Oct. 16, 1951 E. T. BALDWIN 2,571,182

VERTICAL TABULATION MECHANISM FOR TELEGRAPH PRINTERS

Filed June 10, 1949 2 Sheets-Sheet 1

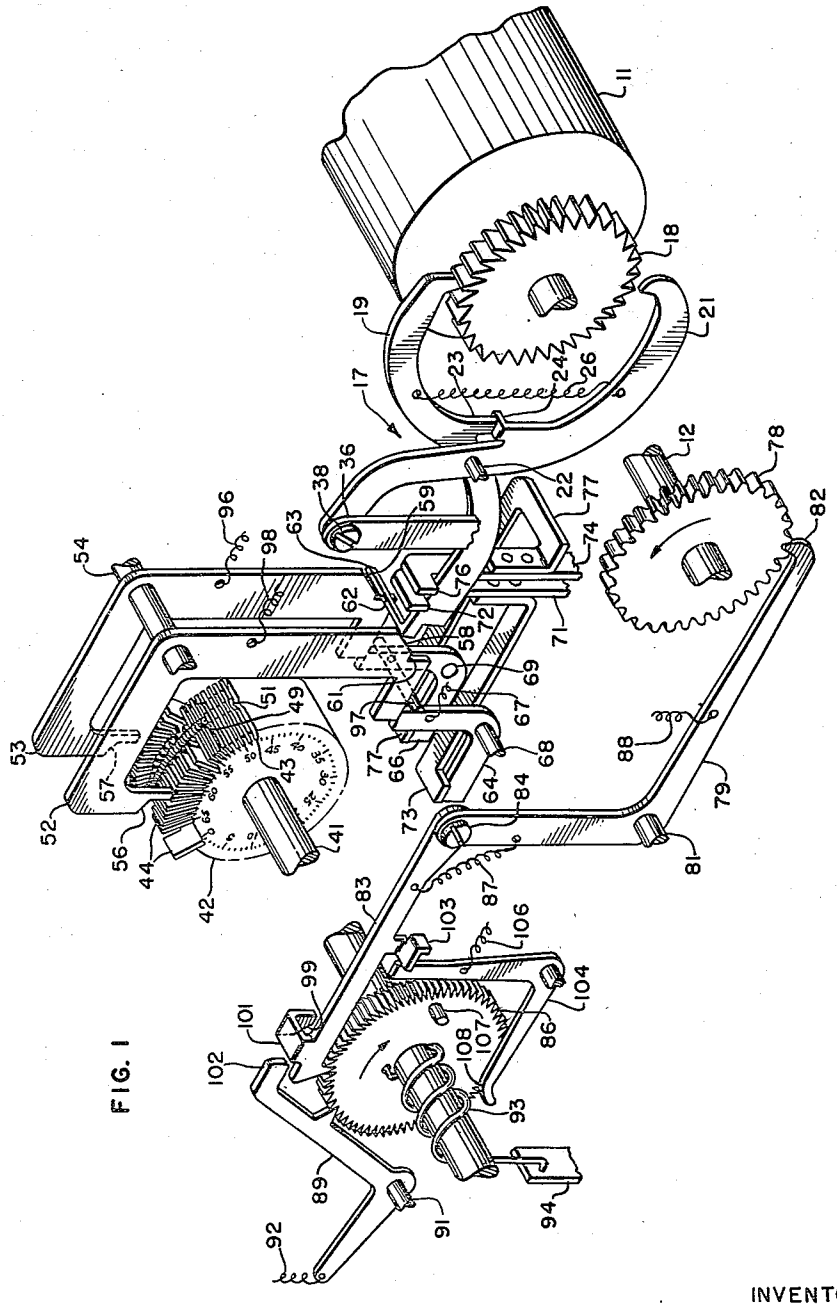


FIG. 1

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VERTICAL TABULATION MECHANISM FOR TELEGRAPH PRINTERS

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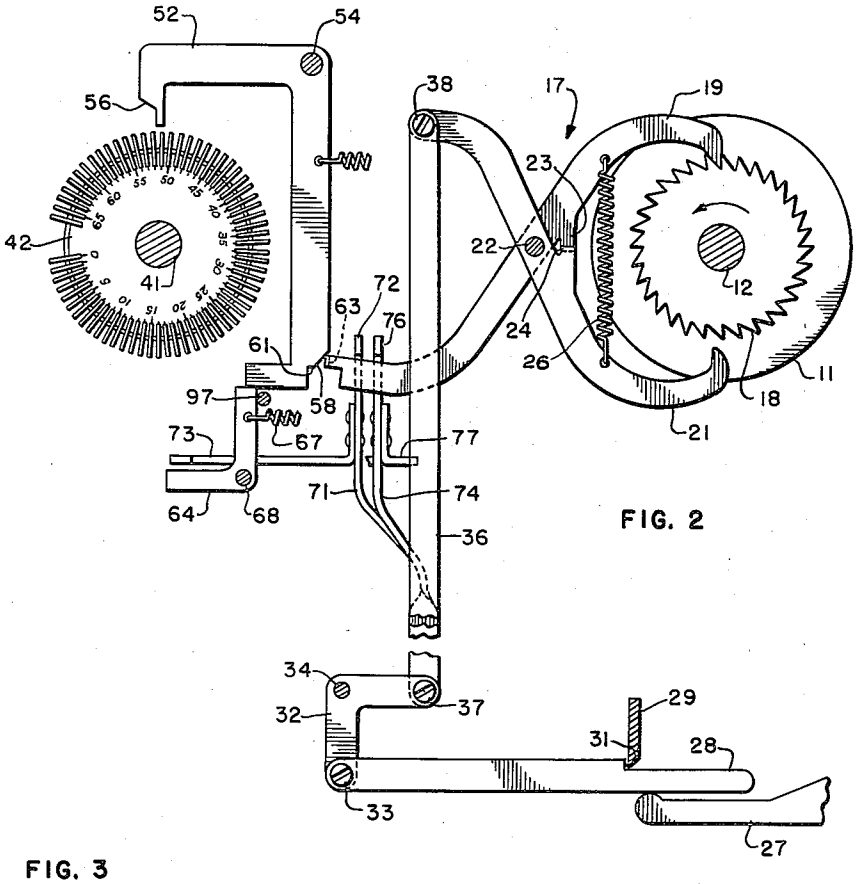
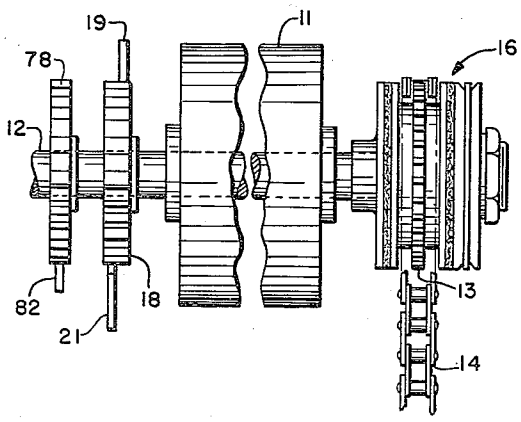


FIG. 2

FIG. 3



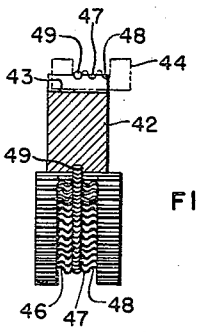


FIG. 4

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UNITED STATES PATENT OFFICE

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VERTICAL TABULATION MECHANISM FOR TELEGRAPH PRINTERS

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15 Claims. (Cl. 178—42)

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This invention relates to printing telegraph apparatus and more particularly to paper feed mechanisms for such apparatus.

The general object of the present invention is to provide a signal controlled mechanism for use in printing telegraph apparatus and the like, for rapidly advancing the paper any predetermined distance.

The present invention is applicable for use on any of the page type telegraph printers in common use at the present time. In the present embodiment, which is merely one of the possible forms the invention could take, the platen is urged rotatably continuously through a friction clutch, an escapement mechanism being provided for controlling the rotation of the platen. Normal line feed operations for spacing the paper between successive lines of printed intelligence, are accomplished in a conventional manner by a signal responsive function lever which actuates the escapement mechanism. A stop wheel is provided which has a plurality of manually settable stops or stop pins which are each positionable to either a form feed out position or a vertical tabulating position. Upon receipt of a vertical tabulation signal the platen is advanced and the stop wheel is rotated therewith until the first stop in vertical tabulation position is effective to cause the escapement mechanism to stop the platen. A form feed out signal similarly causes rotation of the platen until the stop pin in form feed out position causes the escapement mechanism to stop the platen.

