

(No Model.)

R. S. GRAHAM & W. B. SAVELL.
CUSHION FOR KEYS FOR TYPE WRITING MACHINES.

No. 551,543.

Patented Dec. 17, 1895.

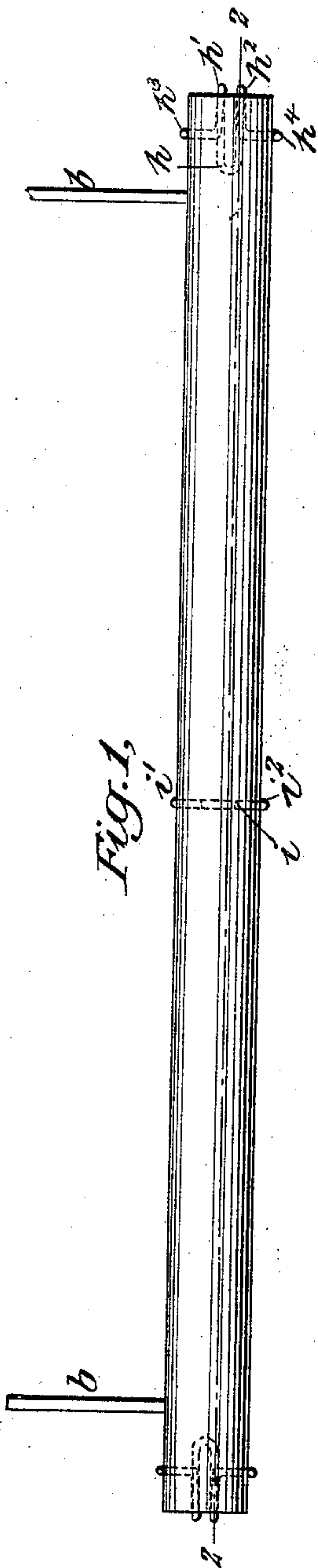


Fig. 1.

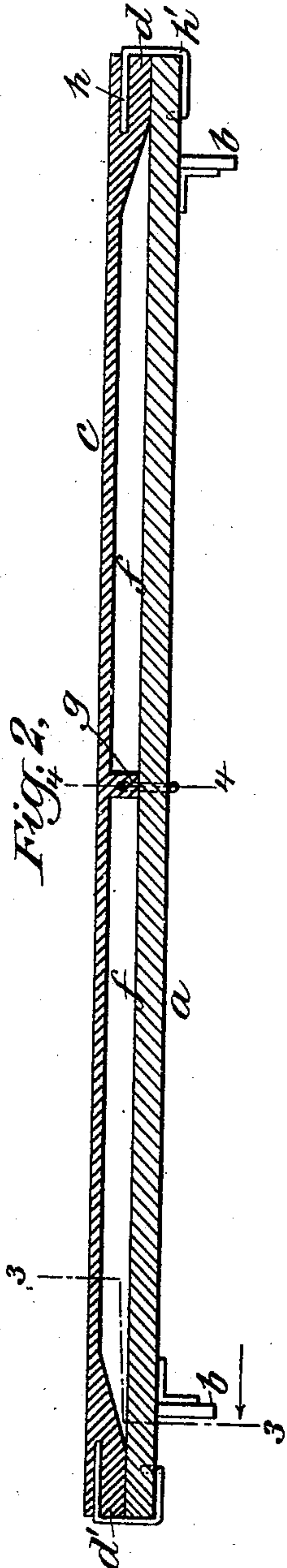


Fig. 2.



Fig. 3.



Fig. 4.

