J. C. McLAUGHLIN.

TYPE WRITING MACHINE.

APPLICATION FILED MAY 7, 1909.

928,877.

Patented July 20, 1909.

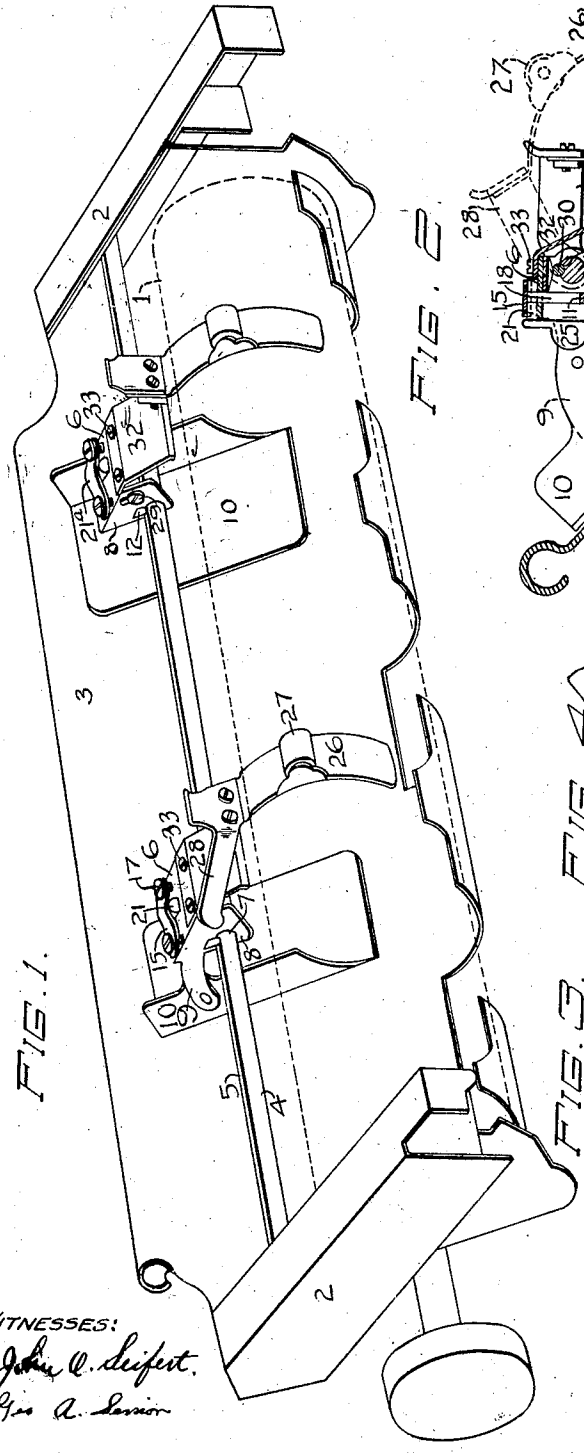

FIG. 1.

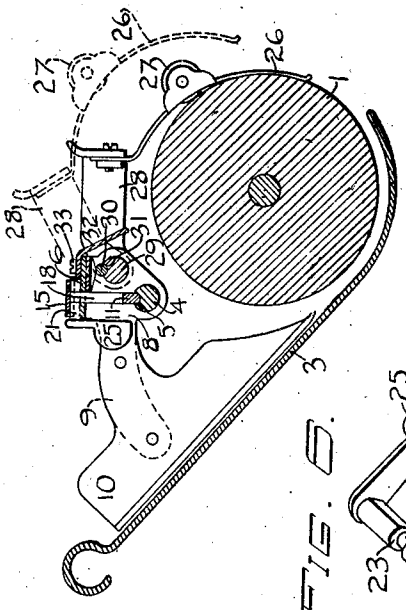

FIG. 2.

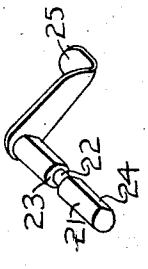

FIG. 6.

