

(No Model.)

V. W. BLANCHARD.  
TYPE WRITING MACHINE.

No. 321,479.

Patented July 7, 1885.

Fig. 1.

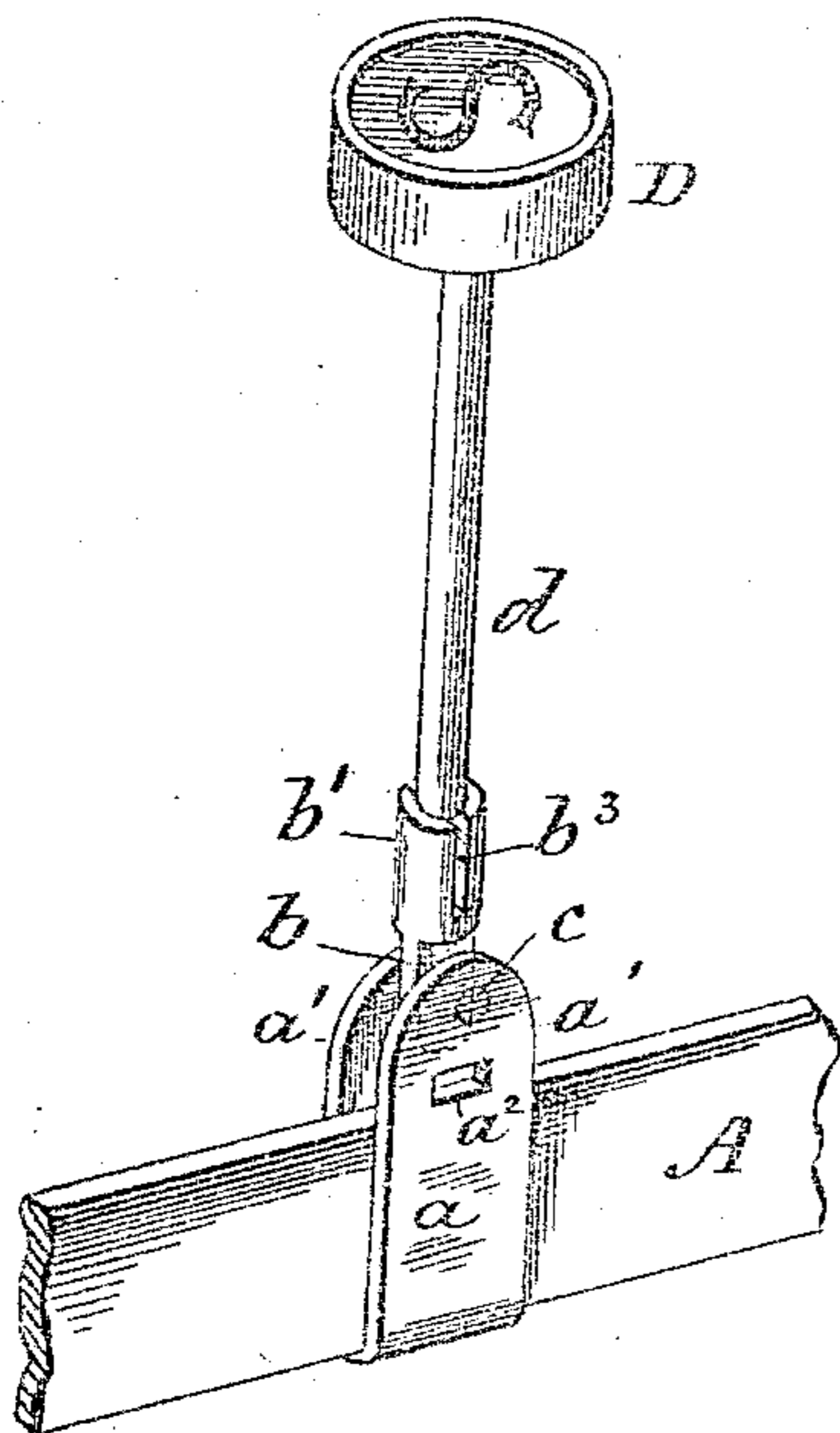


Fig. 2.