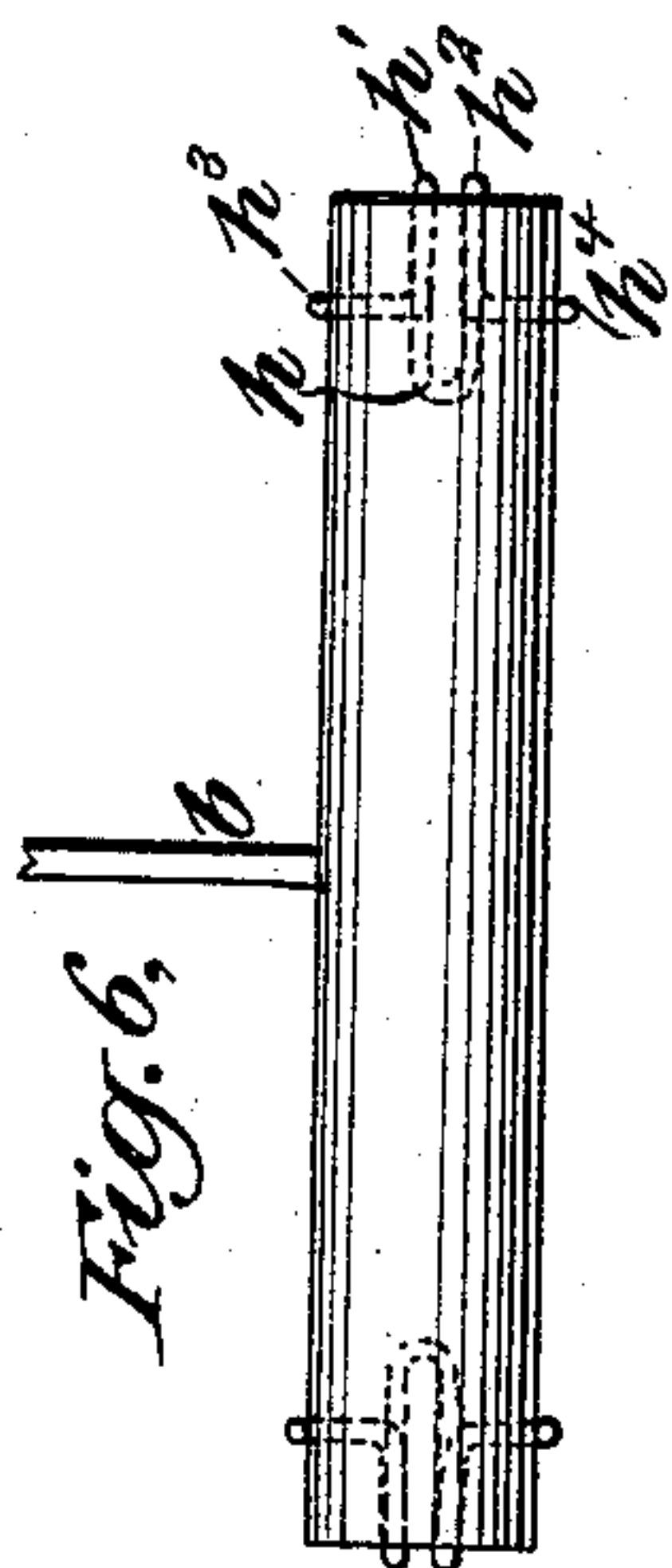


Fig. 5.

