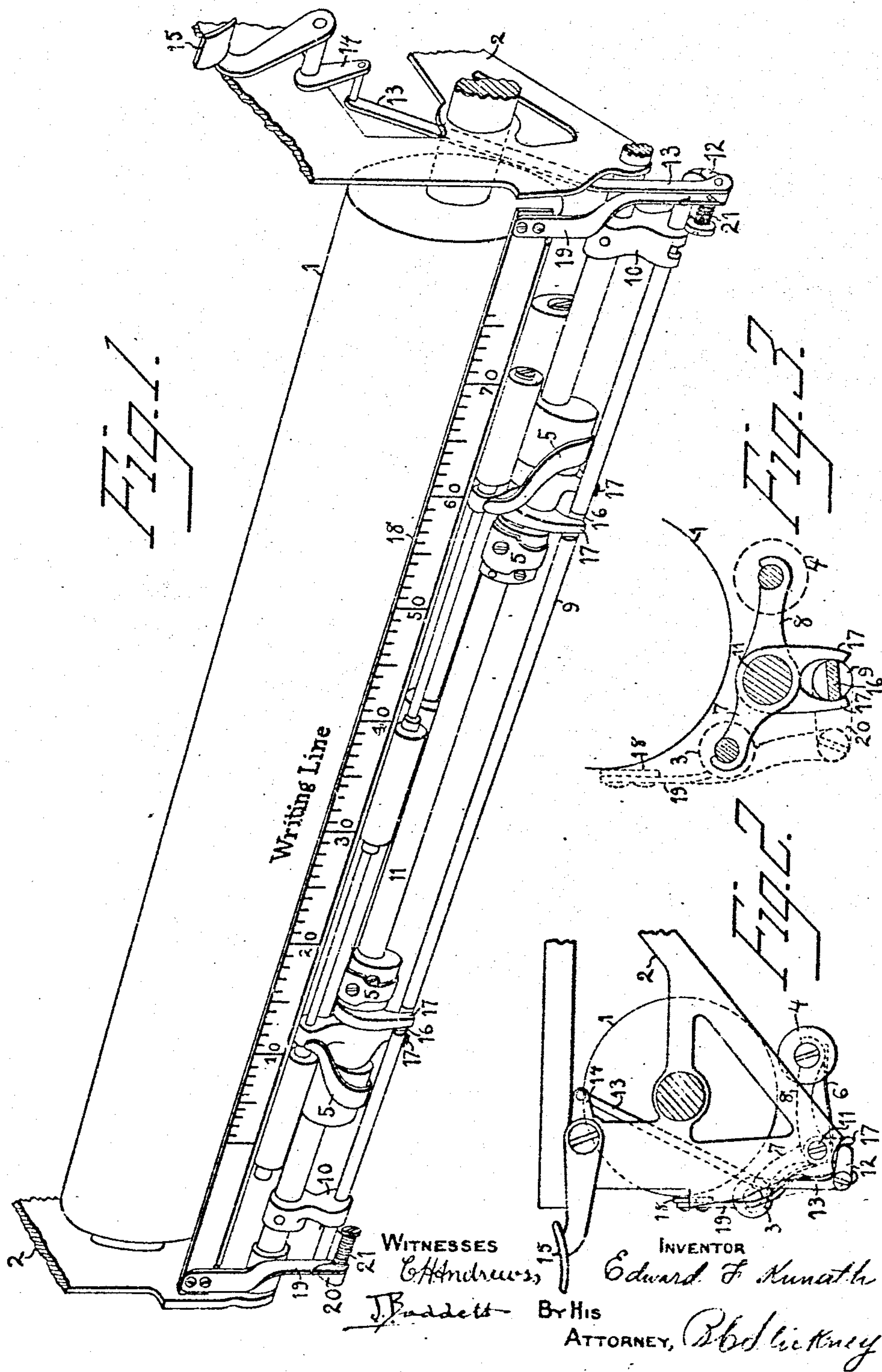


No. 845,240.

PATENTED FEB. 26, 1907.

E. F. KUNATH.
TYPE WRITING MACHINE.
APPLICATION FILED OCT. 27, 1905.



UNITED STATES PATENT OFFICE.

EDWARD F. KUNATH, OF JERSEY CITY, NEW JERSEY, ASSIGNOR TO UNDERWOOD TYPEWRITER COMPANY, OF NEW YORK, N. Y., A CORPORATION OF NEW JERSEY.

TYPE-WRITING MACHINE.

No. 845,240.

Specification of Letters Patent.

Patented Feb. 26, 1907.

Application filed October 27, 1905. Serial No. 284,690.

To all whom it may concern:

Be it known that I, EDWARD F. KUNATH, 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 the platen-scales of type-writing machines, and especially to those in which the writing is always in sight of the operator.

