

1,395,458.

Patented Nov. 1, 1921.

3 SHEETS—SHEET 1.

Fig. 1.

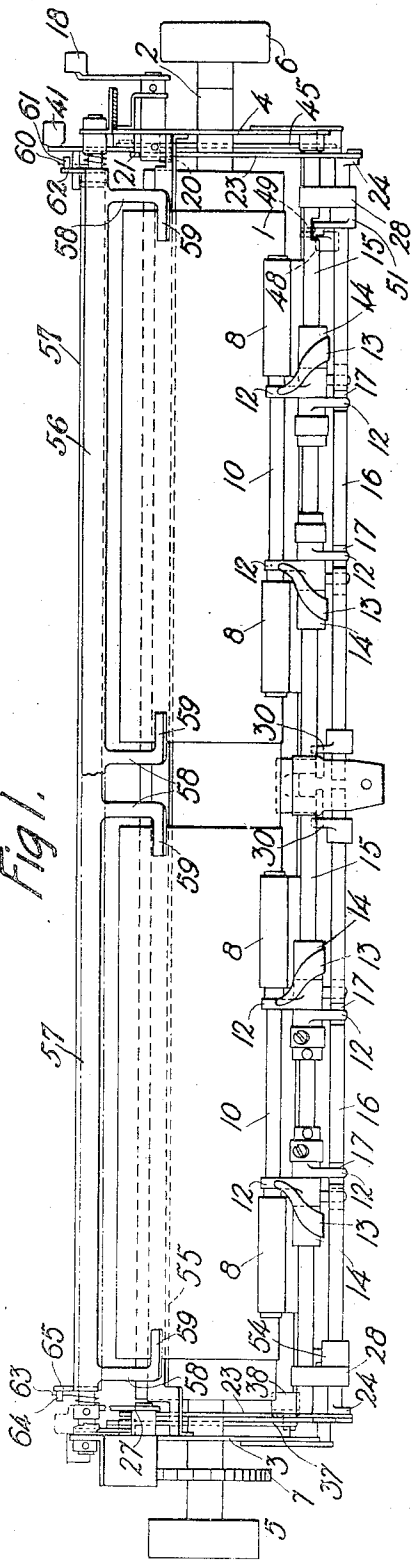
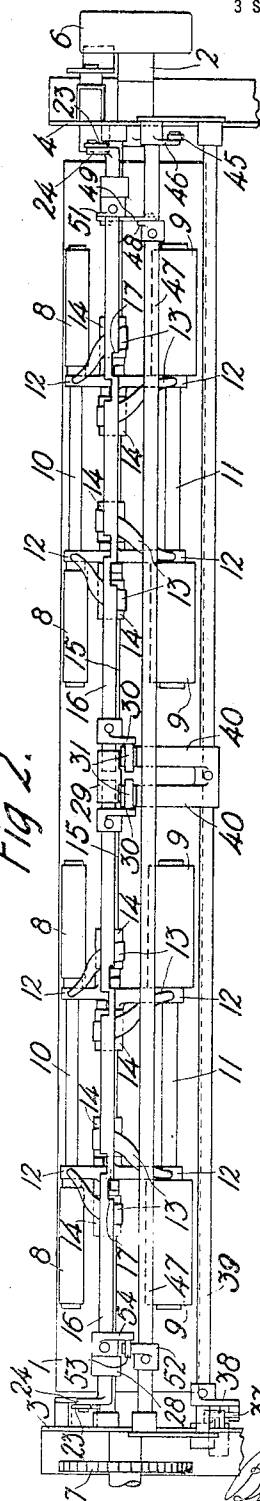


Fig. 2.



Inventor:

