

(No Model.)

C. W. ATWOOD.

LINE NUMBER AND POSITION ATTACHMENT FOR TYPE WRITERS.

No. 569,909.

Patented Oct. 20, 1896.

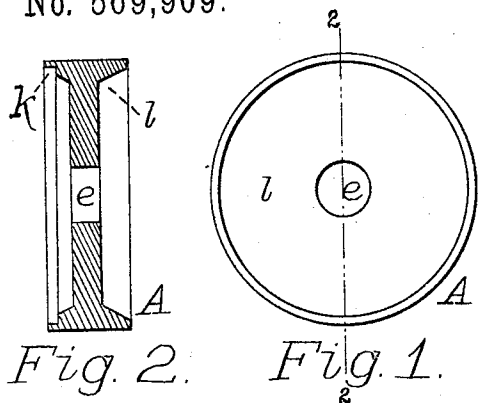


Fig. 3.

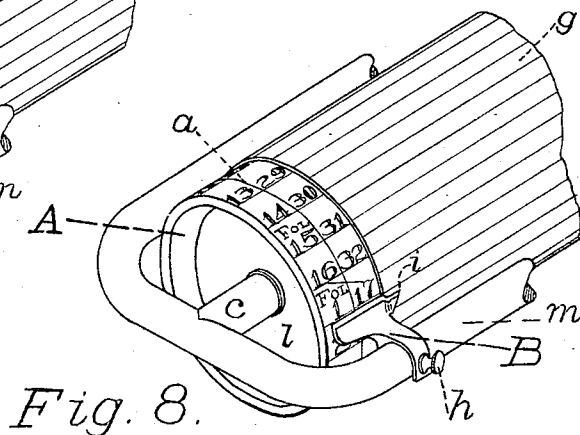
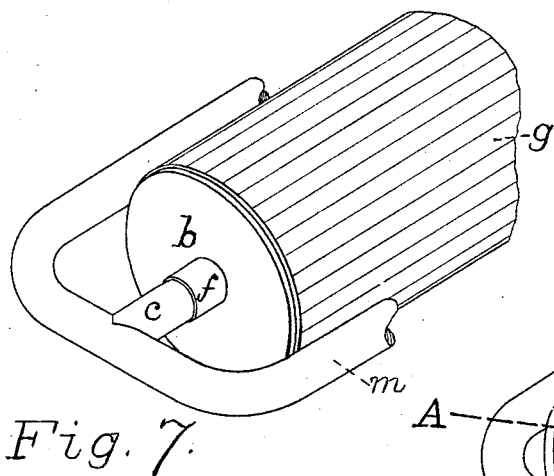
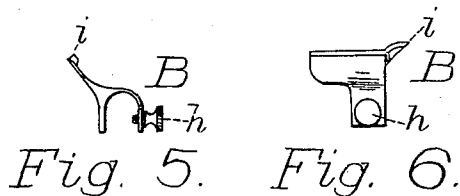
a	
d	d
15	31
16	32
FOL	
1	17
2	18
3	19
4	20

A

Fig. 4.

a	
d	d
9	25
10	26
11	27
12	28
13	29
14	30
FOL	
15	31
16	32
FOL	
1	17
2	18
3	19
4	20
5	21
FOL	
6	22
7	23
FOL	
8	24

a



Witnesses.

Martha H. Atwood

Rowland L. Lamb

Inventor.

Charles W. Atwood

UNITED STATES PATENT OFFICE.

CHARLES W. ATWOOD, OF MIDDLE GRANVILLE, NEW YORK.

LINE-NUMBER AND POSITION ATTACHMENT FOR TYPE-WRITERS.

SPECIFICATION forming part of Letters Patent No. 569,909, dated October 20, 1896.

Application filed April 10, 1895. Serial No. 545,135. (No model.)

To all whom it may concern:

Be it known that I, CHARLES W. ATWOOD, a citizen of the United States, residing at Middle Granville, in the county of Washington and State of New York, have invented a new and useful Line-Number and Position-Indicating Attachment for Type-Writers, of which the following is a specification.

