No. 654,618. Patented July 31, 1900.

A. FRESCHL.

ART OF UPHOLSTERY.

(Application filed Sept. 25, 1899.)

(No Model.)

FIG. 1.

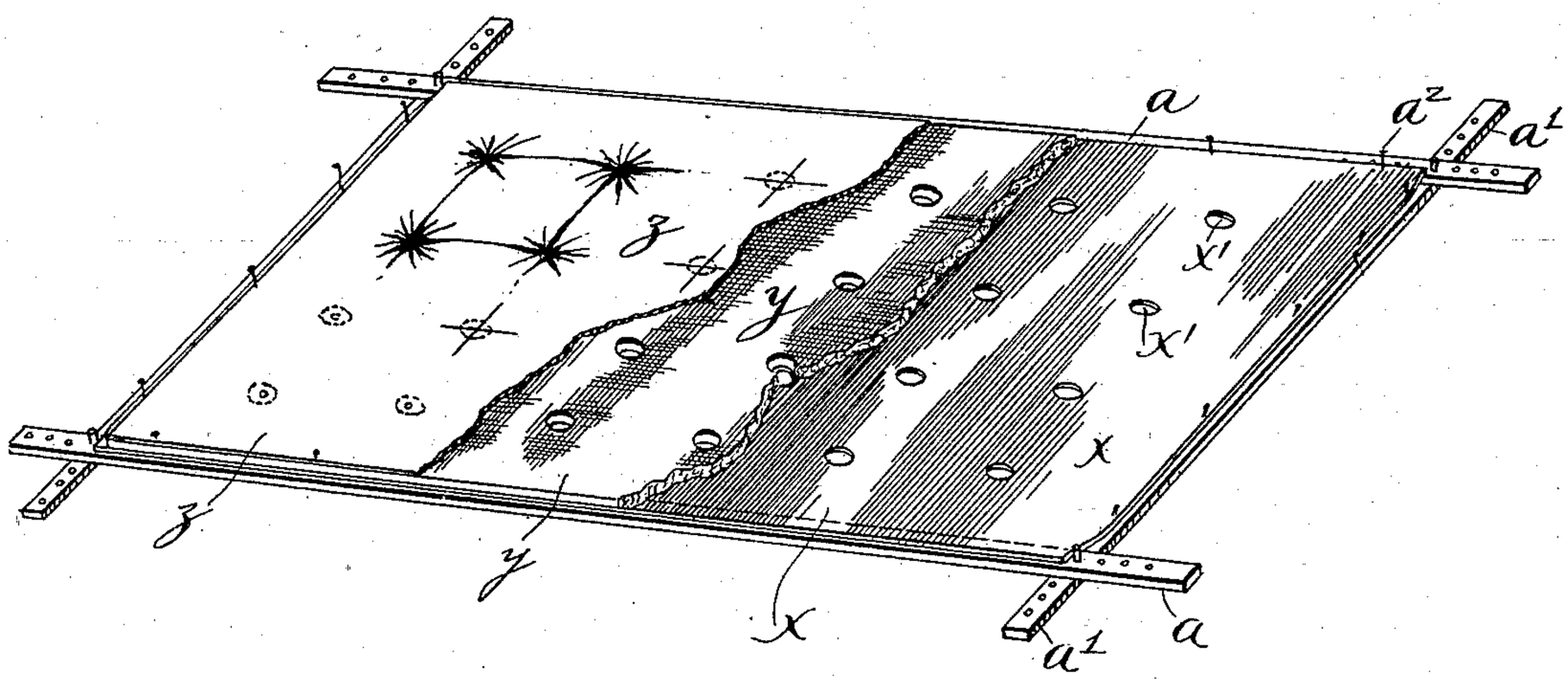


FIG. 2.

