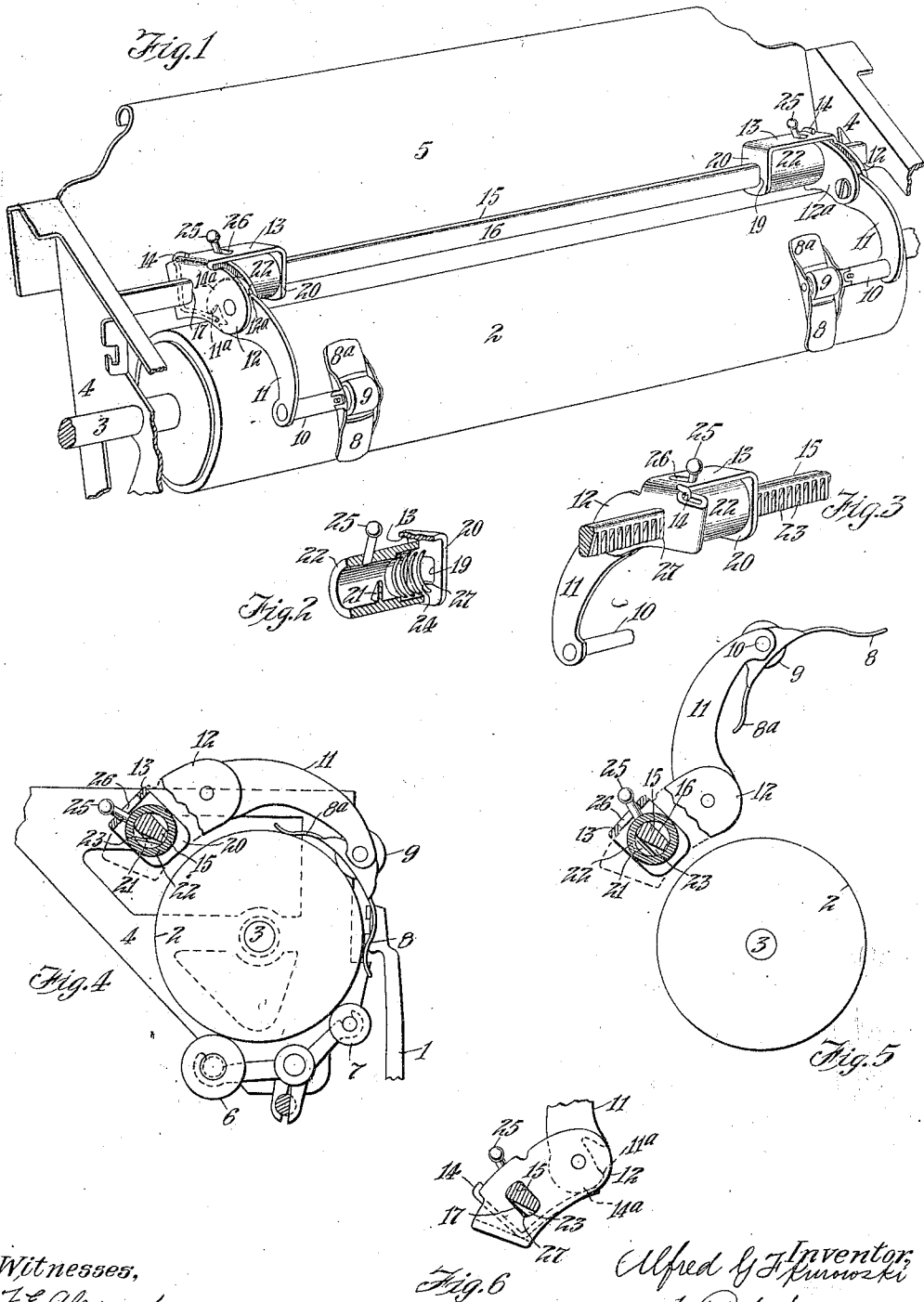


A. G. F. KUROWSKI.
TYPE WRITING MACHINE.
APPLICATION FILED NOV. 1, 1910.

982,183.

Patented Jan. 17, 1911.



Witnesses,
F. C. Alexander
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Fig. 6
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UNITED STATES PATENT OFFICE.