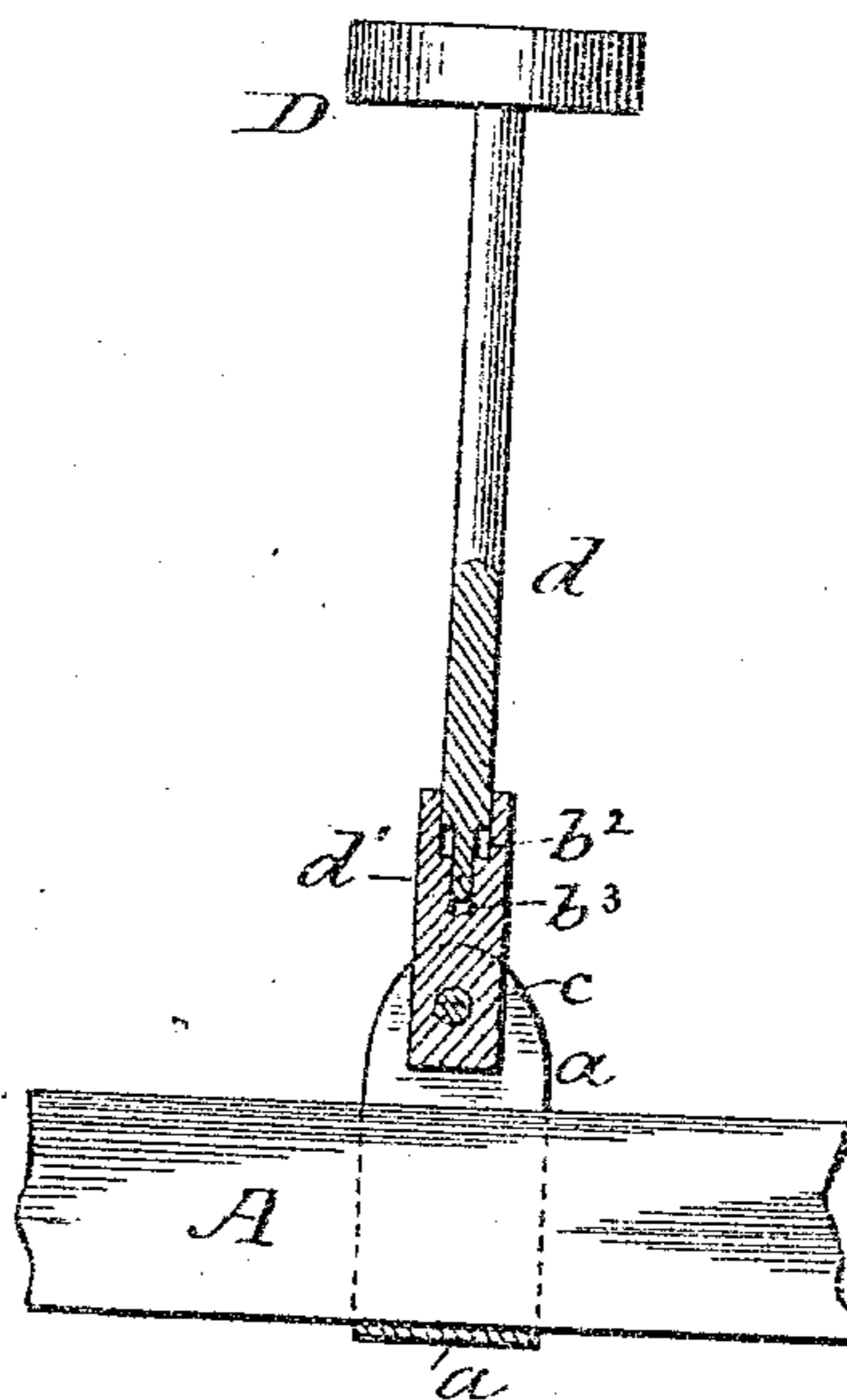


Fig. 3.

