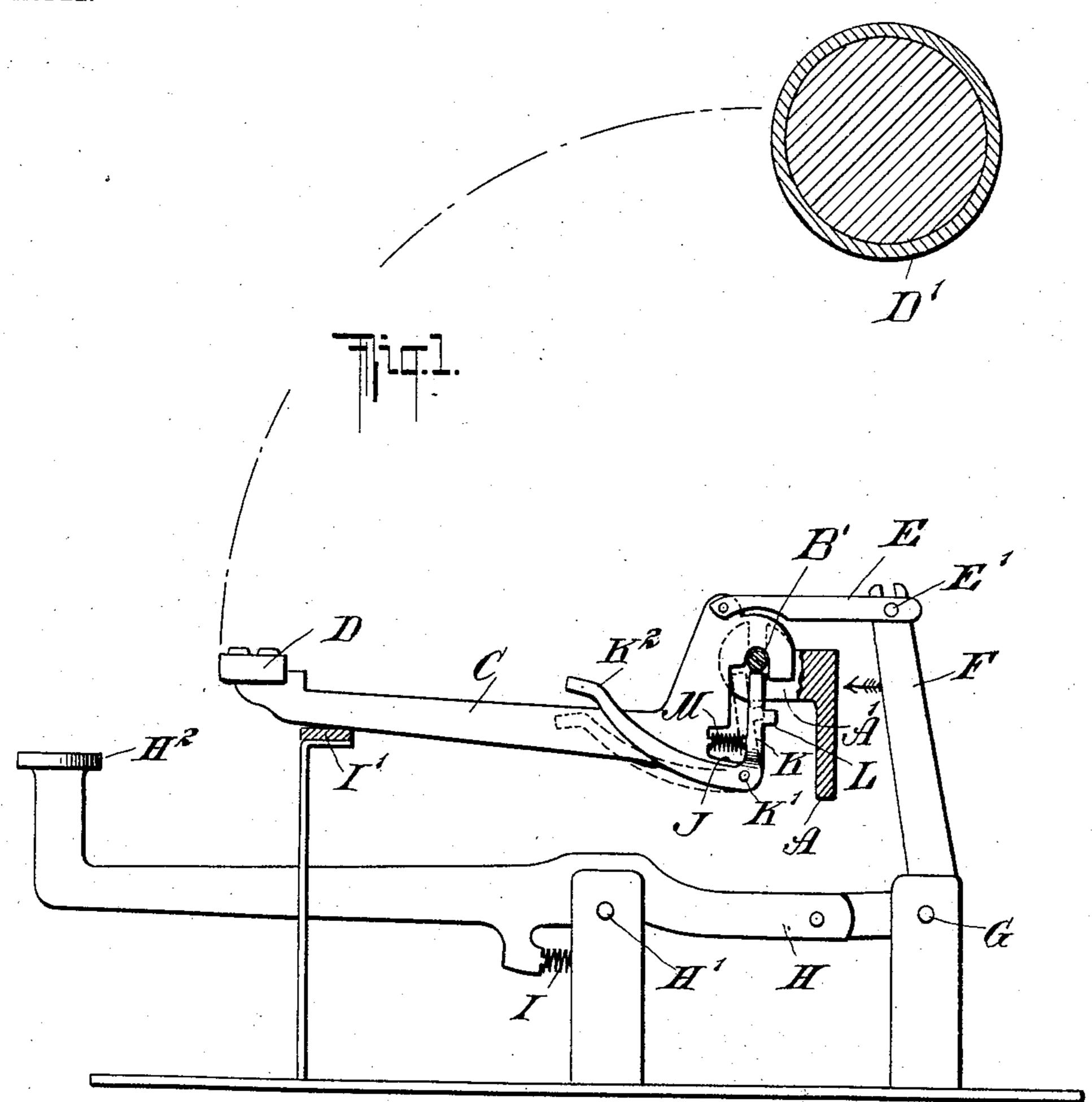
F. X. WAGNER.

TYPE BAR FOR TYPE WRITERS OR LIKE MACHINES. APPLICATION FILED PEB. 2, 1904.

NO MODEL.



