

C. N. WILSON.
 LINE INDICATOR AND SIGNAL.
 APPLICATION FILED MAR. 1, 1913.

1,083,646.

Patented Jan. 6, 1914.

Fig. 1.

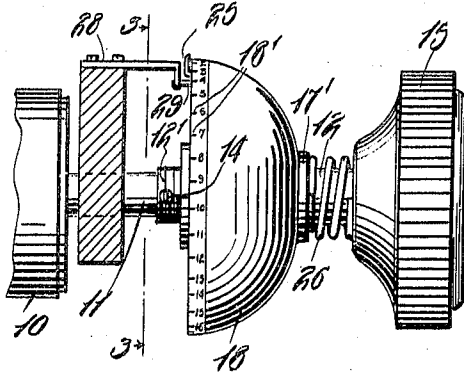


Fig. 2.

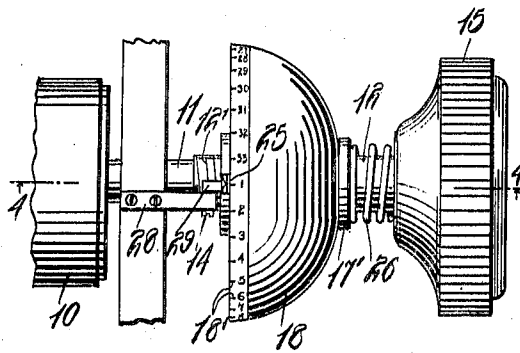


Fig. 4.

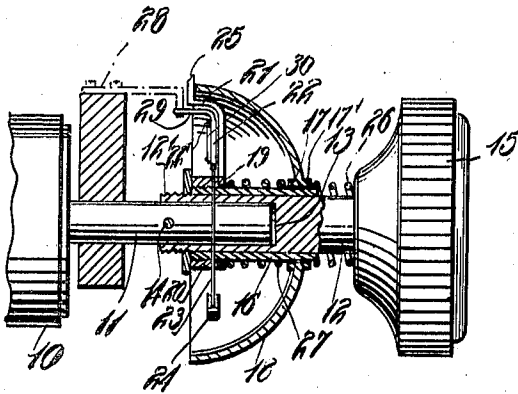
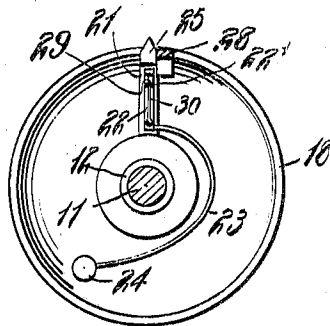


Fig. 3.



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UNITED STATES PATENT OFFICE.

CHARLES N. WILSON, OF THE UNITED STATES ARMY.

LINE INDICATOR AND SIGNAL.

1,083,646.

Specification of Letters Patent.

Patented Jan. 6, 1914.

Application filed March 1, 1913. Serial No. 751,573.

To all whom it may concern:

Be it known that I, CHARLES N. WILSON, lieutenant, U. S. Army, a citizen of the United States, stationed at Fort Rosecrans, in the county of San Diego, State of California, have invented certain new and useful Improvements in Line Indicators and Signals; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in typewriters, and particularly to an attachment for the platen to indicate the number of lines to one revolution of the platen, from which is determined the number of revolutions of the platen to furnish a predetermined number of lines to be written on the page.

An object of the present invention is to provide a simple device of this character which can be quickly and easily attached to or detached from the pintle end of the platen roller.

Another object of the invention is to provide such a device that the same can be set to begin to number the lines at various distances from the top of the page.

Other objects and advantages will be apparent from the following description and with particular reference to the accompanying drawings.

In the drawings: Figure 1 is an elevation of one end of a typewriter platen roller showing my invention applied thereto. Fig. 2 is a plan view. Fig. 3 is a section on the line 3-3 of Fig. 1, looking in the direction of the arrows. Fig. 4 is a longitudinal sectional view on the line 4-4 of Fig. 2.

Referring particularly to the accompanying drawings, 10 represents a portion of a typewriter platen roller, and 11 the pintle end thereof, to which my invention is applied, in the manner shown and to be more specifically described hereinafter.

My device comprises a shaft 12, having a socket 13 in one end which is adapted to receive the before-mentioned pintle end 11 of the platen, the said shaft being held firmly to the pintle by means of a set screw 14, or may be threaded thereon. This end of the shaft is provided with the external threads 12'. On the other end of the shaft is a milled knob 15, this knob taking the place

of the ordinary knob in use, and being of the same construction.