Another object of the present invention is to provide a form feed out mechanism which is readily adaptable for use with different length forms by the mere manual displacement of a stop in a stop wheel.

Another object of the invention is to provide a mechanism for simplifying the printing of forms of uniform length by enabling the rapid advancement of the form between successive sections thereof in response to a special signal. This feature of the invention renders it particularly adaptable under conditions where it is desired to print limited amounts of information on various portions of the form. Due to the ease with which the manually operable stops may be set, the present invention renders itself adaptable for remote controlled printing of forms having blank spaces thereon to be filled up with transmitted information.

Another object of the invention is to provide a means for feeding a fixed amount of paper out of a cabinet or cover at the end of a message in response to a predetermined signal.

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The above and other objects and advantages of the invention will be apparent from the following detailed description when taken in conjunction with the accompanying drawings wherein;

Fig. 1 is an isometric view showing the principal features of the invention;

Fig. 2 is an end view of the invention also showing fragmentarily a portion of the function mechanism;

Fig. 3 is a fragmentary view of the platen and its drive mechanism; and

Fig. 4 is a detail view, partly in section, of the stop wheel.

Referring now to the drawings a platen 11 is mounted suitably on a shaft 12 rotatable in the printer frame (not shown), and is rotated by means of a toothed drive wheel 13. The drive wheel 13 is rotated continuously so long as the printer is in operation by means of a chain 14 operably connected to a similar wheel (not shown) on the main drive shaft of the printer. The drive wheel 13 is operably connected to the platen shaft 12 through the usual friction clutch 16 of any well known type.

The rotation of the platen 11 is controlled by an escapement mechanism 17 which cooperates with a ratchet 18 fast to the platen shaft 12. The escapement mechanism 17 consists of an upper pawl 19 and a lower pawl 21 each of which is secured pivotally to a shaft 22. The upper pawl 19 has a shoulder 23 and the lower pawl 21 has a shoulder 24 both of which are cooperable to limit the movement of the pawls 19 and 21 towards one another in response to the urging of a spring 26 secured suitably to both of the pawls 19 and 21.

When a line feed signal is received by the printer a line feed function bar 27 is selected and moved upwardly at which time it engages and lifts a line feed push bar 28 into engagement with a function bail 29. The function bail 29 operates invariably, moving to the left (Fig. 2) and, in so doing, engages a shoulder 31 on the line feed push bar 28 and moves the push bar 28 to the left. The line feed push bar 28 is secured pivotally to a bell crank 32 by a bolt 33 and pivots the bell crank 32 about its pivot shaft 34 during the leftward movement of the push bar 28. The bell crank 32 is secured pivotally to a line feed veritcal link 36 by means of a bolt 37 and the vertical link 36 is in turn secured pivotally to the lower pawl 21 by means of a bolt 38. Thus the movement to the left of the line feed push bar 28 is translated into a counterclockwise movement of the lower escapement pawl 21.

When the lower escapement pawl 21 is pivoted counterclockwise in response to a line feed sig-

nal the shoulder 24 thereon, being in engagement with the shoulder 23 of the upper pawl 19, also causes the upper pawl 19 to be pivoted counterclockwise. Thus the ratchet 18 is advanced a step in response to a line feed signal in the following manner. Both pawls 19 and 21 move upwardly relative to the ratchet 18 and when the upper pawl 19 disengages the ratchet 18 the lower pawl 21 is moved to a position midway between two teeth of the ratchet 18. Thus the platen 11 is rotated counterclockwise a half step by the clutch 16 until the pawl 21 engages a tooth on the ratchet. Thereafter as the bail 29 moves back to the right a spring (not shown) causes the lower pawl 21 to be moved clockwise to its normal position. A spring 39 connecting the two pawls 19 and 21 is effective at this time to pivot the upper pawl 19 clockwise, thereby retaining both pawls engaged at their shoulders 23 and 24. When the pawl 21 moves from engagement with the ratchet 18 the pawl 19 moves to a position midway between two adjacent teeth on the ratchet 18. Thus the clutch 16 is again effective to cause the platen 11 to be moved a half step whereupon the pawl 19 again engages a tooth on the ratchet 18. It is therefore apparent that upon the receipt of a line feed signal the platen 11 is moved a total of one full step counterclockwise which is equivalent to a single line feed.

