C. HOLLAND.

INDICATOR FOR TYPE WRITING MACHINES.

APPLICATION FILED DEC. 20, 1909.

983,860. **Patented Feb. 7, 1911.**

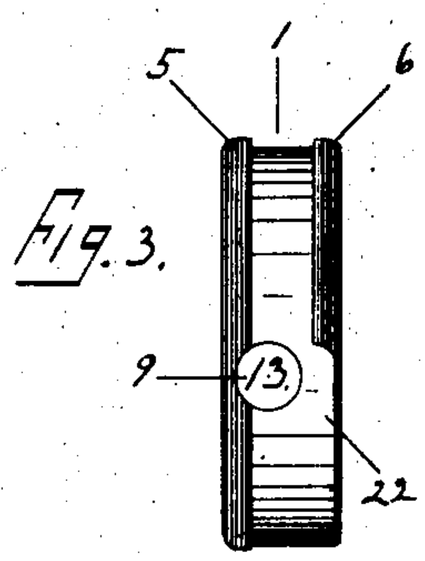

Fig. 3.

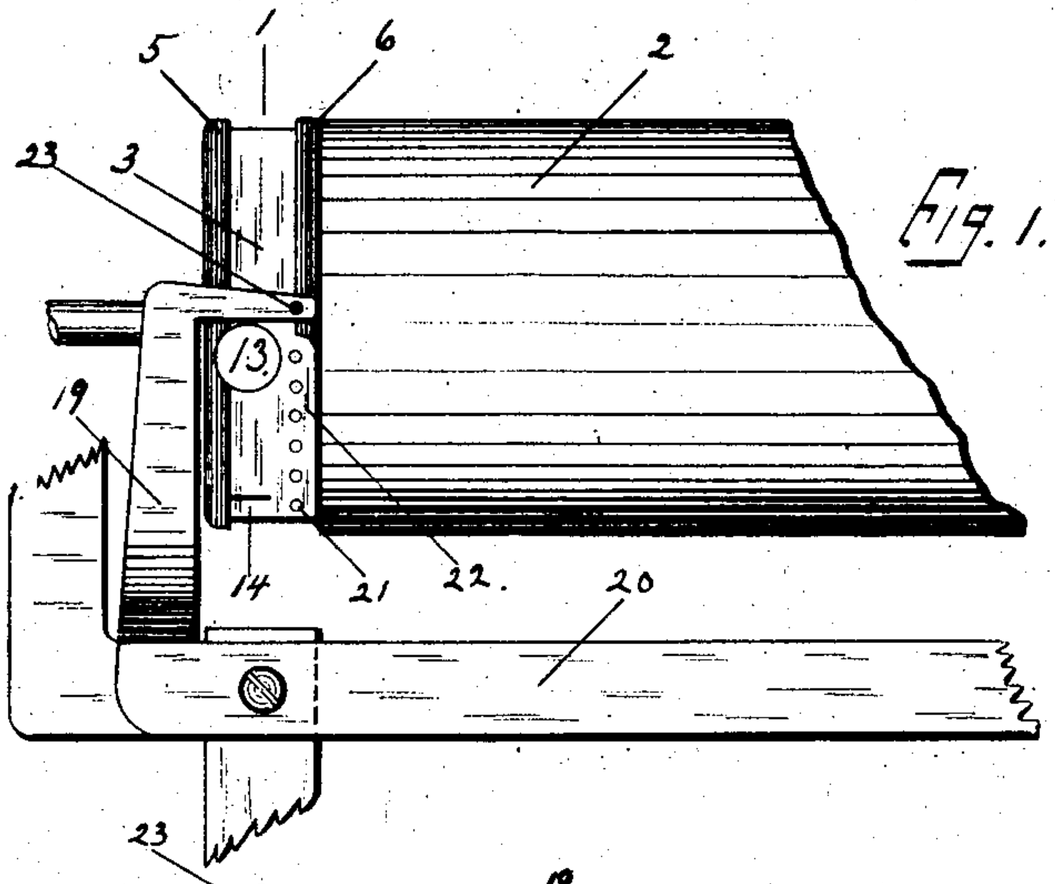

Fig. 1.