ALFRED G. F. KUROWSKI, OF NEW YORK, N. Y., ASSIGNOR TO UNDERWOOD TYPE-WRITER COMPANY, OF NEW YORK, N. Y., A CORPORATION OF DELAWARE.

TYPE-WRITING MACHINE.

982,183.

Specification of Letters Patent. Patented Jan. 17, 1911.

Application filed November 1, 1910. Serial No. 590,118.

To all whom it may concern:

Be it known that I, ALFRED G. F. KUROWSKI, a citizen of the United States, residing in the borough of Brooklyn, city of New York, in the county of Kings and State of New York, have invented certain new and useful Improvements in Type-Writing Machines, of which the following is a specification.

This invention relates to locking means to retain paper guiding devices where adjusted along a typewriter platen, and constitutes an improvement upon a portion of the device disclosed in the application of Frank A. Young, filed October 7, 1910, Serial No. 585,752. In said application a paper guide and roll are mounted on an arm hinged to a slidable mount or clip, the latter being fitted to a guide rod and the guide being pressed toward the platen by a spring.

I have provided an improved positive lock to hold the bracket where adjusted; said lock comprising a dog arranged internally of a barrel that is journaled on the rod and confined between arms formed on the mount, said tooth engaging a rack formed on the rod. A finger piece on the barrel turns the same to release the dog. The rod is oblong in cross section to fit guide holes in the mount, so that the latter may not turn; while said barrel fits on the rod in a manner to be capable of rotation thereon.

Other objects and advantages will herein-after appear.

In the accompanying drawings, Figure 1 is a perspective, showing the invention applied to the platen frame of an Underwood writing machine. Fig. 2 is a section through the locking barrel. Fig. 3 is a rear perspective of a paper finger, showing the guide rod and rack. Fig. 4 is a cross section, showing the mount locked to the guide rod. Fig. 5 shows the mount released. Fig. 6 is a detail, showing the mount and guide rod.

Types 1 strike a platen 2 on an axle 3 journaled in the ends 4 of a platen frame, said ends connected by a paper shelf 5. The sheets are dropped between the paper shelf and platen, and are fed beneath the platen by the usual rear and front feed rolls 6 and 7. After leaving the front guide roll 7, the leading edge of the sheet rises and is caught by a downwardly-extending finger 8, which conducts the sheet up in front of the platen and under a feed roll 9 running on the

platen, after which a rearwardly-extending finger 8^a, directs the rising sheet backwardly over the platen.

The paper guides and holders are preferably arranged in pairs, one for each side edge of the sheet, the guide fingers 8¹, 8^a and roll 9 being pivoted on inwardly projecting pins 10 carried by arms 11 each pivoted between ears or arms 12, 12^a, preferably integral with a sliding clip, bracket or mount 13. A spring 14 on the mount bears against a projection 11^a formed on the inner end of the arm 11, to press the roll 9 normally against the platen, (Fig. 1). When the arm 11 is swung up out of the way, (Fig. 6) the spring engages a dwell portion 14^a to hold the guide fingers and roll idle. The mounts 13 are each supported for adjustment to different widths of sheets, on a guide rod 15 extending between the platen ends, said rod passing through bearings formed in the arms 12, 12^a and through an aperture 19 in a steadying arm 20 (forming part of the mount) parallel with the arms 12, 12^a. The aperture 17 in arm 12 and aperture 19 in the arm 20 may conform to the contour of the rod which may be flattened at 16, to prevent the mount from turning thereon. This form may be produced by cutting away opposite sides of a cylindrical rod, so that it will be oblong in cross section, as illustrated. The mounts are each positively locked where adjusted, by an internal dog 21 projecting from the inner side of a collar or barrel 22 journaled on the cylindrical sides of the rod 15, and confined between the inner arm 12^a and the steadying arm 20. Said dog 21 is held in engagement with a rack 23 on the rod, by a spring 24, coiled around the rod within the barrel, its ends engaging the barrel and the bearing 20 respectively. By pressing forwardly on a finger piece 25 projecting from the barrel up through a slot 26 in the mount 13, the barrel 22 is turned to release the dog 21 from the rack 23 and enable the guide fingers and roll to be adjusted along the rod 15. The releasing pressure on the finger piece causes the latter to bear against one end of the slot 26 and thereby rock the mount slightly forward about the rod (see Fig. 6), to lift the corners 27 of the angular apertures 17 and 19 off the rack teeth 23 (which are cut in one corner of the rod 15), to avoid noise from the teeth in shifting the mount along the

rack; the mount fitting the rod with sufficient looseness for this purpose. Upon release of the finger piece 25, spring 24 snaps the dog 21 back into mesh with the rack.

