C. HOLLAND.

TYPE WRITING MACHINE.

APPLICATION FILED MAR. 10, 1910.

970,052. Patented Sept. 13, 1910.

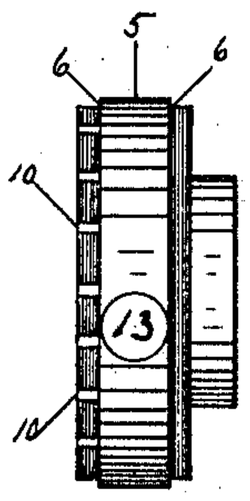

Fig. 1

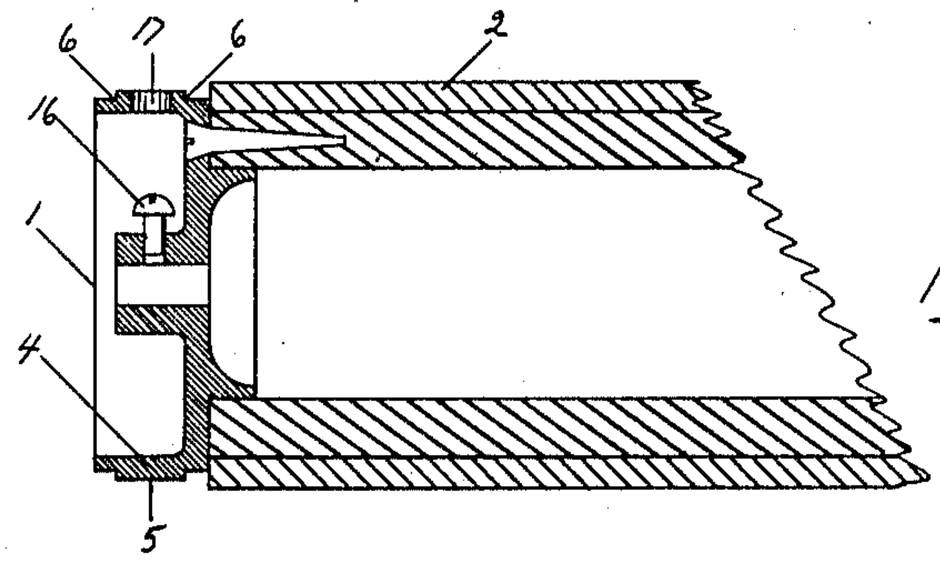

Fig. 2.

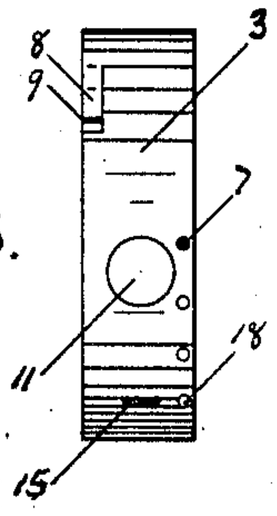

Fig. 3.

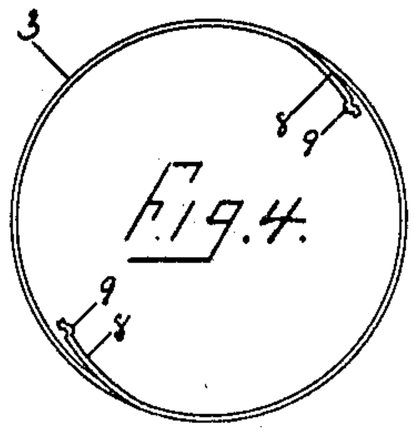

Fig. 4.

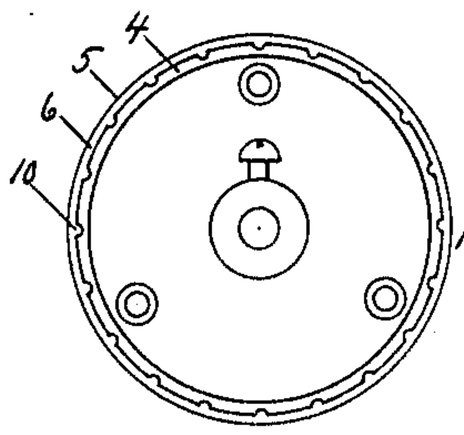

Fig. 5.

