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W. E. SACKNER ET AL

2,219,115

REED FABRIC

Original Filed April 6, 1936

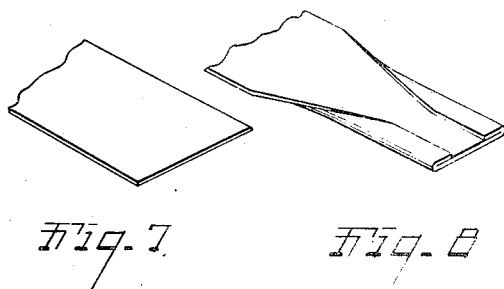
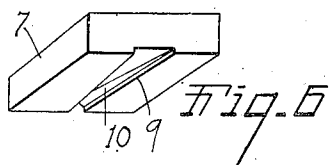
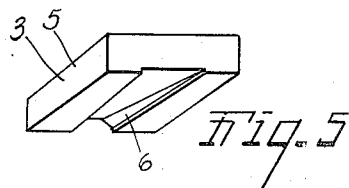
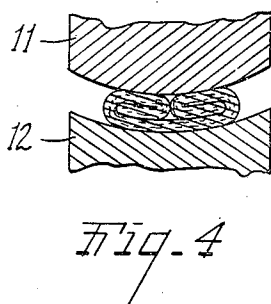
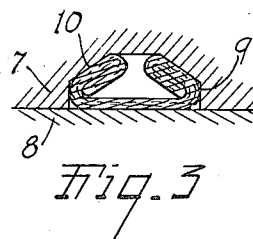
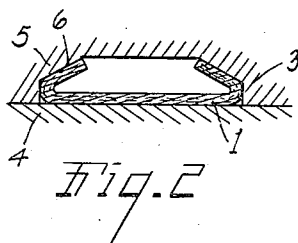
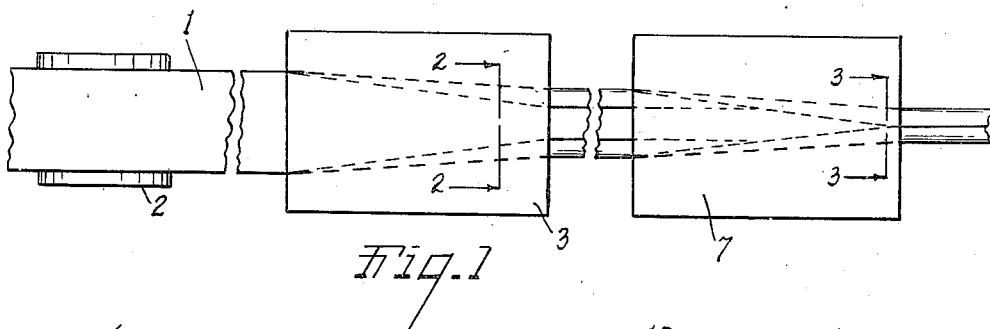
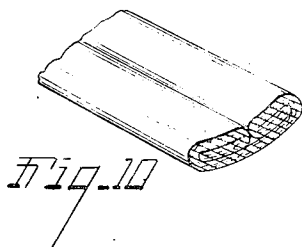
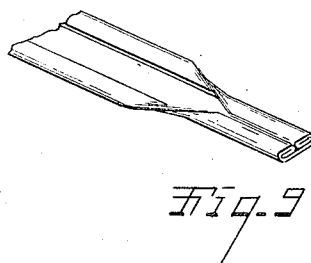


Fig. 8



INVENTOR.
Wade E. Sackner
John E. Millett
BY
Earl + Charles
ATTORNEYS.

UNITED STATES PATENT OFFICE

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REED FABRIC

Wade E. Sackner and John E. Millett, Grand Rapids, Mich., assignors to Grand Rapids Fibre Cord Company, Grand Rapids, Mich.

Original application April 6, 1936, Serial No. 72,972. Divided and this application July 13, 1938, Serial No. 219,020

1 Claim. (Cl. 93—84)

This application is a divisional of our application Serial No. 72,972, filed April 6, 1936, for Apparatus and method of producing imitation reed fabric.

