

A. E. ZUMPE.
TYPE WRITER PLATEN CHECKING DEVICE.
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983,340.

Patented Feb. 7, 1911.

Fig. 1.

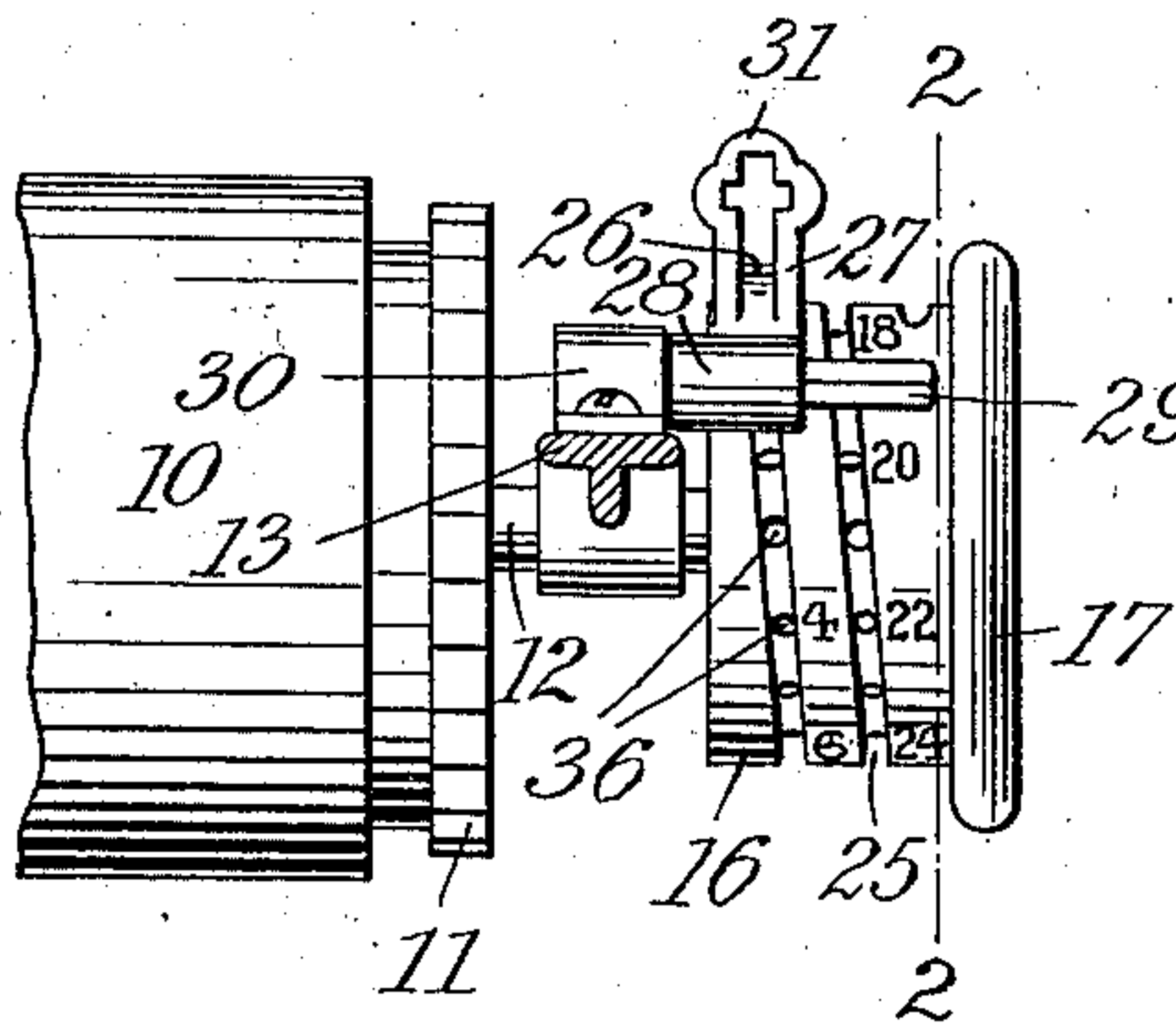


Fig. 2.