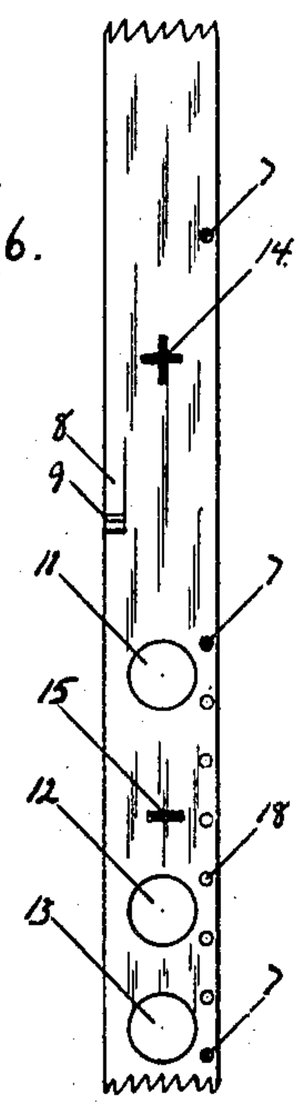

Fig. 6.

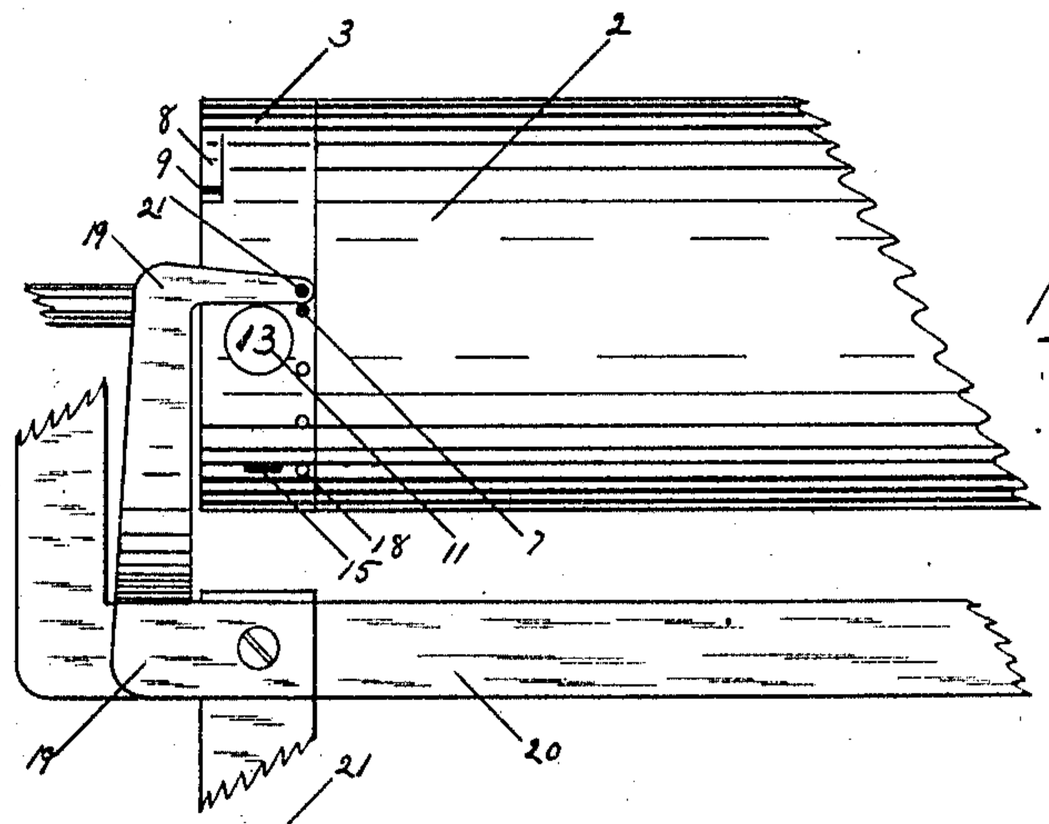

Fig. 7.