The vertical tabulation and form feed out mechanisms will now be described. A freely rotatable auxiliary shaft 41 is mounted suitably in the printer frame and a stop wheel 42 is fixed to and rotatable with this shaft. The stop wheel 42 is provided with a plurality of radial slots 43 spaced uniformly around the periphery thereof. A stop 44 is provided for each one of the slots 43 and is slidable therein with the exception of the stop in the No. 66 position of the dial, as shown. The stop 44 in the No. 66 position is wider than the other stops 44 and is permanently positioned so as to extend into feed out position and vertical tabulation position at all times to insure proper operation of the mechanism under all conditions of operation. Each of the stops 44, from zero to No. 65 position is provided with three notches 46, 47, and 48. A garter spring 49 is positioned within slots 51 around the stop wheel 42 for the purpose of retaining the stops 44 within the slots 43. Normally the garter spring 49 is lodged in the middle notch 47 of the stops 44 so as to retain the stops in an ineffective position. When one of the stops 44 is moved to the right, or to its tabulation position, as shown in Fig. 4, the garter spring becomes lodged in the notch 46 of that stop and thus retains the stop in tabulation position. Similarly when one of the stops 44 is moved to the left, or form feed out position, the garter spring 49 becomes lodged in the notch 48 and retains the stop in form feed out position. The garter spring 49 and the notches 46, 47, and 48 in each of the stops 44 provide a convenient means for retaining the stops 44 in the slots 43, and further render it easy to change the settings of the stops manually. When it is desired to set one of the stops 44 in either its tabulation or form feed out position such stop is merely moved longitudinally in its slot 43 until the garter spring 49 rides over the bump between the notches and becomes lodged in the next adjacent notch. The stop wheel 42 may be marked by numbers such as is shown in Fig. 2 in order

to facilitate the manual operation of setting the stops 44.

A form feed out latch 52 and a vertical tabulation latch 53 are mounted pivotally on a shaft 54 which is mounted suitably in the printer frame. The feed out latch 52 has a cam surface 56 for cooperating with a stop 44 which has been set previously in its leftward or form feed out position and the tabulation latch has a cam surface 57 for cooperating with those stops which have been set previously in their rightward or tabulation positions. The latches 52 and 53 respectively have cam surfaces 58 and 59 and locking surfaces 61 and 62, all of which cooperate with a bent over portion 63 on the end of the escapement latch 19. The latches 52 and 53 respectively have cooperating bell cranks 64 and 66, each of which are spring biased in a clockwise direction by springs 67, about their respective pivot shafts 68 and 69. A form feed out vertical link 71, which is rendered operable in response to a form feed out signal by a function mechanism similar to the line feed function mechanism, has a shoulder 72 for cooperating with the lower arm of the upper escapement pawl 19, and carries an arm 73 which cooperates with the bell crank 64. A vertical tabulation link 74, similar to the form feed out vertical link 71 and operable in response to a vertical tabulation signal, also has a shoulder 76 for cooperating with the upper escapement pawl 19 and carries an arm 77 which cooperates with the bell crank 66.

A line feed cam wheel 78 is secured fixedly to the platen shaft 12 and rotates in unison with the platen 11. A bell crank 79 is mounted pivotally on a suitable shaft 81 and has a follower portion 82 which follows the surface of the line feed cam wheel 78. The bell crank 79 is secured pivotally to a feed pawl 83 by means of a bolt 84. The feed pawl 83 is continuously urged towards a ratchet wheel 86 mounted fixedly on the shaft 41 by means of a weak spring 87, the bell crank being urged continuously counterclockwise about the shaft 81 by means of a suitable spring 88. A holding pawl 89 mounted pivotally on a shaft 91 and spring biased clockwise by a spring 92, also cooperates with the ratchet 86. The ratchet 86 is normally urged in a counterclockwise direction by a helical spring 93 suitably secured to the ratchet 86 at one end and to a stationary member 94 at its other end. With each line feed operation or with each step of the platen 11, the line feed cam wheel 78 oscillates the follower bell crank 79 which in turn oscillates the feed pawl 83. When the feed pawl 83 moves to the right it advances the ratchet 86 until the holding pawl 89 engages the next successive tooth and by this time the follower 82 will have passed the peak of one of the cams on the cam wheel 78 so that during the last half of the step of the platen 11 the feed pawl 83 returns to the left and slides over the next adjacent tooth.

