No. 736,038. PATENTED AUG. 11, 1903.

F. X. WAGNER.

INDICATING DEVICE FOR TYPE WRITING MACHINES.

APPLICATION FILED JUNE 20, 1902.

NO MODEL. 2 SHEETS—SHEET 1.

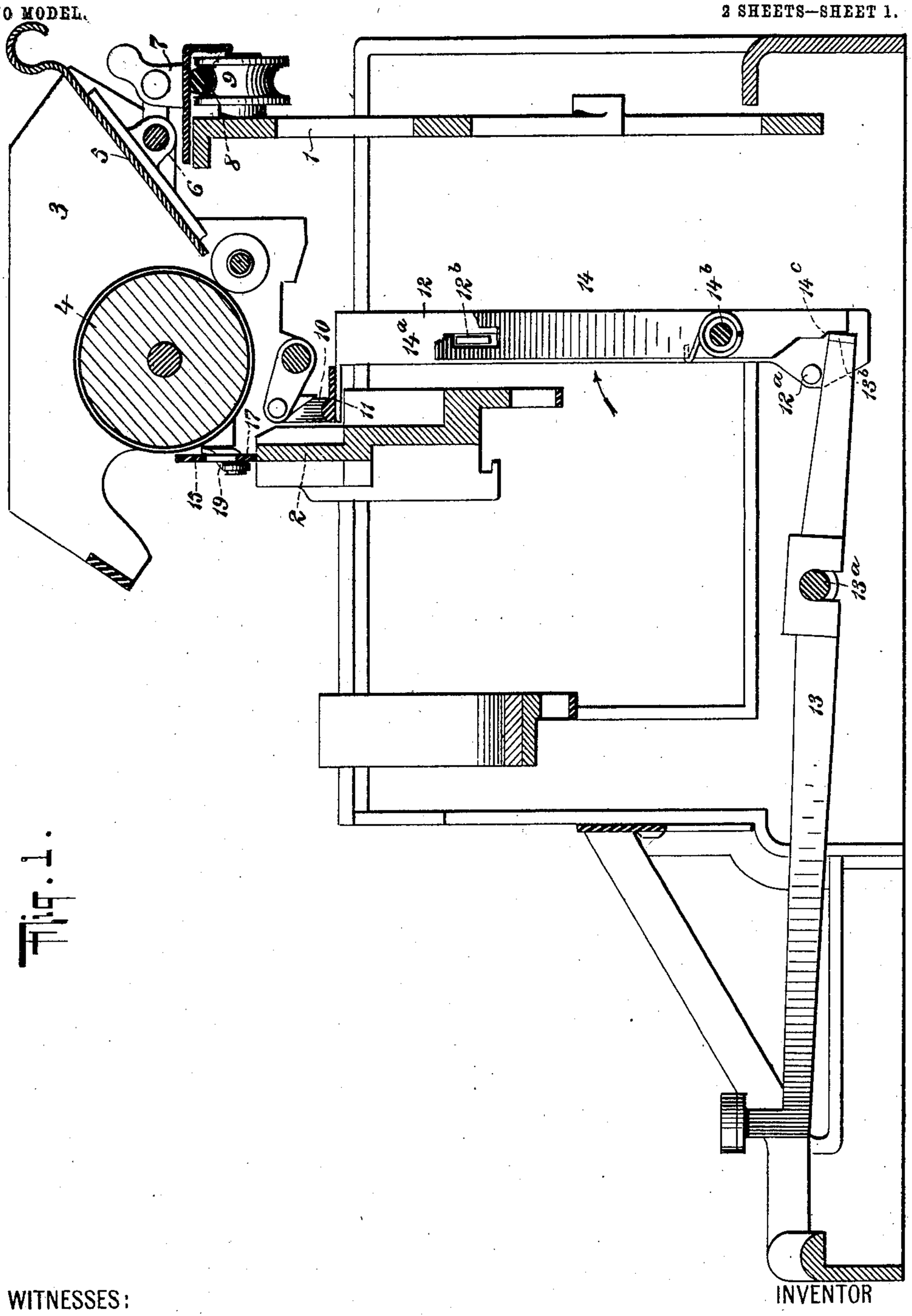

Fig. 1.

WITNESSES:

John A. Kehlenbeck.

