June 10, 1924.

1,497,410

J. A. B. SMITH

TYPEWRITING MACHINE

Original Filed Sept. 2, 1920 4 Sheets-Sheet 1

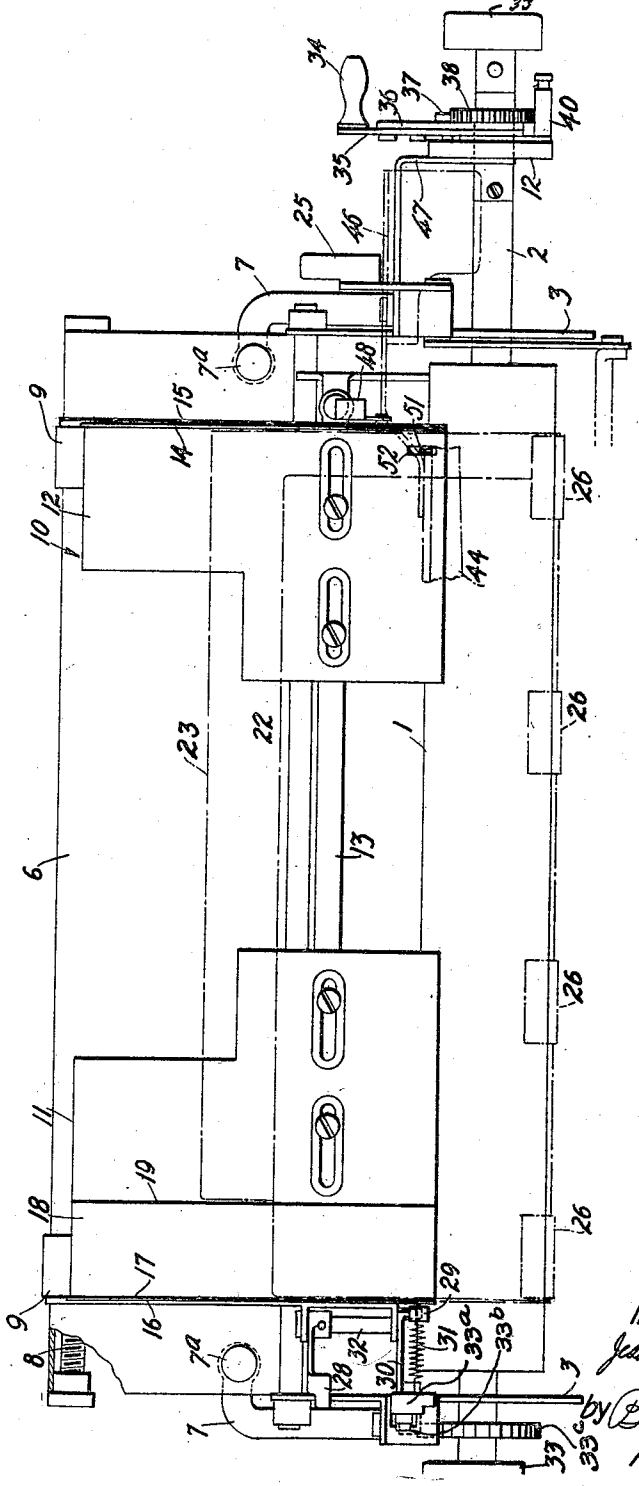

Fig. 1.

