Aug. 15, 1961 I. DODDS 2,996,164

LETTER PLACEMENT INDICATOR FOR TYPEWRITERS

Filed Oct. 13, 1960

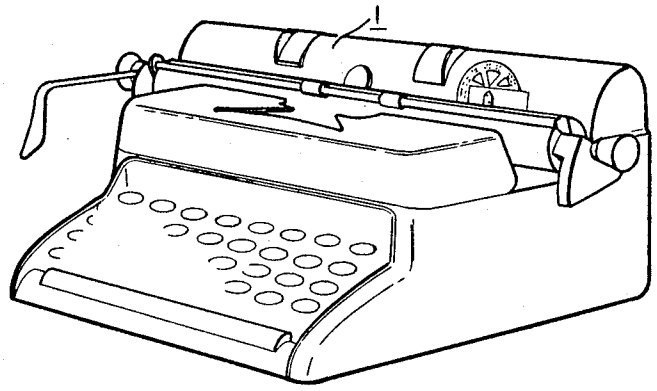


FIG. 1

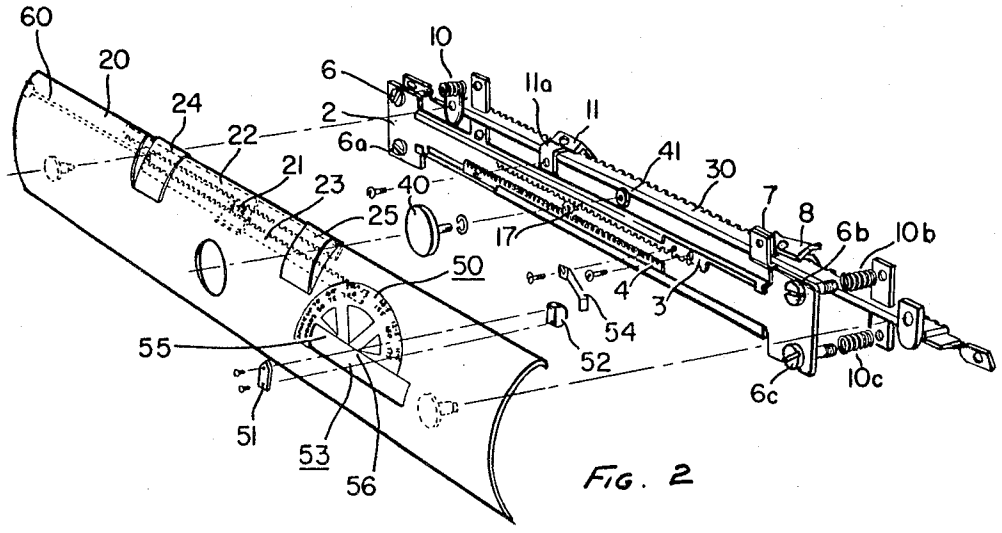


FIG. 2

IRVINE DODDS
INVENTOR

by: Harold S. Fox
ATTORNEY

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LETTER PLACEMENT INDICATOR FOR TYPEWRITERS

Irvine Dodds, 55 York St., St. Catharines, Ontario, Canada

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This invention relates to typewriters.

More particularly this invention relates to typewriters provided with a letter placement indicator which enables the letter to be correctly and evenly spaced between the top and bottom of a page on which the letter is to be typed.

A letter placement indicator embodying my invention is particularly suited for use with a typewriter employing the margin setting attachment disclosed and claimed in my United States Patent No. 2,872,012, filed March 10, 1958 and issued on February 3, 1959. As disclosed in this patent, I have provided a margin setting attachment which quickly, easily and positively enables margins to be set so as to permit a letter to be centered between the sides of a page on which the letter is to be typed. There is no provision in my aforementioned patent, however, to enable a letter to be correctly centered between the top and bottom of the page. Indeed the centering of a letter between the top and bottom of a page has been in the past left to the judgment of the typist.

In the past it has been difficult to correctly center a letter on a page when the letter must be transcribed from either longhand or shorthand notes, because the typist has had, prior to my invention, no means other than his or her human judgment and experience on which to base the calculation of the number of lines down from the top of the page to the first line where typing should begin so as to correctly center the letter between the top and bottom of the page.

It is therefore an object of my invention to provide a letter placement indicator which will enable a typist to center a letter between the top and bottom of a page with a minimum of effort and without involving guess work on the part of the typist.

It is another object of my invention to provide a letter placement indicator for a typewriter which will enable letters of any length to be correctly centered between the top and bottom of a page.

