Oct. 3, 1967 J. E. O'HERRON 3,345,240

HOBBY CRAFT DEVICE

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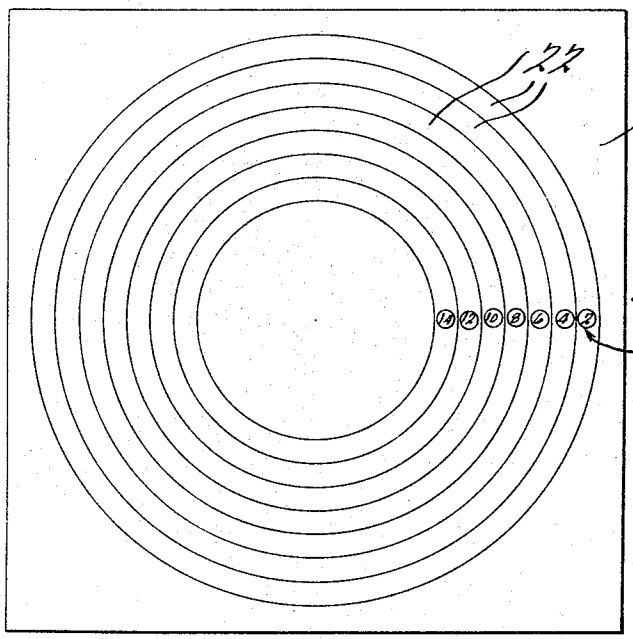


FIG. 1.

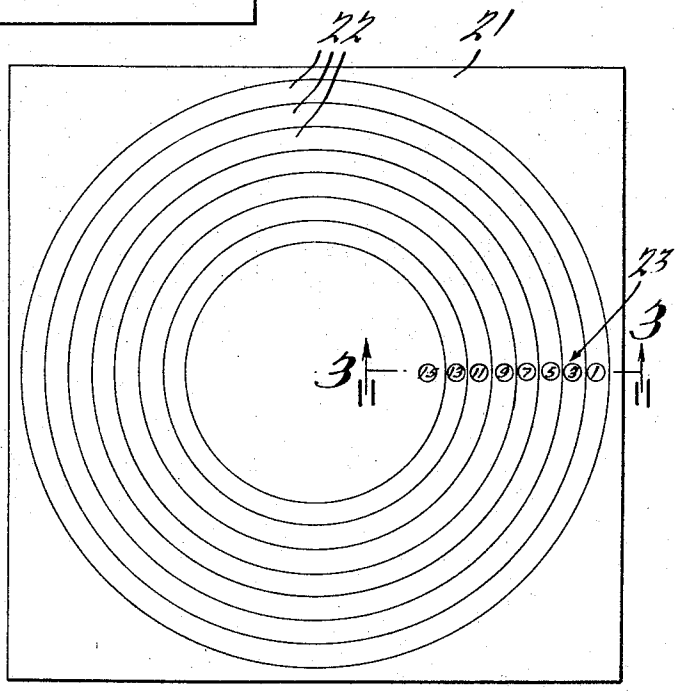


FIG. 2.

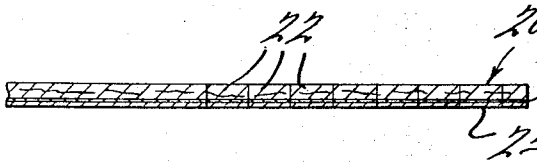


FIG. 3.

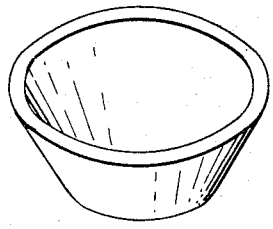
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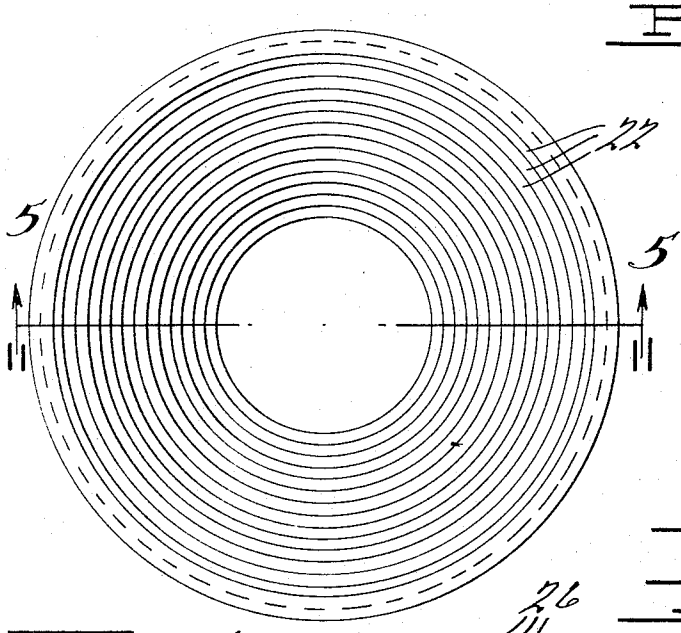
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FIG. 7.