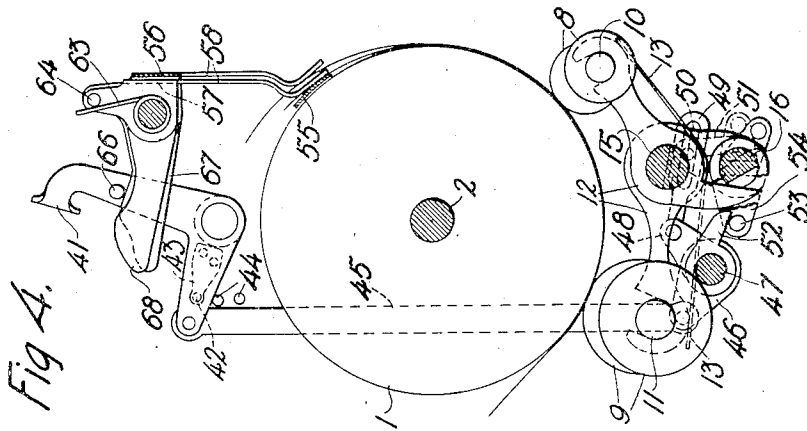
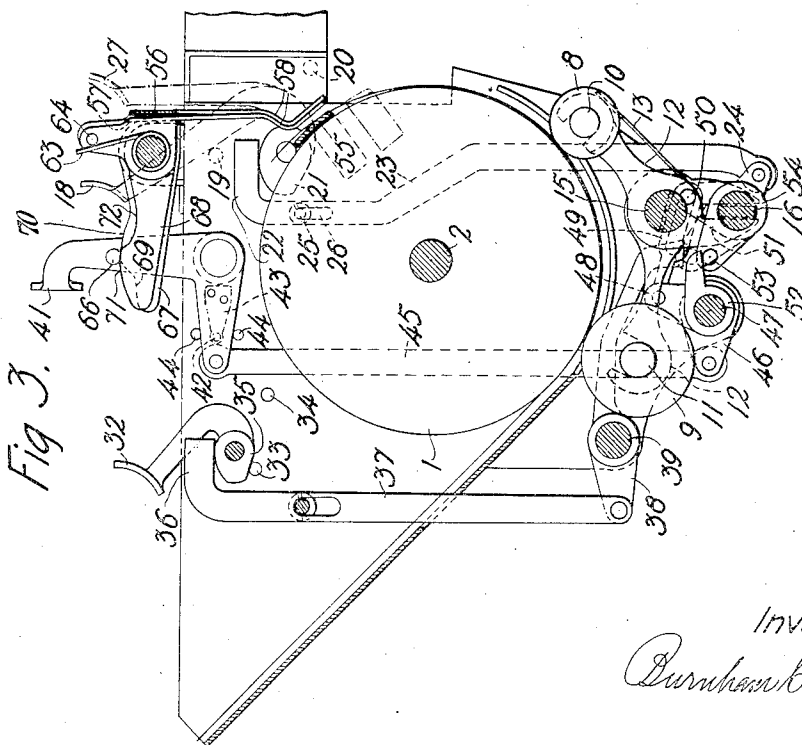
Burham Stickney

B. C. STICKNEY,
TYPEWRITING MACHINE.
APPLICATION FILED OCT. 30, 1919.

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3 SHEETS—SHEET 2.



Inventor:
Burnham C. Stickney

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3 SHEETS—SHEET 3.

Fig 6.

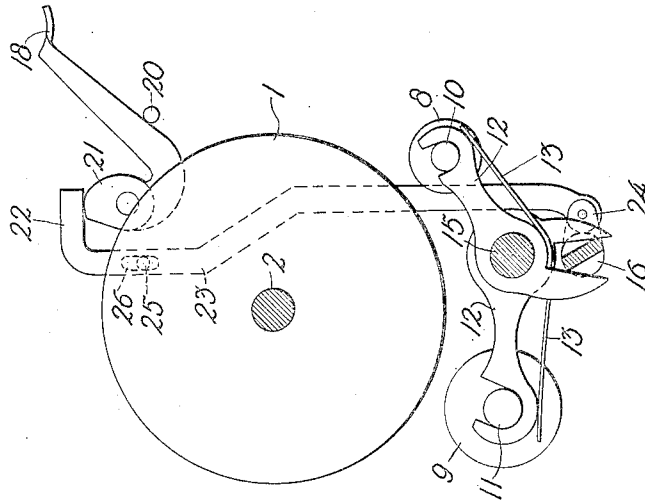
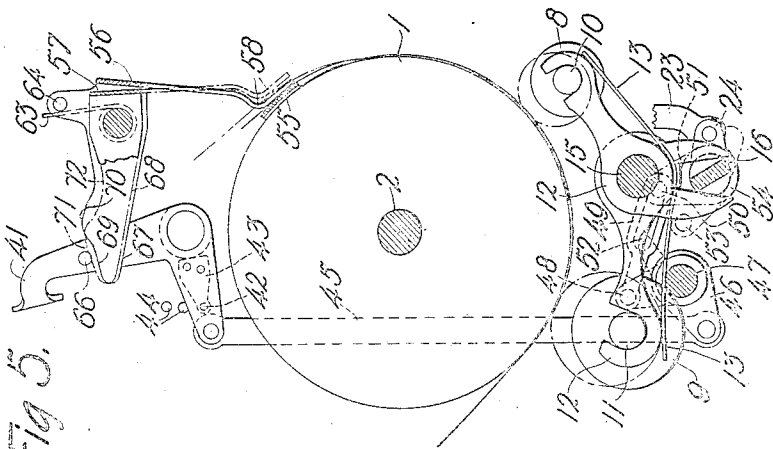


Fig 5.



Inventor:
Burnham B. Stickney

UNITED STATES PATENT OFFICE.