It is a further object of my invention to provide a letter placement indicator which, when used in conjunction with the margin setting attachment disclosed in my aforementioned patent, will permit a letter to be correctly centered with respect to both the top, bottom and sides of a page on which the letter is to be typed.

Another important object of my invention is to provide a letter placement indicator which, in conjunction with a typewriter, will afford a more efficient and effective letter centering means than has heretofore been the case.

Yet another important object of my invention is to provide a letter placement indicator attachment such as may be readily affixed to any conventional typewriter without necessitating any change in the construction of the typewriter.

These and other important objects and advantages of my invention will become apparent from the ensuing disclosure taken in conjunction with the drawings in which:

FIGURE 1 is a perspective view of a conventional typewriter having a letter placement indicator embodying my invention thereon; and

FIGURE 2 is an exploded perspective view, with some parts shown in hidden outline, showing the margin setting attachment claimed in my aforementioned patent and a letter placement indicator embodying my present invention.

In brief, in accordance with my invention, I provide in conjunction with a typewriter, a letter placement indicator comprising a pair of scales, one of the scales having a series of indicia thereon, each indicia of which indicates a different number of spaces between the top of a page and the first line to be typed on the page, and also the number of spaces between the lines in the body of a letter to be typed on the page. The other scale has a second series of indicia thereon each indicia of which indicates a different number of words in the body of a letter to be typed on the page. Individual indicia on one scale are associated with individual indicia on the other scale so as to form a plurality of pairs of indicia to visibly associate the number of words in the body of a letter to be typed on a page with the number of spaces between the top of the page and the first line to be typed on the page and the number of spaces to be provided between adjacent lines in the body of a letter to be typed on the page. I also provide a manually operable movable pointer which may be moved into positions indicating various pairs of indicia. Means are provided to connect the pointer and margin stops, whereby movement of the pointer adjusts the relative position of the margin stops to specific spacings between the margin stops which are dependent on the position of the pointer, which itself is set in a specified position by the typist in accordance with the number of words in the body of the letter.

Referring now to the drawings for a more detailed description of my invention, I have shown an attachment indicated generally as at **1** mounted upon the carriage of a conventional typewriter, preferably at an angle of 45°, as may be seen by reference to the drawings.

The attachment includes a cover **20** and a face plate **2** having two racks **3** and **4** and a centrally disposed freely rotatable pinion **17** mounted thereon. The racks are mounted to engage the pinion on opposite sides so that motion of one rack in one direction causes corresponding motion of the other rack in the opposite direction upon rotation of the pinion.

This face plate **2** is connected to a space rack **30** by means of bolts **6**, **6***a*, **6***b* and **6***c* adapted to permit motion of face plate **2** towards space rack **30**. Each bolt is provided with a compression spring **10**, **10***a*, **10***b* and **10***c* adapted to bias face plate **2** away from space rack **30**.

A projection **7** is secured to rack **3** by means of a bolt and is adapted to release the right margin stop **8** when face plate **2** is moved towards space rack **30** against the action of springs **10**, **10***a*, **10***b* and **10***c*, and to permit right margin stop **8** to engage its respective cogs on space rack **30** when face plate **2** is in normal relationship with respect to space rack **30**, i.e. when no load is applied against springs **10**, **10***a*, etc. Similarly rack **4** is secured to a projection **11***a* adapted to release the left hand margin stop **11** when face plate **2** is moved towards space rack **30** against the springs, and to lock left margin stop **11** with its cogs on space rack **30** when face plate **2** is in its normal position.

A release button **40** is provided, and has a threaded member which passes through the aperture in pinion **17**, which is freely rotatable thereon. Release button **40** is secured to face plate **2** by means of a nut **41**.

In accordance with my invention I provide on cover **20** a letter placement indicator comprising a pair of scales generally designated **50** and a pointer **51**. Pointer **51** is secured to a thumb and finger piece **52** by means of small screws. Member **52** is notched and rides in a slot **53** in cover **20**. A flat connecting spring **54** is inserted into and retained by the notch in member **52**. The other end of flat connecting spring **54** is fastened to rack **3**. Pointer **51** and member **52** are adapted to be moved manually longitudinally along cover **20** in slot **53**.

Referring now to FIGURE 2, scale **50** comprises an

upper and a lower scale each composed of a plurality of indicia. The number of each indicia in the upper scale indicates the number of spaces which must be counted down from the top of a page on which a letter is to be typed to the first line to be typed on the page, which is the date line on the letter. The letter associated with each indicia in the upper scale indicates whether it is necessary to count down double spaces or single spaces, and indicates the required spacing between adjacent lines in the body of the letter. Thus the indicia 7–D means that the first line to be typed on the page should be placed seven double lines down from the top of the page, and that the spacing between the lines in the body of the letter should be double. 15–S, on the other hand, means that the first line should be typed on the fifteenth single spaced line from the top of the page, and that the spacing of the lines in the body of the letter should be single.

