(No Model.)

R. S. GRAHAM & W. B. SAVELL.

TYPE WRITING MACHINE CUSHION KEY.

No. 569,196. Patented Oct. 13, 1896.

Fig. 2,

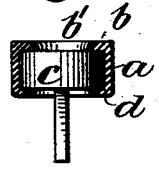

Fig. 1,



Fig. 3,

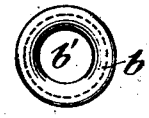

Fig. 5,



Fig. 4,

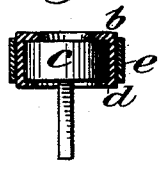

Fig. 7,

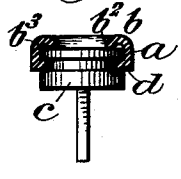

Fig. 8,



Fig. 6



Witnesses:-

D. F. Hayward

Fredrick H. Parker

Inventors:

Robert S. Graham

William B. Savell

by Giffords Daw.

Attorneys

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

ROBERT SYLVESTER GRAHAM AND WILLIAM BENJAMIN SAVELL, OF NEWARK, NEW JERSEY, ASSIGNORS TO THE TYPE-WRITER CUSHION-KEY COMPANY, OF SAME PLACE.

TYPE-WRITING-MACHINE CUSHION-KEY.

SPECIFICATION forming part of Letters Patent No. 569,196, dated October 13, 1896.

Application filed April 21, 1894. Serial No. 508,496. (No model.)

To all whom it may concern:

Be it known that we, ROBERT SYLVESTER GRAHAM and WILLIAM BENJAMIN SAVELL, citizens of the United States, and residents of Newark, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Cushioned Keys for Type-Writing or other Machines, of which the following is a specification.

In the accompanying drawings one form is shown in Figure 1, which is a section of the cushion detached. Fig. 2 is a section of the same applied to the key, and Fig. 3 a plan of the same applied to the key. Another form is shown in Fig. 4, which is a section of the cushion applied to the key; and Fig. 5 is a plan of the same. Another form is shown in Fig. 6, which is a section of the cushion detached. Fig. 7 is a section of the same applied to the key, and Fig. 8 a side view of the key detached.

In the form shown in Figs. 1, 2, and 3 the cushion consists of the soft-rubber band (shown detached in Fig. 1) consisting of the cylindrical body *a*, having an inwardly-turned bead *b* at the top. The body *a* is made of lesser diameter and longer than the key *c*, so that when it is stretched over the key *c*, as shown in Fig. 2, its elasticity will carry its lower edge under the key, as shown at *d*. In use the finger of the operator will strike upon the flange *b*, overlying the top of the key, which flange *b* will constitute the cushion. The opening *b'* will serve to expose the top of the key and display the letter, if any there be thereon.

The form shown in Figs. 4 and 5 is of the same construction as that just described, with the addition of an external band or ring of comparatively rigid material *e*, to be fitted over the body *a* and more securely hold it in place.

In the form shown in Figs. 6, 7, and 8 the cushion consists of the body *a* and the flange *b*, as before, but the body *a* is shorter than the key and is secured thereto by springing the lower portion *d* into a groove *f*, formed on the periphery of the key *c*. Figs. 6 and 7 also show a modified form for the flange *b*, which may be used to advantage for increasing its softness. This form consists in giving the flange *b* a downwardly-turned lip b^2, forming a cushion-roll, so that when applied to the key there will be an annular air-space left at b^3 between the flange *b* and the top of the key *c*.

We claim—

1. A cushion attachment for type-writer and similar keys formed of yielding material and having an open top to expose the character on the key.

2. A cushion attachment for type-writer and similar keys having its upper portion extended over the top of the key and open at its center to expose the character on the key.

3. A cushion attachment for type-writer and similar keys formed of yielding material and constructed to expose the underlying character on the key.

4. A cushion attachment for type-writer and similar keys extended over the key to form a yielding touch-surface said cushion being open at its center to expose the character on the key.

5. A cushion attachment for type-writer and similar keys consisting of an elastic band to be fitted over the key and extended over the plane of the top thereof and having a sight-opening to expose the character on the key.

6. A cushion attachment for type-writer and similar keys having its upper edge curved inward to form a cushion-roll and leave an open center.

7. A cushion attachment for type-writer and similar keys having an open center to expose the character on the key beneath and a cushion-roll bounding the walls of said opening.

8. A key-cushion consisting of a soft-rubber cylinder having an inwardly-turned flange at the top leaving an opening for exposing the top of the key.

9. In combination with a key, a soft-rubber cylinder of lesser diameter than the key and having, when applied to the key, a lip or flange extending inwardly on top of the key and leaving an opening to expose the top of the key.

10. A key-cushion consisting of a soft-rub-

ber cylinder provided at its top with a flange extending inwardly and downwardly and leaving an opening to expose the top of the key.

11. In combination, a key provided with an external groove and a soft-rubber key-cushion provided with an internal flange projecting into said groove.

Signed at Newark, in the county of Essex and State of New Jersey, this 17th day of April, A. D. 1894.

ROBERT SYLVESTER GRAHAM.
WILLIAM BENJAMIN SAVELL.

Witnesses:
FREDERICK A. W. BAKER,
FRANK L. BOPPE.