

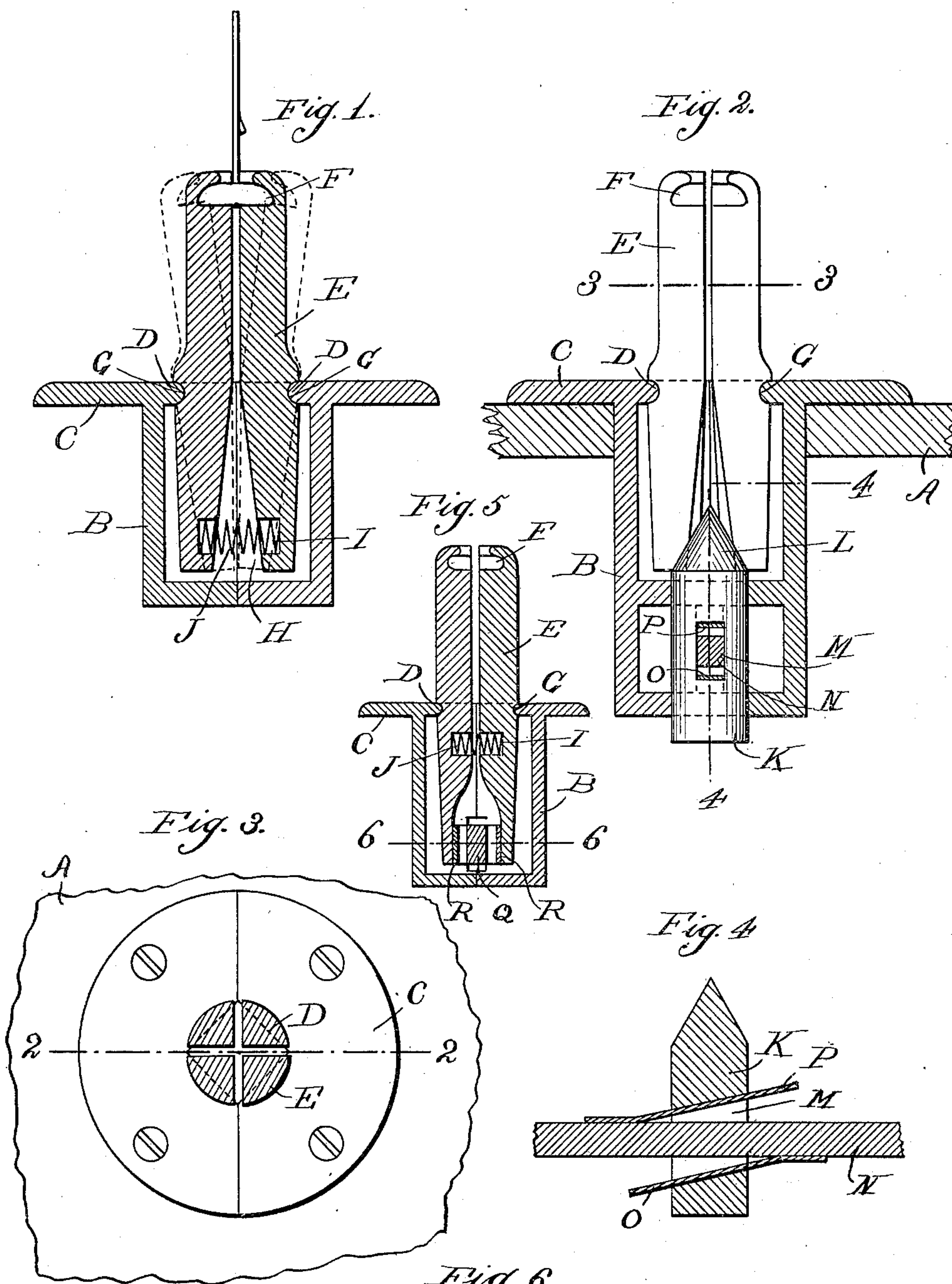
No. 673,987.

Patented May 14, 1901.

H. R. KUERSTEN.
BUTTON HOLDER FOR TUFTING MACHINES.

(Application filed Apr. 30, 1900.)