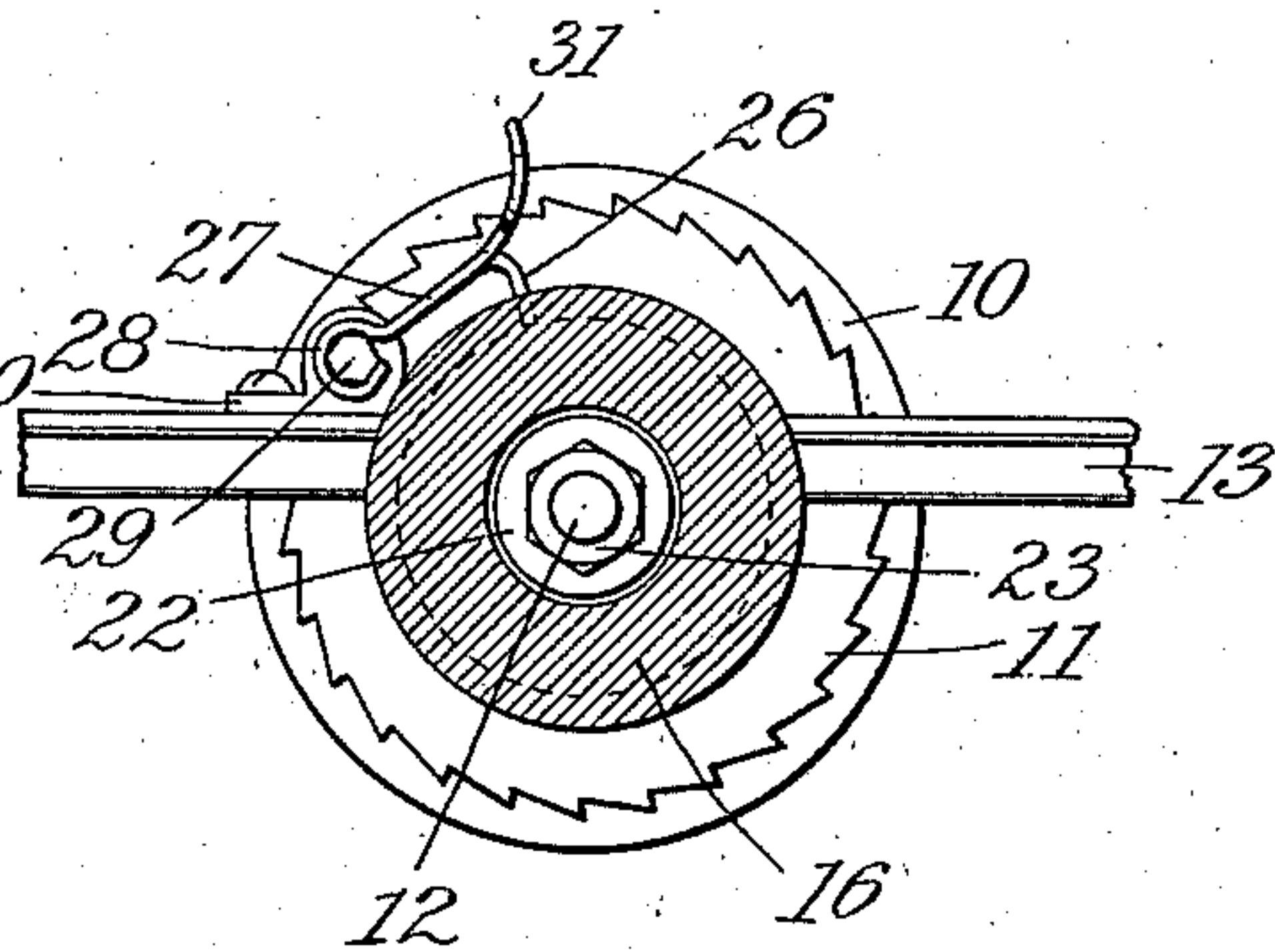


Fig. 3.

