Aug. 27, 1940. E. P. FRANKE 2,212,638

ORNAMENTAL ARTICLE OF MANUFACTURE

Filed Dec. 8, 1939

Fig.1.

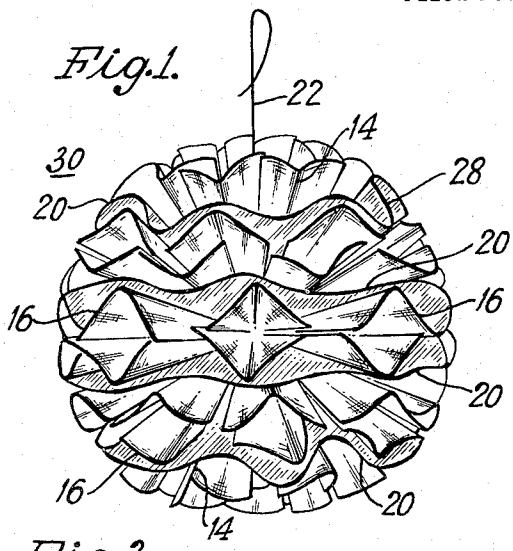


Fig.2.

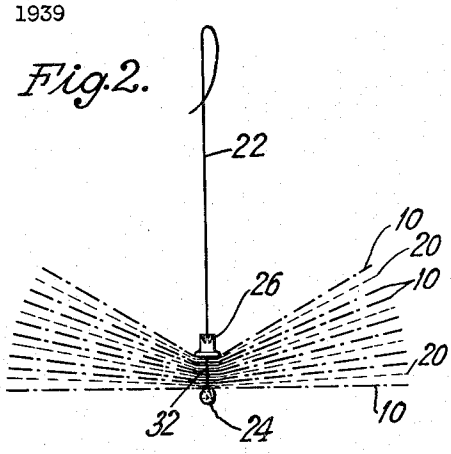


Fig.3.

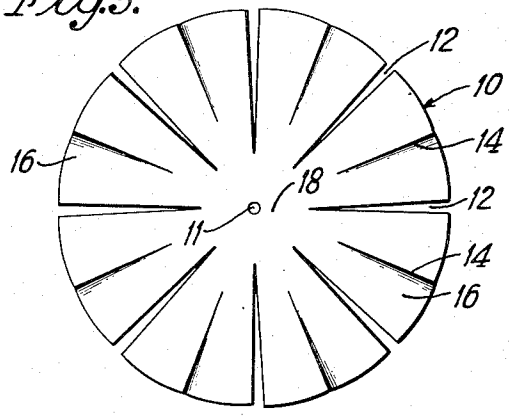


Fig.4.

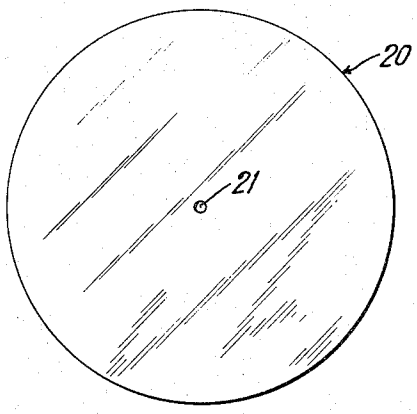


Fig.5.

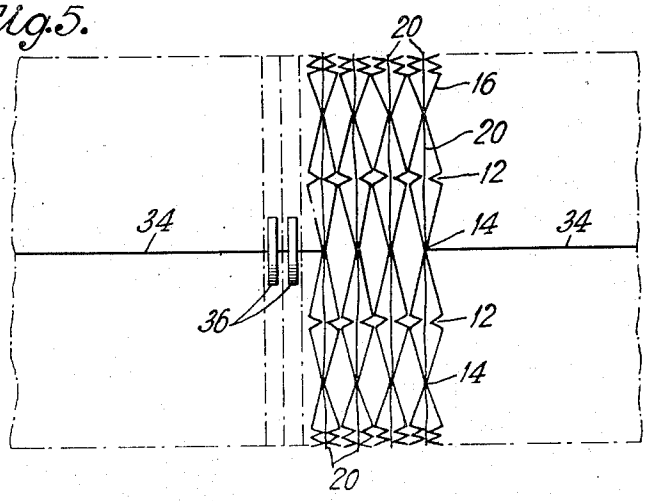


Fig.6.