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TYPEWRITING MACHINE

Original Filed Sept. 2, 1920 4 Sheets-Sheet 2

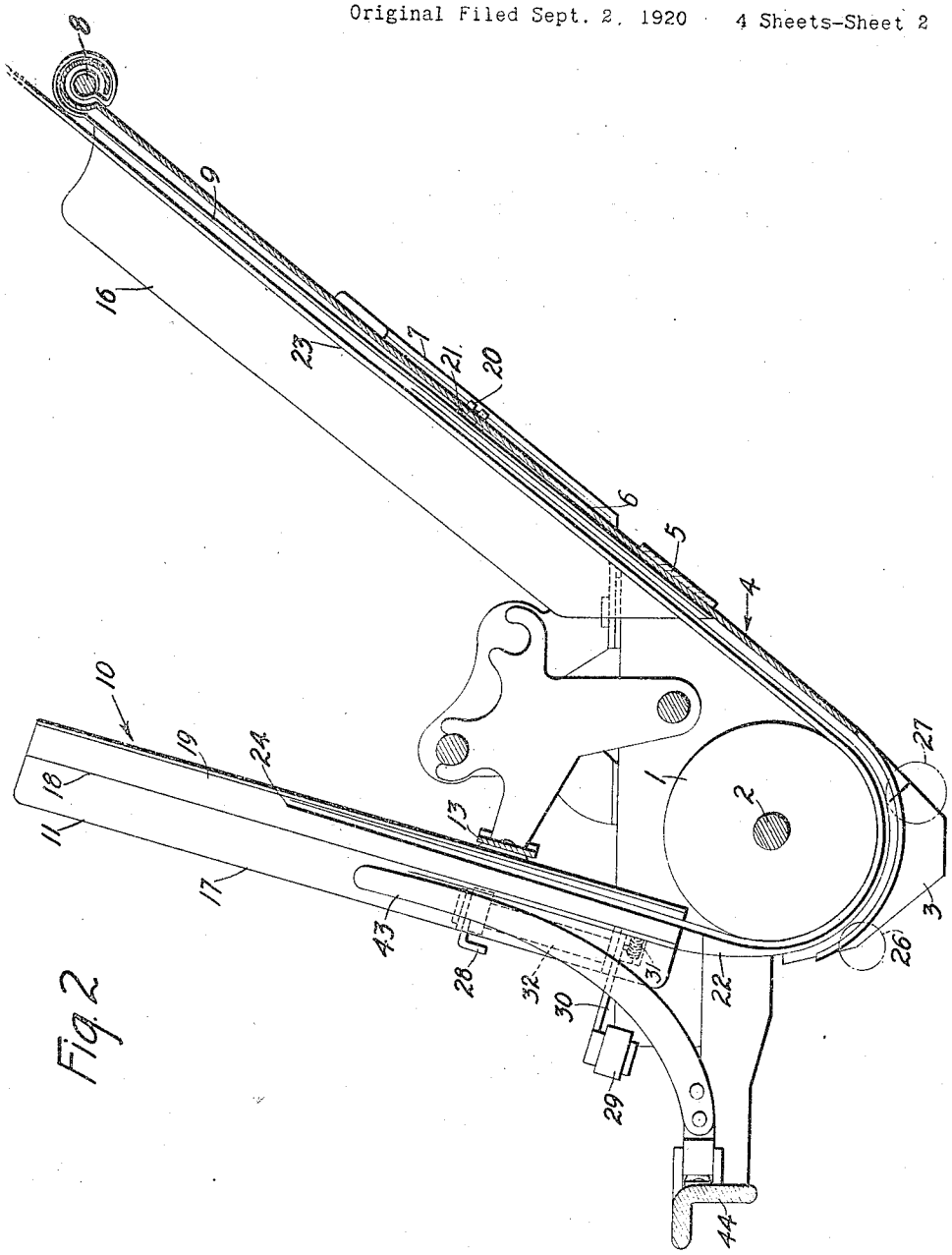

Fig. 2

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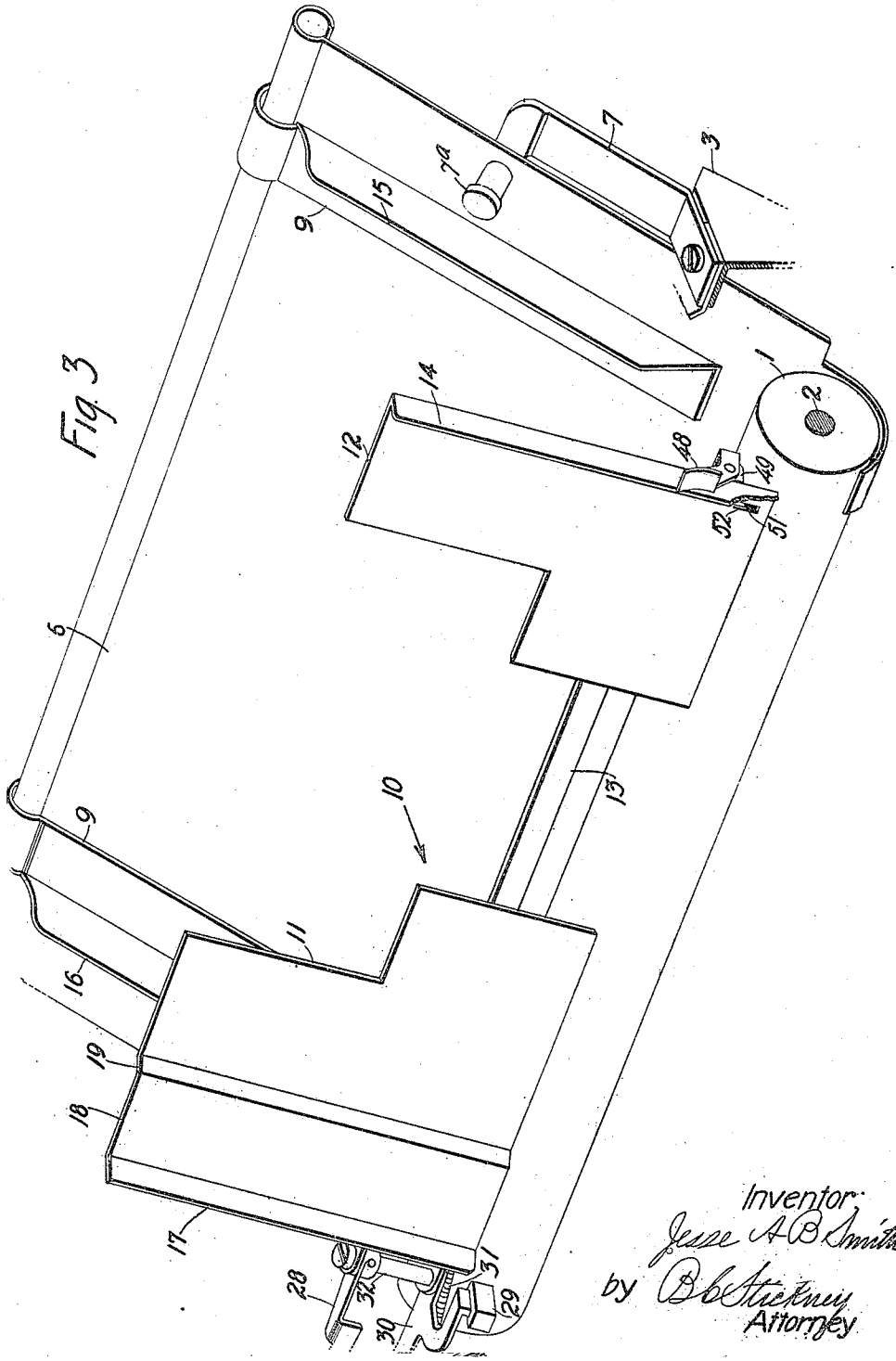
TYPEWRITING MACHINE