Snugly fitted on the socketed end of the shaft is a sleeve 16, which carries the bell 18, the center of which is formed with the oppositely extending hub portions 17 and 17'. The outer circumferential face of the bell, near the edge thereof, is provided with a series of equally spaced graduations 18' and opposite these graduations are numbers 1 to 33. These numbers represent the number of lines which can be written during one complete revolution of the platen. The ordinary platen of the typewriters now in use makes a little more than two complete revolutions to a "legal" size sheet of paper.

Loosely mounted on the opposite end of the sleeve 16 is a flat disk 19 which bears against one end of the nut 20 which is screwed into the threaded end of the sleeve 16. This disk 19 carries an extension 21 to which is pivotally secured a block 22, this block having secured to its lower end a spring clapper arm 23, the outer end of which is provided with a ball head 24. Secured at its lower end to the pivot pin of the block 22 and bearing loosely in the bifurcation of a pin 22' on the said block is a flat spring 30. This spring holds the block in normal position relative to the extension 22, the pivot of the block being rigidly secured to the extension so that the block moves loosely thereon. The device moves, as a unit, with the platen, but the graduated bell and sleeve may be rotated on the shaft 12, when it is desired to set the device.

On the upper end of the extension 20 is a pointer 25 which projects above the graduations on the periphery of the bell. Between the knob 15 and the adjacent flange 17' is a coil spring 26, while between the other flange 17 and the disk 19 is a second coil spring 27. These springs hold the bell sleeve 16 against idle rotation on the shaft 12, but permit the same to be turned by hand to set the device as will later appear. Mounted at a convenient point on the carriage is a finger 28 which extends into the path of the lateral portion 29 of the block 22 and is adapted to be struck thereby to cause the clapper to strike the bell, and indicate the proximity of the bottom of the page.

The operation of the device may be briefly described as follows: The paper is inserted in the typewriter, and the page run through to the point at which it is intended to begin writing. If it is desired that the last line of the page shall be "23" the pointer 25 is moved until it is opposite "23" on the bell. The graduated bell is then rotated until the number "1" comes opposite the end of the finger 28. The writing is then proceeded with. At each line shift of the platen the above-described parts will be rotated one space the number "2" on the bell coming opposite the finger 28. When the number "23" on the bell comes opposite the finger 28, this finger will engage the portion 29 of the block 22, and rock the block to cause the clapper to strike the bell. One complete revolution of the platen represents thirty-three lines at single space. It will readily be seen that when the indicator shows that the platen has made a revolution and one-half, twenty-five (25) lines have been written at double space, or forty-eight (48) lines at single space. When writing twenty-five lines, double space, the platen will make one complete revolution and such portion of a second revolution as to bring the number "18" on the bell opposite the pointer 25. This will indicate that the platen has turned nine lines, at double space, of the second revolution thereof. By this means it can be easily seen just how near to the bottom of the page the writing has progressed.

What is claimed is:

1. A line indicator for attachment to the platen roller of a typewriting machine comprising a shaft having a socket in one end for detachable engagement with the pintle end of the platen roller, a knob on the other end of the shaft, a bell loosely mounted on the shaft, a spring on the shaft between the

bell and knob, a rigidly secured disk on the socketed end of the shaft and a spring between the bell and disk.

2. A line indicator for attachment to the platen roller of a typewriting machine comprising a bell carrying graduations which bell is rotatably mounted on the pintle end of the platen roller of the machine, means for holding the bell frictionally against idle rotation, and a pointer mounted on the carriage of the machine for registration with the graduations of the said bell.

3. A line indicator for attachment to the platen roller of a typewriting machine comprising a bell having graduations and rotatably mounted on the pintle end of the platen roller of the machine, means for holding the bell frictionally against idle rotation, a pointer mounted on the carriage of the machine for registration with the graduations of the said bell, a clapper carried by the pintle, and a finger on the carriage extending into the path of the said clapper.

4. A line indicator and signal for attachment to the platen roller of a typewriting machine comprising a knobbed shaft detachably mounted on the pintle of the platen roller, a sleeve loosely mounted on the shaft, a bell carried loosely on the sleeve, a clapper carried by the sleeve, means for holding the bell against idle rotation, the bell having writing-line numbers on its periphery, a pointer on the clapper, and a striker on the carriage for engagement by the clapper, all of said platen carried parts rotating as a unit with the platen.

In testimony whereof, I affix my signature, in the presence of two witnesses.

CHARLES N. WILSON.

Witnesses:

ELCINEB WOOLLARD,
M. B. WILLETT.