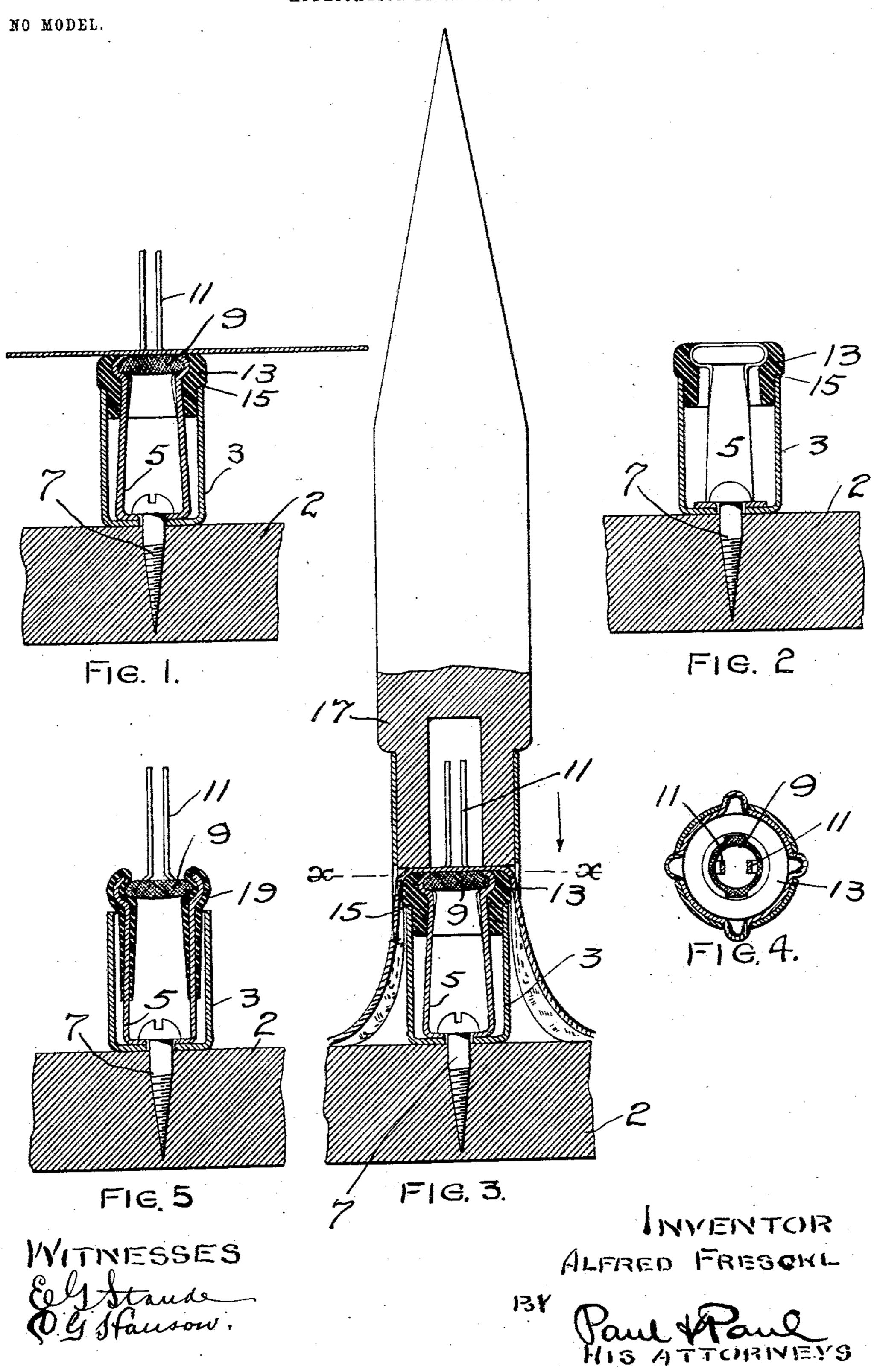
A. FRESCHL.

BUTTON SUPPORT FOR TUFTING MACHINES.

APPLICATION FILED DEC. 15, 1903.



United States Patent Office.

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BUTTON-SUPPORT FOR TUFTING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 753,132, dated February 23, 1904.

Application filed December 15, 1903. Serial No. 185,242. (No model.)

To all whom it may concern:

Be it known that I, Alfred Freschl, of Chicago, in the county of Cook, State of Illinois, have invented certain new and useful Improvements in Button-Supports for Tufting-Machines, of which the following is a specification.

This invention relates to improvements in devices designed to be used in connection with tufting-machines for the purpose of supporting the tufting-buttons while the machine is in use; and the objects of my invention are to provide a support of this kind by means of which a tufting-button may be firmly held, while at the same time the material forming the top of the cushion or other article will be protected and marring thereof by contact with the button-holding means will be prevented.