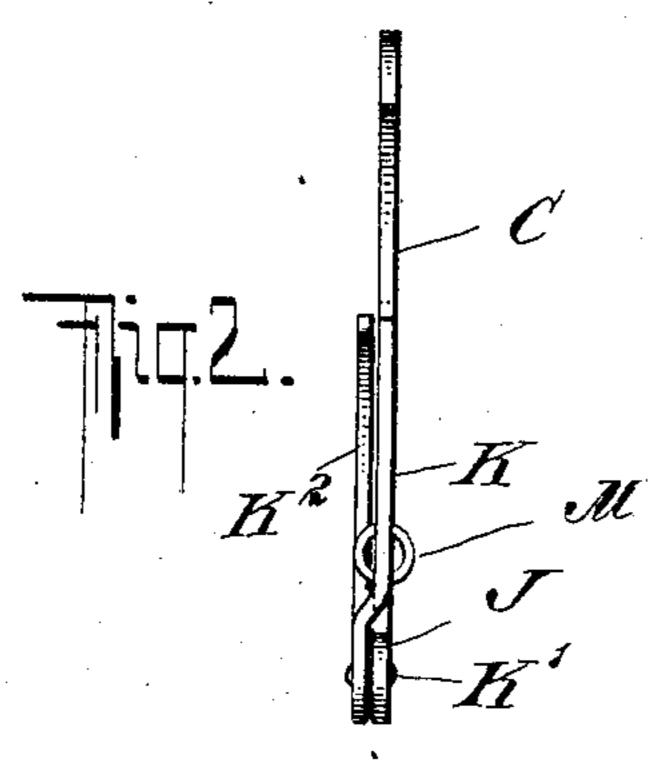


PHOTO-LITHOGRAPHED BY SACRETY & WILHELMS LITHO, & PTE, CO. NEW YORK.

In a Mille Well

INVENTOR
Franz X. Wagner

BY
Briesen Thrank

United States Patent Office.

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

TYPE-BAR FOR TYPE-WRITERS OR LIKE MACHINES.

SPECIFICATION forming part of Letters Patent No. 774,925, dated November 15, 1904.

Application filed February 2, 1904. Serial No. 191,654. (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 the Bronx, city, county, and State 5 of New York, have invented certain new and useful Improvements in Type-Bars for Type-Writers or Like Machines, of which the following is a specification.

My invention relates to type-bars for type-10 writers or like machines, and has for its object to provide a simple and efficient device to permit of the removal of the type-bars from the

segment or other support.

Reference is to be had to the accompanying

15 drawings, in which—

Figure 1 is a diagrammatic sectional view of a portion of a type-writer, illustrating my improved type-bar; and Fig. 2 is an end view of the said type-bar looking in the direction 20 of the arrow in Fig. 1.

A is the segment, fastened to the frame of | the machine in the usual way and provided with slots A', open at the top and bottom.

B is the rod upon which all the type-bars 25 are pivoted and which extends through the entire segment. It will be understood that the slots A' of the segment are arranged in a semicircle. Upon the rod B are hung the type-bars C, the said type-bars being provided 3° with a seat B' for engaging the rod B and an open-end passage leading from said seat and having the type D and arranged to print upon paper carried by the platen D'. The typebars C are connected, through the medium of 35 a link E, by a pin-and-slot connection, as at E', to an elbow-lever fulcrumed upon the frame of the machine at G. The said elbow-lever F in turn has a pin-and-slot connection with keylever H, pivoted at H' upon the frame of the 4° machine and carrying the usual key H2.

I is a spring which tends to keep the keylevers in their normal position, and I' is a cushion or pad upon which the type-bars rest

when in their lower position.

The type-bars of my invention are each provided with a projection J, upon which is piv-

oted at K' an elbow-lever K, one arm of which, K2, forms a handle, and the other arm of which extends upward from the pivot K', the upper end terminating just below the pivot-bar B, 50 thus forming practically a complete eye for the pivot below the pivot-bar B. The elbowlever K is further provided with a lug L and is held in its normal or locked position by a spring M. Thus when the elbow-lever K is 55 in the position shown by solid lines in Fig. 1 the type is prevented from leaving the pivotbar B no matter in what position the type-bar may be. If now for any reason the operator wishes to remove the type-bar from the seg- so ment, all that is necessary is to press the handle K² of the elbow-lever K to the position shown in dotted lines in Fig. 1, the upwardextending arm of the elbow-lever K having by this operation been thrown from under- 65 neath the rod B, whereupon the type-bar C may be readily lifted until the lug L comes in contact with the pivot-rod B and the link E is disengaged from the elbow-lever F, the type-bar being then drawn forward and free 70 of the slot A'. The purpose of the lug L is to act as a stop to prevent the type-bar from being lifted too high and the spring M from striking the lower surface of the segment. In replacing the type-bar it is only necessary to 75 push it into the slot, the elbow-lever moving against the tension of the spring M, guiding the type-bar to the pivot, and then snapping back into place beneath the pivot-rod B and again securely holding the type-bar to prevent 80 it from leaving the said pivot-rod B.