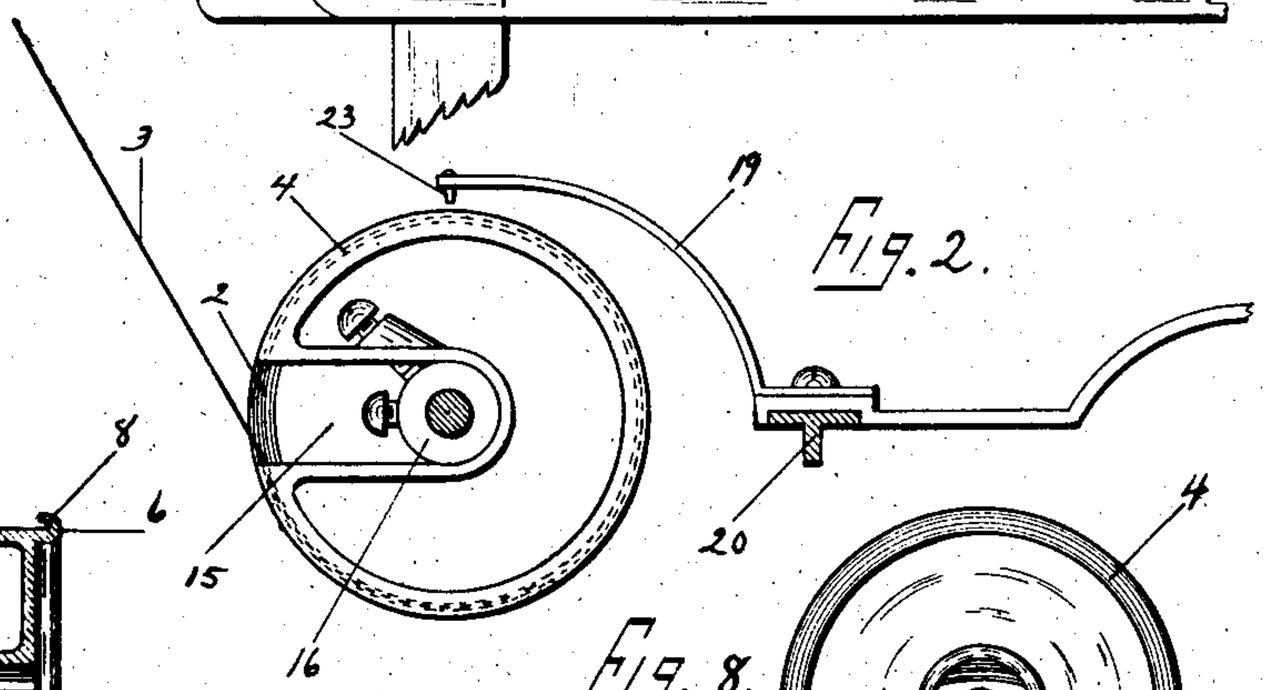

Fig. 2.

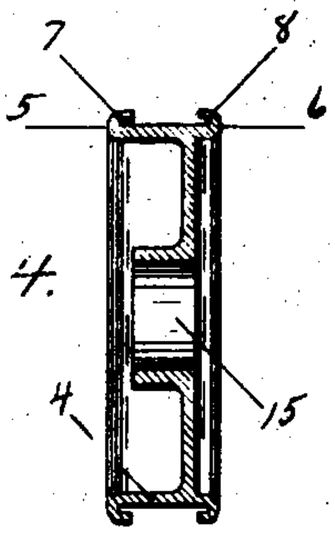

Fig. 4.

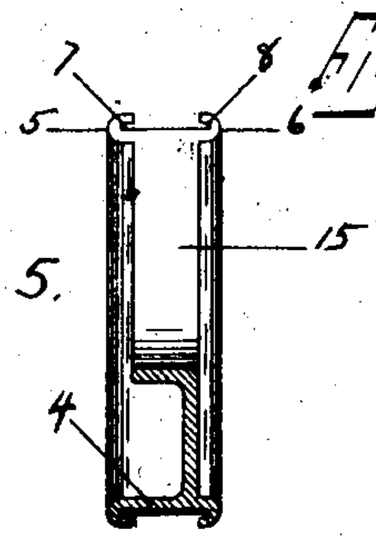

Fig. 5.

