Feb. 19, 1924. 1,484,336

A. H. LICHTER

METHOD OF MAKING SEAT COVERS

Filed Feb. 24, 1919

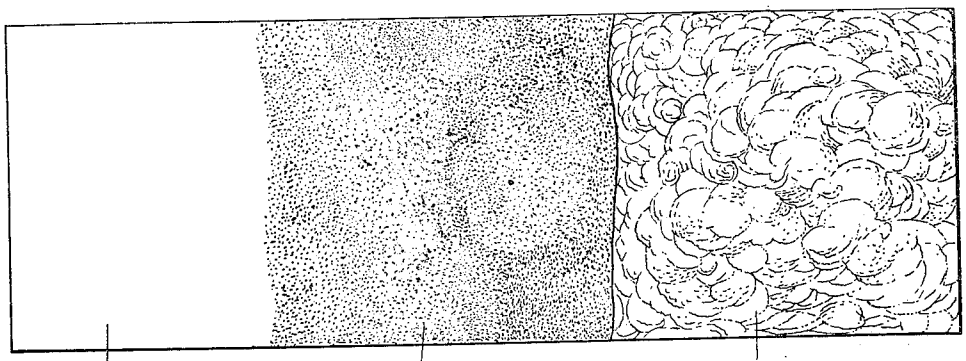


Fig. I.

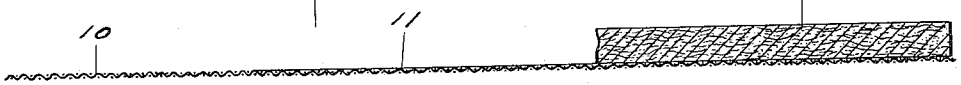


Fig. II.

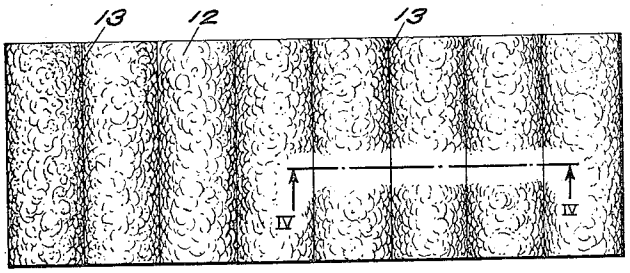


Fig. III.

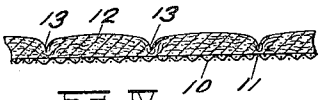


Fig. IV.

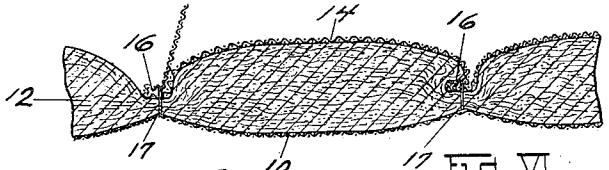


Fig. VI.

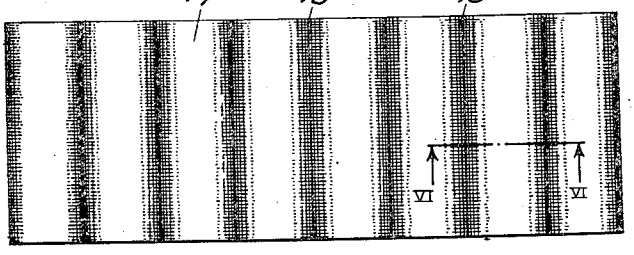


Fig. V.

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UNITED STATES PATENT OFFICE.

ADOLPH H. LICHTER, OF TOLEDO, OHIO, ASSIGNOR TO THE WILLYS-OVERLAND COMPANY, OF TOLEDO, OHIO, A CORPORATION OF OHIO.

METHOD OF MAKING SEAT COVERS.

Application filed February 24, 1919. Serial No. 279,016.

To all whom it may concern:

Be it known that I, ADOLPH H. LICHTER, a citizen of the United States, residing at Toledo, county of Lucas, and State of Ohio, have invented certain new and useful Improvements in Methods of Making Seat Covers, of which I declare the following to be a full, clear, and exact description.

This invention relates to a method of making seat covers, and is particularly applicable to the manufacture of seat covers employed in the construction of automobiles or other vehicles.