BURNHAM C. STICKNEY, OF ELIZABETH, NEW JERSEY, ASSIGNOR TO UNDERWOOD TYPEWRITER COMPANY, OF NEW YORK, N. Y., A CORPORATION OF DELAWARE.

TYPEWRITING-MACHINE.

1,395,458.

Specification of Letters Patent.

Patented Nov. 1, 1921.

Application filed October 30, 1919. Serial No. 334,426.

To all whom it may concern:

Be it known that I, BURNHAM C. STICKNEY, a citizen of the United States, residing in Elizabeth, in the county of Union and State of New Jersey, have invented certain new and useful Improvements in Typewriting-Machines, of which the following is a specification.

This invention relates to typewriting machines, and more particularly to work-sheet-feeding and controlling mechanism for such machines.

In using a typewriter to write individual bills or forms on separate sheets, and to write ledger accounts or classified totals on another sheet, it is necessary to alternate the writing on one sheet with that on another or others. With a typewriter of the ordinary form, work of this nature would require insertion of the same sheet in the machine each time that writing is to be effected thereon, thereby incurring waste of labor and time and liability of error.

According to the present invention, simple and efficient means have been provided, whereby work of this nature may be effected by simple mechanism.

The unitary platen may be and preferably is of considerable length, so as to accommodate a wide sheet, or two sheets of ordinary width side by side. The platen may be actuated by finger-wheels on its axle, or by a suitable line-spacing mechanism, including a ratchet-wheel mounted on the axle.

In the preferred manner of carrying out the invention, the feed-rolls opposite the left-hand half of the platen and those opposite the right-hand half of the platen are mounted independently of each other.

Provision may be made of means to release the feed-rolls from either half of the platen independently of the others. To this end, a feed-roll-release shaft may be positioned below each of the halves of the unitary platen, so as to coöperate with the spring-pressed arms supporting the feed-rolls, to release the feed-rolls when desired. Preferably, the feed-roll-release shafts are in alignment.

To enable the insertion or withdrawal of a single wide sheet, or of two narrow sheets simultaneously, provision may be made of a finger-piece and means controlled thereby, whereby all of the feed-rolls may be re-

leased or permitted to return to their effective positions simultaneously.

Finger-pieces, individual to the feed-roll-release shafts underlying the opposite portions of the platen, may be provided, as well as suitable means through which the finger-pieces may actuate the corresponding shafts. This feature is of particular value in placing narrow sheets, side by side, on the platen, in that the sets of rolls may be released by the finger-pieces and that each set of rolls may be restored to normal position as soon as the corresponding work-sheet has been inserted. This feature may also be of value in connection with the adjustment of a sheet, already inserted, without affecting the adjustment of the other.

In case two work-sheets have been inserted so as to lie side by side on the platen, it may be desirable to feed both of said work-sheets simultaneously, or either one independently of the other. For this purpose, provision may be made of a finger-piece movable to three positions, and means whereby said finger-piece, in one position, will be ineffective to release any of said feed-rolls, but, when moved to either of the other positions, will effect release of the roll or rolls associated with the corresponding end of the platen. As herein disclosed, movement of the finger-piece in one direction will effect rocking of the feed-roll-release shaft under one half of the platen, and movement of the finger-piece in the opposite direction will effect rocking of the other feed-roll-release shaft. Obviously, when the work-sheet opposite one end of the platen is released, actuation of the platen will be ineffective thereon, but may effect movement of the other work-sheet.

In order to prevent accidental displacement of a released work-sheet while the other is being fed by the platen, provision may be made of normally ineffective gripping or holding means, whereby movement of the three-position finger-piece to release one of said work-sheets will render the corresponding gripping or holding means effective to hold the released work-sheet against accidental displacement.

Suitable provisions for lost motion may also be made, so that, with the parts in their normal positions, actuation of any of said fingerpieces may be effected without actua-

tion of any of the others, thus avoiding unnecessary movement of parts.

Due to the use of a single or unitary platen, the mechanism is well adapted to feed wide sheets and feed simultaneously sheets placed side by side on said platen. This feature of construction also enables the use of a single line-spacing mechanism, instead of two line-space mechanisms, or of more complicated mechanism.

Other features and advantages will hereinafter appear.

In the accompanying drawings,

Figure 1 is a front elevation of a platen-frame of an Underwood front-strike typewriting machine, showing my invention applied thereto.

Fig. 2 is a plan view of the platen-frame in inverted position.

Fig. 3 is a sectional side elevation of the structure shown in Fig. 1, the parts being in their normal positions.

Fig. 4 is a view similar to Fig. 3, but showing the left-hand feed-rolls released and the corresponding gripping device effective.