Original Filed Sept. 2, 1920 4 Sheets-Sheet 3

Fig. 3



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TYPEWRITING MACHINE

Original Filed Sept. 2, 1920 4 Sheets-Sheet 4

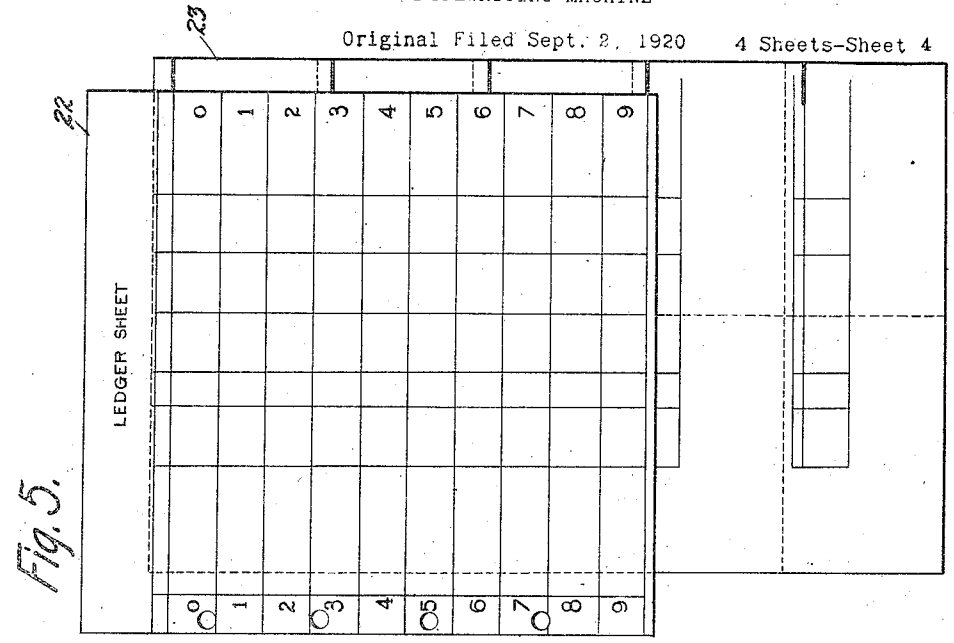

Fig. 5.

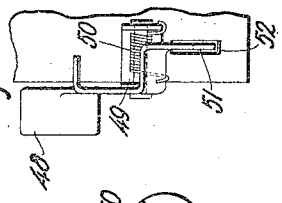

Fig. 8.

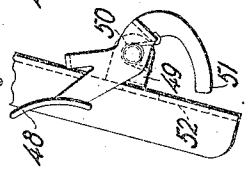

Fig. 7.

Fig 4

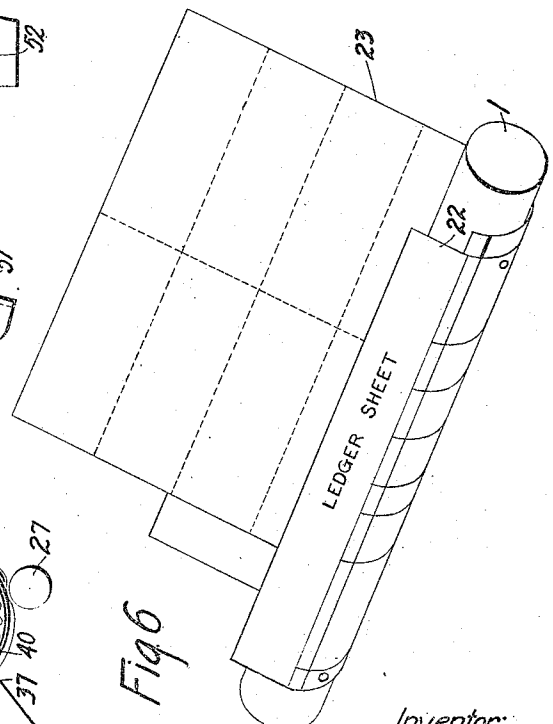

Fig 6

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Patented June 10, 1924. 1,497,410

UNITED STATES PATENT OFFICE.

JESSE A. B. SMITH, OF STAMFORD, CONNECTICUT, ASSIGNOR TO UNDERWOOD TYPEWRITER COMPANY, OF NEW YORK, N. Y., A CORPORATION OF DELAWARE.

TYPEWRITING MACHINE.

Application filed September 2, 1920, Serial No. 407,651. Renewed August 29, 1922. Serial No. 585,078.

To all whom it may concern:

Be it known that I, JESSE A. B. SMITH, a citizen of the United States, residing in Stamford, in the county of Fairfield and State of Connecticut, have invented certain new and useful Improvements in Typewriting Machines, of which the following is a specification.