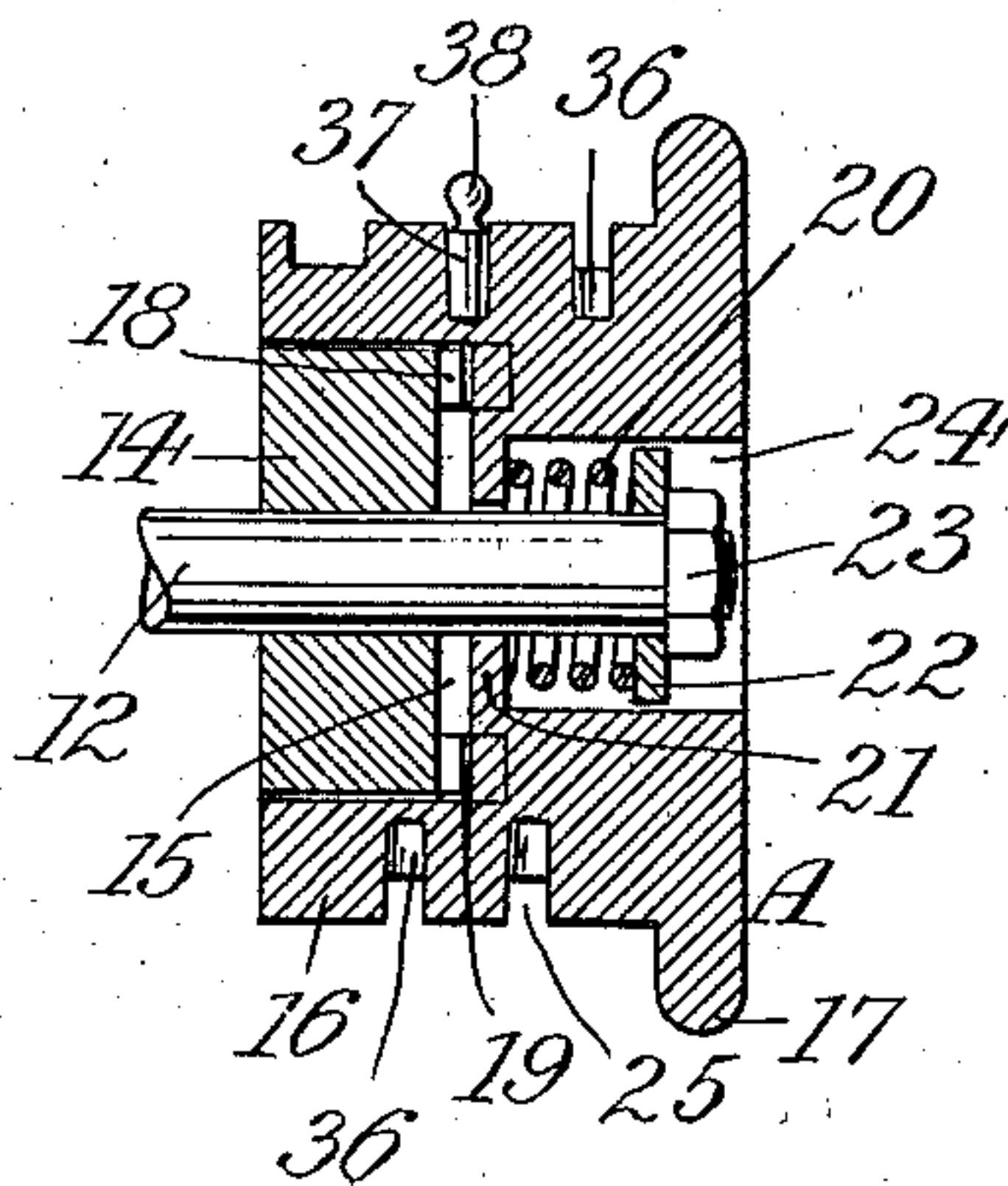


Fig. 4.