The lower scale contains the numbers 50, 75, 100, 125, 150 and 175 which indicate the number of words in the body of the letter to be typed. It will be seen that individual indicia on one scale are associated with individual indicia on the other scale to form a plurality of pairs of indicia which visibly associate the number of words in the body of a letter to be typed on a page with the number of spaces between the top of the page and the first line to be typed on the page and the required spacing between adjacent lines in the body of the letter. Thus, 7–D and 50 are associated, 6–D and 75 are associated, 15–S and 100 are associated, 13–S and 125 are associated, 12–S and 150 are associated and 11–S and 175 are associated.

In the embodiment of my invention illustrated, pointer **51** may be located in either a center position (shown in FIGURE 2) or a left-hand or right-hand position indicated 55 and 56 respectively, pointer **51** being manually positionable in any of these three positions. Of course, pointer **51** is not limited to three positions only. It may be moved to the extreme left side of the slot **53** in cover **20**. This will permit a typist to insert a paragraph within a paragraph, the latter being indented. Alternatively, the pointer may be moved to the extreme right of the slot so as to permit a typist to do work such as billing and tabulating etc.

The operation of this invention is as follows:

The total number of words in the body of the letter to be typed are estimated by the typist from shorthand notes etc. With the thumb of the left hand the typist may press down on release button **40** located in the center of cover **20**, which urges face plate **2** towards space rack **30**, which in turn releases the racks on both left margin stop **11** and right margin stop **8**. Member **52** is then grasped between the thumb and index finger of the right hand and moved so as to place pointer **51** in the center position shown in FIGURE 2, or left-hand or right-hand positions 55 and 56 respectively. Which position is selected will be determined by the typist depending upon the number of words previously approximately estimated in the body of the letter to be typed. For example, if there are between 50 and 75 words in the body of the letter to be typed, pointer **51** should be placed in position 55. Similarly if there are 100 to 125 or 150 to 175 words in the body of the letter to be typed, pointer **51** should be placed in the center position or right-hand position 56 respectively. As member **52** and pointer **51** are moved longitudinally with respect to cover **20**, racks **2** and **3** are caused to move in opposite directions because the motion of member **52** is transmitted to rack **3** through spring **54** and to rack **4** through pinion **17**. Margin stops **8** and **11** move in conjunction with racks **3** and **4** respectively, inasmuch as the margin stops have been released from their cogs by virtue of the depression of release button **40**. Thus the spacing between margin stops **8** and **11** is determined by the position of pointer **51** and may be increased or decreased depending on which way pointer **51** is moved from its center position. Movement of pointer **51** from its center position to position 56 increase the spacing between the margin stops, whereas movement of pointer **51** from its center position to position 55 decreases the spacing between the margin stops. In order to lock the margins in any desired position, that is positions 55, 56 or the center position of pointer **51**, it is merely necessary to remove the pressure from release button **40** and thus permit face plate **2** to return to its normal position, thereby causing margin stops **8** and **11** to lock with their cogs on space rack **30**. The letter may then be typed.

It will be seen that if the number of words in the body of the letter to be typed is, for example, 75, the typist sets indicator **51** in position 55 in the manner just described. Opposite **75** on the lower scale is found the indicia 6–D on the upper scale. Thus the typist is informed that in order to correctly center the letter between the top and bottom of the page, the first line of typing, which is usually the date, must appear on the sixth-double space from the top of the page, and that the spacing between adjacent lines in the body of the letter must be double. The letter may then be typed in the usual way, including the name and address of the person to whom the letter is being sent, and it will be found that the letter will be centered between the top and bottom of the page, this centering effect being attributable to the particular setting of margin stops **8** and **11** and to the first line of the letter being typed a specified distance, in this case, six double spaces from the top of the page.

If the number of words in the body of a letter to be typed does not correspond exactly to the indicia **50**, **75**, etc., on the lower scale, the typist may set pointer **51** before or after the center position, the left-hand position 55 or the right-hand position 56 on the indicator. This will assure perfect centering of letters having numbers of words in the bodies thereof other than approximately 50, 75, etc.

The scale **50** that I have shown in FIGURE 2 is particularly suited for centering letters on standard letter-size paper 11 inches long and 8½ inches wide, said letter being of the standard form in which the first line of typing is the date (normally placed on the right-hand side of the page), the next lines of typing are the name and address of the person to whom the letter is being sent (normally appearing on the left-hand side of the page), and the following line is the salutation (Dear Sir, Gentlemen, etc.), after which follows the body of the letter and the closure (Yours truly, etc.) and signature in that order.