This invention relates to sheet-collating means, and is herein shown as applied to an Underwood standard typewriting machine.

In performing certain kinds of work, for example in making entries upon assessment lists or ledger sheets and bill sheets or statements used in an internal revenue collector's office, it is necessary to make the entries at different distances apart on the two sheets.

The main object of this invention is the provision of simple and efficient means whereby the sheets may be rapidly and accurately inserted in the machine and rapidly positioned longitudinally of each other while in the machine.

In order to obtain proper gaging of the work-sheets laterally of the machine, and at the same time proper positioning of the same relatively to the printing line, the rear paper-table may be made of greater length than usual, and provided with side gages or paper guides of sufficient length so as to insure proper alignment of the work-sheets when inserted, the adjustment of one of the work-sheets being effected by means of one of the side gages and that of the other sheet by the other side gage. Provision may be made of a front paper-table or collating table comprising a chute or portion to receive one of the work-sheets between edge gages forming part thereof, and an extension or secondary paper-table in the form of a shelf projecting from one of said side gages to receive one edge of the other work-sheet.

In order to facilitate relative adjustment of the two work-sheets on the collating table, provision may be made of a clamping device to co-operate with the extension of the collating table to clamp thereon the work-sheet whose edge lies on said extension. By this arrangement, one of the work-sheets may be held in fixed position while the other is adjusted relatively thereto.

As herein disclosed, the statement sheet, which has the printed lines thereon spaced at greater distances than those on the ledger sheet, is inserted between the ledger sheet and the platen, the statement sheet being positioned by means of the right-hand gage on the rear paper-table and the ledger sheet by the left-hand gage. The construction of the collating table is such that the statement sheet will be received between the side gages of the main portion of the collating table, and the ledger sheet will have its left-hand edge resting on the extension of the collating table. When first inserted, the ledger sheet may be brought to proper writing line position and there secured by the clamping device co-operating with th extension of the collating table, and then the statement sheet adjusted to proper writing line position. The usual feed-rolls may then be thrown on and an entry made on said sheets or on the work-sheets.

In order to properly position the work-sheets for subsequent entries, the feed-rolls may be thrown off, after the platen has been turned to bring the ledger sheet to its next line-space position, the ledger sheet may be held in its new position either by the clamping device or gripped against the extension of the collating table by the hand, and the statement sheet drawn forward by the other hand until the next line thereon coincides with the next line of the ledger sheet. The usual feed-rolls may then be thrown on and another entry made.

To facilitate the rapid insertion of the second statement sheet for use with the same ledger sheet, provision may be made of a condensed billing device whereby the platen may be rotated rearwardly to allow the insertion of another statement sheet and then returned to writing position.

Means are provided to move the work-sheets away from the collating table to facilitate grasping of the statement sheet, by the operative, when the statement sheet is to be adjusted relatively to the ledger sheet.

In order to hold the work-sheets in proper position relative to the collating table, provision may be made or a paper-finger supported on the front rail of the typewriter carriage and extending upwardly along the collating table.

Other features and advantages will hereinafter appear.

In the accompanying drawings,

Figure 1 is a front view of the platen frame of an Underwood standard typewrit-

ing machine, with my invention applied thereto.

Figure 2 is a sectional side view of the mechanism shown in Figure 1.

Figure 3 is a diagrammatic perspective view of the principal parts of the invention.

Figure 4 is an end view illustrating the operation of the condensed billing device.

Figure 5 is a detail view of the ledger sheet and statement sheet in adjusted position for insertion in the machine.

Figure 6 is a view showing the platen with the ledger sheets and statement sheets positioned thereon.

Figure 7 is a fragmentary side view of the collating table showing the sheet-lifting finger-piece thereon.

Figure 8 is a rear view of the parts shown in Figure 7.

A cylindrical platen 1 is supported by means of an axle 2 in end frames 3 of a platen frame 4, which comprises a rear bar 5 connecting the end frames 3 and serving to support a rear paper-table 6, the forward end of which may be curved around the platen to the front thereof. According to the present invention, the rear paper-table 6 is of much greater length than those used ordinarily and the portion extending beyond the rear bar is supported by thumb screws 7ª which hold the table on brackets 7 suitably secured to the end frames of the platen frame. At its upper edge the rear paper-table is shaped to form a bead through which passes a rod 8 supported at its ends in any suitable manner on the rear paper-table. For the purpose of properly positioning the leading edges of work-sheets with reference to the writing line, as well as adjusting them to the proper position along the platen, edge gages or guides 9 of considerable length are mounted on the rod 8 in such a manner as to have their forward ends yieldingly pressed against the paper-table 6.

The machine is also provided with a front paper-table or collating table 10 comprising two sections 11 and 12, adjustably secured on a bar 13 supported in any suitable manner on the ends of the platen frame. It should be understood that the right-hand section 12 of the collating table is so positioned that its upstanding edge or gage 14 is in substantially the same plane as the upstanding edge 15 of the corresponding guide 9 on the rear paper-table, so that a work-sheet aligned by the guide 9 will fit closely against the upstanding edge 14 when carried to the collating table. Inasmuch as the right-hand guide 9 on the rear paper-table is of sufficient length to give proper adjustment for a work-sheet, the left-hand guide 9 may be spaced therefrom a distance greater than the work-sheets to be used, and its upstanding edge 16 may be used to gage and adjust another work-sheet, which, when carried around the platen to the collating table, will contact along its left-hand edge with the edge guide 17 at the extreme left of the collating table.

