that cooperate with the "record sheet", and a side edge guide.

24. In a typewriting machine and mechanism for doing condensed record work, the combination of a platen, spring pressed feed rollers that cooperate with the platen near the ends thereof and which are adapted to cooperate with a "record sheet," an intermediate main feed roller that is adapted to cooperate with a "bill sheet" narrower in width than the "record sheet," hand actuated means for moving said intermediate roller toward and away from the platen independently of the feed rollers that cooperate with the "record sheet," whereby the "bill sheet" may be withdrawn independently of the "record sheet," and a side edge guide, all of said feed rollers being at the introductory side of the platen.

25. In a typewriting machine and mechanism for doing condensed record work, the combination of a platen, spring pressed feed rollers that cooperate with the platen near the ends thereof and which are adapted to cooperate with a "record sheet" before the leading edge thereof reaches the printing line, an intermediate main spring-pressed feed roller that is adapted to cooperate with a "bill sheet" narrower in width than the "record sheet," and before the leading edge of the "bill sheet" reaches the printing line,

hand actuated means for moving said intermediate roller toward and away from the platen independently of the feed rollers that cooperate with the "record sheet," whereby the "bill sheet" may be withdrawn independently of the "record sheet," an adjustable side edge guide, and means for locking the intermediate roller away from the platen.

26. In a typewriting machine, the combination with the platen, of paper feed rollers for controlling a plurality of sheets of paper, and means for releasing one of said sheets of paper from its feed roller without releasing another of said sheets of paper from its feed roller.

27. In a typewriting machine, the combination with the platen, of paper feed devices including a main paper feed roller and a special paper feed roller for a "record sheet," and means for releasing said main feed roller without releasing said special feed roller.

28. In a typewriting machine, the combination with the platen, of a plurality of feed rollers including a special feed roller which cooperates with the platen through a part only of the length of said platen; means for pressing said feed rollers toward the platen, all of said feed rollers being at the introductory side of the platen; and a release device for moving one of said feed rollers away from the platen without affecting the other, whereby one sheet of paper may be released without releasing another.

29. In a typewriting machine, the combination with the platen, of a roller for feeding a "record sheet" and a "bill sheet," other feed rollers for retaining the "record sheet" in position when the "bill sheet" is removed from the machine; and a side edge guide for one of said sheets.

30. In a typewriting machine, the combination with the platen, of a paper feed device, cooperating with the middle portion of the platen and adapted to retain a narrow sheet of paper, paper feed devices cooperating with the end portions of the platen and adapted to retain a wide sheet of paper, and means for releasing the former of said feed devices without releasing the latter, whereby the narrow sheet may be removed from the machine without disturbing the broad sheet, all of said feed devices being at the introductory side of the platen.

31. In a typewriting machine, the combination with the platen, of a releasable paper feed device, and a separate paper feed device adapted to clamp the edges of a record sheet and hold said record sheet in position when said releasable feed device is released, all of said paper feed devices cooperating with the platen at the introductory side thereof.

32. In a typewriting machine, the combination with the platen, of a plurality of feed rollers including a special feed roller which cooperates with the platen through a part only of the length of said platen; means for pressing said feed rollers toward the platen, all of said feed rollers being at the introductory side of the platen; and a release device for moving one of said feed rollers away from the platen without affecting the other, whereby one sheet of paper may be released without releasing another.

5 nation of a platen, releasable paper feed devices coöperating with said platen, and means at the introductory side of the platen for clamping the edge of a sheet of paper to the platen to retain it in position when said paper feed devices are released to permit another sheet of paper to be placed in or removed from the control of said paper feed device.

Signed at Syracuse, in the county of On- 10
ondaga and State of New York, this 11th
day of October A. D. 1904.

ALEXANDER T. BROWN.
ARTHUR J. BRIGGS.

Witnesses:

THADDEUS A. KIDD,
GEORGE C. CARLART.