It is assumed that one of the stops 44 has been moved to its right hand position (Fig. 1 or 4) or tabulation position. A vertical tabulation signal causes a vertical tabulation function bar (not shown) similar to the line feed function bar 27 to raise which results in the momentary downward movement of the vertical tabulation vertical link 74. When the vertical link 74 moves in this manner the shoulder 76 pivots the upper escapement pawl 19 counterclockwise from engagement with the

ratchet 18 and the arm 77 pivots the bell crank 66 counterclockwise about the pivot shaft 69 against the action of its spring 67 until the vertical tabulation latch 53 is free to move counterclockwise under the urging of its spring 96. When the shoulder 76 moves the upper pawl 19 the platen 11 is released for continuous rotation for the reason that the lower pawl 21 remains disengaged from the ratchet 18 due to the fact that the line feed vertical link 36, being stationary, prevents the spring 26 from being effective to pull the lower pawl 21 up with the upper pawl 19. Upon the release of the vertical tabulation latch 53 by the bell crank 66, the bent over portion 63 on the upper pawl 19 becomes latched by the locking surface 62 on the tabulation latch 53. Thus the platen 11 continues to rotate until the bent over portion 63 becomes unlatched. When the tabulation latch 53 is pivoted counterclockwise in this manner the cam surface 57 is moved downwardly sufficiently to be in a position to be engaged by the stop 44 in vertical tabulation position.

As the platen 11 rotates in response to the vertical tabulation signals the stop wheel 42, being mounted on the shaft 41 with the ratchet 86, also rotates until the stop 44 in tabulation position engages the cam surface 57. The stop 44, upon engaging the cam surface 57 is effective to cam the tabulation latch 53 slightly clockwise so as to unlatch the bent over portion 63 of the upper pawl 19 from the locking surface 62. The spring 26 is then effective to pull the upper pawl 19 downwards, at which time the bent over portion 63 cooperates with the cam surface 58 to cam the tabulation latch 53 still further clockwise until it overrides the top of the vertical arm of the bell crank 66. The spring 67 on the bell crank 66 is then effective to pivot the bell crank 66 clockwise until it strikes a stop bolt 97. When the upper pawl 19 is pulled downwards by the spring 26 the rotation of the platen 11 is stopped.

When a form feed out signal is received the form feed out vertical link 71 is pulled downwardly in the same manner as the vertical tabulation vertical link 74 or the line feed vertical link 36 is pulled downwardly in response to a vertical tabulation or line feed signal. When the feed out vertical link 71 moves downwardly the shoulder 72 pivots the upper pawl 19 counterclockwise to enable the rotation of the platen 11 and the arm 73 pivots the bell crank 64 counterclockwise until the form feed out latch 52 is free to move counterclockwise under the urging of its spring 98 and it becomes latched at its locking surface 61 by the bent over portion 63 of the upper pawl 19. As the platen 11 rotates the stop wheel 42 also rotates until the stop 44 in form feed out position or, in case there is no stop 44 in such position, the stop 44 in No. 66 position strikes the cam surface 56 on the feed out latch 52. The feed out latch 52 is thus pivoted to its normal position and the rotation of the platen 11 is stopped in the same manner as in the case of a vertical tabulation signal being received.

At the same time the stop 44 in feed out position strikes the cam surface 56 it also strikes a cam surface 99 on an arm 101 projecting from the feed pawl 83. The stop 44 cooperates with the cam surface 99 to cam the feed pawl 83 upwardly until it becomes disengaged from the the teeth of the ratchet 86. Upon raising, due to the action of the stop 44 and cam surface 99, the feed pawl 83 engages a projection 102 on the holding pawl 89 and moves the holding pawl 89 out of engagement with the ratchet 86. When the feed pawl 83 and holding pawl 89 are disengaged from the ratchet 86 a lug 103 is raised sufficiently to permit the vertical arm of a bell crank 104 to be pivoted beneath the lug 103 by a spring 106. The bell crank 104 thus retains the feed pawl 83 and holding pawl 89 in disengaged relation to the ratchet 86. Under this condition the spring 93 is free to unwind and does so, thereby rotating the ratchet 86 and stop wheel 42 counterclockwise. The ratchet 86 and stop wheel 42 continue rotating counterclockwise until a stop pin 107 on the ratchet 86 strokes a camming portion 108 on the horizontal arm of the bell crank 104, whereupon the bell crank 104 is pivoted counterclockwise against the action of its spring 106 and to a position disengaged from the lug 103. The feed pawl 83 and holding pawl 89 again engage the ratchet 86 and the stop wheel 42 occupies its zero position.