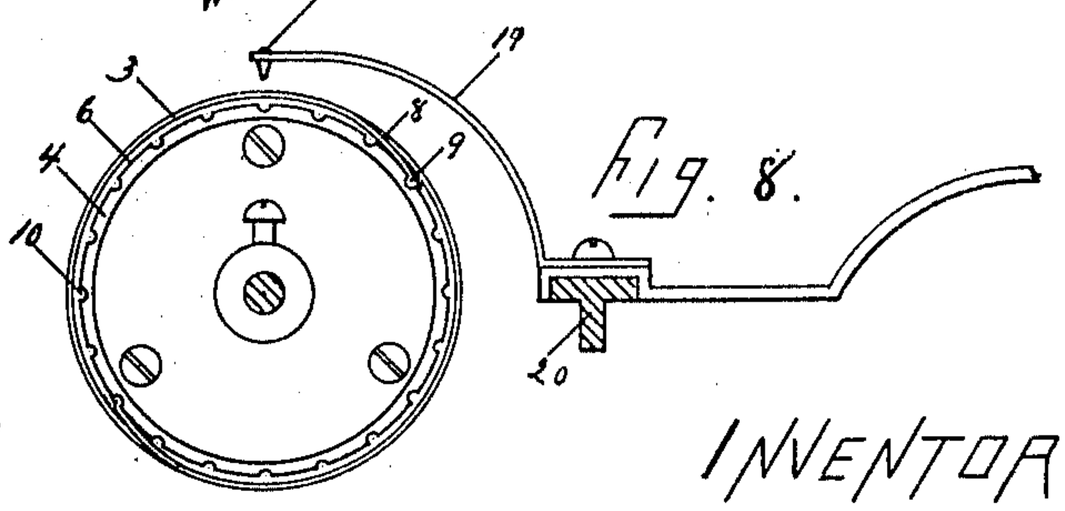

Fig. 8.

WITNESSES

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TYPE-WRITING MACHINE.

970,052. Specification of Letters Patent. **Patented Sept. 13, 1910.**

Application filed March 10, 1910. Serial No. 548,465.

To all whom it may concern:

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

This invention relates to certain improvements in typewriting machines whereby I combine a former attachable device for indicating the approach of the end of the typewriter paper with a new and novel form of construction for the platen end piece. In the present invention I have endeavored to further simplify the device, both in construction and in the manner of application, by adding an annular flange to the ordinary platen end piece, making it, preferably, integral therewith; providing one or more peripheral rabbeted run-ways, and positioning a movable ring-like scale upon and surrounding the periphery of the said flange. The virtues of my former attachable device may well be attributed to the present mechanism, but with the main and special object in view of making it more of an "inbuilt" feature, for the machine adopting it, than as an extra and attachable device.

The present invention provides a device by the use of which it will be possible to determine, at a glance, just what portion of the typewriter paper remains unwritten upon, and further provides means for plainly indicating, at the proper moment, various marginal end limits.

With these and other objects in view the present invention consists in the combination and arrangement of parts, as will be hereinafter more fully described, shown in the accompanying drawings, and particularly pointed out in the appended claims.

Figure 1, shows a plan view of the platen end piece, of my design, detached from the platen-roll. Fig. 2, shows a cross-sectional view of the platen end piece attached to the end of the platen-roll. Figs. 3 and 4, show top and side views respectively of the movable ring-like scale 3. Fig. 5, shows an end or side view of Figs. 1 and 2, while Fig. 6, shows a partial development plan of Fig. 3, as it would appear straightened out. Figs. 7 and 8, show top plan and end views respectively of the complete indicating mechanism attached to the end of the platen-roll, and also shows one method for securing the fixed index member 19, to the carriage frame 20.

The indicator, in its entirety, consists chiefly of two parts; a peripherally flanged disk-like structure 1, attached to the left end of the platen-roll 2, and revolving therewith, and a movable ring-like member 3, positioned upon and encircling the flanged portion of the structure.

The peripherally flanged portion 4, Figs. 1 and 2, has a raised and centrally disposed rib 5, upon its periphery, forming annular rabbeted run-ways 6, which are engaged by the depressed portions 7, and by slitted spring-like registering members 8, integral with the movable ring-like member 3, serving to position and retain said member upon the periphery of the flange 4.

