K. LANDA.

KEY LEVER CUP.

APPLICATION FILED MAR. 21, 1907.

971,050. Patented Sept. 27, 1910.

Fig. 1.

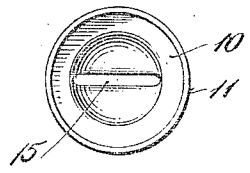


Fig. 4.

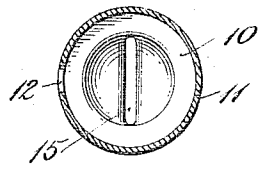


Fig. 2.

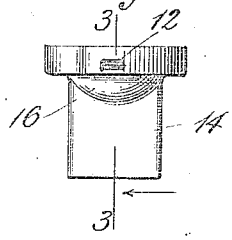


Fig. 3.

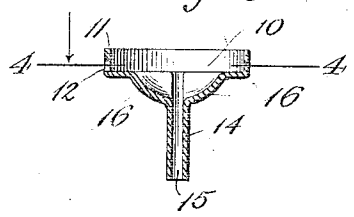


Fig. 5.

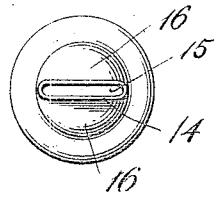
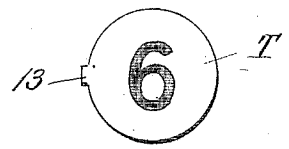


Fig. 6.



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KEY-LEVER CUP.

971,050. Specification of Letters Patent. Patented Sept. 27, 1910.

Application filed March 21, 1907. Serial No. 363,601.

To all whom it may concern:

Be it known that I, KARL LANDA, a citizen of the United States, and resident of Hartford, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Key-Lever Cups, of which the following is a full, clear, and exact specification.

This invention relates to key-levers for type-writing machines, cash registers, etc., and more especially to the finger pieces or "cups" which usually bear specific or designating characters, and it has for one of its objects the provision of a cup which can be easily and cheaply made independently of the key-lever, and may be readily positioned and secured thereto.

My invention has furthermore for its object the provision of means whereby the character-tablet used in connection with each particular key-lever, may be locked against displacement or rotation in the cup, so that the reading matter on the tablet will at all times be in proper readable position as far as the operator or the machine is concerned.

My invention is clearly shown in the accompanying drawings, in which similar characters denote similar parts, and in which—

Figure 1 is a top view of a key-lever cup embodying my invention. Fig. 2. is a side view thereof. Fig. 3. is a section on line 3, 3 of Fig. 2. Fig. 4. is a horizontal section on line 4, 4 of Fig. 3. Fig. 5. shows a bottom view of the cup, and Fig. 6. is a top view of a tablet adapted to be used in connection with my improved cup.

The modern design on the key-levers for actuating the various machines to which my invention may be applied, aims to produce strong and yet cheaply-made devices, so that the process of stamping the same from sheet metal is almost universally adhered to, especially for the reason that the levers thus obtained are comparatively thin laterally, while their cross-section, vertically considered, is such as to provide great strength. On account of the method of stamping the levers from sheet metal, it is deemed expedient to form the "finger pieces" or "cups" entirely separate from the key-levers, and the cups should therefore be made so as to fit the latter, a feature which in the instance of key-lever ends of oblong cross-section is advantageous inasmuch as the cups are prevented from rotation thereon.

My improved cup is therefore provided with a hub having an aperture of oblong shape, and its upper or tablet-receiving portion is adapted to receive the key-designating character label in such a manner that the tablet cannot turn relatively to the cup, and hence will always be in position to be read by the operator.

Referring to the drawings, 10 denotes the tablet-receiving cup, the annular wall 11 of which is provided with an aperture 12 adapted to receive a lip 13 (see Fig. 6.) provided on the designation-tablet T. The bottom of the cup 10 has a hub 14, the central opening 15 of which corresponds to the end of the key-lever which, as above stated, is usually oblong in cross-section, said hub being preferably stiffened or braced at its junction with the cup, by reinforcing walls 16.

While it is evident that my improved cup can be made in many different ways, as for instance by casting, and turning or screw-machine work, I deem it expedient to form the entire device of a single piece of sheet metal by first punching a blank and then "drawing" the blank into the proper shape to be subsequently finished or trimmed as required. Inasmuch as the width of the aperture 15 is in practice very small, in order to fit the thickness of the key-lever end, the hub aperture is at first made larger than necessary and subsequently brought into required condition by compressing its sides against a suitable mandrel inserted into the aperture 15. The aperture 12 for locking the designating-tablet against rotation is preferably punched out after the cup, as a whole, is substantially complete.

I claim:

1. A key-lever cup formed of a single piece of material and comprising a cup portion in the hub connected therewith, and reinforcing extensions for stiffening the hub relatively to the cup.

2. A key-lever cup comprising a tablet-receptacle, and a hub, and formed of a single piece of sheet metal, and drawn to form said hub, an aperture in said hub, and an aperture in the receptacle and adapted to receive a lip on a tablet.

3. In a finger-key or manual, a cup and shank formed from the same piece of metal, the shank being flattened below its junction with the cup leaving a lengthwise opening elongated transversely.

4. The combination with a key lever or stem, of a key consisting of a cup having a flattened shank to fit the stem or lever, the cup being of larger diameter than the shank and formed integral therewith.

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