One object of the invention is to provide a new and improved method of making seat covers, whereby a considerable saving of time and labor is effected.

A further object of the invention is to provide a new and improved method of arranging the material, which will permit of the same being more readily handled and transported than in the methods ordinarily employed.

A further object of the invention is to provide simple and convenient means for forming seat covers whereby the various materials are positively held in position so as to eliminate possible unevenness in the seat cover.

A further object of the invention is to provide improved means for scoring the material so as to clearly indicate the point where the various layers of material are to be secured together.

Further objects of this invention relate to economies of manufacture and details of construction as will hereinafter appear from the detailed description to follow.

The objects of the invention are accomplished in one instance by the devices and means described in the following specification, but it is evident that the same may be varied widely without departing from the scope of the invention as pointed out in the appended claims.

A structure constituting one embodiment of the invention, which may be the preferred, is illustrated in the accompanying drawing forming a part hereof in which:

Figure I is a diagrammatic representation in plan view of a sheet of the base fabric wherein a portion is shown in its inital condition, a portion coated with a layer of adhesive material, and a further portion showing a layer of filler applied to the adhesive coating upon the base fabric.

Figure II is a longitudinal sectional view taken through the base fabric, shown in Figure I, illustrating the relative thickness of the base fabric and filler.

Figure III is a plan view of a sheet of base fabric with the filler material applied thereto, and illustrating the scored lines formed thereon by the scoring operation.

Figure IV is a vertical sectional view taken along the line IV—IV of Figure III.

Figure V is a top plan view of a portion of the completed seat cover, illustrating the form of the same after the top fabric has been attached.

Figure VI is a vertical sectional view, taken along the line VI—VI of Figure V, and illustrating the manner of securing the top fabric to the other parts of the seat cover.

It has been the usual practice in making seat covers of this type to sew the bottom and top fabric together along substantially parallel lines, spaced substantially at equal distance from each other and then insert in the pockets thus formed, strips of filler material extending entirely across the seat cover. This method of forming seat covers consumes considerable time in that a great degree of care is necessary to properly fold and insert the filler material within the pockets formed by stitching together the top and bottom fabric portions of the seat cover.

In the method shown and described herewith, the various elements making up the seat cover can be more readily assembled and arranged in such a manner as to positively retain all of the parts together, and in their proper position relative to each other at all times, thus preventing any displacement of a portion of the filler with respect to the top and bottom fabric.

In the drawing, similar reference characters refer to corresponding parts throughout the several views, and the sectional views are taken looking in the direction of the small arrows at the ends of the section lines.

Referring to the drawing, 10 indicates the base fabric forming a portion of the seat cover, while 11 indicates a layer of sizing material including some adhesive, which is applied to one of the surfaces of the base fabric. A thin layer of this adhesive is

preferably applied to one surface of the base fabric in such a manner as to extend substantially uniformly over the surface thereof, and the filler material, which is preferably cotton or other soft and yielding material, is then fed or woven in a layer of substantially uniform thickness, as indicated at 12 upon the adhesive coated surface of the base fabric. The layer of filler material thus placed upon the adhesive coated surface of the base fabric is secured in position thereon by reason of the adhesive properties of the coating, and there is thus formed a layer of substantially uniform thickness, which comprises the base fabric and the filler, these parts being secured together by the adhesive so as to form a sheet of material which may be handled and operated upon in the same manner as though it was a single sheet of material, thus preventing the accidental separation of the parts.

While this method of securing the layer of filler material to the sheet of base fabric is preferably employed, it is to be understood that any suitable means for securing these sheets together may be used such as stitching or employing other suitable fastening means.

