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3,132,988

DECORATIVE CHRISTMAS ORNAMENTS

Filed Jan. 8, 1963

2 Sheets-Sheet 1

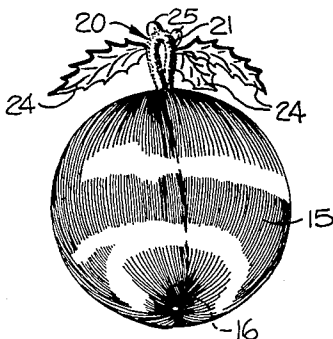


Fig-1

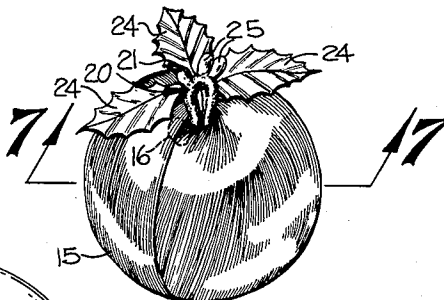


Fig-2

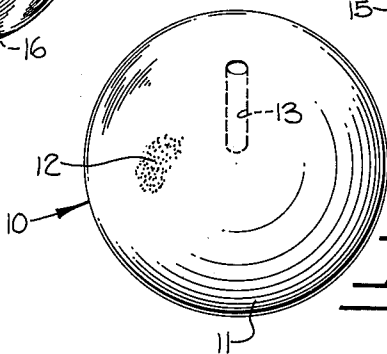


Fig-3

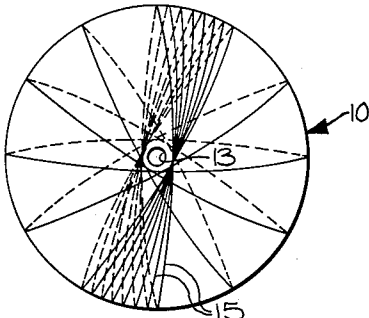


Fig-4

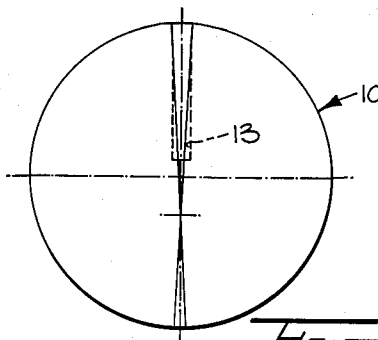


Fig-6

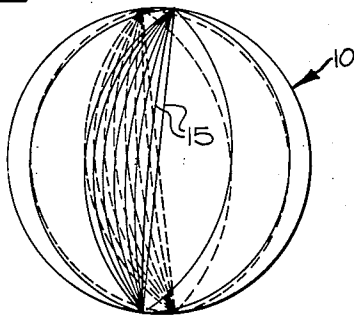


Fig-5

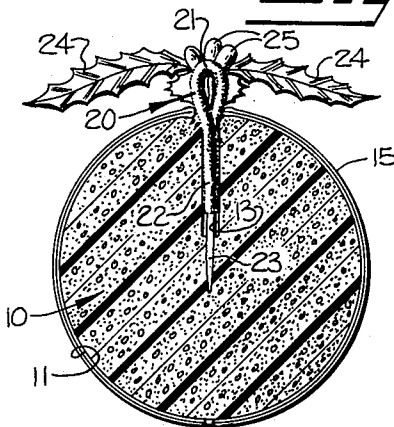


Fig-7

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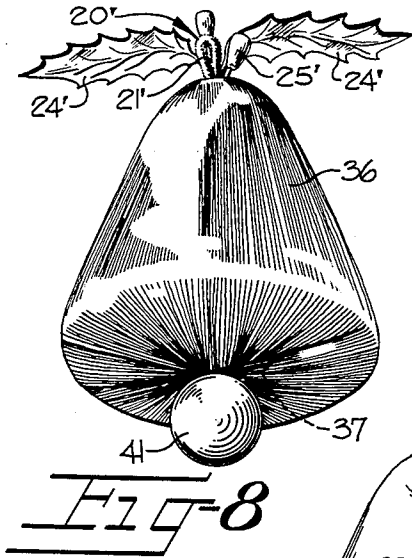
