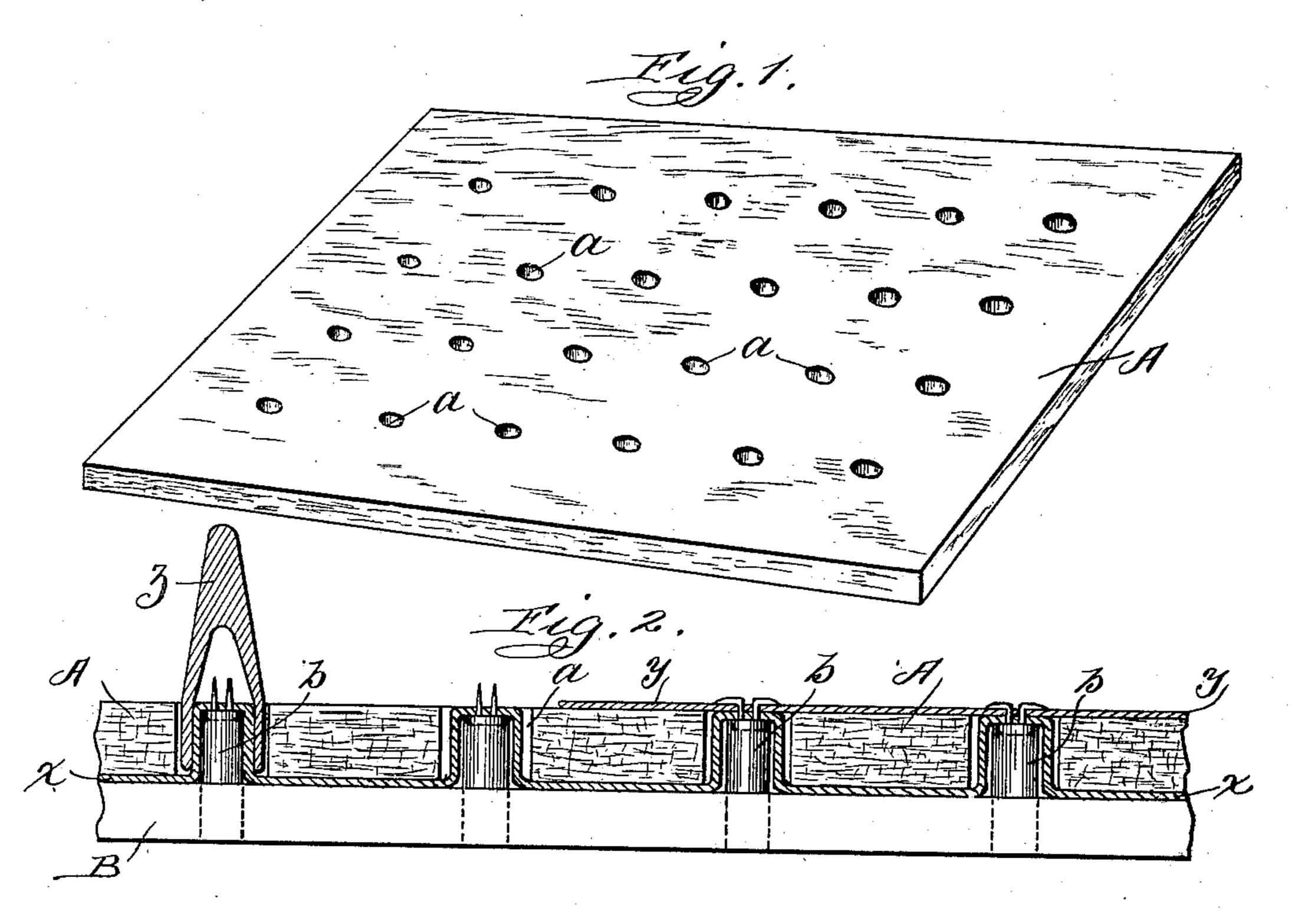