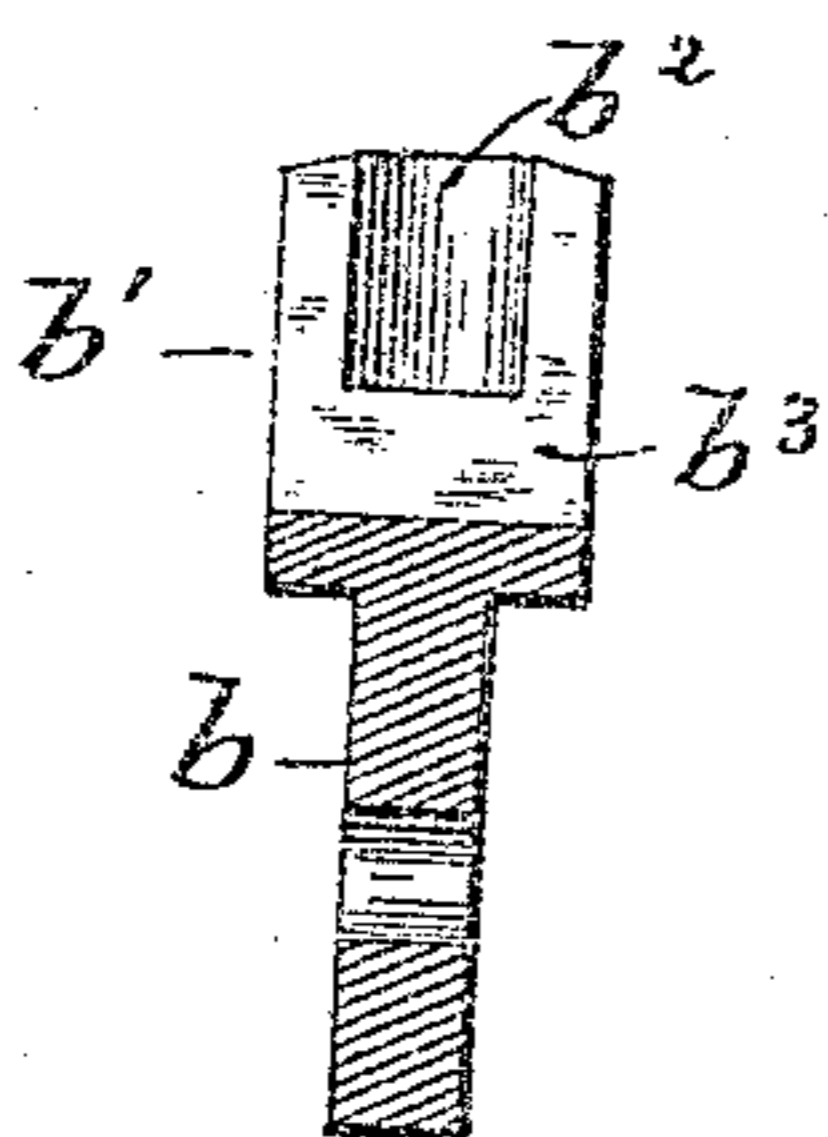
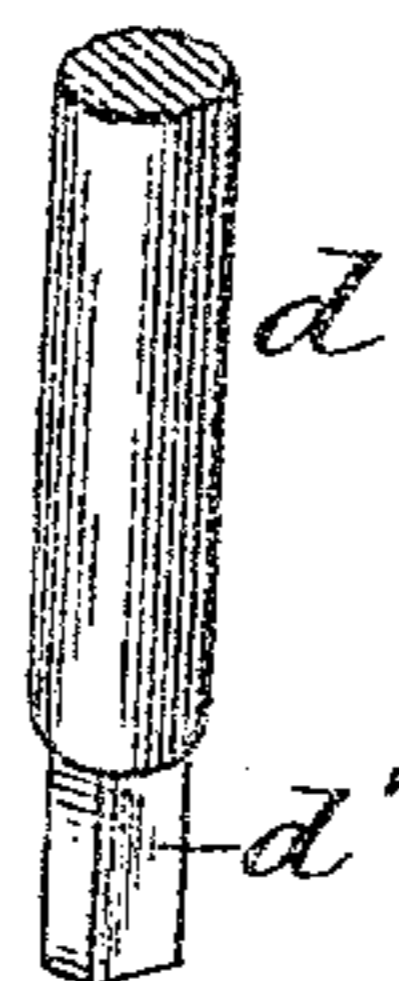


Fig. 4.