Fig. 5 is a view similar to Fig. 3, showing the right-hand feed-rolls released and the corresponding gripping device effective.

Fig. 6 is a view similar to Fig. 3, showing the right-hand feed-rolls released by a finger-piece individual thereto.

A platen 1 of the usual type, preferably a wide platen, is rotatably mounted by means of an axle 2 in end frames 3 and 4 of a platen-frame, and may be rotated by means of finger-wheels 5 and 6, respectively, or by line-space mechanism including a ratchet-wheel 7 mounted on said axle 2.

The work is held against the platen by means of front feed-rolls 8 and rear feed-rolls 9, which, inasmuch as the mechanism is intended for use in feeding two sheets side by side on the platen, are divided into two groups, one cooperating with the left-hand portion, preferably half of the platen, and the other with the right-hand portion. The front and rear feed-rolls at either end of the platen are mounted on shafts 10 and 11, respectively, the shafts being carried by levers 12, which are pressed upwardly by springs 13 secured to collars 14, fixed on shaft 15, on which said levers 12 are pivoted.

In order to release the right-hand and left-hand sets of feed-rolls independently, feed-roll-release shafts 16 are provided for each half of the platen, and are preferably in alinement. These release shafts may be formed in the usual manner by cutting away portions on opposite sides thereof to form depressions 17 having flat bottoms against which the lower ends of the levers 12 rest when the parts are in normal position, as shown in Fig. 3. It will be noted that these depressions, which may or may not overlap are herein disclosed as not overlapping

(Figs. 1 and 2), although the sections of shafts 16 are so taken that, in other figures (Fig. 5, for example), the appearance of overlapping is given.

In case two work-sheets are to be placed side by side on the platen, the feed-rolls opposite either end of the platen may be released, a sheet inserted, and the feed-rolls returned to their normal positions. The second sheet may then be inserted in the same manner. In case the right-hand sheet is to be inserted, a finger-piece 18 is swung about its pivot from a position in contact with stop-pin 19 to a position in contact with stop-pin 20. In this movement, a cam 21, connected to said finger-piece 18, is swung from the position shown in Fig. 3 to the position shown in Fig. 6. The cam 21 in this movement acts against a hooked end 22 of link 23 to lift said link 23 and actuate an arm 24 connected therewith to swing the right-hand-release shaft 16 from the Fig. 3 position to the Fig. 5 position, thereby releasing the feed-rolls of the right-hand set, as shown in Fig. 6. It will be noted (Fig. 6) that the turning of the shaft 16 is not sufficient to force the lower ends of the feed-roll-supporting levers 12 from the flat bottoms of the depressions to the outer surface of the shaft, and that the springs 13 tend to return the rock-shaft to its normal position. Such return movement is prevented, however, by the cam 21 which has assumed such a position that the pressure through link 23 is exerted directly against its pivot. In other words, the cam and link are substantially on a dead center, and the link is locked in its raised position. A pin 25, engaging in a slot 26 near the upper end of link 23, serves to hold the link in position to be actuated by said cam 21.

To insert a work-sheet for use on the left-hand part of the platen, a finger-piece 27 at the left of the platen-frame is depressed, and acts, through parts similar to those actuated by finger-piece 18, to rock the left-hand release shaft 16 and thereby release the feed-rolls of the left-hand set. It will be noted that the finger-piece 27, which is mounted inside the left-hand frame 3, is bent forward midway of its length. The reason for this bending will be brought out hereinafter.

The release shafts 16, which are mounted at their outer ends in brackets 28 and at their inner ends in a common bracket 29, are provided near their inner ends with arms 30, having laterally-projecting pins 31, which constitute parts of the device for releasing both sets of rolls simultaneously. When this result is desired, a finger-piece 32 is moved from its Fig. 3 position, determined by a stop-pin 33, to a position determined by a stop-pin 34, and this motion is transmitted, by means of a cam 35 in contact with the hooked upper end 36 of a link 37, to said

link, and, by means of an arm 38, fixed on shaft 39, to said shaft.

Mounted on said shaft 39 are two arms 40, which may be mounted on a sleeve fixed to the shaft, said arms, when swung downwardly, engaging pins 31 and thereby rocking both shafts 16 and releasing all of the feed-rolls. This mechanism, which enables the release of all of the feed-rolls by a single finger-piece, is of particular value whenever a wide sheet is to be inserted. It will be seen that when finger-piece 32 is in its actuated position, the end of cam 35 will engage the hooked end 36 of link 37 in such a manner as to lock link 37 in raised position.