It will be seen that the edge guide 17 is mounted on a secondary paper-table or shelf formed by an extension 18 of the section 11 of the collating table, and that the extension 18 is raised above the surface of the main part of section 11 by means of an upstanding portion 19, which may serve as a left-hand side guide or gage for a work-sheet aligned against the upstanding edges 14 and 15 of the section 12 and the right-hand guide 9, respectively. In case the machine is to be used continuously with work-sheets of the same width, the paper-guides 9 upon the rear table may be fixed firmly in position by means of screws 20 passing through openings in the rear paper-table and threaded into bosses 21 on the rear faces of said paper-guides 9. It will be seen that the sections 11 and 12 of the front paper-table 10 form, with their respective side gages 19 and 14, a guide-chute for the inner work-sheet.

The ledger sheet 22 and statement sheet 23, as shown in Figure 5, have ten ruled spaces and five ruled spaces, respectively, the spaces of the first-mentioned sheet being numbered from "0" to "9," inclusive. When it is desired to make entries on the ledger sheet and also on the statement sheet, the two sheets are positioned, as indicated in Figure 5, with a carbon sheet 24 interleaved therebetween and inserted in the machine, the statement sheet being gaged by means of the right-hand guide or gage 9 and the ledger sheet by means of the left-hand gage 9. The cast-off lever 25 may then be actuated to withdraw the front and rear feed-rolls 26 and 27, respectively, from the platen by suitable mechanism, such as disclosed in the patent to H. S. McCormack, No. 819,785, dated May 8, 1906, and the work-sheets advanced between said feed-rolls and the platen to the collating table. The statement sheet will lie then between the upstanding edge 14 of the section 12 of the collating table and the upstanding portion 19 of the section 11, the left-hand edge of the ledger-sheet resting on the extension 18. Upon bringing the ledger sheet to adjusted position, a finger-piece 28 may be drawn forwardly to bring a presser block 29 of suitable material, such as rubber, into position to clamp the ledger sheet against the extension 18, the presser block 29 being mounted on a bent lever 30, to which a spring 31 is attached, in such a manner as to urge the presser block 29 against the extension 18, or to urge the same to ineffective position accordingly as the spring is carried past the axis of the shaft 32 on

which both the finger-piece 28 and the bent lever 30 are fixed. The clamping device just described is substantially the same as that disclosed in my co-pending application No. 405,013, filed August 21, 1920. The statement sheet may then be adjusted to the proper position relative to the ledger sheet, and the feed-rolls 26 and 27 returned to effective position by means of the cast-off lever 25. An entry may then be made on both the ledger sheet and the statement sheet.

For making another entry upon the work-sheets, it will be necessary to advance the statement sheet to bring the second heavy line thereon, Figure 5, into alignment with the second printed line on the ledger sheet. This may be done while the presser block is in effective position to hold the ledger sheet on the extension 18, or the ledger sheet may be held in position on extension 18 by means of the left hand and the statement sheet drawn forward to proper position. Line-spacing of the two sheets to bring the ledger sheet to the proper position for the next writing line may be effected either before or after adjustment of the statement sheet with reference to the ledger sheet. This line-spacing may be effected by means of finger wheels 33 or by means of mechanism comprising a slide 33^a carrying a pawl 33^b to operate a ratchet wheel 33^c on the platen-axle 2.

As previously stated, the ledger sheet has ten writing spaces, while the statement sheet, which is considerably longer, has only five writing spaces, which are of greater length than the spaces on the ledger sheet. Thus, it will be seen that after the fifth entry is made, the ledger sheet is fed to the sixth position and the statement sheet is automatically fed out of the machine, after which a second statement sheet may be inserted to be used in connection with the balance of the ledger sheet.

To facilitate the rapid insertion of the second statement sheet, a condensed billing device of the same general character as that shown in said patent to McCormack is provided at the right-hand side of the platen to enable the ledger sheet to be rotated rearwardly to enable the second statement sheet to be inserted in proper position relative to the ledger sheet, and then the two sheets returned, with the sixth printing space of the ledger sheet in proper position to receive typing thereon. Shifting of the sheets relatively to each other may be obtained in the same manner as described for the first statement sheet in connection with the ledger sheet.

When it is desired to use the condensed billing device, the operator grasps the handle 34 and presses the arm 35 inwardly along the bar 36 until the pawl or tooth 37 engages the gear 38 fixed on the axle 2. The handle is then swung from the dot-and-dash position in Figure 4, with the bar or arm 36 in contact with the fixed stop 39, to the full-line position, with bar 36 in contact with the adjustable stop 40, and, after the insertion of the next statement sheet, the handle is restored to its original position, the platen, in the return movement, bringing the second statement sheet to the proper writing line position. It will be seen that stop 40 may be adjustably positioned in any of the positions indicated by the holes 41 in the fixed disk 42. Preferably the stop 40 is set at such a distance from the stop 39 that the reverse movement of the handle 34 to the full-line position in Figure 4 will carry the part of the sheet 22 at the printing line to a position such that the first-line portion of the new sheet 23 will coincide therewith when gaged by the feed-rolls 27, as shown in Figure 4. Restoration of the handle to its dotted-line position in Figure 4 will then cause the work-sheets to be positioned for the next line of typing.