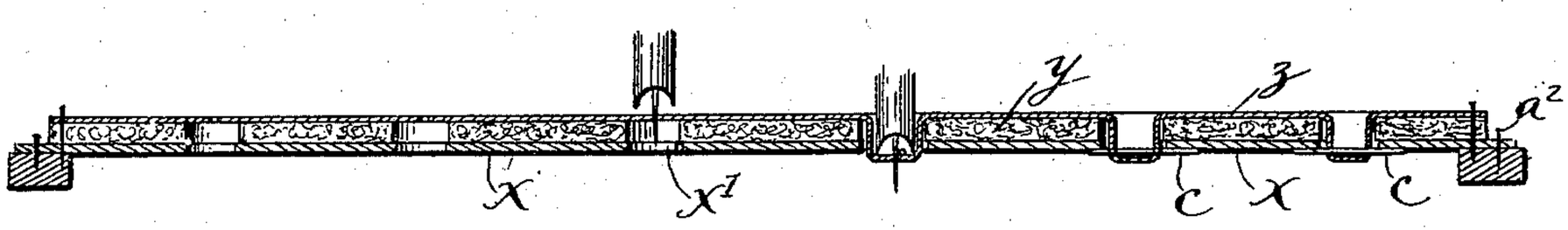


FIG. 3.

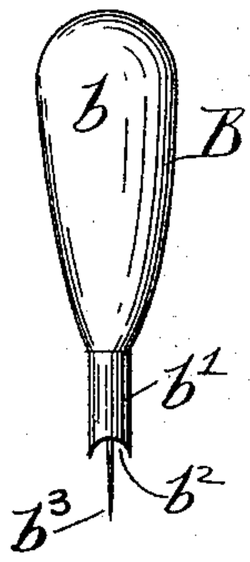
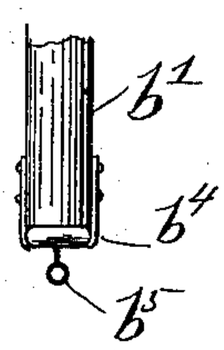


FIG. 4.



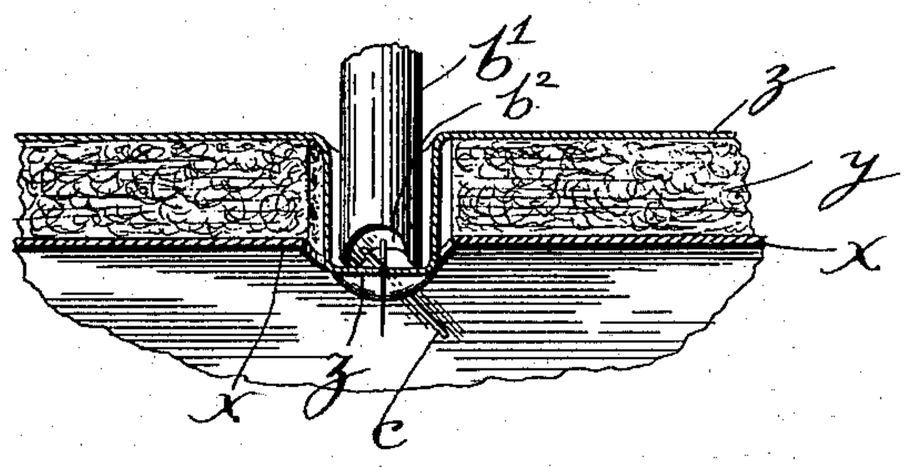


FIG. 5.

Witnesses

W. J. Bell

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UNITED STATES PATENT OFFICE.

ALFRED FRESCHL, OF CHICAGO, ILLINOIS.

ART OF UPHOLSTERY.

SPECIFICATION forming part of Letters Patent No. 654,618, dated July 31, 1900.

Application filed September 25, 1899. Serial No. 731,578. (No specimens.)

To all whom it may concern:

Be it known that I, ALFRED FRESCHL, 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 the Art of Upholstery, (Case No. 7;) 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 art to which it appertains to practice and use the same.

This invention relates to an improved method or process of making upholstered or tufted cushions, and has for its object to render the making of such cushions more expeditious and simple and considerably cheaper.