The slitted and inwardly bent spring-like registering portions 8, serve to grip the rabbeted run-way 6, and cause the indentation 9, to snap into further engagement with the deeper notches or indentations 10, within the rabbeted run-way 6, thus setting and indexing the movable ring-like member 3, in the position desired and normally preventing rotary movement.

The annular raised rib 5, bears characters upon its periphery, and between the rabbeted run-ways, representing various sizes of typewriter paper, as for instance, 5½, 11 and 13, the character representing the "13" size being positioned as shown in Fig. 1.

The movable and settable ring-like scale 3, Fig. 6, has apertures 11, 12 and 13, 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 14 indicating the starting position for the roller for the "13" size paper, and also bears a mark at 15 indicating the starting position for both the 5½ and 11 sizes of paper. To facilitate the loosening and tightening of the set-screw 16, from or against the roller-shaft, is the object of the hole 17 in the flange 4, as shown in Fig. 2, through which a screw-driver may be inserted for the purpose stated.

The movable scale 3, consists of a thin metal ring-like band positioned upon and encircling the periphery of the flange 4, and I have so proportioned and positioned the apertures in the movable ring-like member, with reference to the characters on the flange that only one set of figures, repre-

senting the size of the paper being used, appears at a time. The movable ring-like member is perforated with small holes 18, along a portion of one edge which are adapted to be engaged by a point and the scale thus revolved and set at the desired position.

A fixed index member 19, on the carriage frame 20, is so constructed that a slight pressure of the finger will cause a depending stud 21, carried at the end of the said index member, to engage with one of the perforations 18, and by turning the roller 2, either forward or backward, as the case may require, the scale 3, may be moved and the desired set of figures on the flange thus brought into view through 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. 7, shows this combination where 13, the size of the paper being used, appears through the aperture 11, indicating the 2 inch marginal end limit. The fixed index member 19, 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. After once setting the scale 3, for the size of paper it is desired to use any number of pages may be written thereafter without adjustment of the indicator, the only matter requiring attention being simply the starting position for the roller. By turning the roller the indicator, as a whole, revolves therewith, thus bringing the starting character on the scale 3, 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 roller 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. From this it will be seen that if either 11 or 5½ are set to appear through the "11" aperture, a 2 inch margin would be the result for either of these sizes when they are brought into alinement with the index member 19, and if either figure was set to appear in the "12" aperture a 1 inch margin would result. 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 seen that it is necessary to make this change in the starting position for the roller, for the 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, but 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 member 19, may be dispensed with, a portion of the carriage frame or platen spring clips with a mark, serving the same purpose for alinement and in that case a pencil point, for instance, may be used for engaging the perforations 18, 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. A new article of manufacture comprising a typewriter platen end-piece having a peripheral flange with a centrally disposed annular rib formed upon its periphery.

2. A new article of manufacture comprising a typewriter platen end-piece having a peripheral flange with a plurality of annular rabbeted run-ways upon its periphery, and a plurality of notches or indentations within one of the said run-ways.

3. A new article of manufacture comprising a typewriter platen end-piece having a peripheral flange with a plurality of annular slotted run-ways upon its periphery, a plurality of notches or indentations within one of the said run-ways, a raised and centrally disposed rib formed upon the periphery of the flange, and characters upon the periphery of the said rib.

4. In a typewriting machine, the combination of a rotative platen, a platen end-piece having a peripheral flange with a raised and centrally disposed annular rib, and a plurality of annular rabbeted run-ways on the periphery of the said flange.

5. In a typewriting machine, the combination of a rotative platen, a platen end-piece having a peripheral flange with a raised and centrally disposed annular rib, a plurality of annular rabbeted run-ways on the periphery of the flange, and a plurality of notches or indentations within one of the said rabbeted run-ways.

6. In a typewriting machine, the combination of a rotative platen, a platen end-piece having a peripheral flange with a raised and centrally disposed annular rib, a plurality of annular rabbeted run-ways on the periphery of the flange, a plurality of notches or indentations within one of the said run-ways, and characters upon the periphery of the said annular rib.