Various modifications may be made without departing from the spirit of my invention.

I claim as my invention and desire to secure by. Letters Patent—

1. In a type-writer or like machine, a support, a pivot carried by said support, a typebar provided with a seat adapted to engage said pivot, and an open-end passage leading from said seat, and a device movably carried 90 by said type-bar and arranged in its normal position to close the said passage of the type-

bar, said device being movable to a position in which it leaves said passage open to permit the type-bar to be removed from the pivot.

2. In a type-writer or like machine, a sup-5 port, type-bars pivoted on said support and a device movably carried by the type-bars, which in one position secures the same against removal from the support and in another position permits the said type-bars to be removed

10 from said support.

3. In a type-writer or like machine, a support, type-bars pivoted on said support, a movable device carried by each of the typebars, which in one position locks the same 15 against removal from the support and in another position permits the said type-bars to be removed from the support and means for normally keeping the said device in its locking position.

4. In a type-writer or like machine, a support, a type-bar pivoted on said support and provided with a projection, a device pivoted on said projection for locking the type-bar against removal from its pivot, and means for 25 keeping said device in its locking position.

5. In a type-writer or like machine, a support, a type-bar pivotally carried by said support and provided with a projection, a locking device fulcrumed on said projection and ar-30 ranged while in its normal position to secure the type-bars against removal from the support and means for throwing the locking device into an abnormal position to permit of the type-bars being removed from the support.

6. In a type-writer or like machine, a support, a type-bar fulcrumed upon said support and provided with a projection, a locking device pivoted on said projection and arranged while in its normal position to secure the type-40 bars against removal from the support, means for throwing the said locking device into an abnormal position to permit of the type-bars being removed from the support and a spring for normally keeping the said device in its

45 locking position.

7. In a type-writer or like machine, a support provided with slots, a pivot-rod extending through said slots, type-bars in said slots and fulcrumed on said pivot-rod, a movable lock-50 ing device carried by said type-bars, comprising an arm arranged below the pivot-rod and adapted to prevent the removal of the typebars from the pivot-rod and a handle for throw-

ing the said arm from under the pivot-rod to permit the removal of the type-bars from the 55

pivot-rod.

8. In a type-writer or like machine, a support provided with slots, type-bars fulcrumed in said slots, a device for holding the type-bars against removal from the slots when in one 60 position, means for throwing the device into another position to permit the lifting of the type-bars out of the slots, and a lug on said device for limiting the upward movement of the type-bars.

9. In a type-writer or like machine, a support provided with slots, type-bars fulcrumed in said slots, and a device carried by the typebars which in one position secures the typebars against removal from the slots and in a 7° second position permits the removal of the type-bars from the slots and which further serves to guide the type-bars to their fulcrum when the said type-bars are reinserted in the slots.

10. In a type-writer or like machine, a support, type-bars pivotally carried by said support, an elbow-lever fulcrumed on each typebar, one arm of which acts as a locking device, the other arm serving as a means for 80 throwing the first-mentioned arm out of its locking position and a spring for keeping said first-mentioned arm in its locking position.

11. In a type-writer or like machine, a support, a type-bar pivoted on said support, a 85 locking device pivoted on said type-bar and adapted in one position to lock the type-bar against removal from the support and in another position to permit of its removal from

the support.

12. In a type-writer or like machine, a support, a pivot carried by said support, a typebar provided with an opening adapted to receive said pivot, and a device movably carried by said type-bar, and adapted in one position 95 to close the opening of said type-bar and in another position to leave the same open to permit of the removal of the type-bar from the pivot.

In testimony whereof I have signed my name 100 to this specification in the presence of two sub-

scribing witnesses.

FRANZ X. WAGNER.

Witnesses:

HERMAN L. WAGNER, EUGENE EBLE.