July 28, 1936. R. J. REGAN 2,049,175

METHOD OF MAKING APPLIQUÉ SHOES

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Fig. 1

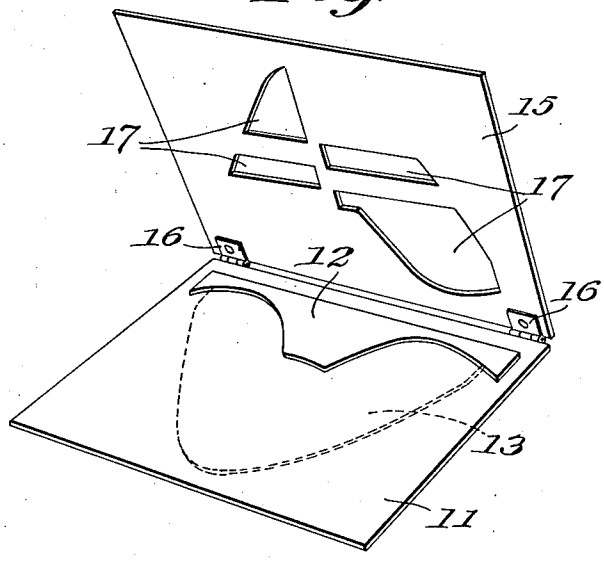


Fig. 2

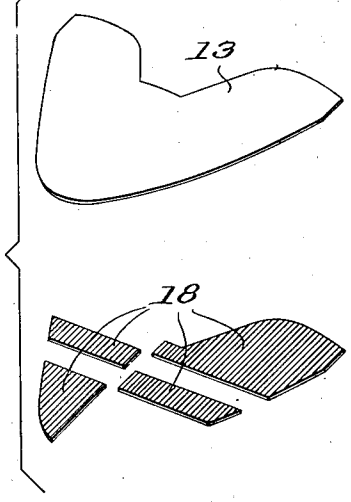


Fig. 3

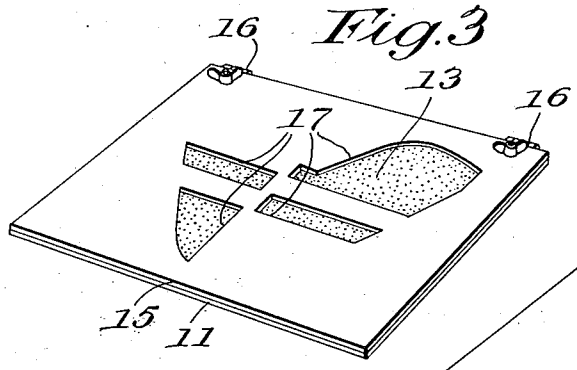


Fig. 4

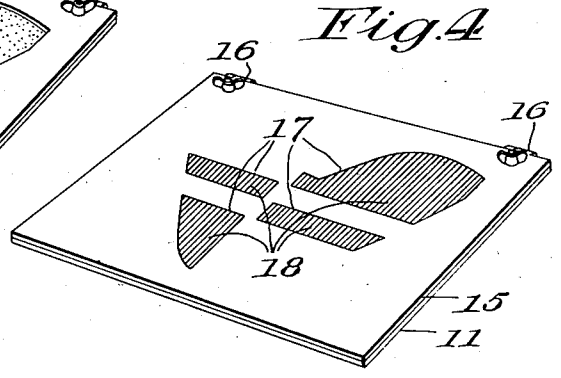
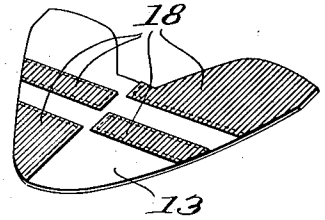