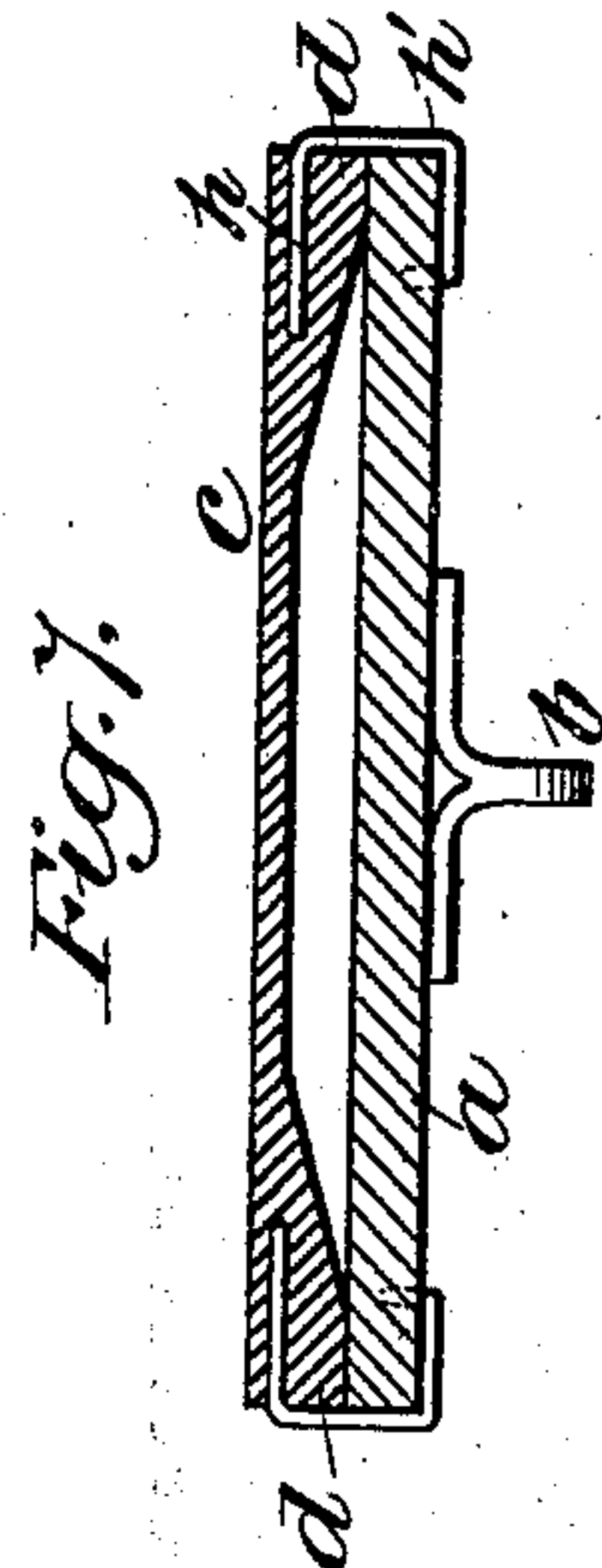


Fig. 6.

Witnesses:-

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UNITED STATES PATENT OFFICE.

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

CUSHION FOR KEYS FOR TYPE-WRITING MACHINES.

SPECIFICATION forming part of Letters Patent No. 551,543, dated December 17, 1895.

Application filed April 21, 1894. Serial No. 508,494. (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 Cushions for Keys of Type-Writing and other Machines, of which the following is a specification.

The object of our present invention is to construct a cushion more particularly for the key which is generally known as the "space-bar," and in the accompanying drawings we have shown the application of the cushion to the long space-bar of the ordinary Remington and other type-writing machines employing a long space-bar, and also to the short space-bar of the ordinary caligraph and other type-writing machines containing the short space-bar.

In the accompanying drawings, Figure 1 represents a plan view; Fig. 2, a longitudinal section; Fig. 3, a cross-section on the line 3 3 of Fig. 2; Fig. 4, a cross-section on the line 4 4 of Fig. 2; Fig. 5, a cross-section corresponding with the line 3 3 of a modification; Fig. 6, a plan view of a short space-bar; Fig. 7, a longitudinal section of the same.

In all the figures, *a* is the space-bar and *b* the bar or bars by which the space-bar is connected with the operative parts of the machine.

The cushion shown in Figs. 2, 3, 4, and 7 consists of soft rubber molded so as to present the continuous upper surface *c* to receive the touch of the finger of the operator, the downwardly-projecting end flanges *d d'* and the downwardly-projecting side flanges *e e'* leaving between said flanges the air-space *f*. The said flanges constitute rests for supporting the upper surface *c* on top of the space-bar in such position that the air-space *f* remains between it and the space-bar and thereby affords softness to the touch by permitting the surface *c* to yield quite freely. The flanges *e e'* at the top are quite narrow, so as to give the maximum extent in width of air-

space beneath the member *a*; but for securing firmness of support, the flanges *e e'* are reinforced by being made thicker at their lower edges, as shown in Fig. 3.

In the case of the cushion for the long space-bar, it is desirable that the member *c* shall be supported at the middle as well as at the ends, and this we accomplish by providing the cross-flange *g* at the middle.

Having thus constructed the cushion, we provide the following means for readily securing it on top of the space-bar: We provide a wire for each end, of duplicate construction, consisting of a loop *h* embedded in the flange at the end of the rubber cushion during the process of manufacture thereof. The projecting ends *h'* and *h''* from this loop are bent downwardly and inwardly over the end of the space-bar. This secures the cushion against endwise movement. The ends *h'* and *h''* are then bent at right angles in opposite directions and turned up, one on each side of the space-bar, as at *h''' h''''*. This secures the cushion against sidewise removal. In the case of the short space-bar, it may be desired to secure the cushion also at its middle, which we may do by the wire *i* embedded crosswise in the flange *g* during the process of manufacture. Each of the projecting ends *i'* and *i''* of the wire *i* is bent downward and under the space-bar, as shown in Fig. 4.

In lieu of having the air-space *f* constructed in the cushion, we may secure the required softness for the upper surface *c* by constructing the whole body of the cushion of cellular or sponge rubber, as shown in Fig. 5.

We have described the means which we prefer for securing the cushion to the space-bar, but we do not wish to be limited to the details of this means.

We claim—

1. In combination, the space-bar and a soft rubber cushion overlying the same and provided with side and end flanges, substantially as described.

2. In combination, the space-bar, a soft rubber cushion overlying the same and means

whereby said cushion is secured at its opposite ends to the space-bar, substantially as described.

3. In combination, a space-bar and a soft
5 rubber cushion consisting of the upper member *c* and side and end flanges whereby said upper member is supported on the space-bar leaving an air space between, substantially as described.

Signed at Newark, in the county of Essex 10
and State of New Jersey, this 17th day of
April, A. D. 1894.

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Witnesses:

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