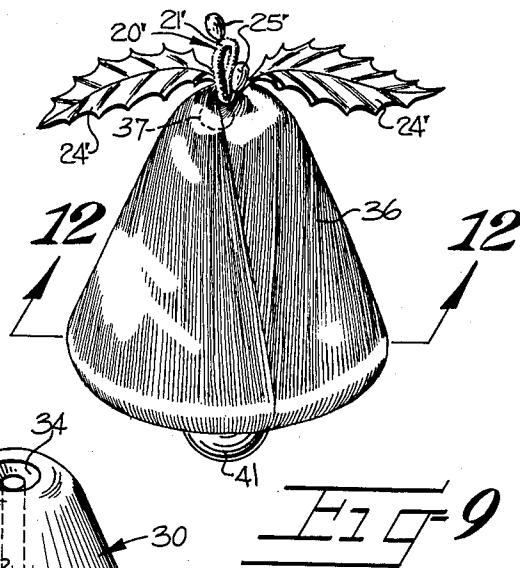
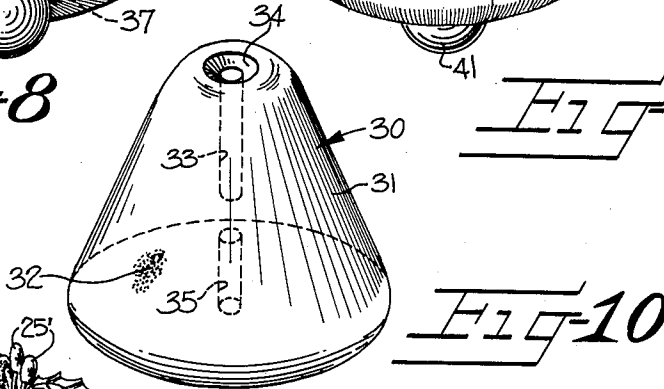
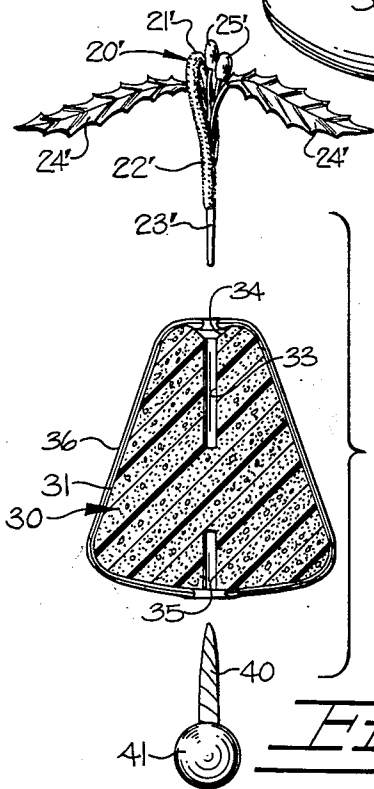
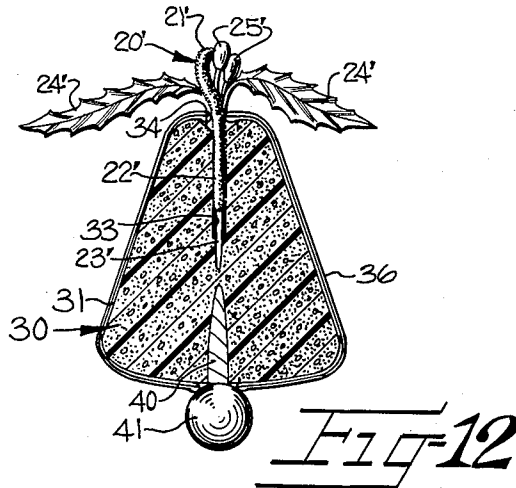
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2 Sheets-Sheet 2



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DECORATIVE CHRISTMAS ORNAMENTS

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5 Claims. (Cl. 161-16)

The present invention generally relates to decorative articles, and more particularly to decorative articles suitable for use as Christmas tree ornaments.