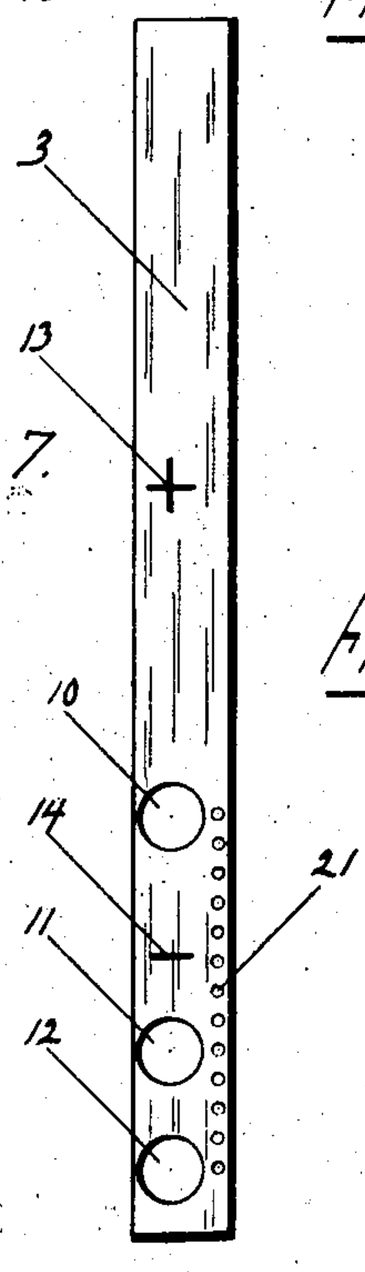

Fig. 7.

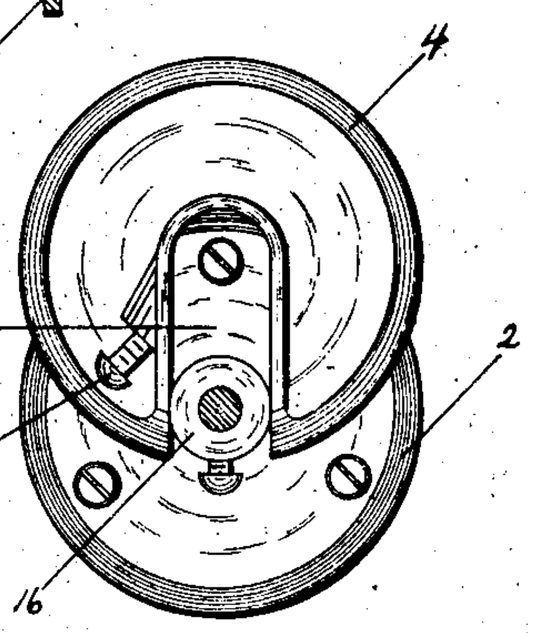

Fig. 8.

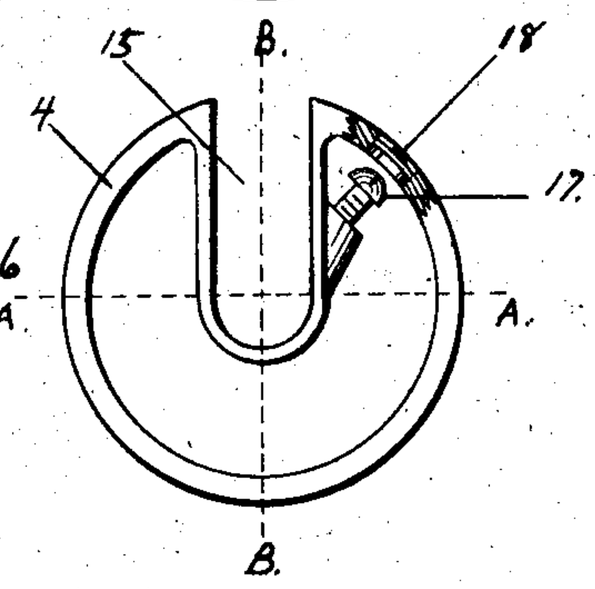

Fig. 6.