Fig. 5



Inventor:
Richard J. Regan
By Dike, Calm & Gray
Attorneys

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Fig. 6

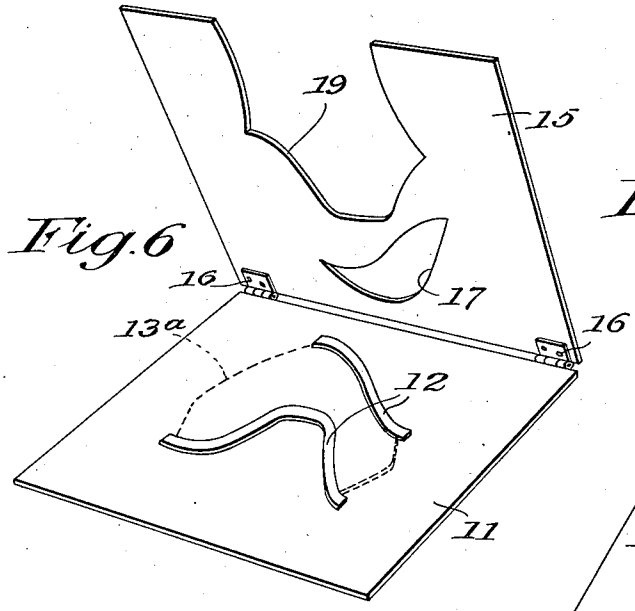


Fig. 7

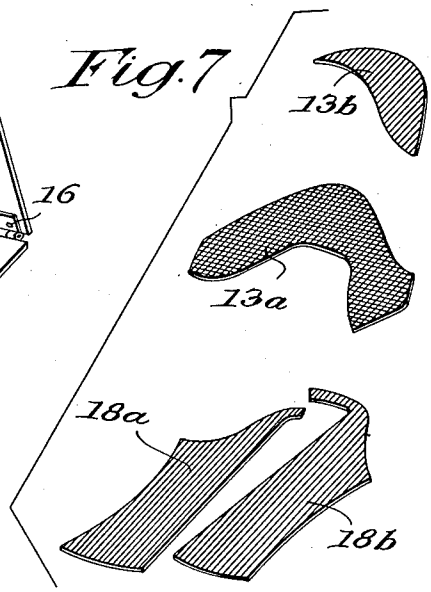


Fig. 8

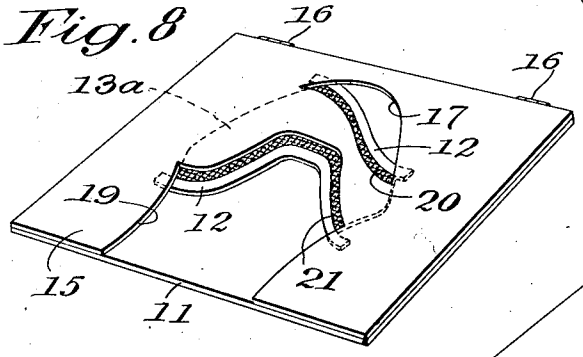


Fig. 9

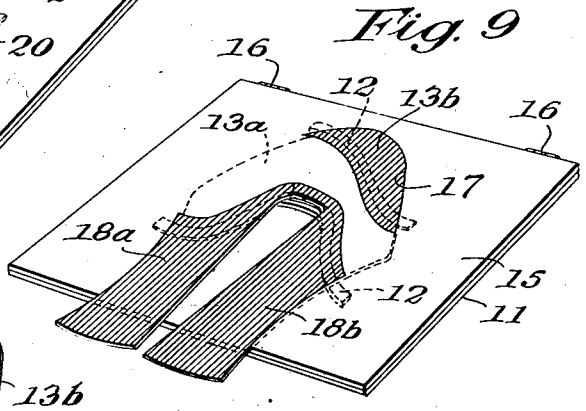
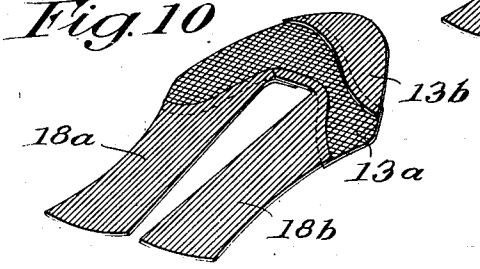


Fig. 10



Inventor:
Richard J. Regan
By Dike Bacon & Gray
Attorneys.

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UNITED STATES PATENT OFFICE

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METHOD OF MAKING APPLIQUÉ SHOES

Richard J. Regan, Lynn, Mass.

Application July 6, 1935, Serial No. 30,049

7 Claims. (Cl. 41—34)

This invention relates to a method of assembling shoe parts in making appliqué shoes or assembling overlapping uppers of shoes.