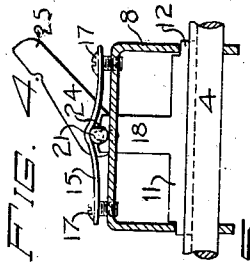

FIG. 4.

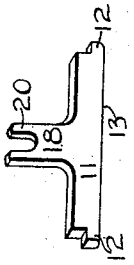

FIG. 5.

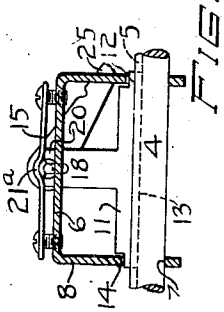

FIG. 3.

WITNESSES:

John C. Seifert.

Geo. A. Senior

INVENTOR:

John C. McLaughlin.

By C. C. Stickney.

ATTORNEY.

UNITED STATES PATENT OFFICE.

JOHN C. McLAUGHLIN, OF JERSEY CITY, NEW JERSEY, ASSIGNOR TO UNDERWOOD TYPEWRITER COMPANY, OF NEW YORK, N. Y., A CORPORATION OF NEW JERSEY.

TYPE-WRITING MACHINE.

No. 928,877. Specification of Letters Patent. Patented July 20, 1909.

Application filed May 7, 1909. Serial No. 494,637.

To all whom it may concern:

Be it known that I, JOHN C. McLAUGHLIN, a citizen of the United States, residing in Jersey City, in the county of Hudson and State of New Jersey, have invented certain new and useful Improvements in Type-Writing Machines, of which the following is a specification.

This invention relates to paper guiding or controlling devices of typewriting machines, and particularly to devices of this kind which are adjustable along the platen.

The present invention is in the nature of an improvement on the devices shown in Patent No. 890,372 to R. J. Orr, dated June 9, 1908.

One of the objects of the present invention is to provide improved means for connecting the gage for the side edge of the paper at the introductory side of the platen with the paper-guiding finger which extends around the front of the platen, whereby both may be adjusted together along the platen, while the paper-guiding finger may be turned up when desired.

Upon a rod, which is fixed in the platen frame and extends along the platen, is mounted a carrier; and to this carrier is attached the gage for the side edge of the paper; a hinged pintle being mounted in the carrier, and a front paper-guiding finger being fixed upon said pintle. The rod is longitudinally grooved, and the carrier is provided with a feather or spline, which is normally pressed by a spring in said groove, which releasably locks or binds the carrier against accidental displacement along the rod. The finger-piece is provided with means for relieving pressure of the spring, so as to release the carrier for free adjustment.

In the accompanying drawings, Figure 1 is a perspective view of the platen frame of an Underwood typewriting machine, showing the invention applied thereto. Fig. 2 is a sectional end view of the platen and other parts. Figs. 3 and 4 are sectional front views of the carrier, showing it in its locked and unlocked positions respectively. Figs. 5 and 6 are perspective views of the feather and cam.

The platen 1 is journaled in a platen frame 2 having an inclined paper shelf 3. To the ends of the platen frame is fixed a rod 4 extending along the platen and having a longitudinal groove 5. Slidably mounted on the bar 4 is a yoke 6, which carries the side gage, the front paper guiding finger, and the locking and unlocking mechanism, the bar passing through openings 7 formed in the sides 8 of the carrier.

Extending back from one of the sides 8 is an arm 9, to which is attached a side gage 10 for the side edge of the sheet of paper as it is being introduced into the machine to pass forwardly around the under side of the platen.

A feather or spline 11 is mounted in the carrier to be capable of a slight vertical movement within the groove 5 of the rod 4. The spline has ends 12 fitting in openings 14 in the ends 8 of the carrier 6. The lower edge of the main portion 13 of the spline engages the groove 5, and prevents the carrier 6 from revolving.

A plate spring 15, secured at each end to the top of the carrier 6 by screws or rivets 17, bears upon the end of the vertical stem 18 of the plunger, which protrudes up through the top of the carrier 6, and presses the spline down into the groove 5, causing it to bind or lock the carrier 6 to the rod 4.

