Jan. 25, 1938. F. C. O. THOMAS 2,106,443

PLYWOOD AND FURNITURE MADE THEREFROM

Filed March 23, 1936 2 Sheets-Sheet 1

Fig. 1.

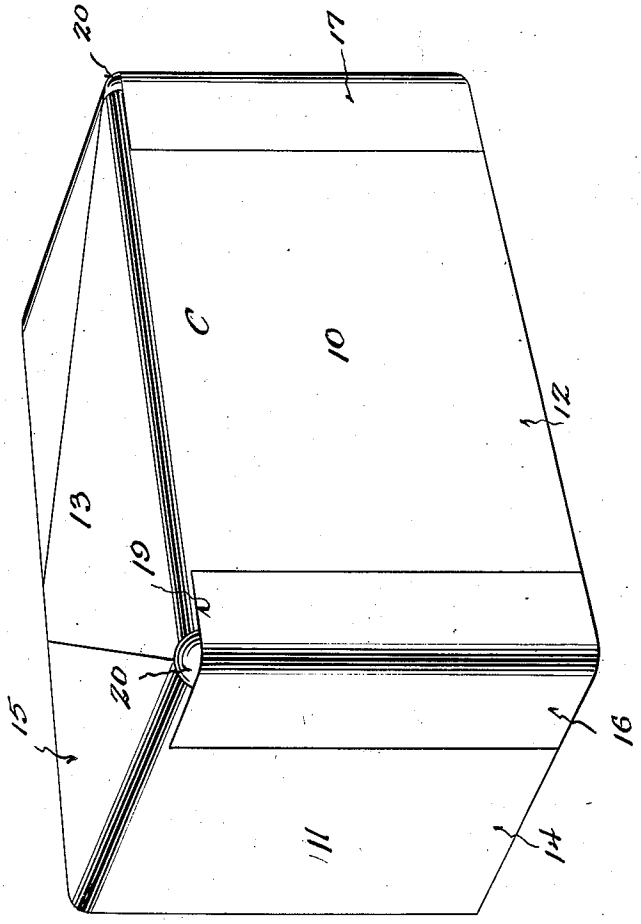
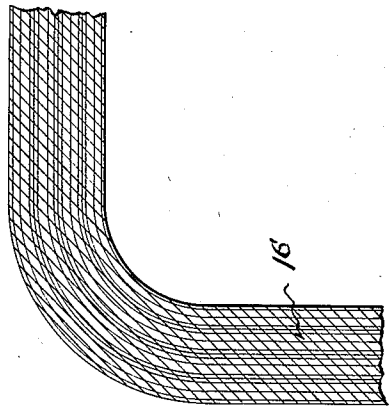


Fig. 2.



Inventor
F. C. O. Thomas
By
Attorneys

Jan. 25, 1938. F. C. O. THOMAS 2,106,443

PLYWOOD AND FURNITURE MADE THEREFROM

Filed March 23, 1936 2 Sheets-Sheet 2

Fig. 3.

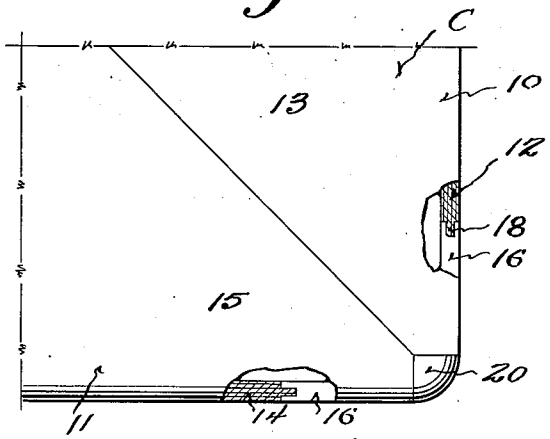


Fig. 5.

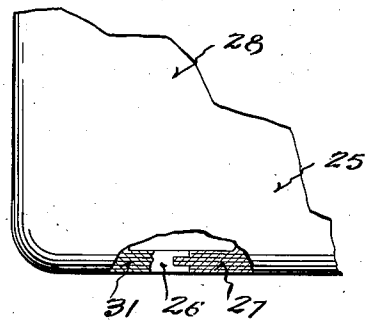


Fig. 4.