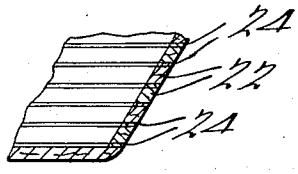


FIG. 6.

FIG. 5.

FIG. 4.

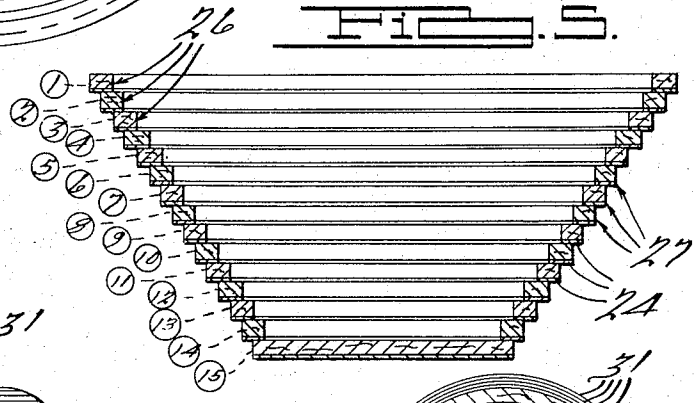
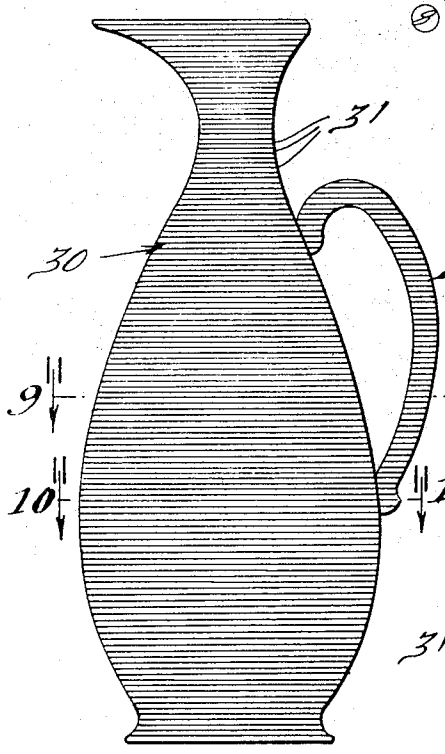
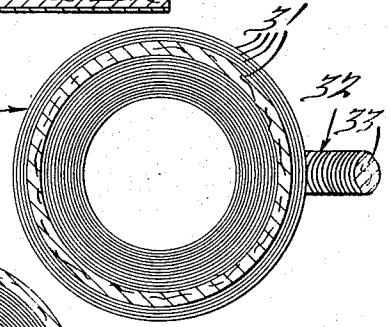


FIG. 8.





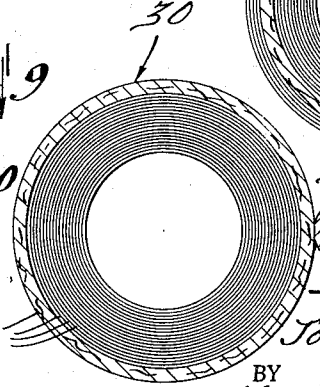


FIG. 9.

FIG. 10.

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HOBBY CRAFT DEVICE

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4 Claims. (Cl. 161—36)

This invention relates to a hobby craft device and, more particularly, to a construction and arrangement of parts whereby artistic articles and the like may be quickly and easily constructed from precut layers or laminations to produce attractive art pieces of unusual beauty and design.

It is an object of this invention to provide a device of this type in which a series of precut sheets of wood veneer or other suitable material are provided in the form of shaped or contoured strips adapted to be superposed on one another in overlapping relation either with regular spacing or with irregular spacing either laterally or circumferentially, to produce a three-dimensional object.

Another object is to provide a device of this type in which the strips are consecutively identified and are provided on one side thereof with an adhesive, such as a pressure sensitive adhesive, whereby they will adhere to one another when assembled in predetermined relation to permanently hold the same in assembled relation. The invention contemplates the use of a strippable paper-like-covering over the adhesive surface to prevent the accidental sticking together of the sheets.

