

H. M. HAY.
CUSHION KEY FOR WRITING MACHINES.
APPLICATION FILED DEC. 9, 1909.

974,487.

Patented Nov. 1, 1910.

Fig. 1.

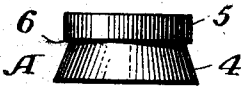


Fig. 2.

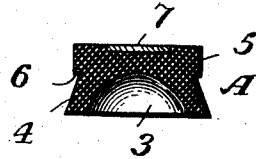


Fig. 3.

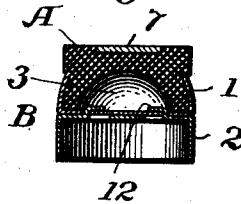


Fig. 4.

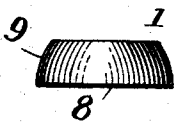


Fig. 6.

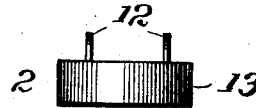


Fig. 5.

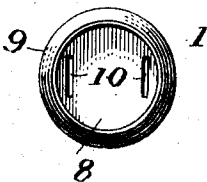
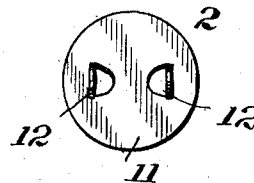


Fig. 7.



Witnesses
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UNITED STATES PATENT OFFICE.

HOWARD MORTON HAY, OF CHICAGO, ILLINOIS, ASSIGNOR TO CUSHION CROWN-ARCH KEY COMPANY, OF CHICAGO, ILLINOIS, A CORPORATION OF NEW JERSEY.

CUSHION-KEY FOR WRITING-MACHINES.

974,487.

Specification of Letters Patent.

Patented Nov. 1, 1910.

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To all whom it may concern:

Be it known that I, HOWARD M. HAY, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Cushion-Keys for Writing-Machines, of which the following is a specification.

This invention relates to improvements in cushion caps for typewriter keys and to the means for holding said caps and securing them to the keys.

In the accompanying drawing which illustrates my invention, Figures 1 and 2 are views showing the cushion cap in side elevation and central vertical section, respectively; Fig. 3 is a central section through the cap and holder or retainer; Figs. 4 and 5 are side and top plan views, respectively, of the upper cup of the retaining device, and, Figs. 6 and 7 are side and top plan views, respectively, of the lower cup of the retaining device.

The device of my invention, as a whole, is shown in Fig. 3, and comprises the cap A, made of rubber or similar resilient material, and the holder B composed of two sheet metal cups, 1 and 2, secured together, base to base, the upper cup 1 being adapted to receive the cushion A and the lower cup 2 being adapted to fit snugly over and around the key of the typewriter or other machine to retain the device in position upon the key.

The cushion A has a substantially hemispherical cavity 3 in its lower side, and the side wall 4 of the cushion flares downwardly and outwardly from the crown 5 which, latter, as shown, projects laterally beyond the upper part of the wall 4, an annular shoulder 6 being thus formed between the flaring wall 4 and the crown. The letters, figures or other characters are inlaid in the top of the crown, as shown at 7.

The device for holding the cushion and securing it to the key, as previously stated, comprises the cups 1 and 2, preferably made of sheet metal. The cup 1, as shown in Figs. 4 and 5, has a flat base 8 and side walls 9 which converge toward the upper open end of the cup. Narrow slots 10 are cut in the base at opposite sides of the center. The lower cup 2 also has a flat base 11 and tongues 12 struck up from the metal of this base are adapted to enter the slots 10 in the upper cup and when these tongues are in-

serted through the slots and bent over, as shown in Fig. 3, the two parts of the device will be securely held together. The side wall 13 of the lower cup, as shown in the drawing, is cylindrical and slightly larger than the key so that it will fit down upon the key and frictionally engage the sides of the key.

In assembling the cushion key cap, the tongues 12 on the part 2 are inserted through the slots 10 in the part 1 and then bent over to secure the two parts together, base to base. The flaring wall 4 of the cushion A is then slightly compressed and inserted into the upper cup, when the wall 4 will expand against the side wall of said cup, the bottom edge of the cushion resting upon the base of the cup. The outward pressure of the cushion against the converging wall of the cup will hold the cushion against turning within or working out of the cup; but if desired cement may also be used to secure the cushion in place.

Instead of making the upper part with a converging side wall, as shown in Fig. 4, it may be made with a cylindrical side wall, like the lower cup shown in Fig. 6, in which case the cushion will preferably be cemented into the upper cup. If desired, also, the side wall of the lower cup, instead of being continuous, may be slotted from the open end toward the base, at one or more points, to make the side wall more or less elastic.

What I claim is:—

1. A device for retaining cushion caps on typewriter keys comprising two cups having their bases formed with interlocking parts, said cups being secured together, base to base, by said parts, one of said cups being adapted to fit over the key, and the other adapted to receive a cushion cap.

2. A device for retaining cushion caps on typewriter keys comprising two sheet metal cups arranged base to base, one of said cups having slots and the other having tongues engaging said slots and locking the cups together.

3. A device for retaining cushion caps on typewriter keys comprising two sheet metal cups arranged base to base, one of said cups having slots in its base and the other having integral tongues struck up from its base and engaging said slots to lock the cups together.

4. A device for retaining cushion caps on

typewriter keys comprising two cups secured together, base to base, one cup having a cylindrical side-wall adapted to fit the key, and the other cup, adapted to receive the cap, having its side wall converging toward the open end of the cup.

5. A cushion key for typewriting machines comprising two cups secured together base to base, one cup adapted to fit over the usual key, and a resilient key cap arranged in the other cup, said cap having a hollow interior and having its side walls flaring downwardly and outwardly from the crown and supported within the latter cup.

6. A cushion key for writing machines comprising two sheet metal cups secured together base to base, one of said cups suitably formed to fit the usual key, the other cup having its side wall converging toward the open end, and a resilient hollow cap fitted into said latter cup, said cap having its side walls flaring downwardly and outwardly and supported within the latter cup.

7. A cushion key for writing machines comprising two sheet metal cups secured together base to base, one of said cups suitably formed to fit the usual key, the other cup having its side wall converging toward the open end, and a resilient hollow cap fitted into said latter cup, said cap having a crown

projecting over the open end of the cup and having its walls, below the crown, flaring outwardly and downwardly and supported within the latter cup.

8. The combination with a sheet metal cup and means for securing the same to a typewriter key, of a cap of resilient material comprising a crown adapted to project over the top of the cup and a hollow base having side walls flaring outwardly and downwardly from the crown and adapted to fit within the cup and rest upon the base thereof.

9. A cushion cap for typewriter keys comprising a hollow conical base and a crown projecting laterally at the smaller end of the base, the cavity in said base extending from the larger end of the base substantially to the crown.

10. A cushion cap for typewriter keys comprising a conical base, having a hemispherical cavity, and a crown projecting laterally at the smaller end of the base.

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

HOWARD MORTON HAY.

Witnesses:

J. T. KENDALL,

D. J. BURLINGAME.