My invention is an improvement in type-writing machines, and relates particularly to the platens thereof, such as turn or revolve upon or with axles or shafts and go forward for the insertion and feed of the paper for lines and spaces. It is a combination with the platen of a supplemental fixed attachment or structural addition to the platen end, having thereupon, as hereinafter fully described, letters, lines, and consecutive line-numbers from "1" inclusive, which, in connection with an attachment to the carriage-arm, are each shown to the operator at a fixed distance or position from the line in writing. It serves the new and additional uses and purposes hereinafter contained and set forth, the object of my invention being, first, to enable the operator when inserting the paper accurately and quickly to stop all sheets for first lines at the same approximate distance from the top of the paper, so that he will always have the same number of lines upon each of several full sheets of same length, and will always know with certainty, without raising the carriage, the number of his last perfect line thereon; second, to enable the operator, without taxing his memory, to number his lines in the margin in succession from first, inclusive, to the bottom of the sheet; third, to enable the operator, without raising the carriage, accurately and quickly to place any written line or line in blank in its correct line position to receive the type-impression for correction, addition, or erasure; fourth, to enable the operator, without taxing his memory, to folio his work in the margin; fifth, to enable the operator, anywhere on the page or sheet, to know where he is, both with respect to the number of his line in writing from the top of the paper and to its distance or position therefrom, so that when he wishes to duplicate matter upon the same sheet, which is often the case, he will know whether he has completed work on first half of the

sheet, and, if so, will know when he is at such approximate distance from the top of such lower half for first line thereon. I attain these objects by the mechanism or devices illustrated in the accompanying drawings, and which, as to structural form, are suitable for adjustment to a Caligraph machine.

Figure 1 represents a side or end view of the indicator-wheel. Fig. 2 represents a section of same through dotted line 2 2 in Fig. 1. Fig. 3 represents a face or edge view of same, showing letters, lines, and numbers. Fig. 4 represents a development of its cylindrical surface, showing letters, lines, and numbers, with their arrangement and positions thereon which I have preferred. Fig. 5 represents a side view of the guide position plate and thumb-screw. Fig. 6 represents a front view of the guide position plate and thumb-screw. Fig. 7 represents a perspective view of a section of carriage-frame with a section of the platen in position thereon. Fig. 8 represents a perspective view of a section of carriage-frame with section of platen in place thereon, the indicator-wheel in position attached to left end of platen, and the guide position plate and thumb-screw also in place upon the fore-arm of the carriage in front of indicator-wheel.

My invention or machine consists of—

First. The indicator-wheel A, as shown in Fig. 8, also in part shown in Figs. 1, 2, 3, and 4. It may be constructed of wood, metal, or any other suitable material and has such diameter as substantially conforms to the diameter of the platen *g*, Figs. 7 and 8, with which it is to be used. The outer surface of its rim may be of such convenient width as will take on the numbers hereinafter referred to and described. Upon this surface I have described the circumferential line *a*, as in Figs. 8 and 3, also developed in Fig. 4. Upon the same I have also described lateral straight lines, as *d d, d d*, in Fig. 4, also showing others. There are as many of these lateral lines as there are line positions upon the platen. Upon such lateral lines are figures representing the numbers in succession from "1" to "32," both inclusive. I have preferred positions for such numbers, as follows: I begin with "1" on any such lateral line and to left of line *a*, and on each successive lat-