More particularly, the present invention is concerned with decorative articles which are of lightweight, unbreakable construction and exhibit a high luster to permit the articles to be readily used for decorating a Christmas tree, for example. To facilitate the use of the articles as Christmas decorations, each of the articles is provided with a hanger element positioned in a preformed bore of the core of the article, the entrance to which bore is bounded by the strand windings forming the covering of the article. To shield the preformed bore from view and to further enhance the appearance of the decorative articles, it is preferred that decorative means such as simulated holly leaves and berries, for example, be provided which also are secured to the article by having lower portions thereof extending into the preformed bore of the core.

Furthermore, to aid in the appearance of the decorative articles and dependent in part upon the particular shape of the articles and the use thereof the strand windings are positioned on the core in such a manner as to provide predetermined amounts of exposed areas at opposite ends of the core, which exposed areas at opposite ends of the core are normally of different amounts dependent in part upon auxiliary decoration being present or not to shield the exposed areas and dependent in part upon providing a sufficiently exposed entrance to the bore of the core for the reception of the hanger element while avoiding injury to the strand windings bounding the opening of the bore.

More specifically, the present invention is directed to ornaments of the type described wherein the core comprises a molded lightweight cellular material, such as polystyrene, having an outer skin which forms a smooth exterior core surface for receiving the windings of strand material thereon to provide a smooth outer covering of the strand windings and wherein the strand windings have a high sheen imparting a decorative luster to the ornament. Furthermore, the preformed bore is provided in at least one end of the core and is constructed for frictional retention of the hanger element therein without injury to the windings of strand material bounding the entrance of the bore.

It is therefore an object of the present invention to provide improved decorative articles of the character described which are of lightweight unbreakable construction and exhibit a high sheen imparting a decorative luster to the article.

Certain objects of the invention having been stated, other objects will become apparent as the description proceeds when taken in connection with the accompanying drawings, in which—

FIGURE 1 is a perspective view of a decorative ornament constructed in accordance with the present invention, the ornament being in the form of a ball having a hanger element adorned with decorative members, such as the foliage and fruit of a red-berried holly;

FIGURE 2 is a perspective view similar to FIGURE 1, but showing the ornament of FIGURE 1 in a different

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tilted position to more clearly illustrate the details of the top portion thereof;

FIGURE 3 is an enlarged perspective view of a core which is a component of the ornament illustrated in FIGURES 1 and 2;

FIGURE 4 is a schematic view looking down at the top of the ornament illustrated in FIGURES 1 and 2 to show how windings of strand material are arranged about the core;

FIGURE 5 is a schematic view similar to FIGURE 4, but looking at a side surface of the ornament of FIGURES 1 and 2 to further show how windings of strand material are arranged about the core;

FIGURE 6 is a diagrammatic view illustrating the preferred arrangement of the windings of strand material about the core with respect to the longitudinal axis thereof in constructing the ornament of FIGURES 1 and 2;

FIGURE 7 is a vertical sectional view taken along the line 7-7 in FIGURE 2;

FIGURE 8 is a perspective view of a modified form of decorative ornament constructed in accordance with the present invention, the modified ornament simulating a bell which has a hanger element adorned with decorative members, such as the foliage and fruit of a red-berried holly;

FIGURE 9 is a perspective view similar to FIGURE 8, but showing the ornament of FIGURE 8 in a different tilted position to more clearly illustrate the details of the top portion thereof;

FIGURE 10 is a perspective view of a core which is a component of the ornament illustrated in FIGURES 8 and 9;

FIGURE 11 is an exploded view of the ornament illustrated in FIGURES 8 and 9, and showing the core and strand windings thereabout in vertical section with the remaining components of the ornament disassembled from the core being shown in elevation; and

FIGURE 12 is a vertical sectional view taken along the line 12-12 in FIGURE 9, and showing the modified ornament of FIGURES 8 and 9 when assembled.

