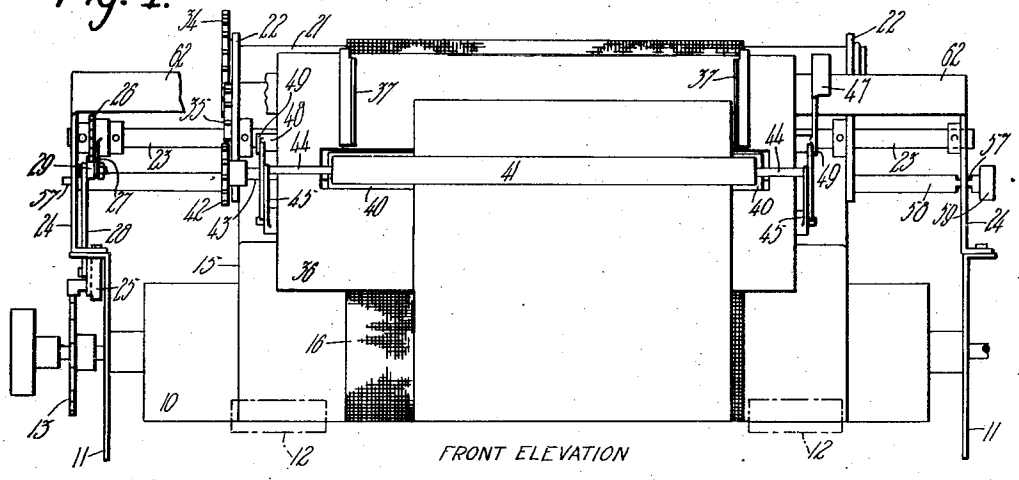
Aug. 9, 1927. 1,638,138

E. A. BASKERVILLE

TYPEWRITING MACHINE

Filed Oct. 6, 1925

Fig. 1.



FRONT ELEVATION

Fig. 2.

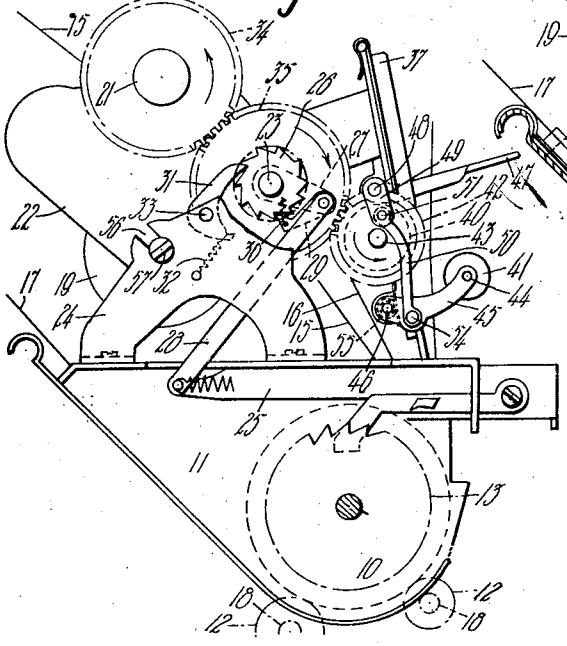
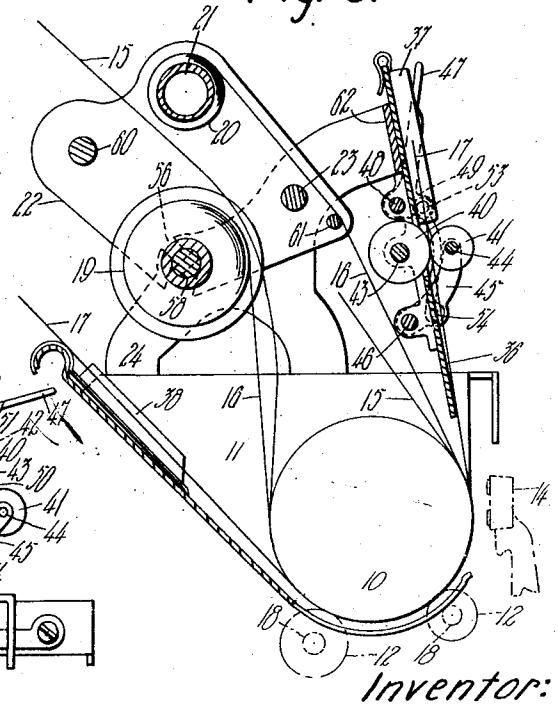


Fig. 3.



