

July 29, 1952

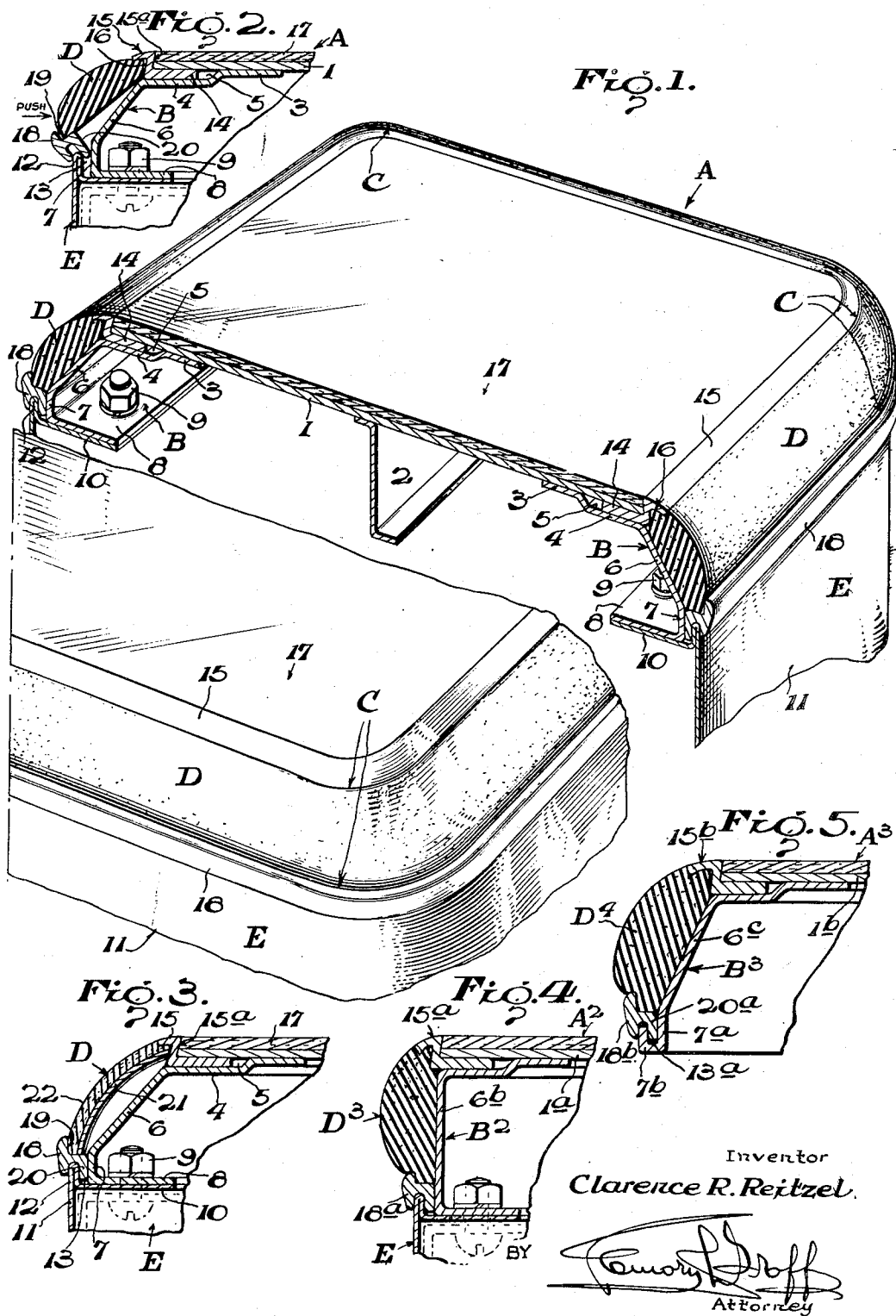
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2,605,157

EDGE CONSTRUCTION FOR FURNITURE TOPS

Filed May 28, 1947

2 SHEETS—SHEET 1



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2 SHEETS—SHEET 2

FIG. 6.

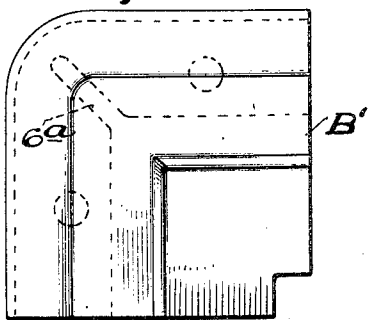


FIG. 7.

