C. E. COOPER.

BUTTON BASE.

APPLICATION FILED DEC. 15, 1913.

1,147,003. Patented July 20, 1915.

Fig. 1.

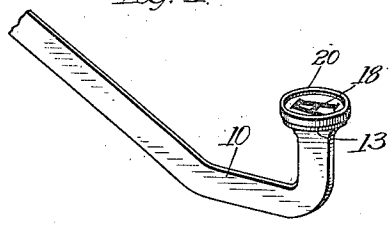


Fig. 2.

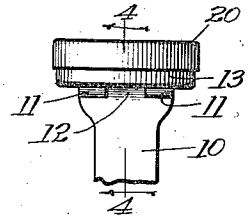


Fig. 3.

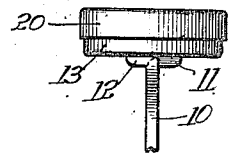


Fig. 5.

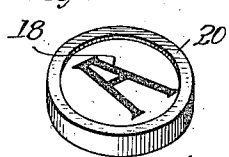


Fig. 4.

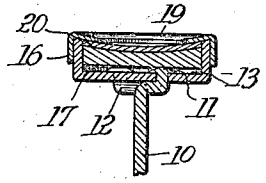


Fig. 6.

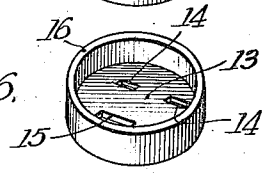
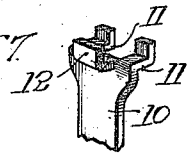


Fig. 7.



Witnesses:
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Nissen & Sprinkle Attys.

UNITED STATES PATENT OFFICE.

CHARLES E. COOPER, OF WOODSTOCK, ILLINOIS.

BUTTON-BASE.

1,147,003. Specification of Letters Patent. Patented July 20, 1915.

Application filed December 15, 1913. Serial No. 806,707.

To all whom it may concern:

Be it known that I, CHARLES E. COOPER, a citizen of the United States, residing at Woodstock, in the county of McHenry and State of Illinois, have invented certain new and useful Improvements in Button-Bases, of which the following is a specification.

This invention relates to a finger button base and particularly to a device of this class which is adapted to be used in connection with a typewriter.

The principal object of the invention is to provide a button base which is firmly secured to the extremity of a key lever without the tendency to become wabbly, or to be unevenly supported.

The invention consists in the features of novelty in the construction, combination and arrangement of the several parts generally shown in the accompanying drawing and described in the specification, but more particularly pointed out in the appended claims.

In the drawings, Figure 1 illustrates one end of a key lever to which a button base embodying my invention is attached; Fig. 2 is a side elevation of a button attached to the end of a key lever; Fig. 3 is a front elevation of the same; Fig. 4 is a sectional view on the line 4—4 of Fig. 2; Fig. 5 is a perspective view of the holding ferrule; Fig. 6 is a perspective view of the button base proper; and Fig. 7 is a perspective view of the extremity of a key lever before the button base is secured thereto.

Some button bases are secured to their key levers by means of a single tongue which extends through a single perforation in the button base. With such a construction it frequently happens that the button base is not level or that after a slight use it becomes loose and uneven or wabbly. The present invention is designed to overcome this difficulty by providing a triangular support for the button base.

The extremity of the key lever, designated by the numeral 10, is formed with tongues 11 and 12, preferably three in number, bent at right angles to the key lever and one of the tongues 12 being substantially wider than either of the other two, being bent oppositely to the other two forming with them a supporting base in the plane at right angles to the plane of the key lever. The extremities of the tongues 11 and 12 are bent upwardly at the ends. A button base 13 is provided with perforations 14 and 15 which correspond in position with the upturned ends of the tongues 11 and 12 and through which the tongues are inserted to form a triangular connection therewith, the upper ends of the tongues being upset or riveted, as clearly shown in Fig. 4, to bind the button base firmly in position, the bottom of the button base resting upon the supporting base formed by the oppositely bent tongues. The button base 13 is formed with an upturned edge 16 and a piece of material 17 rests within this edge with a character 18 on the upper face thereof which designates the character controlled by the key lever. Superposed on the piece 17 is a piece of transparent material 19 through which the character 18 is visible. These members 17 and 19 are the same size as the inside of the button base and substantially fill it. In order to secure them to the button base a ring or ferrule 20 is pressed over or otherwise secured to the upturned edge 16 of the button base binding the members 17 and 19 within the button base.

With this construction a triangular connection is provided for the button base as well as a plane supporting surface at right angles to the key lever which also tends to hold the button base firmly in proper position. By having three connecting tongues there is very little possibility of the button base becoming loose or of its getting out of proper position or alinement.

What I claim is:

1. In a key lever button base, the combination of a flat lever slit at the end to form tongues and the tongues bent in opposite direction to form a plane supporting surface with the extremities of the tongues bent upwardly therefrom, and a perforated button base resting on the supporting surface with the bent extremities of the tongues inserted through the perforations and upset to hold the button base firmly in place.

2. In a device of the class described, the combination of a flat key lever formed with tongues at one end bent at right angles to the lever in opposite directions to form a supporting base and with the extremities of the tongues bent upwardly, and a button base with perforations therein through which the bent extremities of the tongues are inserted.

3. In a device of the class described, the combination of a key lever with parallel tongues at the end formed integral there-

with bent from the same plane in opposite directions to form a supporting base and with the extremities of the tongues turned upwardly, and a button base having perforations to receive the extremities of the tongues, the bottom of the button base resting upon the supporting surface formed by the tongues and the extremities of the tongues being up-set to hold the button base firmly in position.

4. In a device of the class described, the combination of a flat key lever formed with three tongues at the outer end bent at right angles to the lever, two in one direction and one in the opposite direction, to form a supporting base and the extremities of the tongues being up-turned, and a button base with perforations therein adapted to receive the extremities of the tongues and to rest upon the base formed thereby, the extremities of the tongues being upset to hold the button base firmly in position.

5. In a device of the class described, a flat key lever with three tongues at the end, one at right angles to the key lever, the middle one of which is substantially wider than either one of the other two, and is bent in opposite direction therefrom, the extremities of all the tongues being bent upwardly at the ends, and a key lever button base with perforations to receive the up-turned ends of the tongues, the extremities of the tongues which extend through the perforations in the button base being upset to hold the button base firmly in position.

6. In a device of the class described, the combination with a button base having perforations in the bottom thereof triangularly arranged, and a key lever with tongues at the end bent in opposite directions to form a supporting base and upturned at the ends to pass through the perforations of the button base, the upturned ends of the tongues forming a triangular support for the button base.

7. In a device of the class described, the combination with a perforated button base, the perforations being triangularly arranged, of a key lever having tongues extending into the perforations and forming a triangular support for the button base, and means secured to the button base to indicate the character operated by the key lever.

8. In a device of the class described, the combination with a button base formed with a circular upturned edge and having openings in the bottom arranged to form a triangle, of a flat key lever with tongues at the end bent at right angles thereto forming a supporting base for the button base with the extremities of the tongues riveted in the perforations thereof, a character indicating piece disposed within the upturned edge of the button base, and a transparent piece disposed on the top of the character indicating piece, both said character indicating and transparent pieces being of the same size as the inside of the button base and a ferrule securing the two last named pieces to the base and with a central opening to disclose the indicating character through the transparent pieces.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, on this sixth day of December A. D. 1913.

CHARLES E. COOPER.

Witnesses:
J. D. DONOVAN,
A. C. ROEBUCK.