To maintain the work-sheets in position against the collating table, provision may be made of a paper-finger 43 mounted on the front rail 44 of the typewriter carriage and extending upwardly along the collating table. The paper-finger just referred to is substantially the same as that disclosed in said co-pending application, No. 405,013, and may me mounted for movement to and from effective position in substantially the same manner.

It will be seen by inspection of Figure 1 that the condensed billing device is somewhat removed from the end plate 3 of the platen frame. This is done to insure free movement of the lever 35, which would otherwise be obstructed by the usual finger-guard 46 of the Underwood bookkeeping machine, which is mounted near the right-hand side of the carriage and secured to the front rail 44. A support in the form of a bracket 47 is secured to the right-hand end plate 3 to provide a rigid support for the condensed billing device.

When the ledger-sheet 22 and the statement-sheet 23 are fed around the platen to their first printing position, it will be seen that the leading edge of the ledger sheet is in advance of the leading edge of the statement sheet in the relative positions shown in Figure 5. This relation of the sheets renders the taking hold of the statement sheet difficult when it is desired to adjust it relatively to the ledger sheet; it being necessary to take hold of the statement sheet at its upper left-hand corner to facilitate rapid adjustment. The typist, in an effort to grasp the statement sheet when the latter bears the relation to the ledger sheet as above stated, will ordinarily force it against the collating

table, thus rendering it difficult to take off the statement sheet. The operator would ordinarily move the ledger sheet forwardly away from the statement sheet, so as to have access to the leading edge of the latter, between the two sections 11 and 12.

To facilitate the taking hold of the statement sheet at the edge thereof, there is provided a paper-lifting lever or finger-piece 48, which may be pivoted on a bracket 49 secured to the rear of the collating table at the right-hand end of the section 12. Said lever may be pushed rearwardly by the second finger of the typist against the tension of a return spring 50, to force the statement sheet away from the collating table, by means of a finger 51 forming part of the lever 48. The finger 51 normally occupies a position behind the collating table, but moves forwardly through the slot 52 in said table to push the statement sheet away from the front face of the collating table when the lever 48 is operated. The paper-lifting lever 48 is so disposed relatively to the collating table as to be operated by the second finger of the operator, while the upper right-hand corner of the statement sheet may readily be grasped at the same time by the forefinger and the thumb.

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 platen, a front paper-table provided with side gages, and a shelf extending to one side from the upper edge of one of said gages to receive the margin of a work-sheet lying outside of a work-sheet on said front paper-table, and serve as an abutment against which the outer sheet may be held while the inner sheet is shifted relatively thereto to enable typing to be effected thereon in lines spaced farther apart than on the outside sheet.

2. In a typewriting machine, in combination, a platen, a front paper-table provided with side gages, a shelf extending to one side from the upper edge of one of said gages to receive the margin of a work-sheet lying outside of a work-sheet on said front paper-table, and serve as an abutment against which the outer sheet may be held while the inner sheet is shifted relatively thereto to enable typing to be effected thereon in lines spaced farther apart than on the outside sheet, and a clamping member movable to co-operate with the shelf to hold the outer work-sheet thereagainst.

3. In a typewriting machine, in combination, a platen, a front paper-table provided with side gages, a shelf extending to one side from the upper edge of one of said gages to receive the margin of a work-sheet lying outside of a work-sheet on said front paper-table, and serve as an abutment against which the outer sheet may be held while the inner sheet is shifted relatively thereto to enable typing to be effected thereon in lines spaced farther apart than on the outside sheet, and a clamping member pivoted on said shelf for movement into and out of effective position.

4. In a typewriting machine having a revoluble platen and releasable feed-rolls therefor, means for affording different line-spacing of work-sheets superposed between said platen and said feed-rolls, comprising a line-spacing mechanism for co-operating with the feed-rolls to line-feed said work-sheets simultaneously the same distance, means to hold the outside work-sheet stationary, and a chute at the delivery side of the platen, said chute of a width to guide only the inside sheet, which may be manually adjusted along said chute to an extent determined by marks on the sheets, to increase the spacing between the typed lines thereon, while the outside sheet remains stationary, preparatory to restoring the feed-rolls and typing the succeeding line on both sheets; said holding means being exterior to said chute.

5. In a typewriting machine, in combination, a platen, a rear paper-table, side gages on said rear paper-table, each of said side gages being of considerable length, so that a work-sheet held in engagement with either one will be given a proper alignment, a front paper-table having side gages adapted to receive therebetween a work-sheet aligned by one of the side gages on the rear paper-table and of less width than the distance between the edge gages on the rear paper-table, and a raised shelf extending on one side of the front paper-table and having a side gage positioned to co-operate with an outer work-sheet gaged by the side gage on the rear paper-table not used in inserting the first-mentioned sheet, said shelf serving as an abutment against which the outer sheet may be held while the inner sheet is shifted relatively thereto to enable typing to be effected thereon in lines spaced farther apart than on the outside sheet.