Since standard typewriters operate on a basis of ten strokes to the inch, the following table shows the association between the various indicia on scale **50** and the setting of margin stops **8** and **11** e.g., as seen from the following table, for either a 50 or 75 word letter the line length is approximately 50 strokes, this line length being determined by the setting of margin stops **8** and **11** when pointer **51** is in position 55.

TABLE I

Salient points

DOUBLE SPACED LETTERS

Letter Length	Paragraphs	Space-Up	Line Length (Approximately)
50 Words	1—2	7 Double	50 Strokes.
75 Words	2—3	6 Double	50 Strokes.

SINGLE SPACED LETTERS

100 Words	3—4	15 Single	55 Strokes.
125 Words	4—5	13 Single	55 Strokes.
150 Words	5—6	12 Single	60 Strokes.
175 Words	6—7	11 Single	60 Strokes.

As disclosed in my previous patent, I may also employ a paper centering arrangement which will now be

described. In order to provide for this feature, a second pinion **21** is provided together with a second set of oppositely disposed racks **22** and **23** operating therewith. Paper guides **24** and **25** may be affixed, one to each rack, so that as one guide is moved in and out the other guide moves accordingly. Thus two paper guides are provided instead of one as has heretofore been the case. Paper guide **25** is shorter than paper guide **24** so that it will not overlap and hide a part of scale **50**.

As an additional feature of a typewriter embodying my invention, I provide an elastic retractor **60** connected to paper guide **24** and cover **20**. The elastic retractor, aided by carriage vibration, returns paper guides **24** and **25** to the extreme outside of the carriage to allow clearance for carbon removal tabs.

In order to center a sheet, it is merely necessary to bring one paper guide towards or away from the center of the carriage. This action automatically adjusts the other paper guide a corresponding amount. Correct paper centering can therefore be accomplished instantly, without the necessity of centering the carriage.

While I have described certain preferred embodiments of my invention, it will be apparent that numerous modifications thereof may be made without departing from the spirit and scope of my invention as defined in the appended claims.

What I claim as my invention is:

1. A typewriter having a carriage, a space-rack with margin setting cogs attached to said carriage, left and right margin stops co-operating with and normally locked with said margin setting cogs, means for releasing said left and right margin stops from said margin setting cogs, means for moving said left and right margin stops in opposite directions when said margin stops are released from said margin setting cogs, a letter placement indicator adapted to permit a letter to be typed on a page to be centered thereon, said letter placement indicator comprising scale means, a movable pointer adapted to be manually moved to a number of positions, indicia on said scale means associated with each of said positions, said indicia providing a visual indication of (*a*) the number of spaces between the top of a page and a predetermined line to be typed on said page, (*b*) the number of spaces to be provided between adjacent lines in the body of a letter to be typed on said page, and (*c*) the number of words in the body of a letter to be typed on said page, and means connecting said pointer to said moving means whereby movement of said pointer from one of said positions to another is transmitted through said moving means to said margin stops and adjusts the relative position of said margin stops when said margin stops are released from said margin setting cogs, and means for returning said margin stops to locking engagement with said margin setting cogs.

2. In a typewriter having a carriage, a space rack with margin setting cogs attached to said carriage, left and right margin stops co-operating with said margin setting cogs, a margin setting attachment which comprises a face plate attached to said space rack in such a manner as to be movable towards and away therefrom, means for biasing said face plate away from said space rack, a rotatable pinion gear mounted at substantially the mid-point of said face plate, two opposed racks longitudinally slidably mounted on said face plate and adapted to engage said pinion on opposite sides thereof, a left and a right projection, one projection being mounted on each rack towards the outmost extremity thereof, said left and right projections being connected to said left and right margin stops respectively and adapted to cause said margin stops to release their respective cogs when said face plate is moved towards said space rack and to cause said margin stops to engage their respective cogs when said face plate is in its biased position, and a cover for said face plate, the improvement which comprises a letter placement indicator on said cover, said letter placement indicator comprising a manually operable movable pointer adapted to be manually moved to a number of positions, and indicia associated with each of said positions, said indicia providing a visual indication of (*a*) the number of spaces between the top of a page and a predetermined line to be typed on said page, (*b*) the number of spaces to be provided between adjacent lines in the body of a letter to be typed on said page, and (*c*) the number of words in the body of a letter to be typed on said page, and means connecting said pointer to one of said racks whereby movement of said indicator from one of said positions to another is transmitted to said racks and adjusts the relative position of said margin stops, the spacing between said margin stops when said pointer is in any one of said positions being such that a letter to be typed on said page and having the same or approximately the same number of words in the body thereof indicated by said indicia associated with said any one of said positions will be centered between the top and bottom of said page if said predetermined line of said letter is typed on said page a distance from the top of said page indicated by said indicia associated with said any one of said positions and adjacent lines of said body of said letter are spaced as indicated by said indicia associated with said any one of said positions.