Inventor:
Edward A Baskerville
by B. C. Stickney
Attorney

Patented Aug. 9, 1927. 1,638,138

UNITED STATES PATENT OFFICE.

EDWARD A. BASKERVILLE, OF OMAHA, NEBRASKA, ASSIGNOR TO UNDERWOOD TYPEWRITER COMPANY, OF NEW YORK, N. Y., A CORPORATION OF DELAWARE.

TYPEWRITING MACHINE.

Application filed October 6, 1925. Serial No. 60,744.

This invention relates to means for facilitating the handling of work-sheets in typewriting machines, and is especially used in certain systems of typewriter bookkeeping.

In some systems of bookkeeping, such as for instance in "building and loan accounting", there is provided a comparatively wide journal-sheet upon which it is desired to carbon copy certain items as they are entered upon the ledger-sheets, by means of a typewriting machine.

Since both the ledger and the journal sheets are provided with columnar spaces and each item must be entered in its corresponding column on both sheets, it has been found necessary to provide a collating device in front of the platen. Said collating device may be in the form of a table having side gages against which the ledger-sheets may be laterally positioned preparatory to being located relatively to the line of typing upon the journal-sheet.

In this invention it is proposed to hold the journal-sheet and the carbon always around the platen and to insert the ledger-sheets in front of the carbons, to type upon the ledger-sheet one or more lines, and to record the data thus typed upon the journal-sheet.

In order to assist the operative in the manipulation of the work-sheets, the machine is provided with a tally mechanism having a supply of carbon in a spool, the carbon being passed around the platen of the machine and then rewound onto another spool which may be rotated, to present fresh portions of the carbon to the printing line, by means of the line-spacing mechanism. As hereinbefore stated, the journal-sheet is considerably wider than the ledger-sheet and consequently the width of the carbon may be equal to the width of the ledger or narrower sheet, and since the carbon strip is provided with feeding mechanism, which, although operatively connected to the line-spacing mechanism, is, nevertheless, independent of the platen-feeding mechanism, it is possible to arrange the regular feed-rolls of the machine in a manner to feed only the journal-sheet when the platen is rotated. To this end, the center rolls are eliminated and only the outer rolls, bearing upon the edge of the journal-sheet, are left in the machine.

Now then, since the journal-sheet and the carbon strip are placed around the platen of the machine ready to be line-spaced by means of the regular line-spacing mechanism, and since the center feed rolls have been taken off the machine, it will be clear that the ledger-sheet may be inserted around the platen and positioned by means of the collating table in front of the platen. However, in order to hold the ledger-sheet in place, so as to permit the typing of a line thereon, it is necessary to provide clamping means. In this invention, not only are clamping means provided to hold the ledger-sheet but also feeding mechanism therefor, so that in such cases where it may be required to type more than one line upon the ledger-sheet in any one entry, then the same may be line-spaced simultaneously with the line-spacing of the journal-sheet and the carbon strip.

It will be understood that although the three sheets are simultaneously line-spaced if necessary, there are provided three distinctly separate feeding mechanisms, synchronized for simultaneous operation. In this manner it is possible to insert the ledger-sheet around the platen and to remove it therefrom, without disturbing the position of either the journal-sheet or the carbon strip, which is advantageous, since it expedites the operation of the work.

Other features and advantages will hereinafter appear.

In the accompanying drawings,

Figure 1 is a front view of the invention as applied to the platen-frame of an Underwood standard typewriting machine.

Figure 2 is an end view in elevation showing the carbon-feed mechanism and the ledger-sheet feeding mechanism, said mechanisms being synchronized with the platen-feeding means.

Figure 3 is a cross-sectional view in elevation through the center of an Underwood machine and shows all the work-sheets in operative positions.

This invention is illustrated as applied to an Underwood standard typewriting machine, which has, as regular equipment, a platen 10 journaled in the end plates 11 of a platen-frame, and feed-rolls 12 to cooperate with the platen to feed a work-sheet therearound. Said machine is also provided with a line-spacing mechanism 13, operatively connected to the platen, and typing instrumentalities represented by a type-bar 14.

According to one of the features of this invention, a record or journal-sheet 15 and an associated carbon strip 16 may be normally left in the machine, in registering position around the platen, while an outside ledger or statement sheet 17 is removed from the machine, after a line of typing has been written thereon. In carrying out this invention, the center rolls, on the feed-roll-shaft 18, are removed and only the end rolls 12 are left in the machine, so that said rolls will bear on the edges of the journal-sheet 15, thereby feeding it around the platen when the same is rotated by means of the line-spacing mechanism.