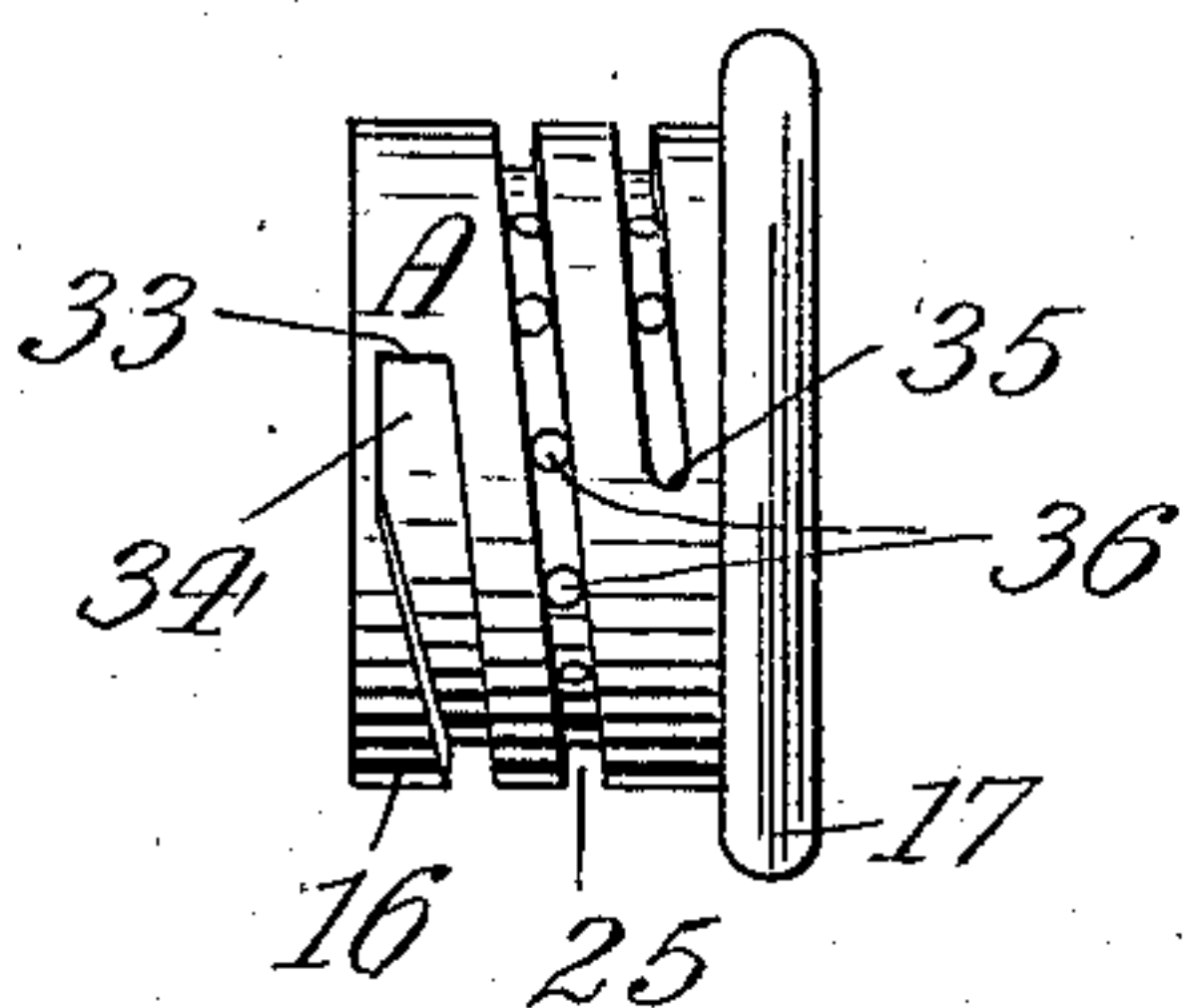


Fig. 5.