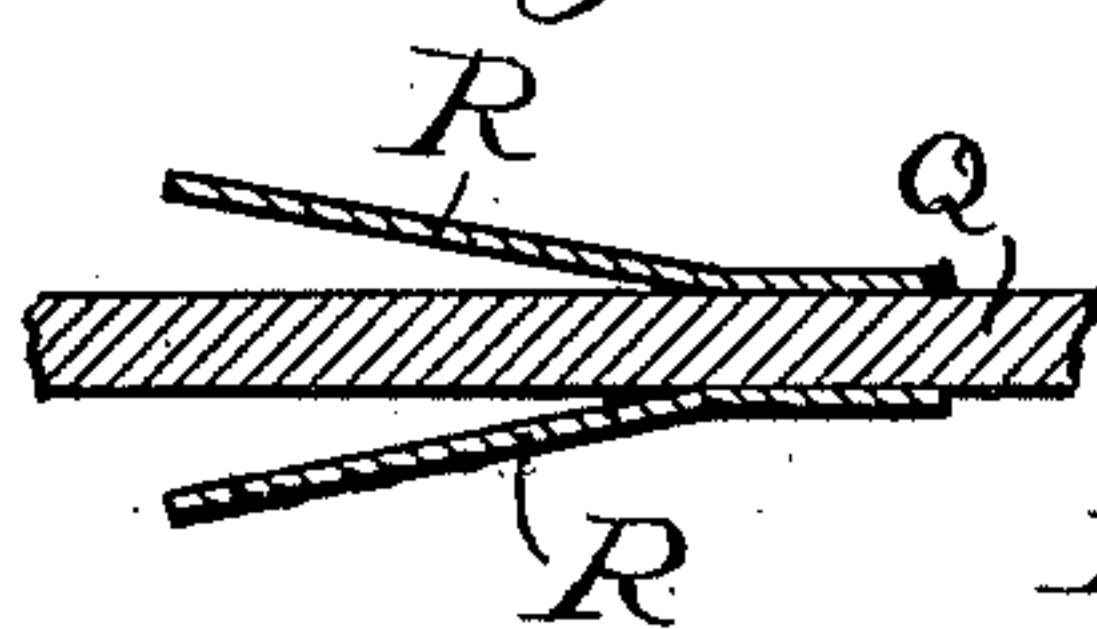
(No Model.)



Witnesses:

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UNITED STATES PATENT OFFICE.

HUGO R. KUERSTEN, OF CHICAGO, ILLINOIS, ASSIGNOR TO THE SENG COMPANY, OF SAME PLACE.

BUTTON-HOLDER FOR TUFTING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 673,987, dated May 14, 1901.

Application filed April 30, 1900. Serial No. 14,896. (No model.)

To all whom it may concern:

Be it known that I, HUGO R. KUERSTEN, 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 Button-Holders for Tufting-Machines; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to a novel construction in a button-holder for tufting-machines, the object being to provide a device of this character which will hold the button firmly in an inverted position, so that the shank thereof will pass through the fabric placed over the board; and it consists in the features of construction and combinations of parts hereinafter fully described and claimed.

In the accompanying drawings, illustrating my invention, Figure 1 is a central vertical section of a button-holder constructed in accordance with my invention. Fig. 2 is a similar section of a slightly-modified form of button-holder, taken on the line 2 2 of Fig. 3. Fig. 3 is a sectional view on the line 3 3 of Fig. 2. Fig. 4 is a detail sectional view on the line 4 4 of Fig. 2. Fig. 5 is a section similar to Fig. 1, showing another modification. Fig. 6 is a detail sectional view on the line 6 6 of Fig. 5.

Referring now to said drawings, A indicates a board provided with openings, in each of which a socket or metallic cup B is fitted, each of said sockets or cups comprising two members, each having a flange C, by means of which they are secured. Said sockets or cups B are open at their upper ends and are provided at the edges of said openings with rounded inwardly-extending flanges D, forming fulcrums on which clamp members E turn. Said clamp members E consist each of a metallic standard provided at its upper end with a recess F to receive the head of an upholsterer's button and provided between their ends, on their outer faces, with recesses G, adapted to receive said flanges D. At their lower ends, on their inner faces, said members E are cut away, as at H, to permit said lower ends to be pressed together, as shown

in dotted lines in Fig. 1, thereby spreading the upper ends and releasing the button held in said recesses F. Recesses I are provided in said inner faces of said lower ends of said members E to receive the ends of a spring J, which serves to normally hold said members E in position to engage the button-head, and thus hold the button.

