Sept. 6, 1955 E. B. MORGAN ET AL 2,717,187

LAMINATED TABLE TOP WITH EDGING

Filed Aug. 13, 1953

Fig. 1

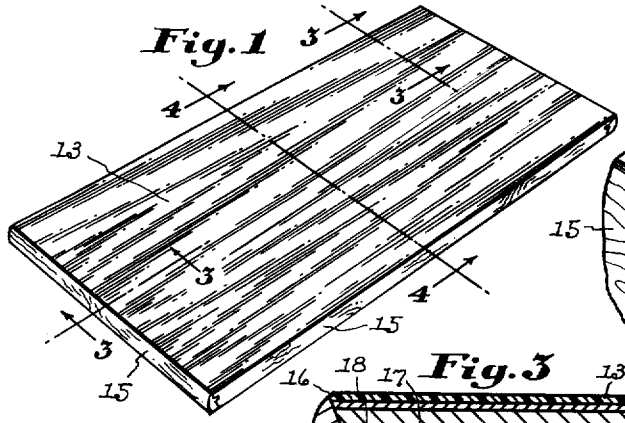


Fig. 2

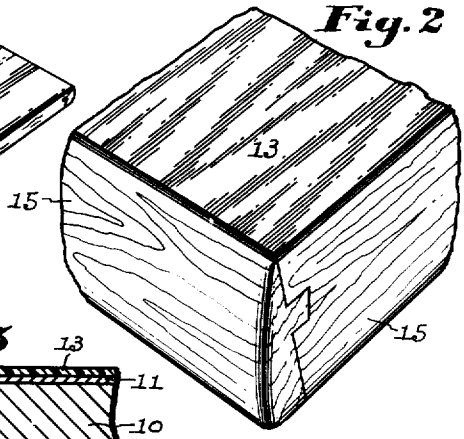


Fig. 3

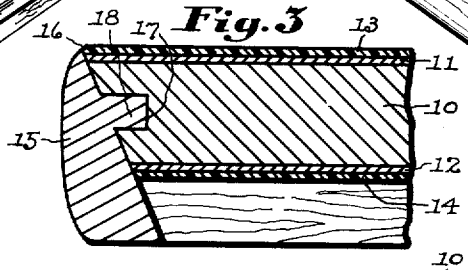


Fig. 4

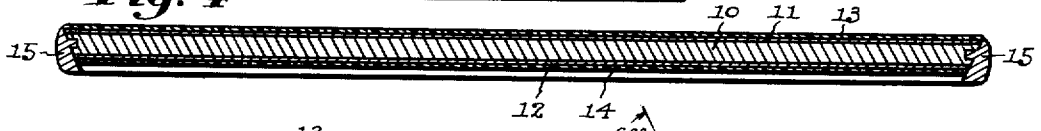


Fig. 5

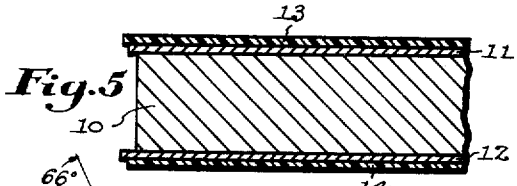
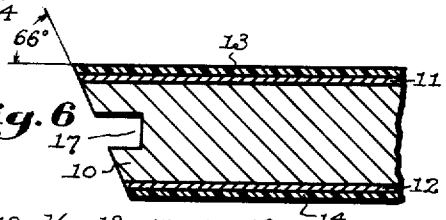


Fig. 6



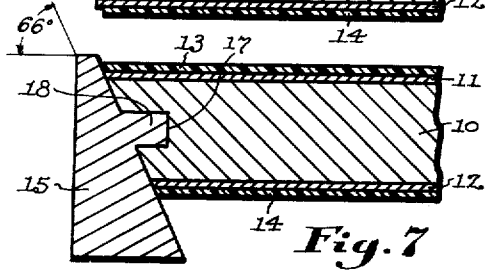


Fig. 7

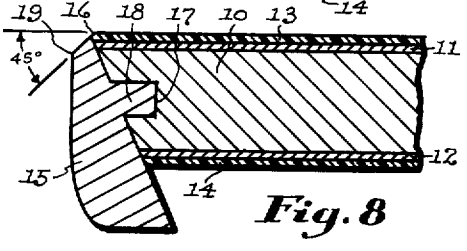
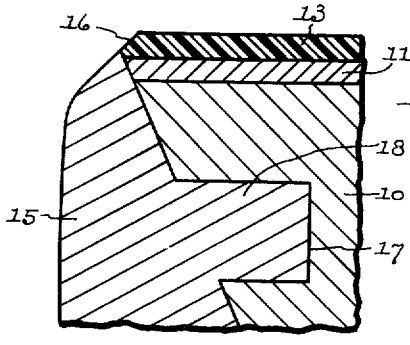