The invention consists generally in providing a cushion of elastic material that surrounds the button-holding clamp and prevents the material from being brought into contact with the clamp or with the tufting-tubes within which the clamps are arranged.

The invention consists, further, in the constructions and combinations hereinafter described, and particularly pointed out in the claims.

In the accompanying drawings, forming part of this specification, Figure 1 is a transverse vertical section of a button-support embodying my invention, a tufting-button being shown in position and a portion of the material being shown with the shanks of the button extending through it. Fig. 2 is a vertical section taken on a plane at right angles to the plane of Fig. 1. Fig. 3 is a view similar to Fig. 1, showing a plaiting-tube in position for making plaits in the material forming the top of the cushion or other article. Fig. 4 is a section on line x x of Fig. 3 looking in the direction of the arrow. Fig. 5 is a transverse vertical section showing a modified construction.

In the drawings, 2 represents the bottom plate or board of a mold or former of a tufting-machine. Arranged upon this board are a series of tufting-tubes 3, with button-holding clamps 5 arranged therein. The tubes 3 and clamps 5 are secured in position by suitable screws 7. The clamps 5 are provided with

suitable jaws adapted to receive and hold the head 9 of a tufting-button, said button being provided with suitable shanks 11. A suitable elastic cushion 13 is arranged between the legs of the clamp 5 and the inner wall of the 55 tufting-tube 3. I prefer to make the tube 3 shorter than the clamp 5, so that the upper end of the tube is below the jaws of the clamp, as shown in Figs. 1, 2, and 3 of the drawings. The elastic cushion 13, as shown in Figs. 1, 2, 60 3, and 4, is preferably made in the form of a rubber ring, having a shoulder 15, that rests upon the end of the tube 3, and this ring extends upward flush with or slightly above the upper edges of the clamping-jaws, and its 65 inner surface is properly shaped to conform to the outer surfaces of the jaws of the clamp.

It is designed to use this button-holding device for supporting buttons of various sizes, and I have found in practice that where clamp- 7° ing-jaws were employed without the surrounding cushion the buttons having the larger heads would spread the jaws apart so far that they would not come back to proper position to engage the heads of smaller buttons. The 75 rubber-ring cushion therefore serves a twofold purpose. It covers the outer surfaces of the jaws of the clamps and also the upper end of the tufting-tube and prevents the material from being brought in contact therewith. It is cus- 80 tomary to use "plaiters" or plaiting-tubes 17, (see Fig. 3,) which after the material for the top of the cushion or other article is put in place are forced down over the tufting-tubes into the position shown in Fig. 3 of the draw-85 ings. These tufting-tubes are slotted, and thereby suitable plaits are formed in the material. The elastic-ring cushion 13, arranged as shown, prevents this material from being brought in contact with the jaws of the clamp 90 and also with the end of the tufting-tube. thereby protecting the material and preventing it from being marred by contact with the metal surfaces of the clamp and the tube. The elastic-ring cushion also adds to the resiliency 95 of the clamp and causes it to return to its normal position after having been used for the support of buttons having large heads.

In place of using an elastic ring 13, surrounding the clamp, as shown in Figs. 1, 2, 100

3, and 4 of the drawings, I may apply an elastic cushion directly to each jaw of the clamp, as shown in Fig. 5 of the drawings. In this instance an elastic cushion 19 is secured upon each jaw of the clamp and is arranged to extend downward, preferably to a point near the lower end of the clamp. This material is preferably rubber, and it is preferably applied directly to the clamp and vulcanized thereon.

I do not limit myself to the details of the construction herein shown and described, as the same may be modified in many particulars without departing from my invention.

I claim as my invention—

1. In a button-holder for upholstering-machines, the combination, with a button-clamp having suitable button-holding jaws, of an elastic cushion covering the outer surfaces of said jaws, substantially as described.

2. In a button-holder for upholstering-machines, the combination, with a button-clamp having suitable button-holding jaws and a tufting-tube within which said clamp is arranged, of an elastic cushion arranged between the outer surface of said clamp and the inner surface of said tube, substantially as described.

3. In a button-holder for upholstering-machines, the combination, with a button-clamp 3° having suitable button-holding jaws, and a tufting-tube within which said clamp is arranged, of an elastic cushion covering the end of said tube and the outer surface of the button-holding jaws, substantially as described. 35

4. In a button-holder for upholstering-machines, the combination, with a button-clamp having suitable button-holding jaws and a tufting-tube within which said clamp is arranged, of an elastic-ring cushion arranged 4° between said tube and said clamp, substan-

tially as described.

5. In a button-holder for upholstering-machines, the combination, with a button-clamp having suitable button-holding jaws and a 45 tufting-tube within which said clamp is arranged, of an elastic-ring cushion arranged between said tube and said clamp and covering the end of the tube and the outer surface of said jaws, substantially as described.

In witness whereof I have hereunto set my hand this 7th day of December, 1903.

ALFRED FRESCHL.

In presence of— H. L. Fahrney, John H. Wolfe.