When a telegraph printer is equipped with the present invention the printing of forms of uniform length is very greatly facilitated. The present invention makes it possible to print and automatically feed out forms of any length up to the length of a single line feed multiplied by the number of stops 44 on the stop wheel 42. In the present disclosure only sixty-six stops are shown on the stop wheel but obviously increasing the number of stops and similarly increasing the number of teeth on the ratchet 86 would make it possible to increase the length of the forms which could be handled. The vertical tabulation feature of the invention makes it possible to advance the platen from any line position on the form to the next stop position as determined by the settings of the stops 44 in response to a single signal.

The various parts of the invention are so arranged as to insure proper operation thereof at all times, even in the case when it is not desired to utilize the form feed out and vertical tabulation features. When these features are not being used, each time the permanent stop 44 (the stop 44 occupying the No. 66 position on the stop wheel) advances to engage the cam surface 99 on the feed pawl 83, the pawls 83 and 89 are disengaged from the ratchet 86, and consequently the spring 93 is able to return the ratchet 86 and stop wheel 42 to their zero positions. Also, when operating under these conditions if an operator accidentally sends a form feed out signal or a vertical tabulation signal the platen 11 will rotate until the stop 44 in No. 66 position engages either the cam surface 56 or 57 depending on which signal was accidentally transmitted. Thereafter the platen is stopped in the manner already described.

Obviously numerous changes may be made in the invention without departing from the spirit or scope thereof.

What is claimed is:

1. In a device for facilitating the printing of forms of uniform length, a platen, means for rotating said platen to advance forms thereabout, means for holding said platen against rotation, means operable in response to a line feed signal to release said holding means to advance said platen a step to bring the next successive line on the form into printing position, a selective stop means for controlling said holding means, means responsive to a vertical tabulating

signal to release said holding means to cause said platen rotating means to advance said platen to a predetermined position as determined by the selective setting of the stop means to thereby bring a line on the form other than the next successive line into printing position, and means responsive to a form feed out signal to release said holding means to advance said platen to a predetermined position as determined by the selective setting of the stop means to thereby bring the next succeeding form into printing position.

2. In a device for enabling vertical tabulation of forms through a signal controlled printer, the combination of a platen, means for rotating said platen, an escapement mechanism for controlling the rotation of said platen by said platen rotating means, a signal responsive line feed mechanism cooperating with said escapement mechanism for causing a line to line advancement of said platen by said platen rotating means, a stop wheel rotatable with said platen, a plurality of settable stops on said stop wheel, each of said stops being movable to a vertical tabulating position, and a signal responsive mechanism cooperating with said escapement mechanism and with said stop wheel to cause advancement of said platen until the next successive stop in vertical tabulating position engages said last mentioned signal responsive mechanism.

3. In combination with a telegraph printer of the page type having a rotatable platen, means continuously operative tending to rotate the platen and feed a form therearound, an escapement mechanism for controlling the rotation of said platen and form, a stop wheel rotatable with said platen, a stop on said stop wheel for each line feed position on said form, each of said stops being settable to a vertical tabulating position, and a signal responsive mechanism cooperable with said stops in vertical tabulating position and with said escapement mechanism to enable vertical tabulation of said form to positions determined by the vertical tabulating settings of said stops.

4. In combination with a telegraph printer of the page type having a rotatable platen, means for rotating the platen to feed a form therearound, an escapement mechanism for controlling the rotation of said platen and form, a stop wheel, a stop on said stop wheel for each line position on said form, each of said stops being settable in a vertical tabulating position, cam actuated pawl and ratchet means for rotating said stop wheel as said platen rotates, a signal responsive mechanism for actuating said escapement mechanism to cause rotation of said platen, a member movable by said signal responsive mechanism into the path of rotation of said stops set in vertical tabulating position, said stop wheel continuing rotation until one of said stops in vertical tabulating position engages said member, said member being effective upon engagement with said one of said stops to cause said escapement member to stop the rotation of said platen whereby said form is stopped in accordance with the setting of said one of said stops in vertical tabulating position.