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

The invention is intended to produce upholstered cushions, backs, or seats designed for use in upholstering sofas, chairs, carriages, and like objects, and which usually consist, when completed and ready for application to the seat or other supporting frame, of a bottom or backing of cardboard, burlap, or other suitable material, an outer or upper covering or facing of leather, cloth, or similar material, and a filling or packing of hair, excelsior, or like material. To produce the tufted effect in these cushions, which may be of any pattern or design, the filling is divided into a plurality of elevated rounded or diamond-shaped projections and the cover and backing are secured together between these elevations at the base of the cushion by suitable fastening or anchoring means, whereby the cover presents a number of tufts disposed in regular and orderly arrangement in accordance with the selected pattern, the outer edges being finished in any manner appropriate to the use for which the cushion 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 edges, and the tufts or projections were made step by step, beginning at the outside row of tufts at one side or end of the cushion, and so on until the several rows were successively completed, for the materials were laid over a suitable form, the filling being inserted around the tufters of the form, and mechanical means were employed to bring the parts into the desired 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 forms of devices that may be employed in practicing the present invention, Figure 1 is a perspective view of a suitable skeleton frame or support upon which the material may be disposed for operation and manipulation. Fig. 2 is a view showing the sequence of steps or operations performed. Figs. 3 and 4 are views of suitable tools that may be employed by the operator, and Fig. 5 is a view showing the relation of parts when the securing means is inserted through the cloth of the cover.

In making a cushion according to the principles of my present invention a suitable support is employed, which is preferably in the form of a frame, such as shown in Fig. 1, upon which the backing x is laid. This frame may be a rectangular skeleton, resembling somewhat an ordinary quilting-frame, composed of the side and end pieces a a', each provided with any suitable device, such as pins a^2, to hold the material in proper position. The backing, which may be of cardboard or other suitable material, is preferably provided with perforations x', arranged in the design or pattern which it is desired to reproduce in the upholstered article, these perforations corresponding in arrangement and disposition to the depressions or indentations in the cushion which receive the tuft-buttons or other fastenings between the elevations or tufts. It is apparent that any design may be made by varying the locations of these perforations. The filling material y is also similarly prepared, the perforations therein corresponding to those in the backing and adapted to register therewith when the filling is superposed upon it. This filling may be of any desired material such as is now commonly employed for this purpose. Layers of cotton-batting are very suitable as readily admitting of easy manipulation, especially in forming the perforations, although I do not wish to be understood as in any way limiting myself to the use of this material,

as it is obvious that other materials may be employed—such as hair, moss, and the like—which may be easily parted or opened to make the desired perforations or which may be formed in the dimensions and pattern desired by packing in suitable mold-cells of the size and form required to make the tufts or elevations.

The cover *z* is preferably marked or creased with a pattern corresponding in design with that outlined by the perforations in the backing, the pattern being marked with such fullness of cloth as will permit the material to form the tufts or elevations in the finished product. The cover may, if desired, be perforated to indicate the points at which the depressions will be formed.

The reference-letter B represents a tufting-tool, which is provided with a suitable handle portion *b* and a shank *b'*, the latter being preferably round and substantially of a size to fit the openings in the backing. The face of the shank shown in Fig. 3 is channeled or concaved, as at b^2, and is provided with a pin b^3, projecting preferably axially therefrom. In the form shown in Fig. 4 the pin is omitted and the tool is provided on the face of its shank with a seat b^4 to receive the head of a suitable tuft-button b^5, provided with an eye in its shank. It will of course be understood that this seat may be formed in any suitable manner, or that the channel b^2, of the form shown in Fig. 3, may be adapted to serve this purpose by making the pin removable.

In the operation of this invention the backing is suitably perforated, as is the filling material, in any of the methods heretofore described, and the cover is preferably marked or creased with a pattern corresponding to the arrangement of these perforations. The backing is secured upon the frame A and the filling material is then superposed thereon, with its perforations or openings between the several portions forming the tufts or elevations in the cushion registering with the perforations in the backing. The cover or outer fabric is then placed face upward over the material, and the fullness of the material is depressed through the perforations in the filling and backing by the operator by means of a tufting-tool, and the parts are then secured in their tufted relation by suitable securing devices. When the step of depressing the cover is about to be begun, the several parts are in the relation shown at the left of Fig. 2, the successive steps being illustrated by the different positions shown therein. The tool is first employed to properly center the fullness of the cover material with respect to the perforations in the backing and filling and then carries it through these perforations to a point slightly below the lower level of the backing and in position to receive an anchor *c*, as of thread, wire, or other suitable material or form.