Referring more specifically to the drawings, and in particular to the form of the decorative ornament shown in FIGURES 1-7, inclusive, FIGURE 3 illustrates a solid core 10 comprising a ball or sphere of molded lightweight cellular material having an outer smooth skin 11 to form a smooth exterior core surface of spherical shape. The core 10 is preferably solid and comprises molded polystyrene material. The smooth exterior surface of the spherical core 10 may be provided with a uniform layer of pressure-sensitive adhesive substance to form a tacky coating 12 over the entire surface area of the core 10. In molding the spherical core 10, the mold provides for the formation of an elongated cylindrical bore 13 in the core 10 with the axis of the elongated bore 13 preferably coinciding with the longitudinal axis of the core 10.

The ball-shaped decorative ornament of FIGURES 1-7, inclusive, is constructed by spirally winding strand material about the spherical core 10 in a particular manner to provide an outer covering 15 for the smooth exterior surface of the core 10. In the latter respect, FIGURES 4 and 5 schematically illustrate certain of the individual strand windings, wherein the core 10 is covered by two layers of strand windings (FIGURE 7) with the strand windings, in the second layer being superimposed over the strand windings in the first layer to form the outer covering 15 for the core 10. FIGURES 4 and 5 exaggerate the respective positions assumed by the individual strand windings about the core 10 to some extent in order to clarify the particular manner in which they are arranged about the core 10—it being understood, for example, that adjacent strand windings in each layer of the outer covering 15 are juxtaposed in touching relation with each other.

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Referring to FIGURE 6, it will be observed that the individual strand windings are so arranged as to substantially lie in respective imaginary planes intersecting the longitudinal axis of the core 10 at a point thereon which is located closer to the bottom end of the core 10 than the top end thereof.

By wrapping the strand material in individual windings or convolutions complying with the diagrammatic illustration in FIGURE 6 with the adjacent windings of strand material in the same layer lying in side-by-side engagement, the concentrations of strand material at the top and bottom ends of the core 10 assume contrasting appearances in that the strand windings concentrated at the bottom end of the core 10 expose an insignificant, hardly noticeable area of the core 10 therebeneath, while the strand windings concentrated at the top end of the core 10 are arranged around the opening defined by the elongated bore 13. It will be appreciated, therefore, that the windings of strand material forming the outer covering 15 for the core 10 are spirally wound about the core 10 in an angular relationship to the longitudinal axis thereof other than a right angle so as to be off-set from the longitudinal axis of the core 10 at the opposite ends thereof by unequal arcuate distances.

The tacky coating 12 on the smooth exterior core surface adheres the lower layer of strand material to the core 10 with the lower layer of strand material forming a base for receiving the upper or superimposed layer of strand material wound thereover. In completing the assembly of the outer covering 15 comprising the layers of strand material wound about the core 10, a small amount or a dab of clear adhesive material 16 is applied to the portions of the strand material disposed at the top and bottom ends of the core 10 to anchor the strand material to the core 10 and prevent unwinding thereof, since the strand windings may tend to become disarranged on the ends of the core 10 where the strand windings are concentrated.

The strand material comprising the outer covering 15 for the core 10 is preferably chosen from a yarn exhibiting high sheen characteristics so as to cooperate with the smooth exterior core surface about which the strand material is spirally wound to produce an outer covering 15 for the core 10 possessing extreme smoothness and relatively high reflectivity to impart a decorative luster to the ornament. By way of example, rayon acetate yarn has been found to be satisfactory and may be suitably employed as the strand material forming the outer covering 15 for the core 10. The rayon acetate yarn may be colored, as desired.

To guard against the creation of lumps or other irregularities in the outer covering 15 of strand windings about the core 10, it has been determined that the layers of strand windings comprising the outer covering 15 should preferably not exceed three in number, with two such layers being preferred. The second or exposed layer of strand windings in the outer covering 15 serves to cover up any minute spaces inadvertently existing between adjacent strand windings in the first or lower layer which would otherwise expose portions of the core 10.