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ORNAMENTAL ARTICLE OF MANUFACTURE

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15 Claims. (Cl. 41—10)

The present invention relates to decorative articles. More particularly, it relates to decorative articles in the form of ornaments for use in trimming Christmas trees, windows, and the like, and for use in other seasonal and general decorative displays.

Ornaments of the type to which the present invention relates have heretofore been marked with extreme delicacy and fragility since they have usually been formed of very thin vitreous materials, such as blown glass which is subject to breakage upon the slighest impact or crushing.

This objectionable feature has added greatly to the expense of such articles since extraordinary care must be exercised during the manufacturing, packaging and shipping of the articles and a large percentage of breakage has always resulted in spite of the utmost precautions. It has also been necessary to paint the ornaments, as by dipping and/or striping them, in order to produce different colors and color combinations.

It is an object of the present invention to provide a decorative article which is unbreakable under normal conditions of usage.

It is another object of the present invention to provide an ornament having unusual decorative properties and which can be manufactured at a rapid and economical rate.

It is a further object of the present invention to provide a decorative article capable of producing brilliant scintillating effects.

It is still another object of the present invention to provide an ornament capable of producing varied color effects.

It is a further object of the present invention to provide an ornament of pleasing appearance from materials which can be worked without the use of expensive equipment.

Other objects and advantages will be apparent to those skilled in the art from the following detailed description of what is now considered to be the preferred form of the invention.

The invention generally comprises a body formed of relatively stiff laminae provided with creased arms extending substantially radially from a central section, and relatively flexible laminae extending from the central section and disposed between the arms.

The invention accordingly comprises an article of manufacture possessing the features, properties, and the relation of elements which will be exemplified in the article hereinafter described and the scope of the invention will be indicated in the claims.

In the drawing,

Fig. 1 is an elevational view of an ornamental article of manufacture constructed in accordance with the present invention;

Fig. 2 is an elevational phantom view of the article illustrated in Fig. 1 at one stage in its manufacture;

Fig. 3 is a top plan view of one of the relatively stiff laminae used in the construction of the article of the invention;

Fig. 4 is a top plan view of one of the relatively flexible laminae used in the construction of the ornamental article of the present invention;

Fig. 5 is a side elevational view of a garland formed in accordance with the present invention, and

Fig. 6 is a top plan view of a spacer element used in the construction of the garland illustrated in Fig. 5.

The finished article illustrated in Fig. 1 is formed primarily of two different types of laminae, namely, relatively stiff and relatively flexible. Laminae of the type illustrated in Fig. 3 may be formed by die-stamping sheets 10 from any suitable relatively stiff material which is preferably opaque and has a highly reflective surface on one or both sides. Such material may be silver, aluminum or other metallic material in sheet form, or may be formed of non-fibrous cellulosic material, such, for example, as Cellophane or cellulose derivatives, such as cellulose acetate, cellulose nitrate or cellulose ethers formed into relatively stiff sheets, also synthetic resins of all kinds. Fibrous materials, such as cardboard, paper, stiff textiles, felt, and the like may be used, if desired. The cellulosic or other material, if desired, may be plated with metal foil or provided with any desired highly reflective coating. Simultaneously with the stamping process, or subsequent thereto, the sheets 10 are provided with radial slits 12 and radially-extending creases 14 which form substantially V-shaped arms 16 extending from a central portion 18 of the lamina or sheet. The relative lengths of the slits 12 and creases 14 may be varied to produce the degree of stiffness desired in the arms 16.

Laminae of the type illustrated in Fig. 4 are formed by stamping discs such as 20 from any suitable sheet material which is preferably transparent and colored. The material may be any of the above-mentioned transparent materials, but because of ease of procurement and desirable visual characteristics, it is preferable that the material from which discs 20 are stamped be cellulose hydrate (Cellophane).