eral line, as the indicator-wheel goes forward, I have its consecutive number and so continue upon and around the rim-surface to and including the number "16," as in Fig. 8, also developed in Fig. 4. Then I continue upon the right of line *a*, with the number "17" upon the same lateral line as number "1," and so on the second time upon and around the rim-surface to and including the number "32," also as shown in Figs. 3 and 8 and developed in Fig. 4. These numbers may begin with "1" to the right of the line *a* and continue with "17" to the left of the same in like manner. If two complete rotations of a smaller-sized platen should be insufficient to feed a legal sheet from first written line to the bottom of the paper there may be another circumferential line *a*, making another division upon the rim-surface, so that there may be room for as many numbers as there are lines upon a legal page. I also have upon the outer surface of the rim, between the numbers "16" and "1," "7" and "8," "14" and "15," and "21" and "22," the letters "Fol." for folio, as in Figs. 3 and 8, developed in Fig. 4. This arrangement of letters measures seven lines for a folio, which I have preferred. Such other number of lines for a folio as will answer legal requirements, with the letters arranged accordingly, may be adopted. The number of lines in a folio should be an exact divisor of the number of last written line, so as to have even folios on each sheet. Crossing the line *a*, between the numbers "16" and "1," I have a short diagonal mark or line to indicate place for passing from left to right series of numbers, as shown in figures. These letters, lines, and numbers may be marked, inserted, cut in, or raised upon the rim-surface and may have such convenient appearance and proportions as that they may be easily seen by the operator.

Upon the outside left end of the wheel A is a cylindrical recess or opening *e*, as in Fig. 8, (see also Figs. 1 and 2,) so that when attached or adjusted to platen *g* the end of hub *f* of platen head-plate *b*, as in Fig. 7, may, for the purpose of inserting the platen, be abutted to the end of the projecting arm *c*, into which the platen-axle is screwed. Through center of the wheel A is a round hole *e*, as in Figs. 1 and 2, through which the hub *f*, Fig. 7, passes, fitting tightly. Upon the inside right end of the wheel A is another such recess or opening *k*, as in Fig. 2, having such flange or rim projection as that it will fit tightly over and upon outer edge of platen head-plate *b* and close up to the rubber at end of platen *g*, as in Fig. 8, so that bearing tightly upon these parts it will turn or rotate with the platen in the operation of the machine. Instead of such connection with these parts it may bear tightly over and upon a movable shaft carrying the platen.

I do not limit my invention to the specific structural form, position, or system of at-

tachment described. I include any equivalent device, such as a cap or cover, rim, band, or supplemental length addition to the platen end, having the lines and characters thereon, as described, and so adjusted to or constructed with the platen at either end thereof, or with a movable shaft carrying the same, that it will have fixed relative position with the platen and will turn or rotate with it in the operation of the machine.

Second. The guide position plate B, as in Figs. 5 and 6, is attached to the fore carriage-arm *m* by means of thumb-screw *h*, as in Fig. 8. It may be constructed of wood, metal, or any other suitable material, with such suitable structural form, position, and mode of attachment as may be desired. It consists of a collar which sets over and upon the fore arm *m* of the carriage in front of wheel A, as in Fig. 8, and has the form of the capital letter U inverted, with the thumb-screw *h* through the fore arm thereof, connecting with the fore carriage-arm *m* to hold it securely in position. To the rear arm of the collar is riveted the guide-plate with the pointer projection *i*, Fig. 8, upon the right side. This plate extends upward and forward over the rim-surface of wheel A and clear from same, so that when in place the upper edge of this plate will come even with one of the lateral lines upon wheel A, showing the numbers thereon.

I make practical use of my invention in manner following.

First. I insert a legal sheet with the figures "12" upon wheel A in line with the upper edge of plate B, then roll the platen *g* forward, stopping with figure "1" in same place, (see Fig. 8,) thereby feeding the sheet to its proper distance from the top for its first line thereon. In this manner I have first-line positions upon all sheets at the same approximate distance from the top of the paper, and consequently same number of type-written lines on all full sheets of same length, so that ascertaining and fixing in mind the final line-number I always know when this number appears that I am writing in last-line position upon the paper. If a narrower margin above first line is desired, I insert the paper with "13" upon wheel A in line with the upper edge of plate B. If a wider margin is desired, I insert the paper with "11" in the same place. For legal work, when folios instead of line-numbers are desired in margin, I insert the sheet with "10" upon wheel A at the edge of plate B. I then have twenty-eight lines or four even folios on a sheet. I insert printed or engraved letter-heads with such number at upper edge of plate B fixed in mind as that when the platen *g* is rolled forward to "1" in same place the date-line will be in its correct line position for writing. In this manner I am enabled to stop all sheets for first lines at any distance desired. Whenever practicable to do so, which is often the case, I take out the sheet in the opposite direction from that by which it was fed in, so as to leave the platen in the

same position as it was in when the paper was inserted, ready for insertion of the next sheet with "12" at the upper edge of plate B.