Witnesses  
L. C. Hill  
W. B. Masson

Inventor:  
Virgil W. Blanchard  
by E. E. Masson  
atty.

# UNITED STATES PATENT OFFICE.

VIRGIL W. BLANCHARD, OF NEW YORK, N. Y.

## TYPE-WRITING MACHINE.

SPECIFICATION forming part of Letters Patent No. 321,479, dated July 7, 1885.

Application filed April 1, 1884. (No model.)

*To all whom it may concern:*

Be it known that I, VIRGIL W. BLANCHARD, a citizen of the United States, residing at New York city, in the county of New York and State of New York, have invented certain new and useful Improvements in Type-Writers, of which the following is a specification, reference being had therein to the accompanying drawings, in which—

Figure 1 is a perspective view of a type-writer finger-key constructed in accordance with my invention. Fig. 2 is a side view of the same with its lower portion in section. Fig. 3 is an enlarged view in section of the socket to receive the lower end of the finger-key stem. Fig. 4 is a perspective view of the lower end of said key-stem.

My invention relates to improvements in type-writing machines in which a series of pivoted type-levers are operated by means of finger-keys in connection with key-levers and connecting-rods.

In the accompanying drawings, A represents a type-writer key-lever, generally made of a strip of wood, around which is secured a strap, *a*, of sheet metal, bent in the middle of its length so as to form two ears, *a'*, extending above the top edge of the key-lever. This strap is secured to the latter in the usual manner by means of a tongue, *a<sup>2</sup>*, cut and punched in from the metal of one of the ears *a'* and pressed into close contact with the upper edge of the key-lever. To the ears of said strap is pivoted, by means of the rivet *c*, a link having its lower end, *b*, rectangular or flattened and its upper end, *b'*, cylindrical. This upper end is first bored centrally or provided with a hole, *b<sup>2</sup>*, having a diameter equal to or slightly smaller than the diameter of the stem *d* of the finger-key. The upper end, *b'*, is then slotted vertically with a saw to form a mortise, *b<sup>3</sup>*, extending under the bottom of the hole *b<sup>2</sup>*, and the latter portion of the mortise forms side

bearings for the flattened faces of the tenon *d'*, formed on the lower end of the finger-key stem, to rest against and prevent the rotation of said stem.

By the above-described means a shoulder is formed within the bottom of the hole *b<sup>2</sup>* within the link corresponding with the shoulder at the lower end of the cylindrical portion of the stem *d*, and also a slightly-springy bearing is formed above the shoulder within the same link that strongly clasps the stem at that point, and a rectangular bearing is produced also below the shoulder to hold the stem at that point.

The upper end of the stem *d* is provided with a finger-key, D, of the usual form and construction.

Having now fully described my invention, I claim—

1. A type-writer key-lever having pivoted to the strap *a* thereof a link, the lower end of which is flattened and its upper end bored centrally, as at *b<sup>2</sup>*, and slotted to form a mortise extended under the perforation *b<sup>2</sup>*, in combination with the cylindrical stem *d*, having a rectangular tenon, *d'*, at its lower end, a finger-key, D, at its upper end, substantially as and for the purpose described.

2. The combination of the finger-key D, provided with a cylindrical stem and a tenon at the lower end of the latter, and a link provided with a cylindrical socket, and a slot extending across and under said socket, with a key-lever and a strap pivoted to said socketed link, substantially as and for the purpose described.

In testimony whereof I affix my signature in presence of two witnesses.

VIRGIL W. BLANCHARD.

Witnesses:

E. E. MASSON,  
L. C. HILLS.