John Lotka

INVENTOR

Franz X. Wagner

BY

Briesen & Knauth

ATTORNEYS

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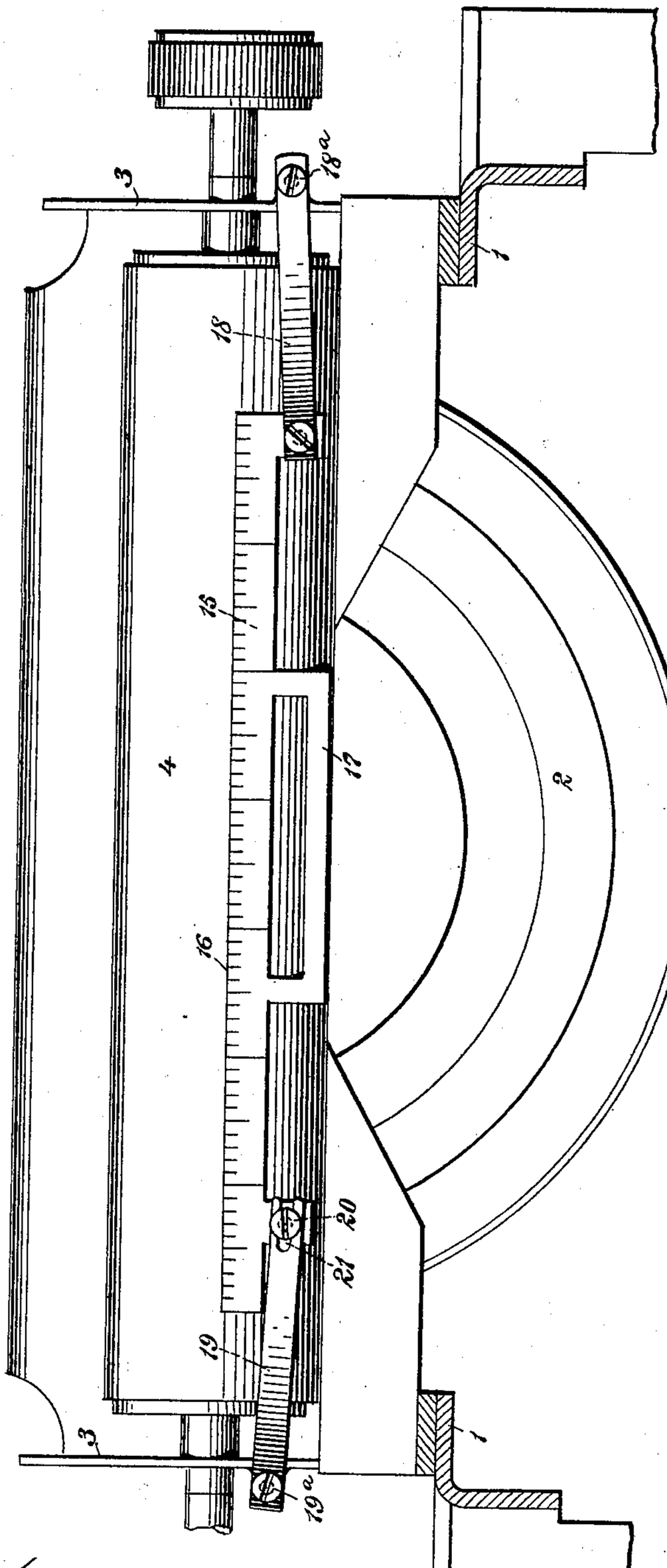
NO MODEL. 2 SHEETS—SHEET 2.

Fig. 2.



WITNESSES:

Theo A. Kehlenbeck.

John Lotka

INVENTOR

Franz X. Wagner

BY

Briesen & Knauth

ATTORNEYS

No. 736,038. Patented August 11, 1903.

UNITED STATES PATENT OFFICE.

FRANZ X. WAGNER, OF NEW YORK, N. Y., ASSIGNOR, BY MESNE ASSIGNMENTS, TO UNDERWOOD TYPEWRITER COMPANY, OF NEW YORK, N. Y., A CORPORATION OF NEW JERSEY.

INDICATING DEVICE FOR TYPE-WRITING MACHINES.

SPECIFICATION forming part of Letters Patent No. 736,038, dated August 11, 1903.

Application filed June 20, 1902. Serial No. 112,457. (No model.)

To all whom it may concern:

Be it known that I, FRANZ X. WAGNER, a citizen of the United States, residing in the borough of Manhattan, city, county, and State of New York, have invented certain new and useful Improvements in Indicating Devices for Type-Writing Machines, of which the following is a specification.

My invention relates to indicating devices for type-writing machines, and has for its object to provide a mechanism for indicating the printing-line to be used on a machine in which the platen is shifted for upper-case or lower-case printing, the said indicating device being so arranged that while connected with the carriage it does not follow the platen in its shifting movement and does not get into the path of the type-bars.

A specific embodiment of my invention is shown in the accompanying drawings, in which—

Figure 1 is a cross-section of a type-writing machine provided with my improvement, and Fig. 2 is a front elevation of a portion of the machine with the frame partly in section.

The framing of the machine is designated as 1.

2 is the type-bar segment.