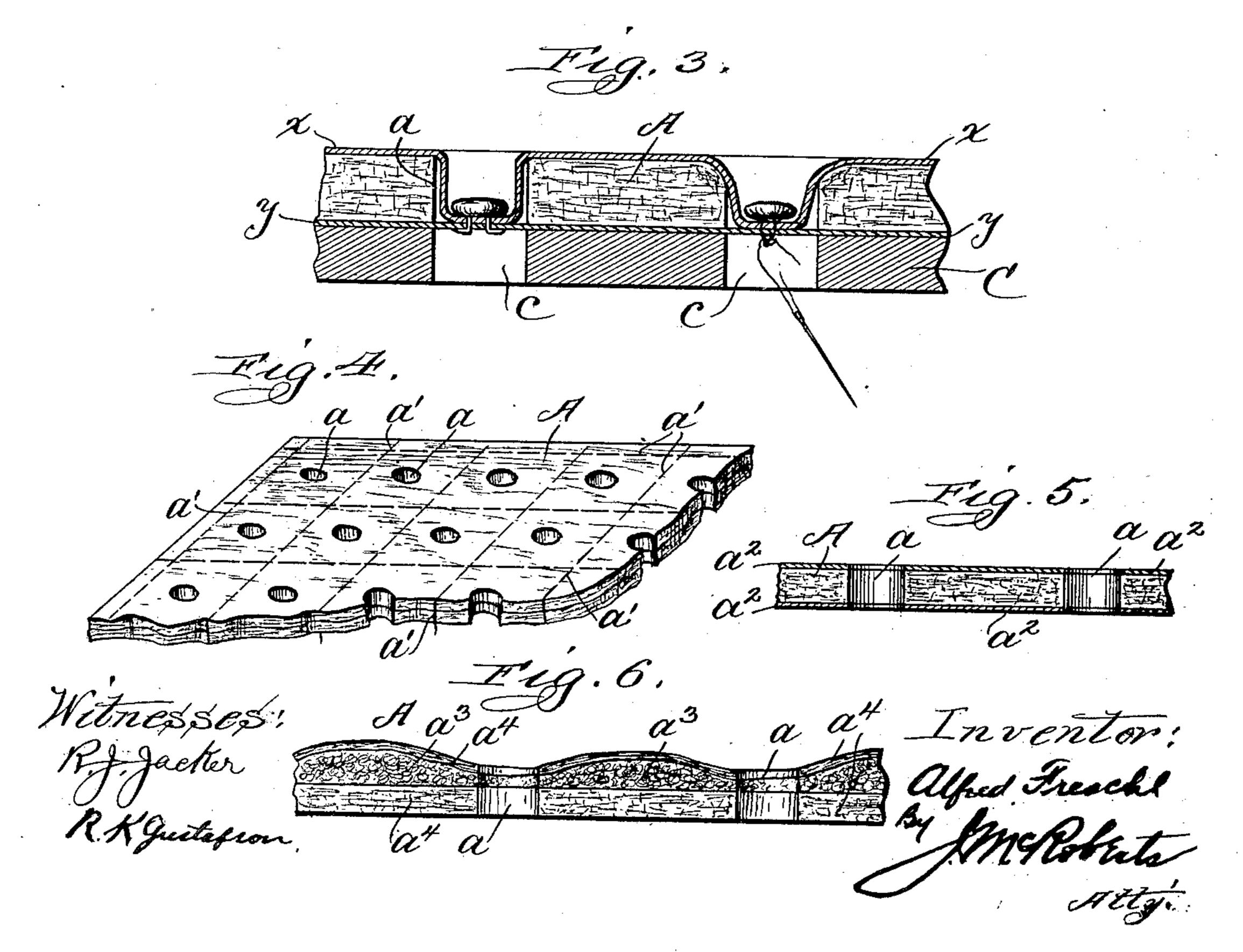
A. FRESCHL. UPHOLSTERY.