Since the journal-sheet 15 is much wider than the ledger-sheet 17, it follows that the carbon-strip needs only to be as wide as the ledger-sheet, and consequently the feeding of the journal-sheet will not affect the carbon. But, since it is desired to feed the carbon also, in order to expose fresh portions thereof to the printing field, mechanism is provided, which, although independent of the platen, is, nevertheless, operatively connected to the line-spacing machanism. Said mechanism may include a supply-spool 19 containing the carbon strip 16 which is led downwardly and is inserted at the introductory side of the platen, under and around the platen, and up in front thereof, past the printing point to be rewound onto a receiving-spool 20. Said last-mentioned spool 20 is operatively mounted on a shaft 21 journaled in end plates 22, pivotally mounted on a shaft 23 which is in turn journaled in end brackets 24, and is operatively connected to a line-space slide 25, by means of a pawl-and-ratchet arrangement. Said arrangement comprises a ratchet 26 secured to the shaft 23 and an arm 27 rotatably mounted on said shaft, the end of the arm being operatively connected by means of a link 28 to the slide 25. Upon said arm 27 there is mounted a pawl 29 engaging with the ratchet 26 with which it is normally held in engagement by means of a spring 30. Said ratchet is also provided with a retaining pawl 31 held in engagement by means of a spring 32, the pawl being pivotally mounted at 33 upon one of the end brackets 24. In order to simplify the mechanism for driving the spool 20 from the slide 25 it has been found advantageous to mount said spool on the shaft 21, whereas the ratchet 26 is mounted on the shaft 23, and, of course, the two shafts have to be operatively connected by means of gears 34 and 35, respectively, secured to the shafts 21 and 23.

From the foregoing description it will be gathered that both the journal-sheet and the carbon strip may be line-spaced by means of the regular line-spacing mechanism, although two distinctly separate mechanisms are provided for reasons which have also been set forth. The journal-sheet is normally left in the machine so that successive lines of typing which are entered in the ledger-sheet may be copied in a condensed form upon the journal-sheet.

In order to facilitate the handling of the ledger-sheet, which is placed in front of the journal-sheet in co-operating position therewith, so that the corresponding columnar spaces of both sheets may register, there is provided a front table 36 having side gages 37 slidably mounted thereon, and in co-operating relationship with side gages 38 slidably mounted on a rear table 39. After positioning the side gages 37 and 38, the ledger-sheet is inserted at the rear of the machine, under and around the platen over the carbon strip, and the leading edge of the sheet is passed between rollers 40 and 41, the former being operatively connected to the line-spacing mechanism by means of a pinion 42 fast to a roller-shaft 43 and engaging with the gear 35. The roller 41 is rotatably mounted on a shaft 44 journaled in arms 45, the arms in turn being pivotally mounted on a fixed shaft 46. Said roller 41 is normally held against the roller 40, as shown in Figure 3, thereby providing a grip for the ledger-sheet, by means of which grip the sheet is fed when the roller 40 is rotated. In order to insert the ledger-sheet between the two rollers, the arms 45 are swung away from the roller 40 to a position, as shown in Figure 2. To this end, there is provided mechanism including a handle 47 fast to a shaft 48, a short arm 49 also fast to the shaft, and a pair of links 50 operatively connecting said shaft 48 with the arms 45. Said links 50 are pivotally mounted on a stud 51 on the arm 49, the handle 47 being also provided with a stud 53 in line with the stud 51 for operating the other link 50. Both links are operatively connected with the arms 45 at 54 in a manner to afford the simultaneous operation of the two arms, thus providing a parallel swing of the roller 41. It will be noted that the arms are provided with springs 55 to hold the roller 41 in effective position. However, upon swinging the handle 47, the actuating studs 51 and 53 will be brought in line with the links, thereby providing locking means for the roller to hold it in a position as shown in Figure 2.

In some systems of bookkeeping it is sometimes necessary to use two classes of ledger-sheets, each ledger-sheet having different columnar spaces and each, of course, must be placed in the machine so that it registers with the corresponding columnar space on the journal-sheet. To this end, there is provided a right and a left system of side gages, positioned to serve as a side guide for the ledger-sheet, each class of ledger-sheets being gaged against its corresponding set of

gages which have been previously referred to as the gages 37 and 38.

In order to facilitate refilling the supply spool 19, there is provided a key-hole slot 56 in the brackets 24 engaging with flattened portions 57 of the spool-shaft 58, which may be rotated by means of a finger-piece 59 so as to clear the slot, thereby permitting the swing of the end plates 22 which are held together by means of tie-rods 60 and 61. In this manner, the shaft 58 is taken off the machine and a fresh spool may then be replaced.