In carrying out the invention, two or more flat sheets of wood veneer or the like are each cut to a predetermined multiple set of contours, forming strips representing sections of the article to be fabricated. The contour lines of the strips from one sheet are so sized and shaped as to lie between the outer and inner contour lines of the strips from the other sheet. The strips of one sheet have identifying indicia, such as numerals, **1**, **3**, **5**, etc., and the strips of the other sheet have cooperating identifying indicia, such as numerals **2**, **4**, **6**, etc. so that the strips may be assembled in predetermined relation. Thereupon, a strip from one sheet is detached therefrom and the strippable paper backing is removed. This strip is then pressed against the top surface of the companion strip removed from the other sheet in superposed, overlapping relation thereto. This operation is continued until all of the strips are assembled and the three-dimensional object is completed. The object is then sanded down to remove the square corners and to blend the strips or laminations into one continuous surface. The finished workpiece is then lacquered or surface finished in some similar manner to present the appearance of a hand-crafted work of art.

While wood veneer is a material admirably suited for use with this invention, sheet material of aluminum, brass, plastic, or the like may be employed with equal facility.

The various object and advantages, and the novel details of construction of two commercially practical embodiments of the invention, will become more apparent as this description proceeds, especially when considered in connection with the accompanying drawings, in which:

FIGURE 1 is a plan view of one of the sheets having precut circular contoured strips suitable for fabricating a bowl-like object;

FIGURE 2 is a similar view showing another sheet having precut circular strips adapted to be arranged in superposed, overlapping relation with the strips from the sheet shown in FIGURE 1;

FIGURE 3 is a sectional view taken substantially on the plane indicated by line **3—3** in FIGURE 2;

FIGURE 4 is a plan view of the assembled strips fabricated to form a bowl-like article;

FIGURE 5 is a vertical sectional view taken substantially on the plane indicated by line **5—5** in FIGURE 4;

FIGURE 6 is a fragmentary vertical sectional view showing the article illustrated in FIGURE 5 after sanding;

FIGURE 7 is a perspective view of the completed object;

FIGURE 8 shows the invention as used in producing a different shaped article;

FIGURE 9 is a transverse sectional view taken substantially on the plane indicated by line **9—9** in FIGURE 8; and

FIGURE 10 is a similar view taken on line **10—10** in FIGURE 8.

This invention relates to a hobby craft device or construction wherein three-dimensional figures may be produced from a series of contoured annular strips. In carrying out the invention, the device would be supplied to the customer in the form of two or more flat sheets from which the contoured annular strips have been precut by any suitable die cutting mechanism and then pushed back together again to form the sheet, or two sets of strips may be die cut from a single sheet of material.

In the drawings, there are shown two sheets **20** and **21** which may be and preferably are formed of wood veneer, but may be of aluminum, brass, plastic, or any other desired material.

Each of the sheets **20** and **21** is precut to form a series or plurality of contoured strips **22**. In the embodiment illustrated, each strip is shown as a circular annulus, but the strip may have any desired contour, depending upon the shape of the object to be constructed. The strips **22** of one sheet are sized and shaped so that their peripheral edges lie between the peripheral edges of the companion strip **22** taken from the other sheet so that the strips may be superposed on one another in overlapping relation to produce a three-dimensional object.

In order to facilitate the matching of the contoured strips **22** from sheet **20** with the contoured strips **22** from sheet **21**, each of the contoured strips is provided with identifying indicia **23**. For instance, the contoured strips **22** of sheet **20** may have identifying indicia **23** in the form of numerals **2**, **4**, **6**, **8**, **10**, **12** and **14** applied thereto, and the contoured strips from sheet **21** would have identifying indicia **23** in the form of alternate numerals **1**, **3**, **5**, **7**, **9**, **11**, **13** and **15** applied thereto.

The strips **22** of each of the sheets **20** and **21** are provided on one side with an adhesive **24**, preferably a pressure sensitive adhesive, and with a strippable paper sheet **25** covering the adhesive surface to prevent the accidental sticking together of the sheets. Obviously the adhesive may be applied to both contacting surfaces as is now well known.

In constructing the three-dimensional object, the contoured annular shaped strips are successively removed from the sheets **20** and **21** and the strippable paper strip **25** is removed to expose the adhesive surface. Thereupon, the strip identified by indicium **1** is pressed against the strip identified by indicium **2** so that the pressure sensitive adhesive surface of the first strip adheres the two strips together in superposed, overlapping relation. The paper strips **25** are successively removed from the contoured strips and the assembly of strips **1** and **2** is then pressed against strip **3** in superposed, overlapping relation, as clearly shown in FIGURE 5. This operation is continued until the three-dimensional object illustrated in FIGURE 5 is completed. Preferably the grain in alternate strips runs in different directions.