6. In a typewriting machine, in combination, a carriage, a platen therein, a front paper-table provided with side gages, a shelf spaced outwardly from said front paper-table and extending laterally from one side thereof to receive the margin of a work-sheet lying upon and extending laterally from a work-sheet on said front paper-table and guided by said gages, said shelf serving as an abutment against which the outer sheet may be held while the inner sheet is shifted relatively thereto to enable typing to be effected thereon in lines spaced farther apart than on the outside sheet, and a paper-

finger mounted on said carriage and extending upwardly therefrom along said front paper-table to hold the work-sheets in operative position on said front paper-table.

7. In a typewriting machine, in combination, a carriage, a platen therein, a front paper-table provided with side gages, a shelf spaced outwardly from said front paper-table and extending laterally from one side thereof to receive the margin of a work-sheet lying outside of a work-sheet on said front paper-table, said shelf serving as an abutment against which the outer sheet may be held while the inner sheet is shifted relatively thereto to enable typing to be effected thereon in lines spaced farther apart than on the outside sheet, a clamping member movable into position to co-operate with the shelf to clamp thereon the margin of the work-sheet associated therewith while the other work-sheet is adjusted on said front paper-table, and a paper-finger mounted on said carriage and extending upwardly therefrom along said front paper-table to maintain said work-sheets in position against said paper-table and said shelf.

8. In a typewriting machine, in combination, a carriage, a platen, a front paper-table provided with side gages, a shelf extending laterally from one of said side gages and provided with a side gage at its outer edge, said shelf serving as an abutment against which an outer sheet may be held while an inner sheet is shifted relatively thereto to enable typing to be effected thereon in lines spaced farther apart than on the outside sheet, a clamping member to co-operate with said shelf and pivoted at the outer edge thereof, and a paper-finger mounted on said carriage and extending upwardly therefrom to maintain the work-sheets in position against said paper-table and said shelf.

9. In a typewriting machine, in combination, a platen, a rear paper-table, side gages on said rear paper-table, each of said side gages being of considerable length, so that a work-sheet held in engagement with either one will be given a proper adjustment relative to the printing line, a front paper-table having side gages adapted to receive therebetween a work-sheet adjusted by one of the side gages on the rear paper-table and of less width than the distance between the side gages thereon, a raised paper-table extending laterally from one of the side gages of the front paper-table and having a side gage positioned to co-operate with a work-sheet gaged by the other side gage on the rear paper-table, and a sheet-clamping device to co-operate with said raised paper-table.

10. In a typewriting machine, in combination, a carriage, a platen, a rear paper-table, side gages on said rear paper-table, each of said side gages being of considerable length, so that a work-sheet held in engagement with either one will be given a proper adjustment relative to the printing line, a front paper-table having side gages adapted to receive therebetween a work-sheet adjusted by one of the side gages on the rear paper-table and of less width than the distance between the side gages thereon, a raised paper-table extending laterally from one of the side gages of the front paper-table and having a side gage positioned to co-operate with a work-sheet gaged by the other side gage on the rear paper-table, a sheet-clamping device to co-operate with said raised paper-table, and a paper-finger mounted on said carriage and extending upwardly along said front paper-table to co-operate therewith.

11. In a typewriting machine having a revoluble platen, a line-spacing organization for controlling the positions of two superposed work-sheets and an interleaved carbon, so that lines of typing made thereon simultaneously may be spaced differently on the different work-sheets, said organization comprising a chute to receive the inner sheet from the delivery side of the platen, releasable feed-rolls to hold in superposed relation the inner sheet and the outer sheet, which extends over said chute, to prevent relative displacement during typing and to enable said sheets to be advanced together by the platen a distance of a line-space for the outer sheet, and means to hold the outer sheet adjacent the chute to maintain its adjustment while the line-space movement of the inner sheet, the feed-rolls being released, is completed.

12. In a typewriting machine having a revoluble platen, a line-spacing organization for controlling the positions of two superposed work-sheets and an interleaved carbon, so that lines of typing made thereon simultaneously may be spaced differently on the different work-sheets, said organization comprising a chute to receive the inner sheet from the delivery side of the platen, releasable feed-rolls to hold in superposed relation the inner sheet and the outer sheet, which extends over said chute, to prevent relative displacement during typing and to enable said sheets to be advanced together by the the platen a distance of a line-space for the outer sheet, and means to hold the outer sheet adjacent the chute to maintain its adjustment while the line-space movement of the inner sheet, the feed-rolls being released, is completed, said holding means comprising a shelf at the edge of the chute and against which the margin of the outer sheet may be pressed.

13. In a typewriting machine having a revoluble platen, a line-spacing organization for controlling the positions of two superposed work-sheets and an interleaved car-

bon, so that lines of typing made thereon simultaneously may be spaced differently on the different work-sheets, said organization comprising a chute to receive the inner sheet from the delivery side of the platen, releasable feed-rolls to hold in superposed relation the inner sheet and the outer sheet, which extends over said chute, to prevent relative displacement during typing and to enable said sheets to be advanced together by the platen a distance of a line-space for the outer sheet, and means to hold the outer sheet adjacent the chute to maintain its adjustment while the line-space movement of the inner sheet, the feed-rolls being released, is completed, said holding means comprising a shelf at the edge of the chute and against which the margin of the outer sheet may be pressed, and a device for pressing said margin against the shelf.