In making of appliqué shoes, (or assembling overlapping uppers) the use of this improved method makes considerable saving in the present cost of making appliqué or overlapping upper shoes by doing the work more quickly, simply, accurately and efficiently. By this method, for instance, three cases of shoes can be appliquéd and stitched in the same time two cases formerly took. The time involved in spacing and stitching the appliqué to the shoe, is thus cut one third. The steps of marking on the shoe by an ink or impression marker the space to which the appliqué is to be fitted, and of removing the ink markings in the treeing room, are eliminated entirely. The appliqué can also be applied more accurately, and thus eliminate the loss and waste of replacing improperly positioned appliqués. The appliqué can also be applied more easily and simply, eliminating the difficulty of holding the appliqué by hand under the older method. These savings in time, labor and waste result in a very considerable savings in the cost of making appliqué shoes. In addition, the use of my method permits the making of fancier and more complicated appliqués, which formerly could not be made in quantity production because of the added expense and greater skill required.

As is well known in the shoe industry, an appliqué shoe is one ornamented by having a piece of leather or other suitable material of distinctive pattern applied to the shoe. The appliqué is ordinarily stitched to the shoe. The common practice in making appliqué shoes has been to mark off or outline on the flat shoe piece to be appliquéd, (vamp, quarter, tip or foxing) as by an ink or impression marker, the place to which the appliqué is to be applied, and then fit and hold the appliqué by hand on the shoe at this place while the appliqué is stitched to the shoe. Considerable skill, however, is required to mark a shoe piece properly and to hold the appliqué accurately in its proper position during the stitching operation. The appliqué often slips from its proper position during stitching, because the smooth surfaces of the pieces make it difficult to hold them together accurately, or the operator is unable to hold the appliqué to the mark, and time is lost and waste occurs while the operator pulls out the stitching, replaces the appliqué with a new one, and stitches over again.

It is to be understood that what is here said as to appliqué shoes is true also of shoes having overlapping upper parts—such as shoes having a pieced or split vamp, in which the vamp is made up of two or more pieces fitted or stitched to each other along one edge, or a four piece pump having a split vamp and quarters attached along one edge. Such overlapping upper shoes are not appliqué shoes in the usual sense, because the appliqué is a small piece of ornamentation, entirely attached or stitched to the shoe, and not essential to the construction of the shoe, while in overlapping uppers, the parts assembled are themselves basic parts of the shoe essential to its construction, such as two parts of a vamp or a vamp and quarter. In the appliqué shoe the appliqué constitutes a second layer of material on the shoe while in the fitted shoe the parts assembled constitute one layer in effect, being two layers only at their attached edges.

My method of making appliqué shoes preferably involves the use of two plates detachably hinged together, the lower or bottom plate receiving the shoe piece to be appliquéd, (vamp, quarter, tip, or foxing) positioned thereon from a suitable gauge. The top or upper plate registers with the lower plate and has openings cut in it permitting the application of adhesive to the work beneath. The openings in the top or upper plate also preferably outline at least in part the shape of the appliqué pieces to be fixed to the shoe piece beneath by the adhesive. The method, preferably, comprises placing the shoe piece (vamp, quarter, tip or foxing) to be appliquéd on the lower plate, correctly positioning it from the gauge thereon, closing the upper plate down on the lower plate in registration therewith, applying adhesive to the shoe piece between the plates through the openings in the upper plate, inserting the appliqué pieces in their proper openings in the upper plate and causing them to adhere to the shoe piece beneath. The parts thus assembled can then be removed from the plates and the appliqué stitched to the shoe piece, as thus held properly positioned by the adhesive.

Before explaining in detail the present invention it is to be understood that the invention is not limited in its application to the details of construction and arrangement of parts illustrated in the accompanying drawings, since the invention is capable of other embodiments and of being practiced or carried out in various ways. Also it is to be understood that the phraseology or terminology employed herein is for the purpose of description and not of limitation, and it is not intended to limit the invention claimed

herein beyond the requirements of the prior act.

In the drawings:

Fig. 1 is a perspective view of my device adapted for appliqué shoes;

Fig. 2 shows the shoe parts to be assembled;

Fig. 3 shows my device with the basic shoe piece in position on the lower plate after adhesive has been applied thereto;

Fig. 4 shows my device with the appliqué parts in position therein;

Fig. 5 shows the assembled pieces with appliqués stitched thereon;

Figs. 6 to 10 show the adaptation of my device to the assembly of overlapping shoe upper parts;

Fig. 6 is a perspective view of my device thus adapted;

Fig. 7 shows the shoe parts to be assembled;

Fig. 8 shows the basic shoe pieces in position on the lower plate after the adhesive has been applied thereto;

Fig. 9 shows the shoe parts positioned and assembled in my device; and

Fig. 10 shows the assembled parts as stitched together.