Fig. 8

Fig. 9



INVENTORS

Erving B. Morgan

Bruno S. Jurewicz and

Alexander J. Plachecki

BY

John S. Braddock

ATTORNEY

United States Patent Office 2,717,187 Patented Sept. 6, 1955

2,717,187

LAMINATED TABLE TOP WITH EDGING

Erving B. Morgan, Bruno S. Jurewicz, and Alexander J. Plachecki, Grand Rapids, Mich., assignors to American Seating Company, Grand Rapids, Mich., a corporation of New Jersey

Application August 13, 1953, Serial No. 374,006

3 Claims. (Cl. 311—106)

The present invention relates to furniture construction and more particularly to the construction of table tops or the like.

The primary objects of the invention are to provide an improved table top construction employing a plywood core having a facing of decorative plastic sheet material and edge finishing strips of wood which harmonize with the facing sheet and which are of greater depth than the thickness of the top proper thus to enhance the appearance of the unit; to provide such an improved construction wherein the plastic facing sheet extends to the edges of the top; to provide such an improved construction which is especially sturdy as well as attractive and practicable; and to provide a novel method of making such a table top construction.

An illustrative embodiment of the invention is shown in the accompanying drawing, wherein:

Figure 1 is a perspective view of a table top constructed according to the invention;

Figure 2 is an enlarged fragmentary perspective of the near corner of the table top shown in Figure 1;

Figure 3 is an enlarged fragmentary vertical sectional view of parts of the table top taken on either of the lines 3—3 of Figure 1;

Figure 4 is a vertical sectional view of the top taken on line 4—4 of Figure 1;

Figures 5, 6, 7 and 8 are vertical sectional views illustrating progressive steps in the method of making the table top; and

Figure 9 is a greatly enlarged fragmentary vertical sectional view of parts shown at the upper left hand corner of Figure 3.

Plastic sheets or "veneers" are now being made in simulation of natural woods. This new material is especially well suited for use on the tops of classroom tables, desks and the like, because it conforms with the traditional appearance of classroom furniture and has the added attributes of being durable and resistant to the vandalism of pocket knives, etc. Furthermore, it is customary to apply wood edging or finishing strips to the tops of all classroom tables, of greater depth than the thickness of the tops proper, both for greater serviceability and for better appearance. In such constructions, the edging is customarily of substantial thickness which becomes a part of the overall length and width of the table top, and the joints between the edging and the top proper are made almost imperceptible by the final sanding of the completed top. It is desirable that a plastic-covered top be provided with similar finishing strips or edging, but since the plastic cannot be sanded, past experiments have been disappointing because of the plainly visible and uneven joints between the edging and the plastic top. Also, it has been found impracticable to first apply the finishing strips to the wood core and later apply the plastic sheet over the entire top surface because, due to the differential in thickness between the wood core and the finishing strips it was found impossible to secure uniform pressure

over the entire plastic top sheet while bonding it tc the core.

The present invention obviates the above difficulties and makes possible the provision of a table top having a decorative plastic top sheet extending to the edges of the top and having harmonizing wood edge finishing strips of greater depth than the thickness of the top proper.

Referring now in detail to the drawing, and referring first particularly to Figures 1–4, the table top there shown comprises a center core **10** of wood or of any other suitable material such as the compositions now commonly substituted for wood cores, an upper cross-band **11** and lower cross-band **12** of suitable veneer bonded to the core **10** by means of an adhesive and forming a part of the core, an upper plastic finishing sheet **13** which is desirably in simulation of natural wood, and a plain lower plastic sheet **14** applied to the bottom of the core for the purpose of balancing the stresses induced by application of the upper plastic sheet **13**, said sheets **13** and **14** being bonded to the wood core by means of a suitable adhesive to thus form a finished "plied-up panel."

To the peripheral edges of this plied-up panel above described are applied wood finishing strips **15** harmonizing with the upper plastic finishing sheet **13**, the outer surfaces of which finishing strips **15** have an attractive rounded contour which at the top is bevelled downwardly and outwardly from the edge of the plastic finishing sheet **13**. It will be particularly noted (see Figure 9) that the upper plastic finishing sheet **13** extends virtually to the edge of the table top, merging gracefully into the upper edge of the finishing strips **15**. The visible portion **16** of the edge of the upper plastic sheet **13** may be somewhat darker in color than the sheet **13** or the strips **15**, which lends a decorative effect to the table top.