14. In a typewriting machine having a revoluble platen, a line-spacing organization for controlling the positions of two superposed work-sheets and an interleaved carbon, so that lines of typing made thereon simultaneously may be spaced differently on the different work-sheets, said organization comprising a chute to receive the inner sheet from the delivery side of the platen, releasable feed-rolls to hold in superposed relation the inner sheet and the outer sheet, which extends over said chute, to prevent relative displacement during typing and to enable said sheets to be advanced together by the platen a distance of a line-space for the outer sheet, means to hold the outer sheet adjacent the chute to maintain its adjustment while the line-space movement of the inner sheet, the feed-rolls being released, is completed, and a platen-rotating device, to be actuated, when the outer work-sheet, which is of sufficient length to be used with a plurality of inner sheets, has been advanced sufficiently to eject the inner sheet, for turning back the platen at a single stroke to position the outer work-sheet with its next unused line in a position such that another inner sheet may be positioned thereon with its first line superposed over the next line of the outer sheet, the outer sheet and the new inner sheet being advanced to typing position by a single stroke of the platen-rotating device.

15. In a typewriting machine having a revoluble platen and releasable feed-rolls therefor, means for affording different line-spacing of work-sheets superposed between said platen and said feed-rolls, comprising a line-spacing mechanism for co-operating with the feed-rolls to line-feed said work-sheets simultaneously the same distance, means to hold the outside work-sheet stationary, a chute at the delivery side of the platen, said chute of a width to guide only the inside sheet, which may be manually adjusted along said chute to an extent determined by marks on the sheets, to increase the spacing between the typed lines thereon, while the outside sheet remains stationary, preparatory to restoring the feed-rolls and typing the succeeding line on both sheets; said holding means being exterior to said chute, the number of lines to be typed on the outside sheet being a multiple of those to be typed on the inner sheet, whereby the typing on the later may be completed and the sheet withdrawn when the typing on the outside sheet is only partly completed, and means for rotating the platen backwardly at a single stroke to a mechanically limited extent sufficiently to bring the outside sheet back to such a position that, upon the introduction of a fresh inside sheet, both sheets may be shifted by a single mechanically limited return stroke of said platen-rotating means, sufficiently to bring the outside sheet to position to begin the next line of writing and the inside sheet to position to begin the first line of writing.

16. The method of completing the line-spacing movement of a laterally-guided inner sheet which has been line-spaced with an outer sheet in accordance with the spacing between the lines on the latter, which is less than on the inner sheet, consisting in holding the outer sheet stationary in the machine, and in advancing the inner sheet to an extent determined by marks upon the sheets to increase the spacing between the lines on the inner sheet relatively to those on the outer sheet.

17. In a typewriting machine, in combination, a platen, a platen frame, a rear paper-table, means, including a long side gage on said paper-table, for guiding work-sheets around the platen with their leading edges parallel to the printing line, means at the front of the paper-table to facilitate the printing of entries at different distances apart on two work-sheets, the one having the entries at the greater distances apart being ejected before the other is filled, and a condensed billing device to turn back the platen to permit the insertion of a work-sheet in proper position relative to that in the machine and in its return movement to bring said work-sheets into position for writing on the next line of the retained sheet and the first line of the newly-inserted sheet.

18. In a typewriting machine, the combination of a paper-table over which a work-sheet may be fed, and a movable device effective, when operated, to move the work-sheet away from the table, so that the work-sheet may be readily grasped by the operator.

19. In a typewriting machine, the combination of a platen, a collating table at the front of the platen over which a work-sheet may be fed, a finger-piece to move the work-

sheet away from the platen, so that the work-sheet may be readily grasped by the operator, and a return spring for the finger-piece.

20. In a typewriting machine, the combination of a paper-table over which a work-sheet may be fed, and a movable lifter associated with said table and effective, when operated, to move the work-sheet away from said table.

21. In a typewriting machine, the combination of a paper-table over which a work-sheet may be fed, a finger-piece pivoted on said table, and a finger on said finger-piece located behind said table, said table having a slot therein through which said finger may be moved by the actuation of said finger-piece to move the work-sheet away from said table.

22. In a typewriting machine, the combination of a table upon which work-sheets may be collated, a finger-piece located at one side of said table, and means operable by said finger-piece to move a work-sheet away from said table, said finger-piece being so disposed that the edge of the work-sheet may be conveniently grasped by the thumb and forefinger of the operative, while the finger-piece is operated by the second finger.

23. In a typewriting machine, a platen, a collating table at the delivery side of the platen, comprising an integral part formed to provide parallel paper-supporting surfaces side by side in unobstructing relation to each other and a plurality of side gaging elements, means normally pressing the paper toward the table, and a clamp for co-operating with one of the supporting surfaces to clamp the paper on that surface only.

24. In a typewriting machine for simultaneously typing a wide permanent record form having numerous closely-arranged writing spaces upon it, and a relatively narrow form having less numerous writing spaces upon it corresponding to the writing spaces on the wide form but spaced farther apart than the corresponding spaces on the wide form, in combination, a revoluble platen, a front collating table having separate side gaging means for the wide and narrow forms at the delivery side of the platen for gaging the forms separately, the wider permanent record form outside, means co-operating with the platen to advance the forms together to locate a fresh writing space on the outside form at the line of writing, a clamp located to act on the outside form only to hold it stationary while the inside form is advanced to register its next writing space with the writing space of the outside form in writing position, and means for lifting the inside form away from the front collating table to enable it to be grasped by the operator for its independent advance.

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