When it is desired to advance the right-hand work-sheet without advancing the left-hand sheet, a finger-piece 41 is swung rearwardly to the Fig. 5 position from its normal position (Fig. 3), in which it is held by a pin 42, carried by a spring 43, mounted on the horizontal arm of finger-piece 41, engaging the middle one of three depressions 44, provided for this purpose. It will be evident that when finger-piece 41 reaches its rearward position, pin 42 will snap into the lower depression 44 to maintain the finger-piece 41 in this position. This actuation of finger-piece 41 will also serve to depress link 45, to swing an arm 46 and thereby rock a shaft 47, to swing an arm 48, to which is pivoted a link 49, having an elongated slot, into which projects a pin 50, carried by an arm 51 on the right-hand release shaft 16. Said pin 50 is normally at the right-hand end of the elongated slot, as seen in Fig. 3, so that rearward movement of finger-piece 41, as described, will rock shaft 16 in counterclockwise direction and throw off or release the right-hand set of feed-rolls, as shown in Fig. 5.

When finger-piece 41 is swung to its forward position (Fig. 4), shaft 47 will be rocked in clockwise direction, and finger 52, at the left-hand end of shaft 47, will press downward on a pin 53, carried by an arm 54 on the left-hand release shaft, and actuate the same to release the corresponding feed-rolls. At the same time, link 49 will be moved idly with reference to pin 50, and the right-hand release shaft will remain in its normal position. It will be noted, in this connection, that when shaft 47 is turned in counterclockwise direction, finger 52 is moved away from pin 53, and the left-hand release shaft 16 is permitted to remain in its normal position.

Provision is also made of means controlled by finger-piece 41 for gripping the work-sheet released by the operation of said finger-piece in one direction or the other. For this purpose, a bar or plate 55, forming a clamp member, is placed adjacent the platen, so that work-sheets may pass thereover in leaving the platen, and is secured

at its ends to the end plates of the platen-frame in any suitable manner.

Provision is also made of nested bails 56 and 57, extending from side to side of the platen-frame and pivotally supported thereon, the outer bail 56 being supplied with spring-clamping fingers 58, having offset ends 59, by means of which the right-hand work-sheet may be pressed against the clamp bar 55. The inner bail 57 is also provided with a set of clamping fingers 58, similar to those carried by the outer bail, but positioned so as to be of service when pressing the left-hand work-sheet against the clamp bar 55. Inasmuch as the finger-piece 27 lies inside the platen-frame and the bails extend completely across the platen-frame, it is necessary to bend finger-piece 27 forwardly to avoid interference with the bails.

The outer bail 56 is urged to an effective gripping position by means of a spring 60, at the right of the machine, engaging a pin 61, carried by an arm 62, which is or may be part of the bail. At the left of the machine, a spring 63 engages a pin 64 on an arm 65 of bail 57, and urges the same to effective position.

Control of bails 56 and 57 by finger-piece 41 is effected by means of a pin 66, which overlies and cooperates with the upper edges of cam-arms 67 and 68 at the right-hand ends of bails 56 and 57, respectively. Cam-arm 67 is provided with a low portion 69 near its end, so that it may rise under action of spring 60, during movement of finger-piece 41, to its rearward position (Fig. 5), and with a curved high middle portion 70, so that substantially no movement of arm 67 and bail 56 will occur during movement of the finger-piece from its middle (Fig. 3) to its forward position (Fig. 4), or vice versa.

Cam-arm 68 is provided with a high end portion 71 and a low middle portion 72, so that movement of finger-piece 41 from its middle position (Fig. 3) to its rearward position (Fig. 5), and vice versa, will have substantially no effect on the position of the inner bail 57, but forward movement of finger-piece 41 from its Fig. 3 position to its Fig. 4 position will effect release of the inner bail 57, which will be moved to effective position by means of the spring 63.

It will be seen that when both bails 56 and 57 are positioned as shown in Fig. 3, the high or elevated portions 70 and 71 of cam-arms 67 and 68, respectively, are substantially concentric with the pivot of finger-piece 41.

When the various finger-pieces are in the positions shown in Fig. 3, rotation of the platen will effect simultaneous feeding of two work-sheets carried thereby. If, however, finger-piece 41 is moved to the rear (Fig. 5), the right-hand feed-rolls will be released and the spring-fingers 58 of the

outer bail 56 will press the right-hand work-sheet against the clamp bar 55, to prevent it being moved by the platen or otherwise displaced. Movement of finger-piece 41 to its forward position (Fig. 4) will release the left-hand work-sheet and cause the same to be held, by the spring-fingers 58 of the inner bail 57, against movement by the platen. This mechanism, therefore, provides means whereby either one of the work-sheets may be fed by the platen and the other held against movement.

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, in combination, a revoluble platen, two feed-rolls co-operating therewith, a finger-piece, and means whereby movement of said finger-piece from its central position to either one of its limiting positions will effect the withdrawal of one or the other of said feed-rolls from the platen, in accordance with the direction of movement of said finger-piece.