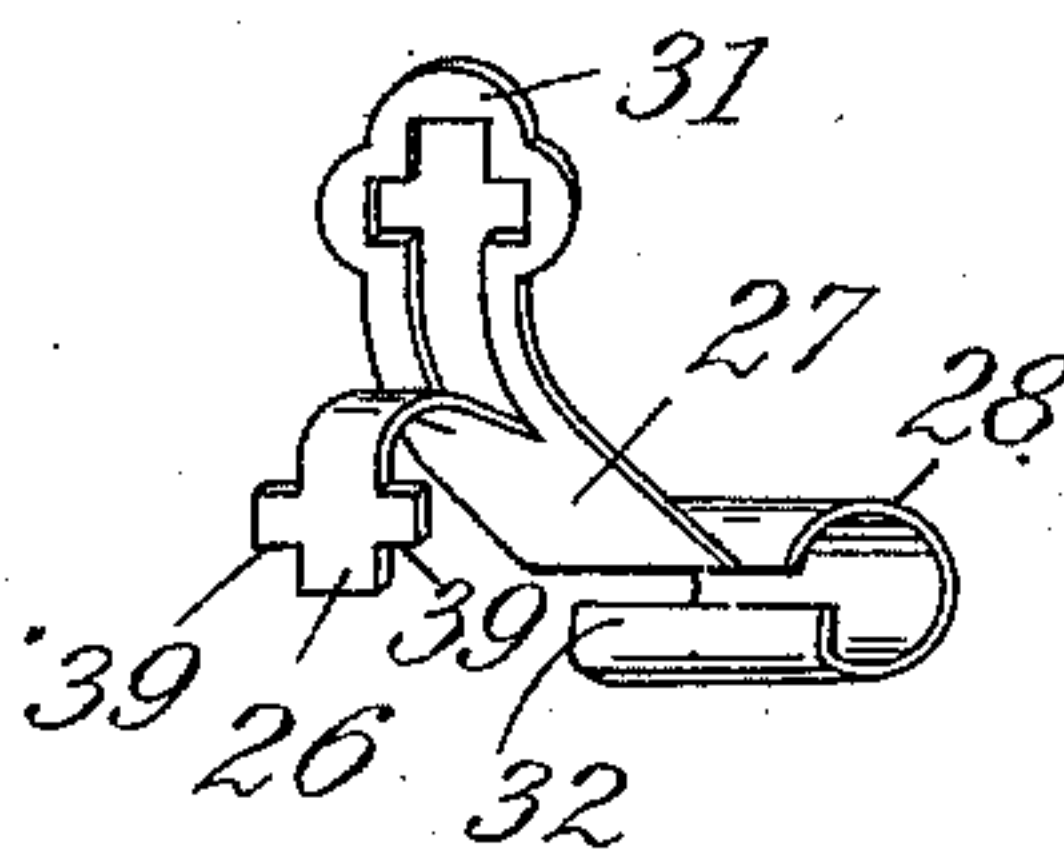
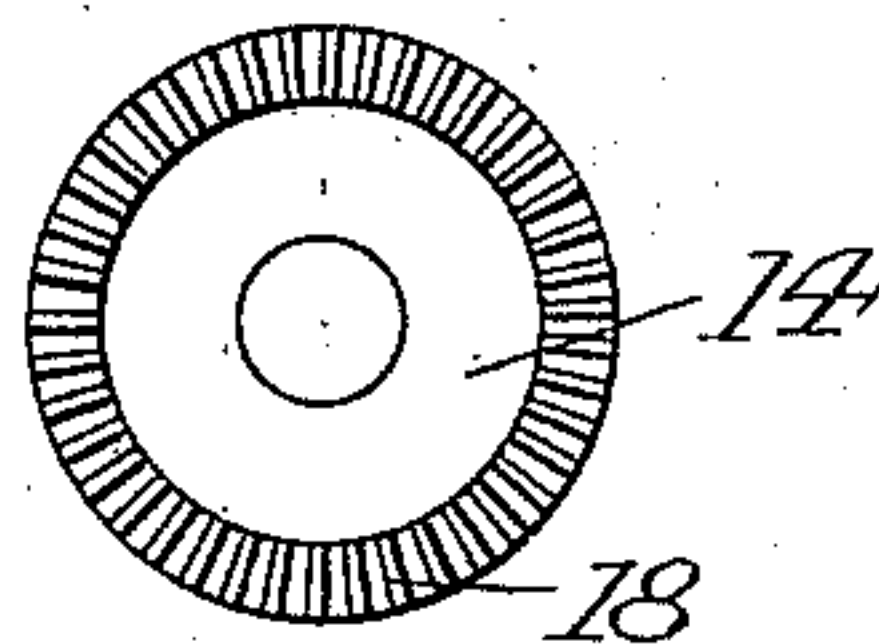


Fig. 6.