It will be noted that according to the present exemplification of the invention, the front table 36 is secured to the end brackets 22 at 62 and that the front rolls are mounted on the table, so that if desired the complete unit may be removed from the machine for other classes of work.

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. The combination with a typewriting machine, having a revoluble platen and line-spacing mechanism therefor, of a pair of feed-rolls permanently held against said platen to hold and feed a work-sheet therearound by its side margins only, means operable by the line-spacing mechanism for feeding a length of carbon around the platen between and free of said feed-rolls, means for collating with the first work-sheet an outside work-sheet brought to printing position over the carbon and free of said feed-rolls, and means for holding the collated outside work-sheet.

2. The combination with a typewriting machine, having a revoluble platen and line-spacing mechanism therefor, of a pair of feed-rolls permanently held against said platen to hold and feed a work-sheet therearound by its side margins only, means operable by said line-spacing mechanism for feeding a length of carbon around the platen between and free of said feed-rolls, means for collating with the first work-sheet an outside work-sheet brought to printing position over the carbon and free of said feed-rolls, and means for holding and feeding said outside work-sheet, said last-mentioned feeding means being operable by said line-spacing mechanism.

3. The combination with a typewriting machine, having a platen, of a pair of feed-rolls permanently held against said platen to grip the side margins only of a comparatively wide record-sheet, means for feeding a strip of carbon under and around the platen past the printing line, said strip being narrower than the record-sheet so as to clear said permanent feed-rolls, means for collating an outside sheet of substantially the same width or narrower than the corbon-strip and placed thereagainst around the platen, and means for holding the collated outside sheet.

4. The combination with a typewriting machine, having a platen, and a line-spacing mechanism therefor, of a pair of feed-rolls permanently held against said platen to grip the side margins only of a comparatively wide record-sheet, means operatively connected to the line-spacing mechanism for feeding a strip of carbon under and around the platen past the printing line, said strip being narrower than the record-sheet so as to pass between and clear of the feed-rolls, means for collating an outside sheet of substantially the same width or narrower than the carbon strip, and means for holding and line-spacing the outside sheet, said last-mentioned means being operatively connected to the line-spacing mechanism in a manner to be line-spaced concomitantly with the line-spacing of the record-sheet and of the carbon strip.

5. In a typewriting machine, having a revoluble platen, a line-spacing mechanism therefor, and outer feed-rolls for feeding a work-sheet around said platen, means including a supply spool and a receiving spool for feeding a carbon strip around the platen, said means being operatively connected to the line-spacing mechanism, and said carbon strip being narrower than the work-sheet so as to clear the feed-rolls, means operatively connected to the line-spacing mechanism effective to feed a second work-sheet of substantially the same width as the carbon strip, and means for collating the last-mentioned work-sheet relatively to the position of the first-mentioned work-sheet.

6. In a typewriting machine, having a revoluble platen, a line-spacing mechanism therefor, and outer feedrolls for feeding a work-sheet around said platen, means including a supply spool and a receiving spool for feeding a carbon strip around the platen, said means being operatively connected to the line-spacing mechanism, and said carbon strip being narrower than the work-sheet so as to clear the feed-rolls, means operatively connected to the line-spacing mechanism effective to feed a second work-sheet of substantially the same width as the carbon strip, and means for collating the last-mentioned work-sheet relatively to the position of the first-mentioned work-sheet, said last-mentioned means including a front and a rear table, and side gages mounted thereon, the side gages on both tables being aligned in a manner to afford the lateral alignment of the last-mentioned work-sheet.

7. The combination with a typewriting machine, having a revoluble platen and means for holding and line-spacing a com-

paratively wide record-sheet therearound, said means including outer feed-rolls positioned near the edges of the record-sheet and a line-space handle operatively connected to the platen, of means to line-space and hold around the platen, a narrower carbon strip, said last-mentioned means including a supply spool and a receiving spool, the latter being operatively connected to the line-space handle, and means for laterally positioning and line-spacing a comparatively narrow statement-sheet, without releasing the feed-rolls, said last-mentioned means including a front and a rear table, side gages adjustably mounted on both tables, and a pair of rolls for gripping the upper edge of the sheet, one of the rolls being operatively connected to the line-space handle in a manner to rotate when the handle is operated, thereby drawing on the statement-sheet to line-space the same.

EDWARD A. BASKERVILLE.