The top 18 of the spline is slotted at 20, Fig. 4, to receive a reduced portion 22 of a cam pintle 21, as shown at Fig. 5. The pintle 21 is free to revolve, but prevented from transverse movement by the shoulders 23 of the cam pintle.

The cam pintle 21 is confined between a fluted portion 21^a of the spring 15 and the top of the carrier 6, and may be turned to lift the spring to release the carrier. Said pintle is of circular section and provided with a flat portion 24, which normally rests upon the top of the carrier when the latter is locked.

A handle 25 is provided on the end of the cam pintle 21, to turn and raise it to the position shown at Fig. 4. This relieves the pressure on the spline 11, and allows the carrier 6 to slide freely along the rod 4.

On turning the handle 25 down to the position shown at Fig. 3, the pintle 21 is again let down, until the flat or dwell portion 24 rests on the top of the carrier 6, allowing the spring to press on the pintle to cause it to lock the carrier.

A front guiding finger 26, carrying a roller 27, which guides the paper on the platen is attached to an arm 28, which is connected to a pintle 29, journaled in the sides 8 of the carrier 6. This guiding finger is releasably held against the platen 1 by means of a spring-

pressed roll 30 fitting in a groove 31 formed in the pintle 29. The front guiding finger is thus hinged or swiveled on a separate bearing from the rod 4, to be capable of turning movement independently of the side gage 10.

An inclined plate or apron 32 may be secured to the front of the carrier by screws 33, to guide the paper up as it leaves the platen 1.

Having thus described my invention, I claim:

1. In a typewriting machine, the combination of a platen, a platen frame, a grooved rod fixed in the platen frame, a carrier slidably mounted on said rod, a front paper-guiding finger attached to a pintle journaled in said carrier, and means to bind said carrier to aforesaid bar; said binding means comprising a spline mounted in said carrier to engage said groove to lock the carrier, said spline capable of movement in the carrier, having one end slotted and protruding through the top of said carrier, and abutting against a spring.

2. In a typewriting machine, the combination of a platen, a platen frame, a grooved rod fixed in the platen frame, a carrier slidably mounted on said rod, a front paper-guiding finger attached to a pintle journaled in said carrier, means to bind said carrier to aforesaid bar; said binding means comprising a spline mounted in said carrier to engage said groove to lock the carrier, said spline capable of movement in the carrier, having one end slotted and protruding through the top of said carrier, and abutting against a spring, and a cam revolubly mounted in a slot formed in the top of the spline and held between the top of the carrier and the under surface of the spring, and provided with a handle, to raise the spring and relieve the pressure on the spline.

3. In a typewriting machine, the combination of a platen, a platen frame, a rod fixed in the platen frame, a carrier slidably mounted on said rod, a gage for the side edge of the sheet connected to said carrier, a front paper-guiding finger connected to a pintle mounted in said carrier, a spline capable of movement in said carrier, and caused by a spring to bite the surface of a groove in the rod to bind the carrier; a slot being formed in the top of the spline which protrudes through the top of the carrier, a cam pintle contracted to fit in said slot, and capable of revolution therein, said cam pintle being confined between a spring and the top of the carrier and being formed with a flat portion which normally lies on the top of the carrier to allow the spring to press on the cam, and a handle on said cam pintle.

4. In a typewriting machine, the combination of a platen, a platen frame, a rod fixed in the platen frame, a carrier slidably mounted on said rod, a paper-guiding member hinged to said carrier, a locking member mounted in said carrier and caused by a spring to bite the rod and thereby bind the carrier thereto, and a cam member to act on the spring to relieve the pressure and allow the carrier and its connected member free movement along the bar.

5. In a typewriting machine, the combination of a platen, a platen frame, a bar fixed in the platen frame, a carrier slidably mounted on said bar, a side gage on said carrier, a front paper-guiding member swiveled to said carrier, a locking member mounted on said carrier, and a cam to lock and unlock the carrier to the rod.

6. In a typewriting machine, the combination with a platen and a platen frame, of a rod fixed to the platen frame and extending along the platen and provided with a longitudinal groove, a carrier sliding upon the rod and having a key or spline to engage said groove, means to bind said spline in the groove and thereby lock the carrier against displacement along the rod, a finger-piece having means to release said spline, and a paper-guiding or controlling device mounted upon said carrier.