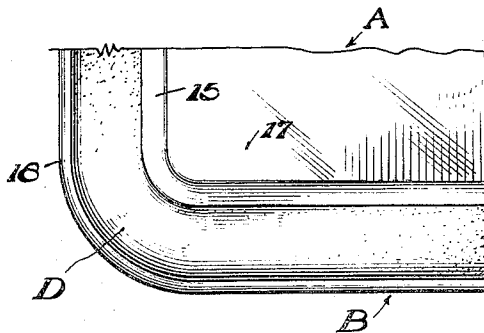


FIG. 8.

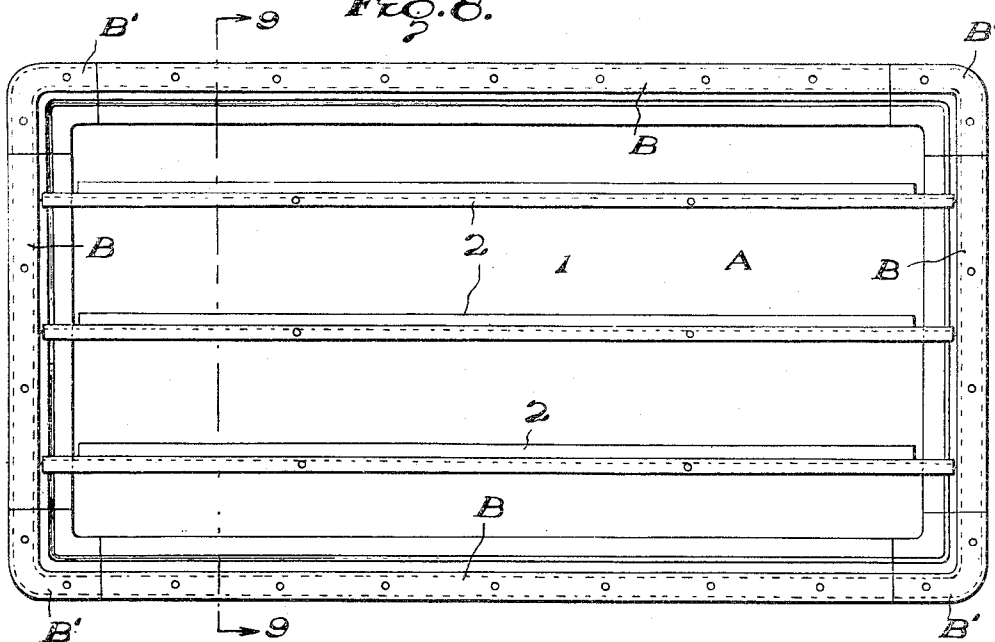
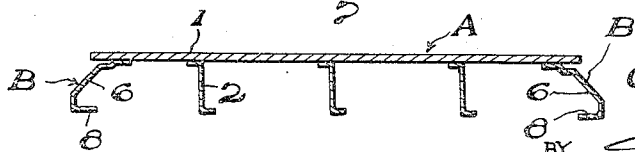


FIG. 9.



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EDGE CONSTRUCTION FOR FURNITURE TOPS

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8 Claims. (Cl. 311—107)

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This invention relates to furniture tops for metal desks, tables, and the like, and has the distinctive feature of providing a rounded or substantially bevelled edge, which has no seams or joints at the corners.

For many years the metal furniture art has sought to make linoleum covered desk and table tops with continuous vertically rounded, instead of vertically angular, edges and corners. Heretofore, this object has partially been attained by forming a metal top sheet with an integral arcuate apron or edge portion and placing the linoleum or like covering over the top and curved edge. However, this practice has required cutting out the corner portions of the linoleum sheet because it was impossible and impractical to work or bend the linoleum over the short radius of the corner without bunching or gathering. The gap resulting from cutting away the corners of the linoleum sheet has heretofore been filled by a corner piece of metal. Because of the cutting and fitting and multiple operations involved, this practice is relatively costly while at the same time it detracts from the harmony of design sought to be attained in good furniture.