In the drawings 11 represents the lower or bottom plate forming part of my device on which my method is used. Plate 11 is preferably of metal, flat and rectangular in shape, and preferably carries an edge gauge 12 for correctly positioning a shoe piece, such as the vamp 13 on the plate 11. A second plate 15 complementary to and registrable with plate 11 is preferably hinged to plate 11 as by detachable hinges 16, and contains openings or apertures 17 outlining the shape of appliqués to be attached to the vamp 13. The openings 17 in upper plate 15 serve as locating means for determining the proper position of applications of adhesive to the vamp 13, the adhesive being applied to the shoe part 13 through the openings or apertures 17 by any suitable means, such as a brush or by spraying.

Shoe piece 13 having been properly located on lower plate 11 by means of edge gauge 12, upper plate 15 is closed down upon it, and openings 17 in upper plate 15 are thus brought into proper position on shoe piece 13 for the application of adhesive to shoe piece 13. Adhesive having been applied to shoe piece 13 as shown in Fig. 3, appliqués 18 are then inserted in their proper apertures 17 in upper plate 15, as shown in Fig. 4, and are affixed to the shoe piece 13 by the adhesive therebetween, appliqués 18 being held in proper position on the shoe piece 13 by means of the adhesive. The appliqués 18 are then stitched to the shoe piece 13 in the usual manner, and the finished product, as shown in Fig. 5, is ready for the next operation.

Of course, if desired, the stitching can be eliminated entirely and the adhesive used exclusively to hold the appliqué onto the shoe.

When it is desired to make similar appliquéd pieces for the other foot, upper plate 15 can be taken from hinges 16, turned over and fastened up again, and the operations repeated for shoes on the other foot as before.

It is understood, of course, that edge gauge 12 in lower plate 11 and opening 17 in upper plate 15 is changed in shape and position as necessary for each individual design of appliquéd shoe. Quarters and foxings may be appliquéd interchangeably with the vamp 13 shown in the drawings. Furthermore without departing from the spirit of my invention, it is to be understood that the operation and parts can be reversed, and the appliqué pieces 18 can be positioned on lower plate 11 by means of suitable indentations thereon similar in shape to openings 17 in the upper plate 15. Appliqués 18 are then arranged on lower plate 11, upper plate 15 closed down, adhesive applied to appliqués 18 through opening 17, the plates opened up again and the shoe piece 13 affixed face down to appliqués 18, being properly positioned thereon by means of edge gauge 12. In such case the lower plate 11 carries the gauges for both the appliqués and the shoe piece 13, the indentations (not shown) on lower plate 11, but similar in outline to openings 17 on upper plate 15 serving as gauges for positioning the appliqué pieces 18, and openings 17 in upper plate 15 serving only as locating means for the proper application of the adhesive.

In Figs. 6 to 10 inclusive I have shown an adaption of my method to the assembling of overlapping parts of uppers, such as shoes having a pieced or split vamp, or 4 piece pump having a split vamp and attached quarters. Lower plate 11 and upper plate 15 are similar to those shown in Fig. 1 with necessary changes in position of edge gauges 12 and with openings 17 and 19 positioned and shaped to accommodate the different kinds of work here involved. As shown in Figs. 7 and 10, numerals 13*a* and 13*b* represent parts of a pieced or split vamp, which when joined together make up a complete vamp. The vamp piece 13*a* is positioned on lower plate 11 by means of edge gauges 12 thereon, and upper plate 15 is closed down upon lower plate 11. Openings 17 and 19 in upper plate 15 are so shaped and positioned with respect to vamp piece 13*a*, as to leave exposed when plate 15 is in closed position, only the edge strips 20 and 21, to which adhesive is then applied, as in the case of appliqués. The vamp piece 13*b* is then inserted in its complementary opening 17 in upper plate 15, and is thus correctly positioned with respect to vamp piece 13*a*, by means of the shape and position of its opening 17, the piece 13*b* being attached to the piece 13*a* along the edge 20 as noted by means of the adhesive placed thereon. Left quarter 18*a* and right quarter 18*b* is then assembled with respect to vamp piece 13*a* by inserting it in opening 19 in registration with the edges thereof, whereby left and right quarters 18*a* and 18*b* are affixed to vamp pieces 13*a* along the edge strip 21, which has been similarly coated with adhesive. The pieces 13*a* and 13*b* and 18*a* and 18*b*, making up the four piece vamp, are then withdrawn from between plates 11 and 15, and pieces 13*b* and 18*a* and 18*b* are stitched to piece 13*a* along their adjacent edges. Again when assembling the pieces for the opposite foot, upper plate 15 may be turned over, and in this instance edge gauges 12 on lower plate 11 must be relocated, as they are not symmetrically positioned with respect to both right and left shoes. Preferably, however, a separate lower plate 11 with relocated gauges 12 already on it is interchanged, rather than relocating the gauges on the original plate 11.