Second. I number the lines in the margin by writing each number therein as it appears on the surface of wheel A at the upper edge of plate B.

Third. I place written lines or lines in blank in their correct line positions to receive the type-impression for correction, addition, or erasure as follows: If lines have been numbered in the margin, I roll back the platen until the number of the line for correction comes back upon wheel A to the edge of position-plate B; that is to say, if line-number "5" needs the correction I roll back the platen until "5" upon the indicator comes back to the edge of the position-plate. If lines have not been numbered in the margin, I roll back the platen until the line for correction comes back to the pointer *i* on the right of plate B. The number appearing upon wheel A is the number of line position in writing. The line for correction is "5," or, as the case may be, line positions ahead of line in writing. If "12" is the number of the line in writing, as seen on wheel A, I take "5," or, as the case may be, therefrom and roll back the platen to "7," which locates accurately the line for correction.

Fourth. When folios are desired in the margin for legal work, I indicate the numbers of same as follows: At first-line position the letters "Fol." are seen upon wheel A. I write this abbreviation in the margin with the figure "1" to indicate the beginning of first folio. This abbreviation again appears at line position "8," which is the beginning of folio "2," which I also write in the margin, and again at fifteenth-line position, which is the beginning of the third folio, and again at twenty-second-line position for the beginning of the fourth folio, which folios I indicate in the margin as they appear upon wheel A, so that I always have four folios of seven lines each on every legal page and a new folio begun with first line on every sheet. When at beginning of second sheet, I know that I have written four folios, and so write "5" in the margin. When at beginning of fifth sheet, I know that I have written sixteen folios, and so write "17" in the margin. The number of folio on the last sheet will indicate the next number for first folio on new sheet. The number of folio after the first on any sheet will indicate the successive number to be made in the margin for the next folio thereon.

Fifth. I always know the number of each line or line position, from the first, inclusive, by the number appearing upon wheel A at the edge of guide-plate B, and if "15" appears I know that I am writing in the fifteenth-line position from the first, inclusive, and also that I am half-way down a legal sheet of thirty lines, so that if I have completed work on first half of sheet and desire to duplicate the same I turn the platen forward to lower half of the sheet till "17" appears for first line upon such duplicate copy.

I am not aware of the previous making or use of any other device or machine that will indicate and show to the operator in regular succession the consecutive numbers and positions of type-written lines from the first inclusive to the bottom of the sheet for the uses and purposes which I have described.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The combination with a rotatable type-writer platen, of a device on one end thereof and rotatable therewith and numbered on its periphery to indicate the consecutive numbers and positions of type-written lines from the first inclusive to the bottom of the sheet and through more than one complete rotation of said platen, substantially as described.

2. The combination with a rotatable type-writer platen, of a wheel on one end thereof and rotatable therewith and numbered on its periphery to provide for indicating the consecutive numbers and positions of type-written lines from the first inclusive to the bottom of the sheet and through more than one complete rotation of said platen, and a guide position plate attached to the platen-carriage and adapted to indicate the consecutive lines on said wheel as the platen is rotated, substantially as described.

3. The combination with a rotatable type-writer platen, of a wheel on one end thereof and rotatable therewith and numbered on its periphery to provide for indicating the consecutive numbers and positions of type-written lines throughout the whole page, and a guide position plate removably attached to the platen-carriage and consisting of a collar embracing the fore arm of the carriage, a rearwardly-projecting plate, and a position-pointer, substantially as described.

CHARLES W. ATWOOD.

Witnesses:

MARTHA H. ATWOOD,
ROWLAND C. LAMB.