Obviously, the three-dimensional object may be constructed by starting with the bottom strip indicated by the

identifying indicium **15** and the strips identified by indicia **14, 13,** etc. can then be successively applied as heretofore described.

It will be noted that the strips **22** of each of sheets **20** and **21** have their peripheral edges so dimensioned as to lie intermediate the edges of the companion strips removed from the other sheet. Thus, the strips may be easily superposed on one another in substantial overlapping relation.

After the three-dimensional object has been constructed, as shown in FIGURES 4 and 5, the corners **26** and **27** of the strips on the inside and outside of the object are removed by sandpaper or some other abrasive means so as to blend the laminations formed by the strips **22** into one continuous surface, as shown in FIGURE 6.

Thereafter, the finished workpiece would be coated with a coat of lacquer or some other surface finish to thus enhance the appearance of the device so as to resemble a handcrafted work of art.

As stated, the kit in which the device is sold would consist solely of the two flat precut sheets **20** and **21**, one side of which is provided with an adhesive and a strippable protective sheet. The kit may also include a container of lacquer or other paint and a piece of sandpaper. In assembling the device, it would only be necessary to remove the strippable sheet **25** and to superpose the precut contoured strips one upon the other in the manner shown in FIGURE 5. After this has been done, the corners or edges **26** and **27** are sanded down to blend the laminations into one continuous surface and the article thus produced could be finished by any suitable lacquer or paint, as desired.

The principle of laminating various shapes together can be used with equal facility in laminating other shaped objects or works of art, such, for instance, as shown in FIGURES 8, 9 and 10. In the figures there is illustrated an artisticly shaped vase **30** formed of a plurality of superposed, overlapping annular contoured strips **31.** As illustrated, the object shown in these figures includes a handle portion **32** which may be constructed of disk-like members **33.** In this form the disk-like members **33** forming the handle would be die cut from the sheet in the outlying material thereof.

As stated hereinbefore, the principle of constructing articles from contoured annular strips may be employed in the production of other works of art in three dimensions, such as busts of famous people, figures of animals, etc. Also, as stated hereinbefore, the invention is not limited to the use of wood veneer in the formation of the contoured strips **22** of the sheets **20** and **21.**

While two commercially practical embodiments of the invention have been described and illustrated herein somewhat in detail, it will be understood that various changes may be made as may come within the purview of the accompanying claims.

What is claimed is:

1. A hobby craft device comprising a series of hollow contoured annualr strips of predetermined width concentrically located and removable from one sheet of rigid material, a like series of hollow annular strips concentrically located and removable from a second sheet of rigid material, said strip from one sheet being of a width to have an outer peripheral edge fall between the inner and outer peripheral edge of a strip of the other sheet so that when the strips from one sheet are alternately applied to the strips of the other sheet a hollow three dimensional object is produced having similar internal and external stepped surfaces.

2. A hobby craft device comprising a series of hollow annular strips cut from a pair of rigid sheets in concentric relation to each other with the dimension of one sheet falling between the inner and outer dimension of the other sheet superposed on one another in overlapping stepped relation, and adhesive means securing the strips together to produce a hollow three dimensional object having similar internal and external stepped surfaces.

3. The method of producing a three-dimensional object from flat annular contoured strips which comprises, providing at least two sheets of precut contoured strips of substantial thickness having a pressure sensitive adhesive on one side of said strips, the inner and outer peripheral edges of the strips from one sheet being dimensioned to lie intermediate the inner and outer perpiheral edges of the companion strips from the other sheet, superimposing the strips from one sheet on the companion strips from the other sheet and pressing the same together to adhere said strips together by said pressure sensitive adhesive to form similar internal and external stepped surfaces, and removing the corners of the strips to blend the strips into one continuous surface.

4. The method of producing a three-dimensional object from flat annular contoured strips which comprises, providing at least two sheets of precut contoured strips of substantial thickness having a pressure sensitive adhesive on one side of said strips, the inner and outer peripheral edges of the strips from one sheet being dimensioned to lie intermediate the inner and outer peripheral edges of the companion strips from the other sheet, super-imposing the strips from one sheet on the companion strips from the other sheet and pressing the same together to adhere said strips together by said pressure sensitive adhesive to form similar internal and external stepped surfaces, removing the corners of the strips by sanding the same to blend the laminated strips into one continuous surface, and applying lacquer or the like to the surface to provide a decorative surface finish thereto.

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DOUGLAS J. DRUMMOND, *Examiner.*