5 Having thus described my invention, I claim:

1. In a typewriting machine, the combination with a platen frame, a platen, a guide rod, and a mount adjustable along the rod and having paper guiding and holding means, of a rack on the rod, a barrel connected to the mount and turning on the rod, a dog carried by the barrel to engage the rack, and a finger piece to control the engagement of the dog and rack.

2. In a typewriting machine, the combination with a platen frame, a platen, a guide rod, a mount having arms and adjustable on the rod, and paperholding and guiding means supported by the mount, of a barrel loosely mounted on the rod between the arms, a dog in the barrel, a rack on the rod normally engaged by the dog, and a finger piece to release the dog from the rack.

3. In a typewriting machine, the combination with a platen frame, a platen, a guide rod, and a mount adjustable along the rod and having paper guiding and holding means, of a rack on the rod, a barrel connected to the mount and turning on the rod, a dog carried by the barrel to engage the rack, and a finger piece to control the engagement of the dog and rack, said finger piece extending through a slot in the mount to limit the rotation of the barrel.

4. In a typewriting machine, the combination with a platen frame, a platen, a guide rod, and a mount adjustable along the rod and having paper guiding and holding means, of a rack on the rod, a barrel connected to the mount and turning on the rod, a dog carried by the barrel to engage the rack, a spring to hold the dog in engagement with the rack, and a finger piece to turn the barrel to release the dog from the rack.

5. In a typewriting machine, the combination with a platen frame and a platen, of a cylindrical guide rod having at least one flattened side, a mount adjustable along the rod, a barrel connected to the mount and journaled on the rod, a dog on the barrel, a rack cut in the rod at one angle formed by the juncture of the flat face with a curved face, said dog normally engaged with said rack, and a finger piece to turn the barrel and to tilt the mount on the rod to release the dog and mount from the rack.

6. In a typewriting machine, the combina-

tion with a platen frame, a platen and a guide rod, of a one-piece mount comprising an arm bent at about right angles to the body of the mount, a second arm on the opposite end of the mount and bent about parallel with the first arm, the rod passing through the arms, paper-holding and guiding mechanism supported by the mount, a barrel journaled on the rod between the arms, a dog on the barrel to engage a rack on the rod, and means to release the dog from the rack.

7. In a typewriting machine, the combination with a platen frame, a platen and a guide rod secured to the frame, of a mount slidable axially on the rod but held thereby against rotation, and having paper guiding and holding means, a barrel or collar rotatable on the rod and connected to the mount to slide therewith, the barrel having a dog, and a rack on the rod engaged by the dog to hold the mount where adjusted.

8. In a typewriting machine, the combination with a platen frame and a platen, of a non-cylindrical guide rod, a mount fitted to and slidable along the rod and having paper guiding and holding means, a barrel or collar rotatably mounted on the rod and connected to slide with the mount, a dog within the barrel, and a rack on one corner of the rod engaged by the dog to hold the mount where adjusted.

9. In a typewriting machine, the combination with a platen frame, a platen and a guide rod secured to the frame, of a mount slidable axially on the rod but held thereby against rotation, and having paper guiding and holding means, a barrel or collar rotatable on the rod and connected to the mount to slide therewith, the barrel having a dog, a rack on the rod engaged by the dog to hold the mount where adjusted, and means to turn the barrel relatively to the rod to release the dog.

10. In a typewriting machine, the combination with a platen frame, a platen and a guide rod, of a mount slidable along the rod and held thereby against rotation, and having paper-holding and guiding means, a barrel or part rotatable on the rod and connected to slide with the mount, a dog carried by the barrel, a rack on the rod engaged by the dog to hold the mount where adjusted, and a spring to hold the dog in engagement with the rack.

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Witnesses:

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