(Application filed July 30, 1900.).

(No Model.)





UNITED STATES PATENT OFFICE.

ALFRED FRESCHL, OF CHICAGO, ILLINOIS.

UPHOLSTERY.

SPECIFICATION forming part of Letters Patent No. 693,644, dated February 18, 1902.

Application filed July 30, 1900. Serial No. 25,223. (No specimens.)

To all whom it may concern:

Beitknown that I, ALFRED FRESCHL, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, 5 have invented certain new and useful Improvements in Upholstery, (Case No. 11;) and I do hereby declare that the following is such a full, clear, and exact description of the invention as will enable others skilled in the 10 art to which it appertains to make and use the same.

This invention relates to an improved prepared filler to be used in making upholstered or tufted cushions and linings, and has for 15 its object to provide a material adapted for such use which shall be already prepared for the process of tufting.

The invention consists in the matters hereinafter described, and particularly pointed out

20 in the appended claims.

The invention is intended to be used in the production of upholstered cushions, backs, or seats designed for use in upholstering sofas, chairs, carriages, and like objects, and for 25 linings and decorations of caskets and other articles where upholstery is used, and which usually consists, when completed and ready for application to the seat or other support, of a bottom or backing of cardboard, burlap, or 30 other like material, an outer or upper covering or facing of leather, cloth, or similar material, and a filling or packing of suitable material. To produce the tufted effect in these cushions or linings, which may be of any pat-35 tern or design, the filling is divided into a plurality of elevated, rounded, or diamondshaped projections, and the cover and backing are secured together between these elevations at the base of the cushion by suit-40 able fastening or anchoring means, whereby the cover or lining presents a number of tufts disposed in regular and orderly arrangement in accordance with the selected pattern, the outer edges being finished in any 45 manner appropriate to the use for which it is intended. In the process of making such tufted cushions as heretofore generally practiced the backing and cover were usually secured together, as along one or more of their 50 edges, and the tufts or projections were made

tufts at one side or end of the cushion, by the operator employing a filler of loose hair, excelsior, or like material and filling each row separately, and so on until the several 55 rows were successively completed, or the materials were laid over a suitable form, the loose filling being inserted around the tufters of the form, and mechanical means were employed to bring the parts into the desired 60 relation to finish the cushion by suitably connecting the cover and backing at the bases of the depressions between the tufts by retaining-stitches or by clench-buttons.

In the drawings, which illustrate certain 65 forms of devices that may be employed in practicing the present invention, Figure 1 is a perspective view of a section of filler constructed according to my invention and ready for operation and manipulation. Figs. 2 and 70 3 are views showing different methods of employing my new filler in the operation of making a cushion. Figs. 4, 5, and 6 are views of

slightly-modified forms of filler.

In making a cushion embodying my pres- 75 ent invention a suitable upholstering or tufting apparatus may be employed, providing means at regular intervals or in regular patterns to allow the operator to tuft the inner and outer coverings together at the base of 80 the tuft-pits. The filler A may be a sheet of any suitable material—such as cotton-batting, felt, compacted hair, moss, excelsior, or any other suitable material—provided with perforations a, arranged in any design or pat- 85 tern which is to be reproduced in the tufted cushion, these perforations corresponding in arrangement and disposition to the depressions or tuft-pits in the cushion, which receive the tuft-buttons or other fastenings be- 90 tween the elevations or projections. The perforations are produced in any suitable manner, preferably by laying the web of filler over a marking-board having indicators arranged to correspond with the tuft-pits and then per- 95 forating the material, as by parting, opening, or cutting through it by means of a suitable tool operating like a biscuit-cutter. Either before or after the perforations have been provided the web of material is preferably suit- 100 ably treated to prevent it from pulling or getstep by step, beginning at the outside row of I ting out of shape. In tufted cushions the

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tuft-pits are regularly and uniformly arranged, and it is desirable to have the perforations in the filler, which should register with these tuft-pits in order to produce the 5 best effects, preserved and retained in the corresponding pattern and prevented from becoming uneven by reasons of the tendency of the material to pull or stretch, especially where a material not closely compacted is 10 employed, as cotton-batting. For this purpose the web or sheet of material may be treated by any suitable means which shall preserve its contour. I have found by experience that a very effective means to this end 15 is provided by stitching the web, preferably longitudinally and transversely, as at a' in Fig. 4. Also this result may be attained by sizing or shellacking the web, as indicated at a^2 in Fig. 5. It is obvious that it is not nec-22 essary to treat all materials adapted for use as a filler in order to prevent irregularity in the perforations, as the density of the material or the degree to which the fibers have been compacted will often preserve its shape—as, 25 for example, where felt or any other denselycompacted material is employed.