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TYPE-WRITER-PLATEN-CHECKING DEVICE.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, ARTHUR E. ZUMPE, a citizen of the United States, residing at Englewood, county of Bergen, and State of New Jersey, have invented a new and Improved Type-Writer-Platen-Checking Device, of which the following is a specification.

This invention relates to a novel attachment for typewriter platens by means of which the advance of the latter and the feed of the paper beyond a desired and predetermined line is automatically checked.

It is desirable that in writing a number of pages, the written matter should terminate at the same line on each page, so that a uniform bottom margin is provided and a neat appearance of the gathered sheets is insured. In order to obtain this desirable result, with the platens hitherto used, the operator had always to bear in mind not to write beyond a certain line. In this way his attention was detracted from the writing operation proper, while quite frequently he would write beyond the desired terminal line, owing to his failure to stop the platen feed at the proper moment.

By my invention, the advance of the platen may be automatically checked at any predetermined point, so as to render it impossible for the operator to write beyond the line selected as the bottom of the page.

In the accompanying drawing: Figure 1 is a front view of part of a platen provided with my improved checking device; Fig. 2 a cross section on line 2—2, Fig. 1; Fig. 3 an enlarged longitudinal section through the knob; Fig. 4 a plan view thereof; Fig. 5 a perspective view of the stop lever, and Fig. 6 a face view of the toothed collar.

The numeral 10 indicates the rotative typewriter platen provided with the conventional feed ratchet wheel 11, the axis 12 of the platen being hung in the carriage frame 13 all as usual. Near its free end, shaft 12 is provided with a relatively fixed collar 14 which is accommodated by a corresponding inner recess 15 of a knob A. The latter is freely rotatable on shaft 12 and is preferably composed of a cylindrical body 16 and an enlarged flanking rim 17, which may be readily grasped by the operator. At its outer face, collar 14 is provided with a series of teeth 18 which are adapted to be engaged by the corresponding teeth 19 of knob A, the parts 14, 16 consti-

tuting respectively fixed and movable coupling members. Teeth 18, 19 are normally maintained in operative engagement by a spring 20, interposed between an inwardly extending flange 21 of knob A and a disk 22 secured to the free end of shaft 12 by a nut 23, said spring, disk and nut being accommodated within an outer recess 24 of the knob.

The cylindrical section 16 of knob A has a peripheral spiral groove 25 which is adapted to be engaged by the hook-shaped end 26 of a stop lever or detent 27. The latter forms part of a split sleeve 28 that slidably encompasses a pin 29 secured to a holder 30 of frame 13. Detent 27 is provided with an upturned finger piece 31, so that hook 26 may be readily brought into or out of engagement with groove 25 by correspondingly turning the detent on pin 29. In order to prevent an accidental disengagement of hook 26 from groove 25 and to maintain the stop lever in its raised position whenever desired, pin 29 is made angular (Figs. 1 and 2) while the free inner edge 32 of the split sleeve 28 is turned slightly inward (Fig. 5); thus providing a springy connection between pin and sleeve.

The length of spiral groove 25 should be such as to permit the rotation of platen 10 to such an extent that a sheet of conventional size may be filled with writing, while leaving the customary margins at top and bottom. If it is desired to write a page, detent 27 is raised, the sheet is applied to platen 10 and knob A is turned forward to rotate said platen until the sheet is in proper position for the starting of the writing. Detent 27 is then swung forward so that hook 26 engages cylinder 16, and knob A is drawn slightly outward to disengage teeth 19 from teeth 18. The knob is then turned backward until hook 26, owing to the springy connection between parts 28, 29, enters groove 25 and abuts against the rear wall 33 of the widened end 34 of said groove, whereupon the knob is released to effect a reengagement between teeth 18, 19. The writing is then started during which operation, platen 10 is intermittently advanced by actuating the customary feed mechanism (not shown) that engages ratchet wheel 11. In this way, knob A will also be rotated, and detent 27 will be gradually moved outward on pin 29 until its hook 26 during the continued rotation of plate 10 abuts against the end 35 of