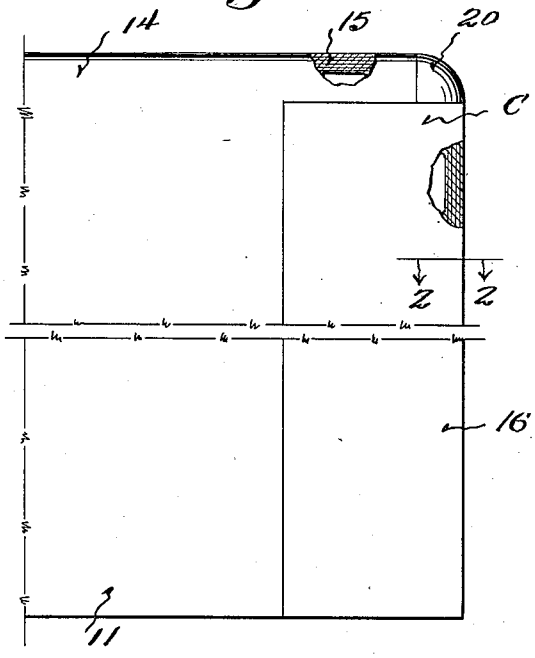
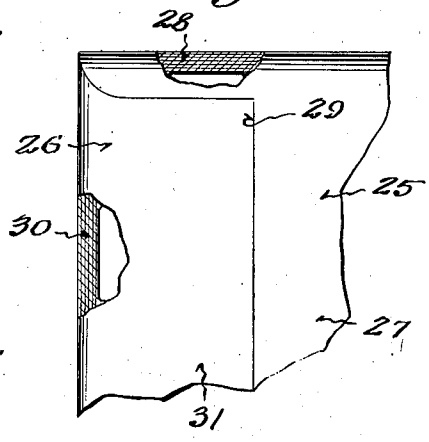


Fig. 6.



Inventor

F. C. Thomas

By

Attorneys

Patented Jan. 25, 1938 2,106,443

UNITED STATES PATENT OFFICE

2,106,443

PLYWOOD AND FURNITURE MADE THEREFROM

Francis C. O. Thomas, Sheboygan, Wis., assignor to Frost Veneer and Plywood Company, Sheboygan, Wis.

Application March 23, 1936, Serial No. 70,348

2 Claims. (Cl. 312—140.1)

This invention appertains to plywood, and to novel means for forming articles of furniture therefrom of all characters, such as cabinets, counters, and the like.

All present counters, counter fronts, and other articles of furniture built from plywood, with which I am familiar, consist of front and top plywood panels formed of relatively heavy stock joined at their adjacent edges by a heavy solid railing. This construction is expensive and requires considerable skill and time to assemble on the job, which materially adds to the cost thereof. Also, a heavy supporting framework for the article must be used. This construction with the railing is not particularly pleasing to the eye and prevents the proper display of the veneers.

It is therefore one of the primary objects of my invention to provide novel means for forming the plywood sections with ninety degree angle turns, whereby the front and sides can be formed integral with parts of the top to give a continuous unbroken effect, so that a strong construction will be had without the use of a supporting framework and edge rail, and whereby the veneers can be used to the best of advantage to produce a pleasing appearance that will satisfy the modern esthetic taste.

Another salient object of my invention is the provision of novel means for forming plywood panels with their short curved ninety degree angle, so that the sections or panels can be quickly and easily assembled on the job at a small expense.

A further important object of my invention is the provision of novel means for forming the panels themselves, whereby the right-angled turns can be had with the employance of a small arc, in proportion to the thickness of the stock and without danger of the plywood cracking or creeping.

A still further object of my invention is to provide a piece of furniture of the above character, which will be durable and efficient in use, one that will be simple and easy to manufacture, and one which can be placed upon the market at a reasonable cost.

With these and other objects in view, the invention consists in the novel construction, arrangement, and formation of parts, as will be hereinafter more specifically described, claimed, and illustrated in the accompanying drawings, in which drawings:

Figure 1 is a perspective view of a counter, or other articles of furniture, constructed in accordance with my invention.

Figure 2 is an enlarged fragmentary detail section through one of the corner bends of one of the plywood panels, the view being taken substantially on the line 2—2 of Figure 4.

Figure 3 is a fragmentary plan view of one end of a counter, or other article of furniture, constructed in accordance with my invention, with parts thereof broken away and in section to illustrate structural details.

Figure 4 is an end elevation of the improved counter, or other articles of furniture, with parts thereof broken away and in section.

Figure 5 is a fragmentary plan view of one corner of a slightly modified form of counter, counter front, or other article of furniture, with parts thereof broken away and in section.

Figure 6 is a fragmentary front elevation of one end of the modified form of the counter, with parts thereof broken away and in section.

Referring to the drawings in detail, wherein similar reference characters designate corresponding parts throughout the several views, the letter C generally indicates a counter, counter front, or article of furniture, formed from front and side plywood panels 10 and 11, constructed in accordance with my invention.

The front plywood panel 10 is bent intermediate its ends at right angles with the employance of a relatively small arc to provide a front wall 12 and a top wall section 13. By this arrangement, a continuous front and top wall section is formed without the employance of a heavy solid front edge rail, which materially adds to the cost of the counter, and spoils the use of effective veneer finishes.