After the completion of the first operation, which consists in attaching the layer of filler material to the sheet of base fabric, scored lines are formed upon the upper surface of the filler material, as illustrated in Fig. III, which scored lines are preferably formed by passing thereover a roller provided with a plurality of ridges extending about the circumferential surface thereof, and spaced at substantially equal distance from each other. The circular ridges upon the outer circumferential surface of the rolls form a plurality of depressed grooves 13 upon the upper surface of the filler material as the rolls are passed thereover, and as considerable pressure is exerted upon the rolls as they pass over the material, the grooves are formed of sufficient depth and permanence so that they are not readily removed from the upper surface of the filler material, but the filler material may be handled and transported from place to place and the grooves still be retained upon the upper surface thereof so as to be sewed to the sheet material thus formed. After the top surface of the sheet material has been scored as above described, the said sheet material may be formed into rolls or arranged in layers so that it will occupy a comparatively small space, and transported to the factory where the seat covers in their completed form are to be used. The sheet of base fabric and the filler material secured together, as previously described, may thus be handled and transported without danger of their becoming separated from each other, and the scored lines formed in the upper surface of the filler material are of such depth and permanence as to be retained therein after the sheets are thus handled and transported.

The final operation in the construction of the completed seat cover consists in stitching a layer of top fabric, such as leather, fabrikoid or other suitable material to the sheet material thus formed in such a manner as to firmly secure said top fabric to the filler material and the base fabric at suitable points.

As illustrated in Figures V and VI, the sheet of top fabric 14 is applied to the upper surface of the sheet material thus formed, and stitched thereto along the lines 15 which coincide with the scored lines 13 formed in the top surface of the sheet material. In stitching the top fabric 14 to the sheet material, the grooved lines 13 serve as guides for indicating the lines along which the various layers are to be sewed together, and after the sheet of top fabric has been properly positioned upon the sheet material, the various layers are sewed together by forming French plaits 16 of the top material and stitching the parts together by lines of stitches indicated at 17. By this method of stitching the several layers together, the stitches are concealed from the upper or outer surface of the top fabric, thus being concealed from view and protected from injury.

It will be understood that this method of forming seat covers provides a simple, convenient, and economical means for constructing seat covers whereby the various layers of material are properly held in position relative to each other, so as to form a cover wherein the various elements are secured against displacement relative to each other, so as to form a highly efficient construction of the class described. By employing this method, it is possible to place the layer of filler material directly upon the base fabric at the factory where the filler material is produced, and after scoring the upper surface of the sheets thus formed transport the completed sheets to the place where the completed seat cover is to be manufactured without injury to the sheet material, and in such a manner that the scored lines will be clearly defined upon the upper surface thereof, and the sheet material will be in such condition as to permit the immediate attachment of the top fabric portion thereto without the necessity of further treating the sheet material prior to the stitching of the top fabric thereon.

While I have shown and described in considerable detail a specific embodiment of my invention, it is to be understood that this showing and description is illustrative only and for the purpose of rendering my inven-

tion more clear, and that I do not regard the invention as limited to the details of construction illustrated or described, nor any of them, except in so far as I have included such limitation within the terms of the following claims, in which it is my intention to claim all novelty inherent in my invention broadly as well as specifically.

What I claim as new and desire to secure by Letters Patent is:—

1. The method of making seat covers comprising the securing of the filler to the base fabric, the scoring of the surface of the sheet material thus formed, and the stitching together of the top fabric, the filler and the base fabric.

2. The method of making seat covers comprising the securing of the filler to the base fabric, the scoring of the surface of the sheet material thus formed and the stitching together of the top fabric, the filler and the base fabric in such a manner that the stitches will be concealed and protected by the top fabric.

3. The method of making seat covers comprising the securing of the filler to the base fabric, and the stitching together of the top fabric, the filler and the base fabric in such a manner that the stitches will be concealed and protected by the top fabric.

4. The method of making seat covers which consists in applying a layer of adhesive to a base fabric, applying thereto a layer of filler, scoring guide lines upon the free surface of the filler and stitching a top fabric thereto along said guide lines.

5. The method of making seat covers, comprising the securing of a base fabric and filler material together in such a manner that the parts will be retained against separation, the scoring of the upper surface of the filler material whereby depressed markings are formed in the upper surface thereof to indicate the points where the top fabric may be preferably attached, and the stitching together of the top fabric, the base fabric and the filler material at the points or along the lines indicated upon the upper surface of the filler material.

6. The method of making seat covers, comprising the securing of the filler to the base fabric and the marking of the exposed surface of the filler material with guide lines, and the stitching together of the top fabric, the filler and the base fabric along said guide lines in such a manner that the stitches will be concealed and protected by the top fabric.

In testimony whereof, I affix my signature.

ADOLPH H. LICHTER.