The object of the invention is to provide a simple, readily-applied, inexpensive, and efficacious means for moving the platen-scale to and away from the writing-line, and especially to simplify the operation.

One of the principal functions of the platen-scale is to serve as a straight-edge by which to adjust the paper upon the platen. In order to facilitate the adjustment of the paper, the usual pressure-rolls which run upon the platen are cast off by means of a release-key. I contrive to connect the platen-scale to the release-key, so that when the latter is operated to free the paper the scale is brought exactly to the writing-line, whereby the paper may be accurately adjusted, and when the pressure-rolls are restored to working positions the scale is moved away from the writing-line, so that it may not be struck by the types.

In the accompanying drawings, Figure 1 is a perspective view of the carriage of the well-known front-strike "Underwood" type-writing machine, showing my improvements applied thereto, the scale being depressed below the writing-line, so as to be out of the way of the types. Fig. 2 is a side elevation showing the pressure-rolls released and the scale raised to the writing-line. Fig. 3 illustrates the manner in which the pressure-rolls are mechanically detained in released positions.

In said machine the types strike upon the front side of a revoluble cylindrical platen 1, which is journaled in a frame comprising end plates 2 and is provided with sets of front and rear pressure-rolls 3 4. Springs 5 6, acting upon arms 7 8, normally press said rolls against the platen. The release of the rolls is effected by a rock-shaft 9, extending along the platen and journaled in fixed brackets 10, depending from a rod 11, which connects said end plates 2. Said rock-shaft 9 has a crank-

arm 12, connected by a link 13 to a lever 14, mounted upon the platen-frame and having a finger-piece 15. When the finger-piece is depressed, the link 13 is raised and the shaft 9 rocked, cams 16, formed upon said rock-shaft, acting upon arms 17, rigid with the arms 7 8, so that the latter are moved away from the platen, thereby releasing the rolls, Fig. 2. At this time the arms 17 are in contact with cylindrical portions of the shaft 9, as at Fig. 3, thereby mechanically holding the arms 17 in abnormal positions and permitting the operator to use both hands to adjust the paper. Upon said carriage and along the front of the platen I mount a platen-scale 18, from the ends of which depend fixed arms 19, which at their lower ends are hinged to arms 12 and 20 upon a rock-shaft 9. Said scale is normally far enough below the writing-line, as at Fig. 1, to clear the types; but when said shaft 9 is rocked by the finger-piece 15 the arms 12 20 lift the scale until it coincides with the writing-line, as at Fig. 2. Since the shaft 9 will remain in this position without further attention, as at Fig. 3, the operator can use both hands to adjust the paper to the scale. Preferably springs 21, acting upon the arms 19, press the scale lightly against the platen so as to hold the paper where adjusted until the operator lifts the key 15, thereby bringing the rolls 3 4 into play, such movement, of course, causing the scale to drop to the normal position at Fig. 1.

Variations may be resorted to within the scope of the invention, and portions of my improvements may be used without others—as, for instance, the arms 7 8 and the rolls 3 4 may be omitted, whereby the remainder of the mechanism will serve not only to move the scale up in front of the platen to the writing-line, but also to hold it there mechanically till the operator lifts the key 15.

Having thus described my invention, I claim—

1. In a type-writing machine, the combination with a platen, of a set of pressure-rolls, a pressure-roll-releasing mechanism including a rock-shaft extending along the platen and having arms at its ends, a scale in front of the platen and pivoted at its ends upon said arms, and a spring for pressing said scale toward the platen.

2. In a type-writing machine, the combi-

nation with a platen, of a set of pressure-rolls, a pressure-roll-releasing mechanism including a rock-shaft extending along the platen and having arms, and a scale having at its ends arms which are hinged to said rock-arms.

3. In a type-writing machine, the combination with a platen, of a set of pressure-rolls, a pressure-roll-releasing mechanism including a rock-shaft extending along the platen and having arms, and a scale having at its end arms which are hinged to said rock-arms, and springs at the ends of said scale for pressing the same toward the platen.

4. In a type-writing machine, the combination of a platen, a scale, a rock-shaft extending along the platen and connected at its ends to said scale, to move the same perpendicularly of its length toward and from the printing-point, a finger-piece for operating

said rock-shaft, pressure-rolls running upon the platen, and means to enable said rock-shaft to release said rolls concomitantly with the movement of said scale toward the printing-point.

5. In a type-writing machine, the combination with a platen, of a scale, a rock-shaft extending along the platen and connected at its ends to said scale, to move the same perpendicularly of its length toward and from the printing-point, a finger-piece for operating said rock-shaft, and pressure-rolls released by said rock-shaft; means being provided for mechanically detaining the scale in elevated position and the rolls in released positions.

EDWARD F. KUNATH.

Witnesses:

B. C. STICKNEY,
C. H. ANDREWS.