It will be seen that by means of this invention, I have provided a novel and improved method for making appliquéd shoes and for assembling the overlapping parts of uppers. The difficulties of holding the respective parts in proper position during the stitching operation is entirely obviated and important savings in the cost of making shoes are effected.

I claim:

1. The method of assembling and applying appliqués on shoes in predetermined position, comprising locating the appliquéd piece in predetermined position laterally and longitudinally upon a plate adapted to receive the same, bringing a second plate into predetermined relation with the first plate, applying adhesive to the appliquéd piece through one or more openings in the second plate, locating one or more appliqués in predetermined position with respect to said appliquéd piece, and affixing said appliqué to said appliquéd piece by means of the adhesive theretofore applied.

2. The method of assembling and applying appliqués on shoes in predetermined position, comprising locating the appliquéd piece in predetermined position upon a plate adapted to receive the same, bringing a second plate into predetermined relation with the first plate, applying adhesive to the appliquéd piece through a plurality of openings in the second plate, locating a plurality of appliqués in predetermined position by means of said openings both with respect to the appliquéd piece and to each other, and affixing said appliqués to the appliquéd piece by means of the adhesive theretofore applied.

3. The method of assembling and applying appliqués on shoes in predetermined positions, comprising locating the appliquéd piece of work in predetermined position upon a plate adapted to receive the same, bringing a second plate into predetermined relation with the first plate, applying adhesive to the appliquéd piece through a plurality of openings in the second plate, locating a plurality of appliqués by means of said openings in predetermined position both with respect to the appliquéd piece and to each other, affixing said appliqués to the appliquéd piece by means of the adhesive theretofore applied, and stitching the appliqués to the appliquéd piece as thus held by said adhesive.

4. The method of assembling and applying appliqués on shoes in predetermined positions, comprising locating the appliquéd pieces in predetermined position upon a plate adapted to receive the same, bringing a second plate into fixed relation with the first plate, applying adhesive to the appliquéd piece through an opening in the second plate, locating an appliqué on said appliquéd piece in predetermined position thereon through the opening in said second plate, and affixing said appliqué to said appliquéd piece by means of the adhesive theretofore applied.

5. The method of assembling and applying appliqués on shoes in predetermined position, comprising locating the appliquéd piece in predetermined position upon a plate adapted to receive the same, bringing a second plate into predetermined relation to the first plate, applying adhesive to the appliquéd piece through an opening in the second plate outlining the shape of the appliqué, locating the appliqué on said appliquéd piece in predetermined position thereon through said opening in said second plate, and affixing said appliqué to said appliquéd piece by means of the adhesive theretofore applied.

6. The method of assembling and applying appliqués on shoes in predetermined positions, comprising locating the appliquéd pieces in predetermined position upon a plate adapted to receive the same, bringing a second plate into fixed relation with the first plate, applying adhesive to the appliquéd piece through an opening in the second plate, locating an appliqué on said appliquéd piece in predetermined position thereon through the opening in said second plate, affixing said appliqué to said appliquéd piece by means of the adhesive theretofore applied, and stitching the appliqué to the appliquéd piece as thus held by said adhesive.

7. The method of assembling and applying appliqués on shoes in predetermined position, comprising locating the appliquéd piece in predetermined position upon a plate adapted to receive the same, bringing a second plate into predetermined relation to the first plate, applying adhesive to the appliquéd piece through an opening in the second plate outlining the shape of the appliqué, locating the appliqué on said appliquéd piece in predetermined position thereon through said opening in said second plate, affixing said appliqué to said appliquéd piece by means of the adhesive theretofore applied, and stitching the appliqué to the appliquéd piece as thus held by said adhesive.

RICHARD J. REGAN.