The side plywood panels 11 are constructed similar to the front panel 10, and hence the side panels are bent with a right-angled turn intermediate their ends to provide a continuous side wall 14 and a top wall section 15.

The top wall sections 13 and 15 of the front and side panels 10 and 11 can be formed and mated together in a number of different manners, but, as shown in Figures 1 and 3, the meeting edges of the top wall sections 13 and 15 abut at a forty-five degree angle. These meeting edges can be secured together in any preferred manner, such as by the use of tongue and grooves, which can be formed in the panels at the factory. Obviously, other forms of joints, such as dowel pins, and the like, can be used without departing from the spirit or the scope of my invention.

With the panels formed and placed together as described, remarkable veneer effects can be had,

and the veneering on the top of the counter can be matched in different ways.

Novel means can also be utilized for forming the front corners of the counter, and I utilize plywood panels 16 and 17 for this purpose. These corner plywood panels 16 and 17 are formed similar to the front and side panels 10 and 11, and hence are formed with the right-angled bends, and the edges of the corner panels are connected to adjacent edges of the front and side wall sections 12 and 14 in any preferred manner, such as by tongue and groove joints 18.

The corner panels 16 and 17 are in effect set into the front and side wall sections 12 and 14, as can be clearly seen by referring to Figures 1 and 4 of the drawings. Hence, the adjacent edges of the front and rear wall sections 12 and 14 are notched or cut away, as at 19, to receive the corner panels.

Where the bend of the corner panels 16 and 17 and the bends of the front and side panels 10 and 11 merge, I utilize rounded corner key blocks 20 to give a finished neat effect.

While possibly the arrangement of my panels shown in Figures 1 to 4, inclusive, may be the preferred use, in Figures 5 and 6 I have shown another means of connecting my plywood panels together to form a strong and durable construction.

By referring to Figures 5 and 6, it can be seen that I provide a front plywood panel 25 and a side plywood panel 26. The front plywood panel 25 is formed with the short right-angle bend to provide the front wall section 27 and the continuous top wall section 28. The ends of the front wall section 27 are cut away, as at 29, for a purpose which will be set forth later.

The side plywood panel 26 is formed with the short right-angle bend to provide a side wall section 30 and corner front bent sections 31. The corner front bent sections are received within the cut-out ends 29 of the front wall section 25, and are connected thereto by the use of a suitable joint, such as a tongue and groove connection. The meeting edges of the top wall section 28 and the side wall sections 30 are preferably mitered and connected together by a suitable joint.

As intimated, one of the salient features of my invention is the forming of the panels with the sharp right-angled bend. Thus, the prime object is to form the curve not more than two or three times the thickness of the material. If the stock is one-half an inch thick, when finished, the curve radius should not be more than one or one and one-half inch.

In forming my plywood panels with their right-angle short curved bends, I utilize a special process, which consists in, first, moistening the two outside veneer faces of the panel for a space about an inch on either side of the panel, where the same is to be bent. Wet sheets of paper are placed on opposite sides of the panel, where the same is to be bent, and the panel is then placed in the form for bending.

From the foregoing description, it can be seen that I have provided novel means for forming counters, counter fronts, cabinets, and other articles of furniture, from novelly constructed and arranged plywood panels.

Changes in details may be made without departing from the spirit or the scope of my invention, but what I claim as new is:

1. A counter, counter front, or other article of furniture, comprising a front plywood panel and side plywood panels, the front plywood panel being provided with a ninety degree bend intermediate its end formed on a short arc of a circle to provide a continuous front wall section and a top wall section, the side panels being bent intermediate their ends at a ninety degree angle to form side wall sections and top wall sections, the top wall sections of the front and side panels being mated together on a forty-five degree angle, the ends of the front wall section and the front ends of the side wall sections being cut away, and corner panels provided with ninety degree bends to form front and side corner sections, the front corner sections of the corner panels being fitted in the cut-out portions of the ends of the front wall section and the side corner sections of the corner panels being fitted in the cut-out portions of the side wall sections.

2. A counter, counter front, or other article of furniture, comprising a front plywood panel and side plywood panels, the front plywood panel being provided with a ninety degree bend intermediate its end formed on a short arc of a circle to provide a continuous front wall section and a top wall section, the side panels being bent intermediate their ends at a ninety degree angle to form side wall sections and top wall sections, the top wall sections of the front and side panels being mated together on a forty-five degree angle, the ends of the front wall section and the front ends of the side wall sections being cut away, corner panels provided with ninety degree bends to form front and side corner sections, the front corner sections of the corner panels being fitted in the cut-out portions of the ends of the front wall section and the side corner sections of the corner panels being fitted in the cut-out portions of the side wall sections, and solid blocks fitted in the corners of the counter at the juncture of the bends of the corner panels, the front panel, and the side panels.

FRANCIS C. O. THOMAS.