7. In a typewriting machine, the combination with a platen and a platen frame, of a rod fixed to the platen frame and extending along the platen and provided with a longitudinal groove, a carrier sliding upon the rod and having a key or spline to engage said groove, said carrier in the form of a yoke having its side members perforated to fit upon said rod, a spring to press said spline into said groove, and a rotatable cam mounted upon said yoke to release said spring and provided with a finger piece.

8. In a typewriting machine, the combination with a platen and a platen frame, of a rod fixed to the platen frame and extending along the platen and provided with a longitudinal groove, a carrier sliding upon the rod and having a key or spline to engage said groove, said carrier in the form of a yoke having its side members perforated to fit upon said rod, a spring to press said spline into said groove, and a rotatable cam mounted upon said yoke to release said spring and provided with a finger piece; said spline being loosely confined between said side members of the yoke and having a part projecting up through the top of the yoke to be engaged by said spring.

9. In a typewriting machine, the combination with a platen and a platen frame, of a rod fixed to the platen frame and extending along the platen and provided with a longitudinal groove, a carrier sliding upon the rod and having a key or spline to engage said groove, said carrier in the form of a yoke having its side members perforated to fit upon said rod, a spring to press said spline into said groove, and a rotatable cam mounted upon said yoke to release said spring and

provided with a finger piece; said spline being loosely confined between said side members of the yoke and having a part projecting up through the top of the yoke to be engaged by said spring; said spring in the form of a cap attached to said yoke and formed to hold the cam in position.

10. In a typewriting machine, the combination with a platen and a platen frame, of a rod fixed to the platen frame and extending along the platen and provided with a longitudinal groove, a carrier sliding upon the rod and having a key or spline to engage said groove, said carrier in the form of a yoke having its side members perforated to fit upon said rod, a spring to press said spline into said groove, and a rotatable cam mounted upon said yoke to release said spring and provided with a finger piece; said spline being loosely confined between said side members of the yoke and having a part projecting up through the top of the yoke to be engaged by said spring; said spring in the form of a cap attached to said yoke and formed to hold the cam in position; said paper-guiding device being in the form of a finger fixed to a pintle mounted in said side members.

11. In a typewriting machine, the combination with a platen and a platen frame, of a rod mounted on the platen frame and extending along the platen, a carrier slidably mounted on said rod, a paper-guiding finger upon said carrier, a clamp to bear upon said rod, a cam rotatable in a slot formed in said clamp and held between the top of the carrier and a spring which is mounted upon the carrier, and a handle for said cam to raise the spring and relieve the pressure on the clamp.

12. In a typewriting machine, the combination with a platen and a platen frame, of a rod mounted in the platen frame and extending along the platen, a carrier sliding upon the rod, a spring upon said carrier, means operated by said spring to clamp the carrier to the rod, a cam provided with a finger-piece to lift said spring and release the carrier, and a paper-guiding or controlling device mounted upon said carrier.

13. In a typewriting machine, the combination with a platen and a platen frame, of a rod mounted in the platen frame and extending along the platen, a carrier sliding upon the rod, a spring upon said carrier, means operated by said spring to clamp the carrier to the rod, a cam provided with a finger-piece to lift said spring and release the carrier, and a paper-guiding or controlling device mounted upon said carrier; said spring-releasing device in the form of a pintle fitting in a recess in the spring and having a flat side to permit it to drop and allow the spring to act upon said clamping means.

14. In a typewriting machine, the combination with a platen and a platen frame, of a grooved rod mounted on the platen frame and extending along the platen, a carrier mounted upon said grooved rod to slide therealong, a feather or spline upon said carrier to engage the groove in the rod, a spring to press the spline into the groove to bind the carrier against movement along the rod, a finger-piece having means to relieve the pressure of said spring on said spline, and paper-guiding means upon said carrier.

JOHN C. McLAUGHLIN.

Witnesses:
JOHN O. SEIFERT,
K. FRANKFORT.