2. In a typewriting machine, in combination, a revoluble platen, two feed-rolls co-operating therewith, a finger-piece, means whereby movement of said finger-piece from its central position to either one of its limiting positions will effect the withdrawal of one or the other of said feed-rolls from the platen, in accordance with the direction of movement of said finger-piece, and means for withdrawing said feed-rolls simultaneously.

3. In a typewriting machine, in combination, a revoluble platen, two feed-rolls co-operating therewith, a finger-piece, means whereby movement of said finger-piece from its central position to either one of its limiting positions will effect the withdrawal of one or the other of said feed-rolls from the platen, a second finger-piece, and means whereby actuation of said second finger-piece will effect concomitant withdrawal of both of said feed-rolls.

4. In a typewriting machine, in combination, a revoluble platen, two feed-rolls co-operating with different parts of said platen longitudinally thereof, so that each may co-operate with one of two sheets placed side by side on said platen, a finger-piece, means controlled by said finger-piece for selectively releasing said rolls, a normally ineffective gripping device adjacent each of said feed-rolls adapted, when effective, to prevent movement of the gripped portions of said sheet, and means for rendering said gripping devices effective.

5. In a typewriting machine, in combination, a revoluble platen, two feed-rolls co-operating with different parts of said platen longitudinally thereof, so that each may co-

operate with one of two sheets placed side by side on said platen, a finger-piece, means controlled by said finger-piece for selectively releasing said rolls, a normally ineffective gripping device adjacent each of said feed-rolls adapted, when effective, to prevent movement of the gripped portions of said sheet, and means whereby movement of said finger-piece to release either of said feed-rolls will render effective the gripping device adjacent the roll released.

6. In a typewriting machine, in combination, a revoluble platen, two feed-rolls co-operating with different parts of said platen longitudinally thereof, so that each may co-operate with one of two sheets placed side by side on said platen, a finger-piece, means controlled by said finger-piece for selectively releasing said rolls, a normally ineffective gripping device adjacent each of said feed-rolls adapted, when effective, to prevent movement of the gripped portions of said sheet, means for rendering said gripping devices effective, finger-pieces individual to said feed-rolls, and means whereby actuation of each of said individual finger-pieces will effect release of the corresponding feed-roll.

7. In a typewriting machine, in combination, a revoluble platen, two feed-rolls co-operating with different parts of said platen longitudinally thereof, a releasing device including a finger-piece for each of said feed-rolls, a work-sheet gripping device adjacent each of said rolls, a third finger-piece, and means controlled by said third finger-piece for selectively rendering said gripping devices effective.

8. In a typewriting machine, in combination, a unitary revoluble platen, a set of feed-rolls yieldingly pressed against the right-hand end portion of said platen, a second set yieldingly pressed against the left-hand end portion of said platen, means including a finger-piece to release said first-mentioned set, means including a second finger-piece to release the second set, means including a third finger-piece to release either the one or the other set of feed-rolls in accordance with the direction in which said third finger-piece is moved, and means including a fourth finger-piece for withdrawing both sets of feed-rolls simultaneously.

9. In a typewriting machine, in combination, a revoluble platen adapted to receive two work-sheets side by side, a set of feed-rolls to co-operate with each of said sheets, means to release either set of said feed-rolls at will, sheet-clamping means, and means whereby actuation of said releasing means to release one set of feed-rolls will actuate the clamping means associated with that set to clamp the sheet released, against movement when the platen is advanced.