The laminae 10 and 20 may be stamped in any desired shape, such as round, square, triangular, and the like, but for the sake of description they have been shown as discs. The discs 10 and 20 are suitably provided with center openings 11 and 21, respectively, at the time of stamping or later.

Several laminae 10 and 20 are stacked together and a fastening device which may be a wire 22 provided at one end with an enlargement in the form of a knot, molded ball or the like 24 is passed through the openings 11 and 21 in the laminae. The laminae may be fastened together as, for example, by passing a small metallic sleeve 26 over the wire 22 and down into firm contact with the laminae. The sleeve may be fastened to the wire as by crimping it into tight contact with the wire. The partly finished ornament will then have the general appearance illustrated in Fig. 2 in which the laminae 10 and 20 have been represented by broken lines. The article is completed by bending the laminae upwardly and downwardly from the central lamina to form a substantially spherically-shaped body as illustrated in Fig. 1.

The sharp creases 14 cause the arms 16 to remain substantially V-shaped and the relatively flexible laminae 20 are disposed between these arms and are frequently bent by the arm so as to take the undulated shape illustrated at 28 in Fig. 1.

Extremely brilliant visual effects can be produced by forming the relatively stiff laminae of highly reflective material such as aluminum foil and forming the relatively flexible lamina 20 of colored Cellophane. The various laminae 20 of a given ornament may have different colors or may be arranged to form a series of colors, such as red, white and blue, or any other desired color combination. Light striking the highly reflective surfaces of the arms 16 passes through the colored transparent material and causes the adjacent arms 14 to appear colored. The various colored light rays passing through and reflecting from the laminae produce a scintillating effect which is exceedingly attractive. When complementary colors are utilized the various colors are blended to form other colors besides those actually appearing in the colored laminae, with the result that the visual and decorative appearance of the ornament is greatly enhanced.

By varying the positions of the relatively stiff and relatively flexible laminae within the ornament body, numerous decorative effects can be produced. For example, the decorative body may be composed of laminae 10 positioned with the open sides of the V-shaped arms 16 together and with transparent laminae 20 interposed between the pairs of laminae 10 so positioned. Also, the laminae 10 and 20 may be alternated in the ornament body with the V-shaped arms 16 all facing in the same direction or facing in opposite directions alternately, as desired. Instead of having the laminae 10 positioned with the open sides of the V-shaped arms together, they may be placed with the points of the V's together, or, if desired, the arms 16 may be creased so that the V-shapes have their open sides and their pointed sides extending alternately upwardly and downwardly within each laminae.

It will be seen that the ornament of the present invention comprises generally a body 30 having a central section 32 (see Fig. 2), arms 16 extending substantially radially from the central section, and laminae 20 extending from the central section and interposed between the arms. The use of a fastening means at approximately the central section of the body leaves the marginal sections of the various laminae unattached and capable of being bent outwardly to form a light substantially unbreakable body.

The present invention may take the form of a decorative garland as illustrated in Fig. 6 by passing a wire, cord, thread or the like 34 through various laminae arranged as described previously in connection with the modifications illustrated in Fig. 1. The laminae may be spaced along the wire to prevent the garland from becoming too dense and heavy by inserting spacer discs 36 (see Figs. 6 and 7) between the laminae. The spacer discs 36 may be placed between every alternate pair of flexible and stiff laminae, or between each successive laminae, or in any other sequence desired to produce a garland having the proper density and appearance. The spacer discs 36 are not visible in the finished article since the arms 16 and discs 20 effectively cover them and shield them from view.

The laminae 10 and 20 may be formed of various grades of colored paper, if desired, to produce the decorative article, but the ornamental characteristics of the article are enhanced if at least one of the laminae has one or more highly reflective surfaces, and the other type of laminae is formed of transparent material, which is preferably colored. Thus, the laminae 20 should preferably be of translucid material, that is, transparent or translucent, and the laminae 10 are preferably formed of a metallic sheet material or a non-metallic sheet material which is provided with a highly reflective surface as by being coated with metallic foil or metal paint. Relatively heavy Cellophane which has been coated with silver by cathode sputtering is especially effective for use in forming the laminae 10.

