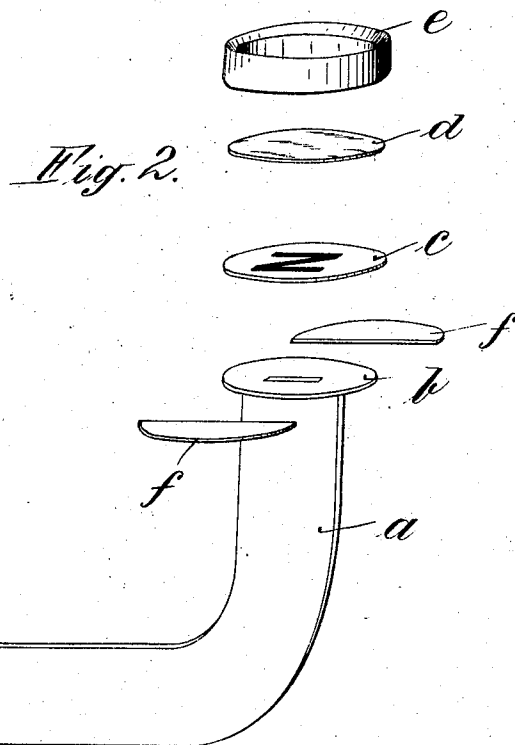
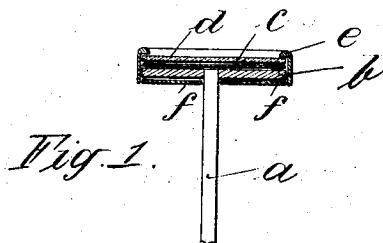


C. F. EHMTSEN.
 KEY CAP FOR TYPE WRITING AND SIMILAR MACHINES.
 APPLICATION FILED SEPT. 18, 1911.

1,021,975.

Patented Apr. 2, 1912.



Witnesses:

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KEY-CAP FOR TYPE-WRITING AND SIMILAR MACHINES.

1,021,975.

Specification of Letters Patent.

Patented Apr. 2, 1912.

Application filed September 18, 1911. Serial No. 650,072.

To all whom it may concern:

Be it known that I, CARL FRIEDRICH EHMSSEN, citizen of the Republic of Hamburg, residing at Schillerstrasse 54, Schönebeck-on-the-Elbe, Germany, have invented certain new and useful Improvements in Key-Caps for Type-Writing and Similar Machines, of which the following is a specification.

Different methods of fixing celluloid frame rings to the metal keys of type-writing machines and the like are already known, but all of these are more or less defective.

The object of the present invention is an improved method of fixing the celluloid rings whereby the foregoing disadvantages are avoided.

The metal keys are provided with a metal plate about 1 millimeter thick, on which the paper disk and the glass disk are laid. Over this the celluloid frame ring is placed, the depth of the ring being such that it projects about 1 millimeter below the key. Hereupon two semi-circular celluloid segments of about 1 millimeter in thickness are laid under the metal plate and connected with one another and with the celluloid ring by means of acetic ether. Hereby the celluloid is somewhat dissolved and connects both parts so that they appear to be one piece. The key or the key-plate is thus firmly inclosed on all sides by celluloid, so that it is impossible for it to turn or come off.

The new method of fixing is illustrated in the accompanying drawing.

Figure 1 is a transverse section of a key, while Fig. 2 illustrates the different parts separated from one another.

On the vertical arm *a* of the key-lever the metal plate *b* is fixed on which the paper disk *c* bearing the letter of the alphabet, and the glass disk *d* are laid. Over the whole the celluloid ring *e* is placed, the lower edge

of which projects about 1 millimeter below the metal plate *b*. The space thus formed is filled up with two semi-circular celluloid segments *f* of above 1 millimeter thickness. By means of acetic ether these two semi-circular disks are connected together and with the celluloid ring and the bottom of the metal plate.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is:—

1. An improvement in key caps for type-writing and similar machines, comprising in combination with a key having a flat key plate and a disk carrying an index character, a celluloid key ring fitting over said key plate and disk, and projecting a slight distance below said key plate, and means fitted against the bottom of said key plate within said downwardly projecting portion of said key ring, and secured to said ring and plate.

2. An improvement in key caps for type-writing and similar machines, comprising in combination with a key having a flat key plate, a character carrying disk and its transparent cover supported on said key plate, a celluloid key ring fitting over said key plate, disk and cover, and projecting below the lower surface of said key plate, and segments fitted within the space formed by the projecting portion of said key ring, and sealed to said lower surface of the key plate and to said projecting portion of the key ring.

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

CARL F. EHMSSEN.

Witnesses:

OTTO GÜLDEMISSBURG,
O. RUDOLF GULOFF.