10. In a typewriting machine, in combination, a revoluble platen, a clamp member adjacent the surface of said platen and extending longitudinally thereof, two co-axial
 5 bails extending longitudinally of the platen, and clamping fingers on said bails adapted to be pressed against said member in accordance with the bail actuated.
11. In a typewriting machine, in combination, a unitary revoluble platen, feed-rolls
 10 arranged longitudinally thereof, means including pivoted arms for supporting said feed-rolls in coöperative relation with the platen, two cam shafts longitudinally of the
 15 platen constructed and arranged so that rocking of either of said shafts will actuate the arms corresponding to certain of said feed-rolls to release the same, a manually
 20 movable member, and means effective when said member is moved in one direction to rock only one of said cam shafts and effective when said member is moved in the opposite
 25 direction to rock only the other cam shaft.
12. In a typewriting machine, in combination, a platen, two sets of feed-rolls arranged
 30 to engage different sections longitudinally thereof, means to release each set of feed-rolls including a cam shaft for each of said
 35 sets, said cam shafts being alined with each other, a finger-piece, and means whereby the feed-rolls opposite either section may be released in accordance with the direction in
 40 which said finger-piece is moved.
13. In a typewriting machine, in combination, a revoluble platen, a clamp member adjacent the surface of said platen and extending
 45 longitudinally thereof, two co-axial bails extending longitudinally of the platen, a clamping finger on each of said bails to coöperate with said member, means urging
 50 each of said bails to press the corresponding clamping finger against said member, and controlling means for said bails, comprising
 55 a finger-piece and a cam member on each of said bails co-acting with said finger-piece, said cam members being so formed that both of said bails will be in ineffective position, or
 60 either one in effective and the other in ineffective position, dependent upon the position of said finger-piece.
14. In a typewriting machine, in combination, a revoluble platen, feed-rolls arranged
 65 longitudinally of said platen, means including pivoted arms, for supporting said feed-rolls in coöperative relation with said platen, two cam shafts in alinement longitudinally
 70 of said platen constructed and arranged so that rocking of either of said shafts will actuate the arms corresponding to certain
 75 of said rolls to release the same, an arm mounted on each of said cam shafts, a rockable member, and means whereby movement
 80 in either direction of said rockable member from its normal position will actuate one of
 85 said arms and the corresponding shaft without actuating the other arm in accordance with the direction of movement of said rockable member.
15. In a typewriting machine, in combination, a revoluble platen, feed-rolls arranged
 90 longitudinally thereof, means including pivoted arms, for supporting said feed-rolls in coöperative relation with said platen, two cam shafts in alinement longitudinally of
 95 said platen constructed and arranged so that rocking of either of said shafts will actuate the arms corresponding to certain of said rolls to release the same, a rockable member,
 100 and means effective when said member is rocked in one direction to rock only one of said cam shafts, and effective when said member is rocked in the opposite direction
 105 to rock the other cam shaft in the same direction as the first cam shaft.
3. In a typewriting machine, in combination, a revoluble platen, two set of feed-rolls
 110 yieldingly pressed against said platen, a cam shaft for controlling each set of said feed-rolls, means whereby actuation of each
 115 of said cam shafts will effect release of the corresponding feed-rolls, a finger-piece, and means controlled by said finger-piece whereby movement of said finger-piece in
 120 one direction will rock one of said shafts in one direction and release the corresponding set of rolls, and movement of said finger-piece in the opposite direction will rock the
 125 other shaft and release the corresponding set of rolls.
17. In a typewriting machine, in combination, a revoluble platen, a clamp member adjacent said platen and extending
 130 longitudinally thereof, two bails extending longitudinally of the platen, clamping fingers on said bails for coöperation with said member, means urging each of said bails to bring
 135 the clamping fingers thereon into effective relation with said member, a finger-piece, a pin projecting therefrom, and a cam arm on each of said bails underlying said pin,
 140 said cam arms being so shaped that both of said bails will be held in ineffective position when said finger-piece is in its normal position, and that movement of the finger-piece
 145 to a second position will render one of said bails effective, and that movement of the finger-piece to a third position will render the second bail effective and the first bail
 150 ineffective.
18. In a typewriting machine, in combination, a unitary platen, feed-rolls arranged in
 155 two sets, so that each set may coöperate with one of two work-sheets, placed side by side, on said platen, to enable simultaneous feeding of said work-sheets, and means for releasing
 160 either set of feed-rolls and holding the corresponding work-sheet against movement whereby either work-sheet may be fed with the platen independently of the other.

19. In a typewriting machine, in combination, a unitary platen, means for maintaining two work-sheets, placed side by side, on said platen in coöperative relation with
 5 said platen, to be fed thereby, and means for releasing either of said work-sheets from said maintaining means and holding the released sheet to prevent movement thereof when the platen is rotated.

20. In a typewriting machine, in combination, a unitary revoluble platen, means for maintaining a plurality of sheets, placed side by side, in coöperative relation with
 15 said platen, and means for selectively releasing said sheets from said maintaining means and holding said selected sheets against movement with the platen when the latter is rotated.

21. In a typewriting machine, in combination, a unitary platen, means for maintaining a plurality of work-sheets, placed side by side, in coöperative relation with
 20 said platen, work-sheet gripping devices adjacent said platen, means for selectively releasing said work-sheets from said maintaining means, and means whereby operation of said releasing means, to release a work-sheet, will render one of said gripping devices effective on the released sheet.

22. In a typewriting machine, in combination, a revoluble platen, a plurality of sets of feed-rolls urged against different portions of said platen longitudinally thereof
 30 to support a plurality of work-sheets side by side on said platen, a work-sheet gripping device opposite each of said sets, a finger-piece, means actuated by said finger-piece
 35 for selectively releasing said sets of feed-rolls and concomitantly rendering the corresponding gripping devices effective, finger-pieces individual to said sets of feed-rolls,
 40 means actuated by said individual finger-pieces for releasing the corresponding sets, an additional finger-piece, and means
 45 actuated by said additional finger-piece for releasing all of said sets simultaneously.