Accordingly, the present invention has primarily in view an edge construction for furniture tops made principally of metal, wherein a continuous rounded edge is obtained, even at the corners, by providing in effect a built-up channel extending entirely around the top and adapted to receive a continuous flexible molding strip having the desirable characteristic and capacity to turn corners of short radii in rectangular tops without buckling or gathering and likewise form arcs of greater radius, as for example in the case of round or circular tops. Thus, the desired rounded edge effect may be attained in a practical and expeditious manner during manufacture, and, from the standpoint of neatness and ornamental appearance in the ultimate product, it eliminates corner plates and provides an edge surface which gives the same sense of touch as the linoleum top itself.

Another object of the invention is to provide an edge construction which is substantial and durable in use, and which lends itself to convenient and tested manipulation procedures in manufacturing, while, at the same time, rendering it unnecessary to cut or otherwise form the corners of the sheet of linoleum forming the writing surface of the furniture top, as heretofore set forth, since such surface can now be made in standard stock sizes by precision cutting methods.

A further object of the invention is to provide a furniture top including a rigid top member and subjacent edge forming means including an

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apron concealed or masked by a molding strip which is coextensive with the perimeter of the top. Thus, it is possible to obtain the desired full rounded edge effect at the sides and corners in various materials, or materials having a surface that is comparable to the usual linoleum covering for the top member.

With the above and other objects in view, which will more readily appear as the nature of the invention is better understood, the same consists in the novel construction, arrangement, and combination of parts hereinafter more fully described, illustrated, and claimed.

A preferred and practical embodiment of the invention is shown in the accompanying drawings, in which:

Figure 1 is a perspective view of a furniture top, partly in section, illustrating the improved edge construction.

Figure 2 is a vertical sectional view of the top and apron showing how the continuous molding strip is applied.

Figure 3 is a vertical cross section showing a modified form of molding strip.

Figure 4 is a detail vertical section showing a modified form of apron.

Figure 5 is a detail sectional view of a further modified form of apron.

Figure 6 is a detail bottom plan view of a corner apron of a metal furniture top embodying the present invention.

Figure 7 is a top plan view of the construction shown in Figure 6.

Figure 8 is a bottom plan view of a metal desk or table top embodying the present invention.

Figure 9 is a detail cross-sectional view taken on the line 9—9 of Figure 8.

Similar reference characters designate corresponding parts throughout the several figures of the drawings.

Referring to Figure 1, which shows by way of illustration and not by way of limitation, a furniture top such as used on a metal desk or table, it will be observed that the same generally includes a top proper A, and a subjacent apron B, which cooperate to provide a built-up continuous channel C for receiving the continuous molding strip D which conceals the apron.

The top A preferably consists of a metal sheet 1 to which adequate rigidity may be imparted by any suitable arrangement of reinforcing elements 2. The apron B consists of front, rear, and side members as well as corner units B' in a rectangular top. As will be seen from Figures 1 and 2, said apron members and units include, cross-sectionally, an upper wing 3 welded or otherwise affixed to the bottom surface of

the plate 1 and medially offset as indicated at 4 to provide a top keeper-groove 5 at the underside of plate 1 and which extends throughout the sides and corners of the top. Said apron elements further include a preferably oblique web 6 which forms the base of the channel C, and a connected downwardly extending substantially vertical wall 7 which terminates in the lower integral inwardly directed wing 8. This wing is adapted to be secured by appropriate fastenings 9 to the inwardly directed flange 10 of a front or facing sheet E of, for example, a desk.

As will also be observed from Figures 1 and 2 of the drawing, said facing sheet E includes an outer wall 11 which is doubled upon itself as indicated at 12 to form a rigid wall portion properly spaced from the vertical wall 7 of the apron to provide a continuous bottom keeper-groove 13.

As shown in Figure 6, it will, of course, be understood that when a cross-sectional shape corresponding to the aprons B is bent into angular formation to form the corner units B', it is necessary to slit the inner portion of the oblique web 6 as indicated at 6a in order to compensate for bending of the apron.

The continuous top keeper-groove 5 previously described is intended to receive the shank portion 14 of a continuous metallic bead 15 of angular cross-section. This bead is preferably made of metal, such as aluminum, and is provided at its underside with a continuous undercut shoulder 16, which forms the upper edge of the channel C.