5. In combination with a telegraph printer of the page type having a rotatable platen, means for rotating the platen to feed forms therearound, an escapement mechanism for controlling the rotation of said platen and forms, a stop wheel rotatable with said platen, a stop on said stop wheel for each line feed position on a form, each of said stops being settable from normal to a vertical tabulating position or to a form feed out position, a signal responsive mechanism cooperable with said stops in vertical tabulating position and with said escapement mechanism to enable vertical tabulation of said form to positions determined by the vertical tabulating settings of said stops, and another signal responsive mechanism cooperable with a stop in form feed out position and with said escapement mechanism to enable feed out of said form, whereby a new form is positioned in printing position.

6. In a form feeding device for telegraph printers, a rotatable platen, means for rotating said platen to advance forms therearound, means for holding the platen against rotation, signal responsive means for releasing the holding means for enabling the step by step advancement of said platen by said rotating means to bring successive lines of a form into printing position, a settable stop mechanism for predeterminedly selecting a plurality of intermediate stop positions of said platen and a form feed out stop position of said platen, means responsive to a special signal for releasing the holding means for enabling said platen rotating means to advance said platen and said form to the next successive predeterminedly selected intermediate stop position, and means responsive to a different special signal for enabling said platen rotating means to advance said platen and said form to said predeterminedly selected form feed out stop position, whereby said form is fed out and a new form is positioned in printing position.

7. In a form feeding device for telegraph printers, a rotatable platen, means for rotating said platen to advance forms therearound, means for holding the platen against rotation, signal responsive means for releasing said holding means for enabling step by step advancement of said platen by said rotating means to bring successive lines of a form into printing position, a settable stop mechanism, a plurality of settable stops in said stop mechanism positionable in a manner for predeterminedly selecting a plurality of intermediate stop positions of said platen and a form feed out stop position of said platen, means responsive to a special signal for releasing said holding means for enabling said platen rotating means to advance said platen and said form to the next successive predeterminedly selected intermediate stop position, and means responsive to a different special signal for releasing said holding means for enabling said platen rotating means to advance said platen and said form to said predeterminedly selected form feed out stop position, whereby said form is fed out and a new form is positioned in printing position.

8. In a form feeding device for telegraph printers, a rotatable platen, means for rotating said platen to advance forms therearound, signal responsive means for enabling step by step advancement of said platen by said rotating means to bring successive lines of a form into printing position, a settable stop mechanism rotatable with said platen, a plurality of settable stops in said stop mechanism positionable selectively in vertical tabulating position or form feed out position, a first means normally ineffective for engaging a stop positioned in vertical tabulating position, a second means normally ineffective for engaging a stop in form feed out position, means responsive to a special signal for enabling said platen rotating means to advance said platen and said form and for rendering said first means effective, said stop mechanism rotating with said

platen until engagement of said first means with the next successive stop selectively positioned in vertical tabulating position, said first means thereby being rendered effective to cause said platen to stop rotating, and means responsive to a different special signal for enabling said platen rotating means to advance said platen and said form and for rendering said second means effective, said stop mechanism rotating with said platen until engagement of said second means with a stop in form feed out position, said second means thereby being rendered effective to cause said platen to stop rotating, whereby said form has been fed out and a new form positioned in printing position.

9. In a form feeding device for telegraph printers, a platen, means for rotating said platen to advance forms therearound, a signal responsive mechanism for causing line to line advancement of a form around said platen by said platen rotating means, a signal responsive mechanism for initiating vertical tabulating advancement of said form around said platen by said platen rotating means, a signal responsive mechanism for initiating form feed out advancement of said form around said platen by said platen rotating means, a settable stop mechanism rotatable from a zero position with said platen for predeterminedly controlling vertical tabulating and form feed out advancements of said form by said platen rotating means and for adding all line to line and vertical tabulating advancements of said form by said platen rotating means, whereby said platen is rotated to a predetermined point by said platen rotating means as determined by said settable stop mechanism upon initiation of a form feed out advancement thereby feeding out said form and positioning a new form around said platen, and means operable upon completion of a form feed out advancement of said platen for returning said settable stop mechanism to said zero position, whereby said settable stop mechanism is thereby rendered effective for controlling vertical tabulating and form feed advancements of said new form.