The decorative article of the present invention can be rapidly produced without the use of special machinery and from easily procurable and relatively cheap materials, and can be shipped without special packaging precautions because of the substantially unbreakable nature of the article. The ornamental articles may be used repeatedly since they will not be injured under normal usage and do not have painted surfaces which become dull, scratched and otherwise marred.

By suitably shaping the individual laminae, it is possible to produce articles having many different shapes, for example, trees, pyramids, cylinders, balls, and the like. By suitably suspending the ornament made in accordance with the present invention and rotating it as by the use of a small electric motor or the like, an attractive dining room or ballroom ornament may be produced and the scintillating effect of the ornament may be enhanced by directing a spotlight upon it. The color effects may be further varied by changing the colors of the spotlight.

Since certain changes may be made in the above article and different embodiments of the invention could be made without departing from the scope thereof, it is intended that all matter contained in the above description or shown in the accompanying drawing shall be interpreted as illustrative and not in a limiting sense.

Having described the invention, what is claimed is:

1. An ornamental article comprising a body formed of relatively stiff sheet members having creases extending laterally therein, relatively flexible sheet members disposed between adjacent

creased sheet members, and fastening means for securing the sheet members together substantially at their central sections.

2. An ornament comprising a body formed of one or more translucid refractive laminae and one or more opaque reflective laminae, said laminae being positioned with an opaque lamina adjacent a translucid lamina, and fastening means for securing said laminae together substantially at their central sections while leaving their marginal sections unattached.

3. An ornamental body comprising a central section, arms extending substantially radially therefrom, and sheets of flexible material extending from said central section and disposed between said arms.

4. A decorative article comprising a body having a central section, creased arms extending substantially radially therefrom, and sheets of flexible material extending from said central section and disposed between said arms.

5. An ornamental body comprising a central section, arms extending substantially radially therefrom and sheets of colored flexible material extending from said central section and disposed between said arms.

6. A decorative article comprising a body having a central section, creased arms formed of material having a highly reflective surface extending substantially radially therefrom, and sheets of colored flexible material extending from said central section and disposed between said arms.

7. An ornamental article comprising a body formed of relatively stiff sheet members having highly reflective surfaces and creases extending laterally therein, relatively flexible sheet members disposed between adjacent creased sheet members, and fastening means for securing the sheet members together substantially at their central sections.

8. An ornament comprising a body formed of one or more translucid refractive laminae and one or more opaque reflective laminae, said laminae being positioned with an opaque lamina adjacent a translucid lamina, and fastening means for securing said laminae together centrally so as to leave portions of the laminae free and capable of being bent away from each other.

9. An ornamental article comprising a substantially spherical body formed of relatively stiff sheet members having creases extending laterally therein, relatively flexible sheet members disposed between adjacent creased sheet members, and fastening means for securing the sheet members together substantially at their central sections.

10. An ornamental article comprising an elongated body formed of relatively stiff sheet members having creases extending laterally therein, relatively flexible sheet members disposed between adjacent stiff sheet members, and fastening means for securing the sheet members together substantially at their central sections.

11. An ornamental body comprising a central section, arms extending substantially radially therefrom to form a substantially spherical body and sheets of flexible material extending from said central section and disposed between said arms.

12. A decorative article comprising a substantially spherical body having a central section, creased arms extending substantially radially therefrom and sheets of flexible material extending from said central section and disposed between said arms.

13. A decorative article comprising a substantially spherical body having a central section, creased arms having highly reflective surfaces extending substantially radially therefrom, and sheets of flexible colored material extending from said central section and disposed between said arms.

14. An ornamental article comprising a substantially spherical body formed of relatively stiff sheet members having highly reflective surfaces and creases extending laterally therein, relatively flexible colored sheet members disposed between said sheet members and undulated by the latter, and fastening means for securing the sheet members together substantially at their central sections.

15. An ornamental article comprising a substantially spherical body formed of relatively stiff sheet members having highly reflective surfaces and creases extending laterally therein, said members being positioned back to back with the creases projecting in opposite directions, relatively flexible colored sheet members disposed between adjacent pairs of said creased sheet members in contact with the creases, and fastening means for securing the sheet members together substantially at their central sections.

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