The entire top surface of the plate 1 is preferably covered by linoleum 17, whose edge portion lies flush behind the inner oblique shoulder 15a of the bead 15. Thus, when the bead 15 is fitted to the metal top 1, the linoleum 17 is completely flush with said bead to form a flat working or writing surface. Another bead 18 of aluminum, or other material, is used to form the lower edge of the continuous channel C. This bead is provided with a head portion having an inner groove 19 and an inwardly extending angular shank portion having a depending flange 20 adapted to fit into the bottom keeper-groove 13 of the apron.

From the foregoing it will now be seen that the channel C is formed by the beads 15 and 18, in cooperation with the web 6 of the apron elements and completely surrounds the sides and corners of the top. This channel is intended to receive the continuous flexible molding strip D which not only has the capacity of becoming interlocked within the channel, but also turning corners of short radius without binding, gathering, bunching or puckering.

According to Figures 1 and 2, the molding strip D is preferably made of an extrudable composition similar to linoleum, or alternatively, it may be made of any plastic or non-metallic material having sufficient longitudinal flexibility and inherent transverse yieldability to fit into and remain permanently interlocked with the beads 15 and 18.

In practice, when the construction is to be assembled, the molding strip D of Figures 1 and 2, for example, having the cross-sectional configuration shown, may first have one edge thereof placed within the undercut shoulder 16 of the upper bead 15. The bead 18 may then be placed in the position shown in Figure 2 with one edge of the strip D behind the shoulder 19. Then the bead 18 may be hit with a rubber mallet or

hammer to bring the entire assembly into permanent position, as shown in Figure 1.

During the course of applying the molding strip D or its equivalent, to conceal the apron A, it will be understood that the same may be made to readily turn the corner of the furniture top without difficulty, and in all cases molding strip is of sufficient length to completely encircle or embrace the entire perimeter top without any joints except where it begins or ends. This joint may be made so accurately that it is hardly visible.

As shown in Figure 3, a modified form of molding strip D² may be made of a continuous transversely bowed spring metal strip 21, whose outer surface is covered with fabric 22, or other material which gives a soft feel when touched by the hands and arms.

Figure 4 of the drawings illustrates a modification of the apron element B² wherein the same is perpendicular to the top A² instead of oblique as in Figures 1 to 3, inclusive. In the arrangement shown in Figure 4, the molding strip D³ is fitted between the top bead 15a and the bottom bead 18a in the same manner as shown in Figure 3. All of the features of the invention heretofore described are carried forward in this modification except that the web 6b of the apron B² is at right angles to the top sheet 1a.

A further modification of the invention is illustrated in Figure 5 wherein the top A³ is provided with an apron B³ whose web 6c is oblique to the top sheet 1b and its bottom vertical wall 7a is continued outwardly and upwardly as indicated at 7b to form the lower groove 13a for receiving the shank 20a of the bead 18b. The continuous molding strip D⁴ is held between the top bead 15b and the lower bead 18b which, together with the web 6c of the apron B³ forms, in effect, the channel for receiving the molding strip. The general structural features of this modification are the same as Figures 1 to 3 except that the bottom groove 13a is formed by means integral with the lower wall of the web of the apron.

From the foregoing it will be apparent that in all forms of the invention the aprons are of greater depth than the thickness of the top member and that the one-piece molding strip may be continuously applied to the edge portions of furniture tops having angular corners, it will be apparent that the molding strip readily conforms to corners of short radius. It will, of course, be understood that this radius may vary with different types of furniture and, as previously indicated, the primary features of the invention may even be applied on circular or oval table tops utilizing structural features peculiar to the particular piece of furniture being made.

I claim:

1. A furniture top construction, comprising, in combination, a top member including angularly related sides and subjacent edge forming means of greater depth than the thickness of the top member, said means including an apron connected to the underside of the top member and shaped to form therewith a top keeper-groove, means at the bottom of the apron forming a bottom keeper-groove, a top bead including a shoulder and having a shank for interlocking with said top keeper-groove, a bottom bead having a shoulder and also having a shank for interlocking with said bottom keeper-groove, and a longitudinally flexible and transversely yieldable edge-molding strip supported on the apron between said shoulders.