10. In an apparatus for feeding forms out of a telegraph printer, a platen adapted to carry a form therewith, means for advancing said platen, a member for holding said platen against advancement, a stop mechanism connected to said platen, a plurality of settable stops in said mechanism wherein a stop may be set according to the length of form to be fed by the platen, and a linkage unit connected to said holding member whereby actuation of the linkage unit by the reception of a special signal releases said holding member and simultaneously positions said linkage unit in position to be engaged by the advance of said stop, said linkage unit being adapted to move the holding means into engagement with the platen upon the stop striking the linkage unit.

11. In an apparatus as defined in claim 10 which includes means to be engaged by the settable stop to return the stop mechanism to its initial position upon completion of the form feed out operation.

12. In a signal controlled form feeding apparatus for use in a telegraph printer, a platen for carrying a form therewith, means to advance the platen in accordance with predetermined signals, said means including drive means engaging said platen, means for normally holding the platen against advancement by the drive means, a plurality of linkage devices for controlling the holding means in accordance with the reception of a signal in any particular devices, an actuator operatively connected to the platen for movement therewith, settable means on the actuator for engaging one or more of the linkage devices, whereby selective actuation of any of the devices causes said platen to rotate said actuator to bring one of the settable means into engagement with the selected device to cause the holding means to engage the platen to stop the advancement of the platen.

13. In a printing telegraph machine, a platen adapted to be moved and carry a form therewith, continual driving means frictionally engaged to said platen, means for restraining the movement of the platen against the frictional driving means, means responsive to a line feed signal for releasing the restraining means to permit the platen to advance one increment, a stop mechanism settable in a number of predetermined positions, means interconnecting the stop mechanism with the platen whereby movement of the platen is imparted to stop mechanism, latching means adapted to be positioned in the path of movement of the stop mechanism, and means operated by reception of another signal for releasing said restraining means, engaging the restraining means with the latching means and moving the latching means into position to be engaged by the advance of the stop mechanism.

14. In a mechanism for advancing a platen in a telegraph printer, driving means for the platen, frictional means connecting the platen to the driving means, means for engaging the platen to normally overcome the frictional means to prevent the platen from advancing, a pair of operating members for controlling the position of the engaging means, said operating members being formed to provide a latch for said engaging means, a stop carrier operatively connected to and moved by advancement of the platen, a plurality of stops settable to predetermined positions in the stop carrier, means responsive to a tabulation signal to move the engaging means from the platen and move one of the operating members into position to be engaged by a set stop, whereby the engaging means is latched in position, said platen and stop carrier advancing until the set stop engages the operating member whereby the operating member unlatches the engaging means to engage the platen to stop the advancement, and means responsive to another signal to move the engaging means from the platen and move the other of said operating members into a position to be engaged by a second one of said stops whereby the engaging means is latched in position, said platen and stop carrier advancing until the second stop engages the operating member whereby the operating member unlatches the engaging means to engage the platen to stop the advancement of the platen.

15. In an apparatus for advancing a form in a printing telegraph machine, a rotatable platen adapted to carry a form therewith, drive means frictionally connected to the platen, a first ratchet connected to said platen, an escapement means normally engaging said first ratchet to prevent rotation of the platen, means responsive to a line feed signal for moving the escapement means sufficiently to allow the first ratchet to advance one increment, a cam connected to said platen, said cam having a plurality of lobes thereon equal in number to the teeth on the first ratchet, a second ratchet, a pawl means interconnecting said second ratchet and lobed cam, a stop

wheel connected to said second ratchet, a plurality of selectable stops on the stop wheel, means to hold a selected stop in a set position, a pivotally mounted bell crank having a notch on one end adapted to engage and hold the escapement means out of engagement with the first ratchet, and means responsive to a form feed signal to move the escapement means out of engagement with the first ratchet, move the bell crank to latch the escapement in position and move the bell crank into a position to be engaged by a selected stop on the stop wheel whereby the rotation of the platen is imparted to the cam which moves the pawl to advance the second ratchet and the stop wheel to bring the stop into engagement with the bell crank so that the escapement means is unlatched to stop the rotation of the platen.

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