The filler, as above described, will be found suitable for use in any kind of tufted cushion, as it is clear that any depth of tuft may 30 be produced by employing as many layers of the prepared sheets or webs as may be desired. However, in order to provide for extra fullness and softness in the tufts I may construct a filler having an intermediate 35 layer of loose hair, moss, or like material between two layers or webs of more compact or dense material, such as felt or cotton-batting. As shown in Fig. 6, this type of filler may be produced by using an intermediate | 40 layer a^3 of loose material between an upper and lower web a^4 of relatively compact material. The several layers may be secured together, if desired, in any suitable manner, and the upper and lower layers are provided with perforations a in the manner above described, the intermediate loose material, if not separated at these points, readily compacting when the tuft-pits are formed. In this form or in any form where one web is 50 placed upon another the lower web may be of coarse material, this producing a deep tuft of the finest upper surface at a comparatively low figure.

The prepared filler may be employed in any 55 manner and upon any type of machine. For example, as shown in Fig. 2, it may be used on a mold B, provided with upwardly-projecting tufting-posts b. In this machine the cover or outer fabric x is placed face down-60 ward in the mold, being positioned upon the tufters by marks first provided, as is well understood in the art, the tufting-pegs z preferably being employed, and the filler is then put in place by passing the tufters or tufting-

ing y is positioned and secured to the cover in any of the well-known ways, the pegs being removed, of course, before the backing is applied. Also, as shown in Fig. 3, the cushion may be tufted upon a suitable tufting- 70 table C, provided with tufting-openings c. In this case the backing is laid over the table, and the filler, previously provided with perforations arranged to correspond with the openings in the table, is then placed in posi- 75 tion, with its perforations registering with the openings in the table, after which the cover is positioned over the filler and the tuft-pits formed by sewing through the openings or otherwise securing the cover to the backing 80 at the perforations, the fullness of material in the cover providing the slack for the tufts or projections. As shown at the right of Fig. 3, the edges of the filler about the perforations will be drawn down or compacted by 85 the operation of securing the cover and backing together, the cover being drawn taut, the other figures not showing this feature for mere convenience of illustration.

In the form shown in Fig. 6 the intermediage ate layer a^3 is shown at the left hand as parted or perforated to correspond with the perforations in the outer webs, while at the right hand it is shown as compacted at the perforations, and it will be drawn down to the base 95 thereof by the cover when in position.

With any type of machine that may be used to tuft the cover the tufting or securing together of the inner and outer materials may be accomplished in any well-known manner. 100 In Fig. 2 I have shown tuft-buttons for this purpose, they being employed where superior workmanship is desired, though ordinary soft tufts stitched to the material may be used. At the left of this figure the shanks of the 105 buttons are shown before they are clenched, while at the right they are shown clenched over, it being understood that suitable washers may be used, as now well understood. In Fig. 3, at the left, is shown a clench-button, 110 which may be of any desired type of either single or double prong variety and which is inserted from above by hand, and its shank is bent or clenched over by a hand-tool or by a suitable anvil on the table, both as now 115 well known. At the right of this figure the cover and backing are shown as sewed or stitched together, when a soft tuft or rosette may be used.

It is apparent that any suitable material 120 may be employed as the filler, and my invention comprehends any material of a suitable nature, the important feature being the provision of a prepared filler, which may be expeditiously and uniformly positioned on the 125 mold or table in proper relation to the associated parts.

The term "cushion" is here used to indicate any form of upholstered article—such as 65 pegs through its perforations, and the back-la cushion, a pad, a lining, or any similar de-130

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vice—it being obvious that the prepared filler here disclosed may be used in making upholstered articles of any kind and regardless of their particular form or the nature of their specific use or the material employed.

Having thus described my invention, what

I claim is—

1. A prepared filler for use in making tufted upholstery composed of a sheet of fibrous material provided with perforations arranged in predetermined order in the pattern to be produced in the cushion.

2. A prepared filler for use in making tufted upholstery composed of a web of fibrous material provided with perforations arranged in

the pattern to be produced, and means to preserve the arrangement of the perforations.

3. A prepared filler for use in making tufted upholstery comprising an upper and lower layer of comparatively compact fibrous mate- 20 rial, and an intermediate layer of loose material, the upper and lower layers perforated at intervals corresponding to the pattern to be produced in the finished cushion.

In testimony whereof I affix my signature 25 in the presence of two subscribing witnesses.

ALFRED FRESCHL.

Witnesses:

ROBERT J. CATCHFOLE, J. MCROBERTS.