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2. A furniture top construction, comprising, in combination, a top member, and subjacent edge forming means of greater depth than the thickness of the top member, said means including an apron connected to the underside of the top member and shaped to form therewith a top keeper-groove, said apron including a web, means at the bottom of the web forming a bottom keeper-groove, a top bead including a shoulder and having a shank for interlocking the said top keeper-groove, a bottom head having a shank for interlocking with said bottom keeper-groove, and a longitudinally flexible and transversely yieldable edge-molding strip supported on the web of the apron between the shoulders of said top and bottom beads.

3. A furniture top construction, comprising, in combination, a top member, and subjacent edge forming means of greater depth than the thickness of the top member, said means including an apron connected to the underside of the top member, and shaped to form therewith a top keeper-groove, said apron including a web disposed oblique to the plane of the top member, a wall at the lower edge of the web, means cooperating with said wall to form a bottom keeper-groove, a top bead including a shoulder and having a shank for interlocking with said top keeper-groove, a bottom bead having a shoulder and also having a shank for interlocking with said bottom keeper-groove, and a longitudinally flexible and transversely yieldable edge-molding strip supported on the web of the apron between the shoulders of said top and bottom beads.

4. A furniture top construction, comprising, in combination, a top member including angularly related sides and subjacent edge forming means, said means including aprons connected to the underside of the top member, along the sides thereof, and at the corners, said aprons being carried by the top and shaped to form therewith a top keeper-groove, said apron including a web, means at the bottom of the web forming a bottom keeper-groove, a top bead including a shoulder and having a shank for interlocking with said top keeper-groove, a bottom bead having a shoulder and also having a shank for interlocking with said bottom keeper-groove, and a longitudinally flexible and transversely yieldable edge-molding strip supported on the web of the apron between the shoulders of said beads, said strip providing an unbroken smooth surface about the sides and related corner of the top member.

5. A furniture top construction, comprising, in combination, a top member including a rigid sheet and a covering of non-metallic material, and subjacent edge forming means, said means including an apron, said apron being of angular cross-section, and including upper and lower wings extending to the same side of a connecting web, the upper wing being connected to the underside of the said top member, and offset medially thereof to cooperate with the underside of the rigid sheet to form a top keeper-groove, means at the lower end of the web to provide a bottom keeper-groove, a top bead including an inner undercut shoulder and an outer opposite shoulder, said bead having a shank fitting into the top keeper-groove, and said outer shoulder abutting said edge of the top member and the covering therefor, a lower bead having an inner shoulder and a shank portion for fitting into said bottom keeper-groove, and an edge-molding strip of longitudinally flexible and transversely yieldable material interlocked between the undercut shoulder

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of the top bead and the shoulder of the upper bead and said inner shoulder of the bottom bead and overlying the web of said apron member.

6. A furniture top construction, including, in combination, a top member, and subjacent edge forming means of greater thickness than the top member, said means including an apron including a top wing secured to the underside of the top member and also having an intermediate offset portion adapted to cooperate with the underside of the top member to provide a top keeper-groove, said apron also including a web disposed obliquely to the plane of the top member, and a channel integral with the lower edge of said web and forming a bottom keeper-groove, a top bead, including a shoulder and a shank for interlocking with the top keeper-groove, a bottom bead including a shoulder and having a shank for interlocking with said bottom keeper-groove, and a longitudinally flexible and transversely yieldable edge-molding strip mounted over said web member and between the shoulders of said beads.

7. An article of furniture comprising a top including a top member and an apron depending therefrom along the edge thereof, said top member and the top portion of said apron being spaced apart to provide an outwardly opening channel, means cooperating with the bottom portion of said apron to provide an upwardly opening channel, top and bottom strips having shank portions disposed in said channels, respectively, lips extending from said strips and providing in conjunction with said apron an outwardly opening channel having a mouth of less width than the channel proper, and an edge-finishing molding strip for said top having upper and lower edge portions thereof confined in said last-mentioned channel behind said lips.

8. An article of furniture comprising a top having extending along the edge thereof an upper outwardly opening channel and a lower upwardly opening channel, an edge finishing molding strip for said top extending along the edge thereof, and means for securing said molding strip to said top comprising upper and lower fastening strips having shank portions engaged in said channels, respectively, and lip portions engaged with upper and lower edge portions, respectively, of said molding strip.

CLARENCE R. REITZEL.

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