3. The invention according to claim 2 wherein said predetermined line is the first line to be typed on said page.

4. In a typewriter having a carriage, a space rack with margin setting cogs attached to said carriage, left and right margin stops co-operating with said margin setting cogs, a margin setting attachment which comprises a face plate attached to said space rack in such a manner as to be movable towards and away therefrom, means for biasing said face plate away from said space rack, a rotatable pinion gear mounted at substantially the midpoint of said face plate, two opposed racks longitudinally slidably mounted on said face plate and adapted to engage said pinion on opposite sides thereof, a left and a right projection, one projection being mounted on each rack towards the outmost extremity thereof, said left and right projections being connected to said left and right margin stops respectively and adapted to cause said margin stops to release their respective cogs when said face plate is moved towards said space rack and to cause said margin stops to engage their respective cogs when said face plate is in its biased position, and a cover for said face plate, the improvement which comprises a letter placement indicator on said cover, said letter placement indicator comprising (*a*) a pair of scales, one of said scales having a first series of indicia thereon indicating the number of spaces between the top of a page and a predetermined line to be typed on said page, and the number of spaces to be provided between adjacent lines in the body of a letter to be typed on said page, the other of said scales having a second series of indicia thereon each indicating a different number of words in the body of a letter to be typed on said page, individual indicia on one scale being associated with individual indicia on the other scale to form a plurality of pairs of indicia to visibly associate the number of words in a body of a letter to be typed on said page with the number of spaces between the top of said page and said predetermined line to be typed on said page, and the number of spaces to be provided between adjacent lines in the body of a letter to be typed on said page, and (*b*) a manually operable movable pointer adapted to be moved into positions indicating various pairs of said numbers, and means connecting said pointer to one of said racks whereby movement of said pointer is transmitted to said racks and adjusts the relative position of said margin stops when said pointer is in any one of said positions, the spacing between said margin stops when said pointer is in any one of said positions

being such that a letter to be typed on said page and having the same or approximately the same number of words in the body thereof indicated by said indicia associated with said any one of said positions will be centered between the top and bottom of said page if said predetermined line of said letter is typed on said page a distance from the top of said page indicated by said indicia associated with said any one of said positions and adjacent lines of said body of said letter are spaced as indicated by said indicia associated with said any one of said positions.

5. The invention according to claim 3 wherein said pointer is manually movable to a center position, a left-hand position, or a right-hand position, each position having associated therewith two pair of indicia.

6. The invention according to claim 5 wherein said margin stops are set for line lengths of 50 strokes, 55 strokes, and 60 strokes when said pointer is in said left-hand, center and right-hand positions respectively.

7. The invention according to claim 5 wherein the first of said pair of indicia associated with said left-hand position indicates seven double spaces between the top of said page and the first line to be typed on said page, double spacing between adjacent lines in said body of said letter to be typed on said page and 50 words in the body of a letter to be typed on said page, the second of said pair of indicia associated with said left-hand position indicates six double spaces between the top of said page and the first line to be typed on said page, double spacing between adjacent lines in the body of a letter to be typed on said page and 75 words in the body of a letter to be typed on said page, the first of said pair of indicia associated with said center position indicates 15 single spaces between the top of said page and the first line to be typed on said page, single spacing between adjacent lines in the body of a letter to be typed on said page and 100 words in the body of a letter to be typed on said page, the second of said pair of indicia associated with said center position indicates 13 single spaces between the top of said page and the first line to be typed on said page, single spacing between adjacent lines in the body of a letter to be typed on said page and 125 words in the body of a letter to be typed on said page, the first of said pair of indicia associated with said right-hand position indicates twelve single spaces between the top of said page and the first line to be typed on said page, single spacing between adjacent lines of the body of a letter to be typed on said page and 150 words in the body of a letter to be typed on said page, the second of said pair of indicia associated with said right-hand position indicates 11 single spaces between the top of said page and the first line to be typed on said page, single spacing between adjacent lines of the body of a letter to be typed on said page and 175 words in the body of a letter to be typed on said page, said pairs of indicia being positioned on said scales in the order named from left to right.

No references cited.