In Fig. 1 I have illustrated a button-holder consisting of two members E, while in Fig. 2 I have shown four of said members with devices for holding same in positive and rigid engagement with the button-head. The said four members are adapted to be spread apart at their lower ends by means of a plunger K, provided with a conical head L, adapted to engage the lower inner edges of said members E. Said plunger K is vertically movable in the bottom of said cups or sockets B, the latter being preferably provided with a double bottom where said plunger is used to provide two bearings for the latter. The said plunger is provided with an elongated slot M, the upper and lower walls of which are inclined, but parallel. A rectangular rod N, carrying inclined flat springs O and P, extending parallel with each other and secured at opposite ends to the upper and lower faces, respectively, of said rod, passes through said slot, said springs being adapted to engage said upper and lower walls of said slot M, respectively, so that as said rod is moved in either direction said plunger is either raised or lowered, thus engaging or releasing said members E, as desired.

As shown in Fig. 5, the members E where only two are employed may be thrown into firm but yielding engagement with the button-head by means of a rod Q, provided with springs R at opposite sides, which are secured at opposite sides of said rod and diverge at their free ends, thus acting like a wedge to force the lower ends of said members E apart. The spring J is set near the middle portions of said members, thus holding the same normally in position to lightly engage the button-head to prevent same from becoming displaced before the springs R are brought into engagement therewith. Other means for bringing said members into engagement with the button-head may obviously be designed,

and I do not wish to be limited to any specific devices for this purpose.

I claim as my invention—

1. The combination with a tufting-board
5 having recesses, of clamping members fulcrumed between their ends in said recesses, a spring interposed between said members to normally hold their upper ends together, and devices for locking said members together at
10 their upper ends, said members being adapted at their upper ends to receive and hold a button-head, substantially as described.

2. In a tufting-machine, the combination with a tufting-board provided at intervals
15 with recesses, and sockets adapted to fit said recesses, of inwardly-extending shoulders on said sockets, clamp members extending into and above said sockets and provided between their ends with grooves adapted to receive
20 said shoulders, recesses in the upper ends of said clamp members adapted to receive and engage a button-head, and devices for forcing and holding said clamp members into engagement with a button-head, said members turning
25 on said shoulders as a fulcrum.

3. In a tufting-machine, the combination with a tufting-board provided at intervals with openings, of cups or sockets adapted to fit said openings, said cups or sockets each
30 comprising two members provided at their upper ends with inwardly-extending shoulders, and clamp members extending at their lower ends into said cups or sockets and fulcrumed on said shoulders and projecting
35 above same, the upper ends of said clamp members being provided with recesses adapted to receive and engage a button-head, and devices engaging the lower ends of said members for spreading same to move the upper

ends thereof into engagement with said button-head. 40

4. In a tufting-machine, the combination with a tufting-board provided at intervals with openings, of cups or sockets adapted to fit said openings, said cups or sockets each
45 comprising two members provided at their upper ends with inwardly-extending shoulders, and clamp members extending at their lower ends into said cups or sockets and fulcrumed on said shoulders and projecting
50 above same, the upper ends of said clamp members being provided with recesses adapted to receive and engage a button-head, and spring-actuated devices engaging the lower ends of said members for spreading same to
55 move the upper ends thereof into engagement with said button-head.

5. In a tufting-machine, the combination with a tufting-board having recesses, of button-holders adapted to be mounted in said
60 recesses and comprising two clamp members one of which is fulcrumed between its ends and movable toward and away from said other member at its free ends, means for holding a button-head between the upper ends of said
65 members, a spring interposed between said members to normally hold them in relative position to clamp the button-head, and devices engaging the lower ends of said members for locking said members in position to
70 engage and hold the button-head.

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

HUGO R. KUERSTEN.

Witnesses:

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RUDOLPH WM. LOTZ.