

(No Model.)

2 Sheets—Sheet 1.

J. N. WILLIAMS.  
TYPE WRITING MACHINE.

No. 523,028.

Patented July 17, 1894.

Fig. I.

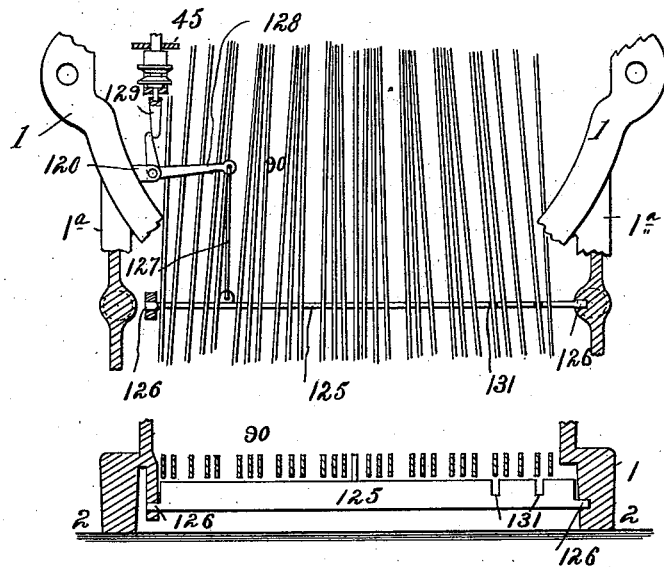


Fig. II.

Witnesses

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Inventor

John Newton Williams  
By *[Signature]*  
Attys.

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2 Sheets—Sheet 2.

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Fig. III.

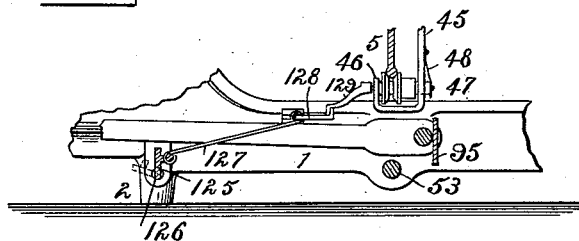


Fig. IV.

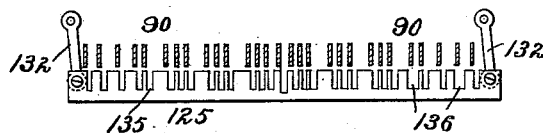
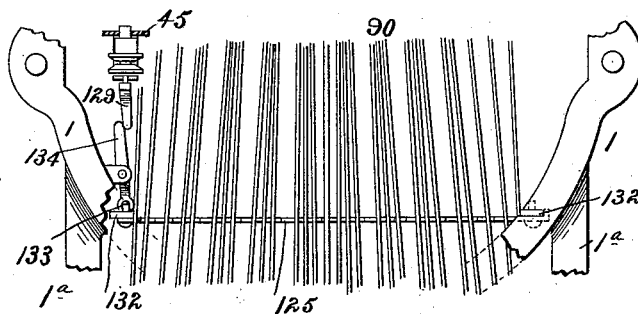


Fig. V.

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# UNITED STATES PATENT OFFICE.

JOHN N. WILLIAMS, OF NEWARK, NEW JERSEY.

## TYPE-WRITING MACHINE.

SPECIFICATION forming part of Letters Patent No. 523,028, dated July 17, 1894.

Original application filed November 20, 1890, Serial No. 372,119. Divided and this application filed March 14, 1893. Serial No. 466,940. (No model.) Patented in England September 29, 1891, No. 16,488.

*To all whom it may concern:*

Be it known that I, JOHN N. WILLIAMS, a citizen of the United States, residing at Newark, county of Essex, State of New Jersey, have invented certain new and useful Improvements in Type-Writing Machines, of which the following is a specification.

This application is a division of my application filed in the Patent Office November 20, 1890, Serial No. 372,119, and its subject matter forms part of the invention of my English patent, No. 16,488, dated September 29, 1891.

In most of the typewriting machines on the market at the present day there is nothing to arrest the action of the keys when the end of a line is reached and the operator may, if not careful, strike one character over another in the same spot, causing a mark which is difficult of erasure.

The object of my invention, therefore, is to provide a lock which will positively arrest the movement of the keys when the carriage is at or near the end of its movement.

The invention consists in the novel details of improvement and the combinations of parts that will be more fully hereinafter set forth and then pointed out in the claims.

Referring to the accompanying drawings which form a part of this specification:—Figures I, II and III are respectively a plan and two vertical sectional views in transverse plane, illustrating the preferred form of such locking device. Figs. IV and V are respectively plan and transverse vertical sectional views illustrating another form of the locking device.

The preferred form of this locking mechanism is shown in Figs. I, II and III. I employ a bar 125 which is pivoted at 126, 126 in stationary parts of the frame 1 of the typewriter and connected by a link 127 with a bell crank lever 128 adapted to be struck by a projection 129 from the pendent arm 45 or other rigid part of the carriage frame. A spring 130 is arranged to press on the bell crank lever 128 so as to maintain the bar 125 normally in the position shown in dotted lines in Fig. III out of the path of key levers 90 but when the bell crank lever is struck by the projection 129 of the paper carriage it is

vibrated to the position shown in Fig. V raising the bar 127 to the position shown in full lines in Figs. II and III where it will arrest the depression of the key levers 90.

It is convenient to slot the bar 125 at the parts 131 immediately under the period, comma and hyphen levers so that the said levers may be depressed freely to properly end a line.

Another form of the lock is illustrated in Figs. IV and V. Here also a bar 125 is used but the same instead of being pivoted to fixed portions of the main frame is arranged to slide thereon or is mounted on swinging links 132 which are swung from the main frame. One of said links has a stud 133 which is engaged by an open slot in the end of a lever 134 adapted to be struck by a projection 129 on the carriage frame. The bar 125 of this form has a number of slots 135 corresponding to all the key levers 90 and in the normal operation of the machine these slots are arranged under the key levers so that the latter may be freely depressed but when the carriage reaches the end of a line the bar 125 is thrown to the position indicated in Fig. V showing the slots 135 so that the key levers cannot be depressed. An exception is made however as to the two levers containing the period, comma and hyphen the slots for which, as shown at 136, 136 are of double width so that when the bar 125 is shifted as shown in Fig. V, the said key levers can still be depressed.

Having thus described my invention, the following is what I claim as new therein and desire to secure by Letters Patent:

1. The combination with the key levers and the traveling paper carriage, of a locking bar arranged transversely of the key levers and normally out of reach of the same and adapted to be actuated by the paper carriage and moved to a position to prevent the operation of the key levers, substantially as set forth.

2. The combination of the key levers, a transverse locking bar normally out of reach of the key levers, a traveling paper carriage, a lever pivoted upon the machine in the path of the carriage, and an operative connection between said pivoted lever and said locking

bar for moving the latter into position to lock the keys when the carriage engages the said lever, substantially as set forth.

3. The combination of a series of key levers  
5 90, 91 the pivoted bar 125, the connecting rod 127, the bell crank lever 128 and a paper carriage adapted to strike said bell crank lever at the end or nearly the end of its movement, substantially as set forth.

10 4. In combination with a bank of keys, a

key lever locking bar having slots adjacent to certain keys adapted to permit the depression of said certain keys while the rest are locked and means, actuated by the paper-carriage for bringing said bar into and out of action, substantially as set forth.

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