A tufting-tool, such as shown in Fig. 3, is employed when it is desired to have the parts secured together by passing the fastening device through the material of the cover, as the channel in the lower end of this tool permits the anchor to pass directly through the material of the cover itself, this material being held taut around the end of the tool and in the path of the anchor as it passes through the channel, as clearly shown in Fig. 5. When, however, it is preferred to employ tuft-buttons, the tufting-tool of Fig. 4 is employed, in which case the button is inserted in the seat in the end of the tool, its shank projecting axially from the tool to serve the same function as the pin b^3 of the tool of Fig. 3, which is to properly center the fullness of the cover with respect to the perforations. As the tool is operated, it carries the cover into the perforations as before and the shank of the button is positioned to receive the wire or anchor in its eye.

It will be apparent that by providing the filling and backing with perforations before they are placed upon the frame for manipulation the material may be prepared in large quantities and of any desired number of patterns, this work being accomplished by the method described expeditiously and cheaply, and that a saving in the time and labor of the operator is effected, as he does not have to stop to arrange the perforations in the material. It is, however, apparent that this preparation of the material may be accomplished after the backing and filling have been placed upon the frame. It is further apparent that the backing and filling may be separately prepared or that they may be simultaneously prepared by superposing one upon the other and making the perforations in both at the same time, in which case it will be convenient to apply to the uppermost material a suitable blank or pattern indicating the design to be produced and the locations of the perforations.

By employing a method of the character disclosed it is apparent that cushions of various patterns may be made upon the same frame. While I may employ a work-table having perforations in multiple patterns to accommodate and receive the depressed portions of the cover, it is apparent that the mold or work-table, which of necessity must be provided with such passages and would confuse the operator by reason of the various arrangements thereof for the different patterns, is eliminated in the specific exemplification described in connection with the frame, in which case the backing itself is the sole support of the upholstered material and constitutes the table upon which the work is done; but it will be further observed that it is unnecessary in practicing this invention with either a perforated work-table or a skeleton frame or any equivalent construction to employ any mechanical parts, a simple tool for depressing the material being all that is

required. By dispensing with all mechanical means I simplify the operation and greatly cheapen the cost of production.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. As an improvement in the art of upholstery, the process of preparing the materials to be incorporated into a cushion, which consists in providing perforations in the backing and filling arranged in predetermined patterns, and marking the cover to correspond therewith.

2. As an improvement in the art of upholstery, the process of preparing the materials of the cushion, which consists in superposing the filling upon the backing, providing perforations simultaneously in both materials, and marking the cover to indicate its points of passage through said perforations.

3. As an improvement in the art of upholstery, the method of forming tufted cushions, which consists in providing perforations in the backing and filling arranged upon the same pattern, marking the cover to correspond therewith and forcing the same through said perforations by hand, and then anchoring or fastening the materials in place.

4. As an improvement in the art of upholstery, the method of forming tufted cushions which consists in correspondingly perforating the backing and filling and marking the cover, depressing the cover through the perforations, and then suitably anchoring the cover in place by passing fastening devices therethrough at its points of depression.

5. As an improvement in the art of upholstery, the method of forming tufted cushions, which consists in providing the filling and backing with registering perforations, marking the cover, depressing the cover through the registered perforations, and then wiring the cover at its points of depression.

6. As an improvement in the art of upholstering, the method of forming tufted cushions, which consists in similarly perforating the backing and filling, applying the cover, depressing the cover through the perforations of the filling and backing, and then securing the cover at its points of depression.

7. As an improvement in the art of upholstery, the method of forming tufted cushions, which consists in providing the filling and backing with corresponding perforations, applying and depressing the cover through the perforations, carrying the depressed portions of the cover below the rear of the backing, and passing a securing device therethrough.

8. As an improvement in the art of upholstery, the method of forming tufted cushions, which consists in providing perforations in the backing and filling arranged upon the same pattern, applying the cover, placing tuft-buttons having eyeleted shanks in position over the perforations, depressing the cover and buttons into the perforations, and anchoring the buttons in place.

9. As an improvement in the art of upholstery, the method of forming tufted cushions, which consists in positioning a suitably-perforated backing and a filling upon a frame, applying a cover by forcing the same at intervals through said perforations, and securing said cover in place.

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

ALFRED FRESCHL.

Witnesses:
ROBERT J. CATCHPOLE,
J. MCROBERTS.