3 is the carriage, on which is located the platen 4 and the paper-shelf 5. This carriage may, as shown, consist of two sections pivotally connected at 6, so that the front section 3 may be thrown upward on said pivot, while the rear section 7 remains in position. This rear section is provided with a rod or rail 8, which runs on rollers 9, supported on the frame 1. The front portion 3 is provided with rollers 10, which travel on a track 11, the latter being vertically movable for the purpose of shifting the platen from upper-case printing to lower-case printing, and vice versa. Any suitable mechanism is employed for raising and lowering the track 11. For instance, this track is secured to the upper end of an arm 12, having vertical guided movement and provided with a pin 12^a, adapted to be engaged by a shift-key 13, fulcrumed at 13^a. It will be observed in Fig. 1 that in its normal position the shift-key does not engage the pin 12^a, so that upon depressing the shift-key it will first have an independent movement. This independent movement is utilized for the purpose of unlocking it, releasing the arm or slide 12. Normally this slide is locked by means of a finger 12^b, projecting therefrom laterally and overlapped by a hook member 14^a upon a holding member pivoted at 14^b upon the slide 12. This holding member is provided at its lower end with an inclined surface 14^c and is normally thrown by a spring in the direction indicated by the arrow. Upon depressing the shift-key 13 the end 13^b of the shift-key will travel along the inclined surface 14^c and will thus swing the holding member 14 on its pivot in such a manner as to release the projection 12^b of the slide 12. Upon the further movement of the shift-key the latter will engage the pin 12^a and raise the slide 12, together with the track 11 and the carriage portion supported thereby.

In order to indicate the printing-line and to provide means for readily making corrections, I employ an indicating mechanism connected with the carriage. This mechanism comprises a bar 15, which extends substantially throughout the length of the platen and is provided with indications or a scale 16, indicating the letter-spaces. This bar or scale-indicator 15 is provided with a depending portion 17, adapted to bear upon the top of the segment 2 and to slide thereon during the movement of the carriage. One end of the bar 15 has a pivotal connection with a link 18, the outer end of this link being pivoted, as at 18^a, to the platen-carrying portion 3 of the carriage. The opposite end of the bar 15 is connected with a link 19 by pin-and-slot connection 20 21, the other end of said link being fulcrumed upon the carriage, as at 19^a. The weight of the bar 15 is sufficient to always keep it down upon the segment 2, irrespective of the vertical position of the platen—that is to say, irrespective of whether the platen be shifted to write upper or lower case characters. Thus the indicating-bar 15 will be maintained adjacent to the printing-line and at the same distance from the two points at which the upper and lower case

types, respectively, are adapted to strike the paper on the platen whether the platen be shifted for upper or lower case printing. It will of course be understood that the scale 16 is used for properly adjusting the paper on the platen. Thus the scale enables the operator to readily reinsert the paper in the same position it had before being taken out. Furthermore, the scale-indicator is of great advantage when corrections are made. Let us assume, for instance, that the operator discovers an error after two or three words have been written since the place at which the error occurred. By then comparing the position of the character last printed and of the error with reference to the scale 16 the operator can ascertain how many spaces the carriage must be moved back to bring the printing-point in registry with the error. Similarly, when making a number of corrections in the same line, beginning at the left, the scale will enable the operator to tell at a glance how many times the space-key must be operated between two successive corrections.

As the indicator remains stationary when the carriage is shifted, there is no danger of the indicator obstructing the path of the type-bars, as it would be liable to do if it followed the carriage in its transverse or shifting movement.

While I have described only one particular embodiment of my invention, I desire it to be understood that various modifications may be made without departing from the essence of my invention as defined in the appended claims.

What I claim as new, and desire to secure by Letters Patent, is—

1. In a type-writing machine, the combination of a traveling platen, means for moving it in a direction transverse to its length for upper and lower case printing, and an indicator which travels with the platen longitudinally, but remains stationary when the platen moves transversely, so that said indicator will operate in the same manner whether the platen be in the upper or lower case printing position.

2. In a type-writing machine, the combination of a traveling platen, means for moving the platen in a direction transverse to its length for upper and lower case printing, and a scale-indicator which travels with said platen, but remains stationary when the platen is moved transversely.

3. In a type-writing machine, the combination of a traveling platen, means for moving the platen in a direction transverse to its length for upper and lower case printing, a scale-bar operatively connected to travel with said platen in its longitudinal movement, but which remains stationary when the platen is shifted for upper or lower case printing.

4. In a type-writing machine, the combination of a traveling platen, means for moving said platen in a direction transverse to its length, a loosely-supported scale-bar, links for connecting said bar with the platen-carriage, so that the scale-bar will travel with the carriage in its longitudinal movement, and a fixed support on the machine, upon which the scale-bar rests permanently, whether the platen be in the upper or lower case printing position.

5. In a type-writing machine, the combination of a carriage comprising two sections, one of which is relatively stationary while the other is capable of a shifting movement in addition to the traveling movement of the carriage, a platen carried by the second-named section, means for moving the platen relatively to the stationary section of the carriage, to bring the platen into position for upper or lower case printing, and an indicator arranged to move with the carriage, but loosely connected with the platen-carrying portion thereof, so that said indicator will remain stationary when the platen is shifted for upper or lower case printing.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

FRANZ X. WAGNER.

Witnesses:
JOHN LOTKA,
EUGENE EBLE.