WITNESSES.

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INDICATOR FOR TYPE-WRITING MACHINES.

983,860. Specification of Letters Patent. Patented Feb. 7, 1911.

Application filed December 20, 1909. Serial No. 534,170.

To all whom it may concern:

Be it known that I, CURTIS HOLLAND, a citizen of the United States, residing in Butte, county of Silver Bow, State of Montana, have invented certain new and useful Improvements in Indicators for Type-Writing Machines, of which the following is a specification.

The modern typewriting machine even in its present state of perfection, with its hundreds of devices and attachments for speed and accomplishment, and for the comfort of the operator, still lacks a novel and much desired feature heretofore practically unprovided for. With the advent of the visible typewriter the necessity of raising the carriage for inspection of the work, to make insertions, etc., has, to a certain extent, been obviated since all of the work is directly before the eyes of the operator, but no means were provided for watching the end of the paper or of accurately knowing, within certain limits, what portion of the paper remains unwritten upon, and with the non-raising carriage the operator has even less or no means of knowing this important condition. Ignorance of this condition is often the cause of great waste of time, labor and typewriter paper, and where numbered pages of the same matter are involved uniformity seldom exists. Knowing the exact distance from the bottom of the page will often save the operator from rewriting the page, as for instance in billing, enabling the making of the computation at the bottom of the page before the paper has run off the roll. Always having the same starting position for the roller, for the size of paper being used, will, where it is necessary to make insertions after the page has been written, enable the operator to reach the exact spot without twisting and turning the paper and do away with the necessity of inserting the paper in the machine several times in order to make the necessary correction.

The main object of this invention is to provide an indicator attachably adapted to be secured to the end of a typewriter platen-roll for accurately indicating, without the necessity of lifting the carriage, the distance the operator is from the bottom of the page.

A further object, is to simplify a device of this character and to avoid confusion by providing means whereby the indicating characters appear one at a time, and only that one for the size of paper being used, and for the marginal end limit desired.

A still further object, is to provide an article of low cost of manufacture, and to provide means whereby the device is readily adaptable to typewriters of various makes, and is also adjustable for different sizes of typewriter paper.

An indicating device for typewriting machines constructed in accordance with my invention is shown in the accompanying drawings, in which—

Figure 1, shows a top plan view of the indicating mechanism attached to the platen-roll. Fig. 2, is an end view of Fig. 1, while Fig. 3, shows a top plan view of the indicator detached from the platen-roll. Figs. 4 and 5 show cross sectional views taken on the lines A—A, and B—B, respectively, of Fig. 6. Fig. 6, also shows an end plan and part sectional view disclosing more fully a portion of the flange through which the set-screw is inserted. Fig. 7, shows a plan view of the movable and settable scale, while Fig. 8, more particularly illustrates the method of applying the indicator without removing the roller from the carriage.

Referring to the said drawings the indicator, in its entirety, is represented by 1, Fig. 1, and consists chiefly of two parts, a flanged disk-like structure attached to the left end of the platen-roll 2, and revolving therewith, and a movable and settable scale 3, positioned upon and encircling the flanged portion of the structure. The flanged portion 4, of the structure 1, Figs. 4 and 5, has raised peripheral edges or rims 5—6 which are inwardly bent or grooved at 7—8, and form an annular retaining runway for the movable and settable scale 3 which is positioned therein. The annular flange 4 bears characters upon its periphery, between the raised edges or rims, representing various sizes of typewriter paper, as for instance, 5½, 11 and 13, the 13 size being positioned as shown by 9 in Fig. 3. The movable and settable scale 3, Fig. 7, has apertures 10, 11 and 12, at certain points representing various marginal end limits, as for instance, 2 inch, 1 inch and ½ inch respectively, and also bears a character at 13 indicating the starting position for the roller for