7. In a typewriting machine, the combination of a rotative platen, a platen end-piece having a peripheral flange with a plurality of rabbeted run-ways upon its pe-

riphery, a plurality of notches or indentations within one of the said run-ways, a movable ring-like member positioned upon and encircling the periphery of the flange, depressed portions on the movable member adapted to engage with the rabbeted run-ways on the flange, and means positioned on the carriage-frame for holding the said movable member against rotary movement.

8. In a typewriting machine, the combination of a rotative platen, a platen end-piece having a peripheral flange with a plurality of rabbeted run-ways upon its periphery, a plurality of notches or indentations within one of the said run-ways, a movable ring-like member positioned upon and encircling the periphery of the flange, depressed portions and slitted spring-like registering members integral with the said movable member adapted to snap into engagement with the registering notches or indentations within one of the rabbeted run-ways on the periphery of the flange to normally prevent rotary movement.

9. In a typewriting machine, the combination of a rotative platen, a platen end-piece having a peripheral flange with a plurality of characters upon its periphery, a movable ring-like member positioned upon and encircling the periphery of the flange, depressed portions and slitted spring-like registering members integral with the said movable member, and apertures in the said movable member adapted to individually expose certain characters upon the periphery of the flange.

10. In a typewriting machine, the combination of a rotative platen, a platen end-piece having a peripheral flange with a rabbeted run-way on each side of the flange, a movable ring-like member positioned upon and encircling the periphery of the flange, a fixed index member attached to the carriage-frame, and a row of perforations along one edge of the said movable member adapted to be engaged by the said fixed index member for holding said movable member against rotary movement.

11. In a typewriting machine, means for indicating the approach of the end of the typewriter paper comprising, in combination, a rotative platen, a platen end-piece having a peripheral flange bearing characters representing various sizes of typewriter paper, a movable member positioned upon and encircling the periphery of the flange having apertures representing various marginal end limits, the said apertures adapted to register with the various characters on the flange.

12. In a typewriting machine, means for indicating the approach of the end of the typewriter paper comprising, in combination, a rotative platen, a platen end-piece having a peripheral flange bearing characters representing various sizes of typewriter paper, a movable ring-like member positioned upon and encircling the periphery of the flange, apertures in the said movable member representing various marginal end limits for the paper, the said movable member being adapted to cover or to individually expose a certain character on the flange.

13. In a typewriting machine, means for indicating the approach of the end of the typewriter paper comprising, in combination, a rotative platen, a platen end-piece having a peripheral flange bearing characters representing various sizes of typewriter paper, a plurality of rabbeted run-ways on the periphery of the flange, a movable ring-like member positioned upon and encircling the periphery of the flange, depressed portions on the movable member adapted to engage with the rabbeted run-ways, and apertures in the said movable member representing various marginal end limits adapted to register with and to expose an individual character on the flange.

14. In a typewriting machine, means for indicating the approach of the end of the typewriter paper comprising, in combination, a rotative platen, a platen end-piece having a peripheral flange bearing characters representing various sizes of typewriter paper, a plurality of rabbeted run-ways on the periphery of the flange, a plurality of notches or indentations within one of the said run-ways, a movable ring-like member positioned upon and encircling the periphery of the flange, depressed portions and slitted spring-like registering members integral with the said movable member adapted to snap into engagement with the notched or indented peripheral run-way on the flange, and apertures in the said movable member representing various marginal end limits adapted to be circumferentially moved to register with and to expose an individual character on the flange.

15. In a typewriting machine, means for indicating the approach of the end of the typewriter paper comprising, in combination, a rotative platen, a platen end-piece having a peripheral flange bearing characters representing various sizes of typewriter paper, a rabbeted run-way on each side of a raised and centrally disposed annular rib formed upon the periphery of the flange, a plurality of notches or indentations within one of the said run-ways, an apertured ring-like member positioned upon and encircling the periphery of the flange, said apertures representing various marginal end limits and adapted to individually expose a certain character on the flange, depressed portions and slitted spring-like registering members integral with the said ring-like member adapted to snap into engagement with the notched or indented run-way on

the flange, a plurality of perforations along one edge of the said ring-like member, and a fixed index member on the carriage frame having a depending stud adapted to engage with the said perforations for holding said ring-like 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, this 3rd. day of March, A. D. 1910.

CURTIS HOLLAND.

Witnesses:
J. ASHER COWAN,
NELL BRASIER.