The method of making the table top above described is illustrated in Figures 5 through 8 of the drawing. Figure 5 shows the plied-up panel consisting of the core **10**, veneer cross-bands **11**, **12** and plastic sheets **13**, **14** which may all be plied up together in the same press. This panel has rough edges but is oversize to permit clean trimming or shaping to net size. The opposite side edges of the plied-up panel are next shaped on a shaper machine as shown in Figure 6 to form an inwardly-downwardly extending bevel at an angle of approximately 66° from horizontal, and a groove **17** in said bevelled edge. Finishing strips **15**, preformed on a molding machine or "sticker" to the cross-section illustrated in Figure 7 with a complementary 66° bevel and tongue **18**, are next bonded to the side edges of the plied-up panel as seen in Figure 7. The strips **15** extend below the bottom of the plied-up panel their net distance, but at this stage in the method they extend above the plied-up panel and outwardly beyond their net thickness, all as seen in Figure 7, and also project beyond the ends of the plied-up panel.

The next step in the method is to similarly shape (see Figure 6) the end edges of the plied-up panel, this shaping cut also including the projecting ends of the strips **15** bonded to the side edges of the panel. Finishing strips **15** are then glued to the end edges of the panel in like manner to those secured to the side edges and as shown in Figure 7.

Next the entire "composite top" is edge-shaped to the contour shown in Figure 8. It will be noted that the upper peripheral corner edge of the composite top is bevelled outwardly-downwardly at about a 45° angle through the finishing sheet **13** and the finishing strips **15** to a depth sufficient to expose the upper part of the

ishing sheets' peripheral edge but not sufficient to ɔose the core of the top.

The 45° and 66° angles selected for the bevels above ɜcribed were determined empirically to give the best ults, particularly to prevent any tendency of the pointed per edge of the finished strips 15 to "feather" during ɜ shaping operation. However, the 66° angle may be ried between about 45° and 85°, and the 45° angle may varied between about 30° and 60° with reasonably od results.

In the final operation the outer surfaces of the finish-ɜ strips are sanded thus smoothing out the shoulder, licated at 19 in Figure 8, which was purposely left in ɜ shaping operation to further minimize the possibility "feathering" of the upper edges of the finishing strips during the shaping.

It will thus be seen that the invention provides a dura-ɜ and attractive table top and an efficient method for aking it, and while but one specific example of the ɜvention has been herein shown and described it will be ıderstood that numerous details may be altered or omit-ɜd without departing from the spirit of the invention as e same is defined by the following claims.

We claim:

1. A top for a table or the like, comprising: a flat core; finishing sheet bonded to the upper surface of the core form a plied-up panel having its peripheral edge pro-ded with a bevel extending inwardly from top to bottom; ıd finishing strips provided with complementary bevels ɔnded to the peripheral edge of said plied-up panel to ɜrm a composite top; said composite top having the upper ɜripheral corner edge thereof bevelled outwardly-down-ardly from the upper line of junction between the finish-g sheet and the finishing strips.

2. A top for a table or the like, comprising: a flat core; finishing sheet bonded to the upper surface of the core to form a plied-up panel having its peripheral edge provided with a bevel extending inwardly from top to bottom; and finishing strips provided with complementary bevels bonded to the peripheral edge of said plied-up panel to form a composite top; said composite top having the upper peripheral corner edge thereof bevelled outwardly-downwardly through the finishing sheet and the finishing strips to a depth sufficient to expose the upper part of the finishing sheet's peripheral edge but not sufficient to expose said core; and said finishing strips extending below the under surface of said plied-up panel.

3. A top for a table or the like, comprising: a flat, multi-ply wood core; a plastic sheet bonded to the under surface of said core and a simulated-wood plastic finishing sheet bonded to the upper surface of the core to form a plied-up panel having its peripheral edge provided with a bevel extending inwardly from top to bottom; and wood finishing strips provided with complementary bevels bonded to the peripheral edge of said plied-up panel to form a composite top; said composite top having the upper peripheral corner edge thereof bevelled outwardly-downwardly through the finishing sheet and the finishing strips to a depth sufficient to expose the upper part of the finishing sheet's peripheral edge but not sufficient to expose said core.

References Cited in the file of this patent

UNITED STATES PATENTS

562,226	Kimball	June 16, 1896
1,233,497	Ohnstrand	July 17, 1917
1,381,916	Gunn	June 21, 1921
1,396,554	Breese	Nov. 8, 1921
1,960,769	Beiger	May 29, 1934
2,002,228	Meyercord et al.	May 21, 1935
2,134,999	Crouch	Nov. 1, 1938
2,297,072	Raggio	Sept. 29, 1942