The invention relates to imitation reed fabric made of paper and formed into a concavo-convex form. The objects of the invention are:

First, to produce a new and improved imitation reed.

Second, to produce such a reed in which raw edges of the paper employed in forming the reed are positively covered and concealed.

Third, to provide such a reed in which the seam formed from folding the paper is completely concealed so that it cannot be seen when the reed is in use in making up imitation reed fabric or furniture.

Fourth, to produce a new and improved method for forming the reed from a strip of paper.

Other objects and advantages pertaining to details and economies of construction and operation will appear from the description to follow. The invention is defined in the claim. A preferred embodiment of our invention is illustrated in the accompanying drawing, in which:

Fig. 1 is a plan view showing the carrying out of the steps of the process.

Fig. 2 is a detail sectional view taken on line 2—2 of Fig. 1.

Fig. 3 is a detail sectional view taken on line 3—3 of Fig. 1.

Fig. 4 is a detail sectional view through the rollers employed in forming the final product.

Fig. 5 is a bottom perspective view of a folder adapted for use in one step of our method for producing the reed.

Fig. 6 is a bottom perspective view of a somewhat similar folder used in a later step in the process of forming the reed.

Fig. 7 is a perspective view showing a portion of the paper strip used in forming the reed.

Fig. 8 shows the paper as it is folded in the first step of producing the reed.

Fig. 9 is a perspective view showing the paper after the second step in the operation of forming the reed.

Fig. 10 is a perspective view partly in section showing the finished reed.

In carrying out the operation of our invention a strip of paper 1 is fed continuously. We prefer to use a three-eighths-inch strip of stiff kraft paper of .095 gage on a hundred-pound basis. The strip of paper first passes to a moistening roll 2 where it is moistened prior to the performing of the other operations. This moistening roll may be of any desired form.

After the moistening, the paper strip 1 passes

through a folder 3. This folder is illustrated in perspective in Fig. 5 and in section in Fig. 2. The folder serves to fold the edges of the strips of paper approximately one-half way to the center line of the paper, as shown in Fig. 8. The former consists of a supporting plate 4 on which is mounted the forming block 5. The walls 6 of the former receive the paper and as they gradually narrow in form they approach the cross section shown in Fig. 2, and finally give the paper strip the form shown in Fig. 8, the edges of the strip being bent upwardly and over as shown in Fig. 8.

The strip then passes to a second former 7 and we prefer to engage the strip to crease it using any suitable means such as nipper rolls. The former 7 consists of a supporting plate 8 and a forming block 9 which has its walls 10 slanting inwardly and serving to fold the folded edges of the paper strip to the center line, as indicated in Fig. 9. The walls 10 gradually change from the form shown in Fig. 3 to give the desired fold shown in Fig. 9.

After the strip has passed from the folder 7 with its edges folded as shown, it passes to a pair of rolls 11 and 12. The roll 12 has a concave face and the roll 11 a corresponding convex face. The fold of the strip is engaged by the convex face of the roll 11 and the imitation reed is given the concavo-convex form shown in Fig. 10. This is a concavo-convex form with the concave side being the one on which the edges are folded.

The product may be used advantageously for making imitation reed fabric or furniture and when in use the convex side of the material faces outwardly and the seam or juncture of the folds is completely hidden. The product is a satisfactory imitation reed and is made and formed with a minimum amount of paper. The finished reed is substantially free from internal stresses tending to flatten it since the paper at the concave side is in a continuous piece and is not in compression.

Having thus described our invention, what we claim as new and desire to secure by Letters Patent is:

An imitation paper reed for furniture manufacture or the like comprising a concavo-convex reed of folded and molded paper comprising a strip having its edges folded in and then folded again to the center line of the strip with the meeting edges on the concave face of the reed whereby the formed reed has a minimum tendency to flatten and offers maximum resistance to external forces tending to flatten the reed.

WADE E. SACKNER.
JOHN E. MILLETT.