groove 25. When the operator attempts to again actuate the platen feed mechanism, he will ascertain that the platen cannot be further advanced and he will thus be advised without inspection or other mental effort that the page is full. After throwing back detent 27, the sheet may be removed from the typewriter, whereupon the operation is repeated. Means should further be provided that effect a checking of the paper feed before the detent 27 engages the end 35 of groove 25 so that the device may be set for larger and smaller pages. For this purpose, a plurality of spaced sockets 36 is shown to be formed in the bottom of groove 25 which are adapted for the reception of a plug or stop 37 having grip 38, but it is obvious that other convenient means may be provided for rendering part of groove 25 ineffective without departing from the spirit of my invention. These pockets may be numbered as shown in Fig. 1 to constitute a scale by means of which the number of line spaces may be ascertained through which a rotation of platen 10 may take place before hook 26 will strike stop 37. By selecting the proper socket 36 for plug 37 the device may thus be set to any desired number of lines. To prevent hook 26 from entering the open sockets 36, the former is provided with a pair of shoulders 39 adapted to ride on the periphery of cylinder 16.

It will be seen that by my invention, the writing may be automatically stopped at any desired distance from the bottom of the page, thus obviating frequent inspection by the operator and insuring neatness and uniformity in the filled pages.

I claim:

1. In a device of the character described, a rotative typewriter platen, a shaft carrying the same, a knob on said shaft, said knob being adapted to be either coupled to the shaft or to be rotated independently therefrom, and adjustable means cooperating with the knob for checking the rotation thereof.

2. In a device of the character described, a rotative typewriter platen, a shaft carrying the same, a knob axially displaceable on the shaft and adapted to be coupled thereto, said knob constituting a handle for manually operating the platen, a spring that tends to maintain the knob and shaft in operative engagement, and means cooperating with said knob for checking the rotation thereof.

3. In a device of the character described, a rotative typewriter platen, a shaft carrying the same, a knob axially displaceable on the shaft and having a spiral groove, said knob constituting a handle for manually operating the platen, coupling means on said knob and shaft, a spring that tends to close

said coupling means, and a detent adapted to engage said groove.

4. In a device of the character described, a rotative typewriter platen, a shaft carrying the same, a knob axially displaceable on the shaft and having a circumferential spiral groove, said knob constituting a handle for manually operating the platen, coupling means on said knob and shaft, a spring that tends to close said coupling means, and a detent removably engaging said groove.

5. In a device of the character described, a rotative typewriter platen, a shaft carrying the same, a knob axially displaceable on the shaft and having a circumferential spiral groove, said knob constituting a handle for manually operating the platen, coupling means on said knob and shaft, a spring that tends to close said coupling means, and a slidable stop lever removably engaging said groove.

6. In a device of the character described, a rotative typewriter platen, a shaft carrying the same, a knob axially displaceable on the shaft and having a circumferential spiral groove, said knob constituting a handle for manually operating the platen, coupling means on said knob and shaft, a spring that tends to close said coupling means, a pin and a stop lever slidable on said pin and adapted to engage said groove.

7. In a device of the character described, a rotative typewriter platen, a shaft carrying the same, a knob which is normally coupled to said shaft and has a circumferential spiral groove, said knob constituting a handle for manually operating the platen, an adjustable stop in said groove, and a detent removably engaging said groove and stop.

8. In a device of the character described, a platen, a shaft carrying the same, a toothed collar on said shaft, a toothed spring-influenced knob adapted to engage the collar, and a detent adapted to engage the knob.

9. In a device of the character described, a platen, a shaft carrying the same, a toothed collar on said shaft, a toothed spring-influenced knob adapted to engage the collar and having a spiral groove, and a detent adapted to engage said groove.

10. In a device of the character described, a platen, a shaft carrying the same, a toothed collar on said shaft, a toothed spring-influenced knob adapted to engage the collar and having a socketed spiral groove, a stop adapted to be fitted into either of the groove-sockets, and a detent adapted to engage said groove and stop.

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Witnesses:

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