23. In a typewriting machine, in combination, a revoluble platen, two sets of feed-rolls yieldingly pressed against different
 50 portions of said platen longitudinally thereof, gripping devices mounted adjacent said platen, a finger-piece, means controlled by said finger-piece when moved to one position
 55 to release one set of rolls and render the corresponding gripping device effective, and when moved to another position to release the other set of feed-rolls and render the corresponding gripping device effective, finger-pieces individual to said sets of feed-rolls,
 60 and means whereby actuation of either of said individual finger-pieces will effect release of the corresponding set of feed-rolls.

24. In a typewriting machine, in combination, a revoluble platen, a front set and
 65 a rear set of feed-rolls, means to support

said sets of feed-rolls, comprising a pair of pivoted levers for each of said sets, and means to release said rolls, comprising a feed-roll-release shaft, an arm at one end
 70 of said shaft, a link pivoted to said arm, and a cam for actuating said link, the contact between the link and the cam being carried to a dead-center position with reference to said cam, so that the latter will lock the link in operated position.

25. In a typewriting machine, in combination, a revoluble platen, a set of feed-rolls yieldingly supported against each half
 75 of the platen to maintain a work-sheet thereagainst, a gripping device adjacent each half of the platen to receive a work-sheet advanced therefrom, a finger-piece,
 80 means operable by said finger-piece to release one or the other of said feed-roll sets in accordance with the direction of movement of said finger-piece, and means operated
 85 by said finger-piece for controlling said gripping devices, comprising a pin on said finger-piece, a cam-arm connected to each of said gripping devices, and means
 90 urging each of said cam-arms in a direction to render the corresponding gripping device effective, said cam-arms being provided with elevations and depressions to co-operate with said pin in determining the
 95 effectiveness of said gripping devices for different positions of the finger-piece.

26. In a typewriting machine, in combination, a revoluble platen, a set of feed-rolls
 100 to coöperate with each end of the platen, and means for releasing each set of feed-rolls independently of the other, including a feed-roll-release shaft adjacent each end
 105 of the platen, an arm on each shaft, an operating shaft parallel to said release shafts, a finger on said operating shaft to engage the arm on one of said release shafts, an arm on said operating shaft, and a link
 110 pivoted to said last-mentioned arm and having a pin-and-slot connection with the arm on the other of said release shafts, whereby movement of said operating shaft in one direction will turn one of said release shafts in a certain direction, and
 115 movement of said operating shaft in the opposite direction will cause a movement of the other release shaft in the same direction as the first was moved by rotation of the operating shaft in the opposite direction.

27. In a typewriting machine, in combination, a revoluble platen, a bar positioned
 120 adjacent said platen to receive work fed therefrom, a bail pivoted to swing about an axis parallel to that of the platen, spring-fingers on said bail to engage a work-sheet
 125 and press the same against said bar, and means yieldingly urging said bail to a position to cause said fingers to coöperate with said bar.

28. In a typewriting machine, in combination, a revoluble platen, a set of feed-rolls
 130 to support a plurality of work-sheets side by side on said platen, a work-sheet gripping device opposite each of said sets, a finger-piece, means actuated by said finger-piece for selectively releasing said sets of feed-rolls and concomitantly rendering the corresponding gripping devices effective, finger-pieces individual to said sets of feed-rolls, and means whereby actuation of either of said individual finger-pieces will effect release of the corresponding set of feed-rolls.

nation, a unitary cylindrical platen adapted to receive two work-sheets, side by side thereon, means, associated with said platen, to enable said work-sheets to be fed thereby, means for selectively determining whether one or both of said sheets is to be fed by said platen, and means to prevent accidental movement of the sheet which is not to be fed.

10 29. In a typewriting machine, in combination, a unitary cylindrical platen adapted to receive two work-sheets, side by side thereon, means, associated with said platen, to enable said work-sheets to be fed thereby, 15 a finger-piece, and means whereby the feeding of one or both of said sheets by the platen may be selectively determined by said finger-piece.

30. In a typewriting machine, in combination, a unitary revoluble platen, a set of 20 feed-rolls yieldingly pressed against the right-hand end portion of said platen, a second set of feed-rolls yieldingly pressed against the left-hand end portion of said platen, means including a finger-piece to 25 release said right-hand set of feed-rolls, means including a second finger-piece to release said left-hand set of feed-rolls, and means including a third finger-piece to release either the one or the other set of 30 feed-rolls in accordance with the direction in which said third finger-piece is moved.

BURNHAM C. STICKNEY.

Witnesses:

EDITH B. LIBBEY,
JENNIE P. THORNE.