the 13 size paper, and also a mark at 14 indicating the starting position for both the 5½, and 11 sizes of paper. In order to facilitate the attaching of the indicator to the platen-roll the slotted portion 15 is provided, which allows the indicator to be slipped on over and seated against the platen end plate hub 16, without necessitating the removal of the roller from the carriage frame. The manner of doing this is clearly shown in Fig. 8. The set-screw 17 is then firmly set up against the hub 16, by inserting a screw-driver through the aperture 18, as shown by the broken away portion in the flange, Fig. 6, thus securely holding the indicator in the proper position, as shown by the end view in Fig. 2. The movable and settable scale 3, which is preferably made of a thin strip of celluloid, and therefore quite flexible, is then inserted in the annular retaining runway by means of the opening 15, as shown in Fig. 2, this causing the scale to encircle the periphery of the flange through the annular grooves 7—8. A stationary index member 19, attached to the frame of the carriage 20, is adapted to aline with the starting position for the roller, and also serves as a stopping point when the predetermined marginal character comes into alinement. It is obvious that, in order to avoid confusion, the fewer the figures or characters appearing on the indicator at one time, the better for the operator, and I have so proportioned and positioned the apertures in the movable and settable scale, with reference to the characters on the flange, that only one set of figures, representing the size of paper being used, appears at a time. Another novel feature of the movable and settable scale is in its being perforated with small holes 21, along a portion of one edge, and adapted to be engaged by a point and revolved and set at the desired position. To further facilitate this operation the inner edge of the raised peripheral rim 6 has a cut-out portion 22 exposing, for a short distance, these perforations. The fixed index member 19, on the carriage frame 20, is so constructed that a slight pressure of the finger will cause a depending stud 23, carried at the end of the said index member, to engage with one of the perforations 21. By turning the roller 2 either forward or backward, as the case may require, the scale 3 may be moved the limit of the cut-out portion 22, and the desired set of figures thus brought into view in either the 2 inch, 1 inch or the ½ inch aperture in the scale. Thus, for instance, if it is desired to use 13 inch paper allowing a 2 inch margin at the bottom of the page, the scale 3 is moved until 13 appears in the 2 inch aperture in the scale. Fig. 1, shows this combination, where 13, the size of the paper being used, appears through the aperture 10, indicating the 2 inch marginal end limit. The roller is then turned causing the indicator to revolve therewith, bringing the starting character on the scale into alinement with the fixed index member 19, indicating the position of the roller for the insertion of the paper and the starting off point. Certain revolutions of the platen-roll 2 will bring 13 into alinement with the index member 19 thus showing that that line may be written upon and still leave a 2 inch margin at the bottom of the page for signature, or in the case of billing, for the computation. It is obvious that if 11 or 5½ are set to appear in the 10 aperture, a 2 inch margin would be the result for either of these sizes, and if either figure were set to appear in the 11 aperture, a 1 inch margin would be the result. It is understood that moving the scale 3 either forward or backward, produces a like change in the position of the starting characters, with regard to the figures on the flange. It will be readily seen that it is necessary to make this change in the starting position for the roller, for different sizes of typewriter paper, with regard to the stopping position, in order to obtain the different marginal end limits. For the sake of illustration, 20 represents a portion of a "Remington" typewriter carriage frame, and the manner of attaching the fixed index member 19 thereto does not limit the device to this manner of attachment alone, as other means may be employed, and other forms of index members used, as best serves the purpose for the various makes of machines.

Certain carriage frames are so constructed that the fixed index member 19 may be dispensed with, a portion of the carriage frame or the platen spring clips, serving the same purpose for alinement, and in that case a pencil point, for instance, may be used for engaging the perforations 21, for moving and setting the scale 3.

Having thus fully described my invention, what I claim as new therein, and desire to secure by Letters Patent, is:—

1. An indicator adapted to be attached to the end of a typewriter platen-roll for indicating various marginal end limits for typewriter paper of different sizes, said indicator having means providing for attachment without removing the platen-roll from the carriage-frame.

2. An indicator adapted to be attached to the end of a typewriter platen-roll for indicating various marginal end limits for typewriter paper of different sizes comprising, in combination, a disk-like structure having an annular flange, and a movable and settable member positioned upon and encircling the periphery of the flange.

3. An indicator adapted to be attached to the end of a typewriter platen-roll for indicating various marginal end limits for typewriter paper of different sizes compris-

ing, in combination, a disk-like structure having an annular flange with characters on its periphery representing different sizes of typewriter paper, and a movable and settable member positioned upon and encircling the periphery of the flange, said movable and settable member having apertures and bearing characters representing various marginal end limits for the paper and starting positions for the platen-roll.

4. An indicator adapted to be attached to the end of a typewriter platen-roll for indicating various marginal end limits for typewriter paper of different sizes comprising, in combination, a disk-like structure having an annular flange with raised and inwardly projecting rims, a centrally located peripheral channel on the flange, a movable and settable member positioned within and encircling the said channel, said movable and settable member having apertures adapted to expose an individual character on the flange, and means for moving and setting the said member to different positions on the flange.

5. An indicator adapted to be attached to the end of a typewriter platen-roll for indicating various marginal end limits for typewriter paper of different sizes comprising, in combination, a disk-like structure having an annular flange, a movable and settable member positioned upon and encircling the periphery of the flange, perforations along one edge of the said movable and settable member, and a fixed member positioned on the carriage-frame adapted to engage with the said perforations for holding the movable and settable member against rotary movement.

6. An indicator adapted to be attached to the end of a typewriter platen-roll for indicating various marginal end limits for typewriter paper of different sizes comprising, in combination, a disk-like structure having an annular flange, a centrally located peripheral channel having inwardly projecting rims, an elongated cut-out portion in one of the said rims, a movable and settable member positioned within the said peripheral channel, a row of perforations along one edge of the said movable member adapted to be exposed through the said cut-out portion in one of the rims, and a fixed index member positioned on the carriage-frame having means for engaging with the exposed perforations for holding the said movable member against rotary movement.

7. An indicator adapted to be attached to the end of a typewriter platen-roll for indicating various marginal end limits for typewriter paper of different sizes comprising, in combination, a disk-like structure having an annular flange with a slot in the disk portion of the structure and a corresponding opening in the flange, a set-screw for positioning and securing the said structure to the end of the platen-roll, an aperture in the flange for inserting and setting up the said screw, and a fixed index member positioned on the carriage-frame adapted to aline with positioning characters on a movable and settable member encircling the periphery of the flange.

8. An indicator adapted to be attached to the end of a typewriter platen-roll for indicating various marginal end limits for typewriter paper of different sizes comprising, in combination, a disk-like structure having an annular flange, raised and inwardly projecting rims on the flange forming a centrally located peripheral channel thereon, a movable and settable member positioned within and encircling the said peripheral channel, a plurality of characters upon the flange, a plurality of apertures in the said movable and settable member adapted to expose an individual character on the flange, and a fixed index member positioned on the carriage-frame adapted to aline with an aperture in the said movable member and with an exposed character on the flange.

9. An indicator adapted to be attached to the end of a typewriter platen-roll for indicating various marginal end limits for typewriter paper of different sizes comprising, in combination, a disk-like structure having an annular flange, raised and inwardly projecting peripheral rims on the flange, an elongated cut-out portion in one of the said rims, a movable and settable member positioned upon and encircling the periphery of the flange, a plurality of perforations along one edge of the said movable member adapted to be exposed through the said cut-out portion in one of the rims, and a fixed index member positioned on the carriage-frame provided with a depending stud adapted to engage with the exposed perforations for holding the said movable member against rotary movement.

10. An indicator adapted to be attached to the end of a typewriter platen-roll for indicating various marginal end limits for typewriter paper of different sizes comprising, in combination, a disk-like structure having an annular flange, raised and inwardly projecting peripheral rims, an elongated cut-out portion in one of the said rims, characters on the flange, a slot in the disk portion of the structure and a corresponding opening in the flange, a set-screw for positioning and securing the said disk-like structure to the platen-roll, a movable and settable member positioned upon and encircling the periphery of the flange, a plurality of centrally located characters and apertures on the movable and settable member, a plurality of perforations along one edge of the said movable member, and a

fixed index member positioned on the carriage-frame provided with a depending stud adapted to engage with the said perforations for holding the said movable member against rotary movement.

In witness that I claim the improvements described in the foregoing specification I have signed my name in the presence of two subscribing witnesses.

CURTIS HOLLAND.

Witnesses:
JAMES J. MOONEY,
FRANK WEST, Jr.