A hanger element 20 is partially inserted within the elongated bore 13 formed in the core 10 so as to protrude outwardly of the strand-wrapped core 10 with the outer end of the hanger element 20 terminating in a loop 21 adapted for receiving a support such as a branch of a Christmas tree to suspend the ornament therefrom. As shown in the drawings, the hanger element 20 comprises a suitably colored flexible chenille-like stem 22 in the form of a pipe-cleaner element bent to provide the loop 21 of the hanger element 20. As illustrated, the hanger element 20 frictionally engages the walls bounding the elongated bore 13 formed in the core 10 to releasably secure the hanger element 20 in place.

Preferably, a decorative wire element 23 is also positioned in the bore 13. As shown, the lower end of the

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wire element 23 pierces the inner blind end of the bore and is embedded within the interior of the core 10 for thus being releasably retained thereby. The portion of the decorative wire element 23 extending outwardly of the bore 13 is adorned with decorative members which in the illustrated embodiment of FIGURES 1-7, inclusive, take the form of simulated foliage 24 and fruits 25 of a red-berried holly plant to lend additional decorative effect to the ornament. However, it will be understood that the simulated foliage 24 and fruits 25 are merely representative of decorative members which may be attached to the protruding portion of the decorative wire element 23 and should not be regarded as being necessarily restrictive.

Referring now to the modified form of ornament illustrated in FIGURES 8-12, inclusive, it will be observed that the modified ornament may be generally characterized as simulating a bell in appearance. In this respect, the modified ornament of FIGURES 8-12, inclusive, comprises an inner solid core 30 of molded lightweight cellular material, preferably polystyrene, which is of generally conical shape and has an outer smooth skin 31 forming a smooth exterior core surface. The entire surface area of the smooth exterior core surface of the conical or bell-shaped core 30 may be provided with a tacky coating 32 for adhering windings of strand material to the core 30. In molding the bell-shaped core 30, the mold for the core 30 provides for the formation of an elongated cylindrical bore 33 and a tapered countersunk bore 34 which open onto the top end of the core 30, and an elongated cylindrical bore 35 which opens onto the bottom end of the core 30. Preferably, the axes of all of the bores 33, 34, and 35 coincide with the longitudinal axis of the bell-shaped core 30.

As in the first form of ornament illustrated in FIGURES 1-7, inclusive, the modified ornament of FIGURES 8-12, inclusive, includes strand material, such as high sheen rayon acetate yarn, spirally wound about the smooth exterior core surface of the conical core 30 so as to be arranged thereon in a particular manner to provide an outer covering 36 for the smooth exterior surface of the core 30. It will be noted, however, that the individual strand windings comprising the outer covering 36 for the conical core 30 are arranged to substantially lie in respective imaginary planes intersecting the longitudinal axis of the conical core 30 at a point thereon which is located closer to the top end of the core 30 than the bottom end thereof in contrast to the arrangement of the strand windings in the ball form of the decorative ornament illustrated in FIGURES 1-7, inclusive, previously described. Like the ball form of ornament illustrated in FIGURES 1-7, inclusive, the windings of strand material forming the outer covering 36 for the core 30 are spirally wound about the core 30 in an angular relationship to the longitudinal axis thereof other than a right angle so as to be off-set from the longitudinal axis of the core 30 at the opposite ends thereof by unequal distances. Thus, the outer covering 36 for the conical core 30 includes concentrated strand windings at the top and bottom ends thereof bounding the respective elongated bores 33 and 35 with the concentrated strand windings at the bottom end of the conical core 30 exposing a greater surface area of the core 30 than the concentrated strand windings at the top end thereof.

The tapered countersunk bore 34 at the top end of the conical core 30 receives the strand windings concentrated at the top end of the core 30 to avoid formation of a protruding hump of strand windings at the top end of the conical core 30 which is more likely to occur in this form of decorative ornament, since the top end of the conical core 30 is of substantially reduced size compared to the bottom end and affords only a limited area for receiving the layers of strand material wound about the conical core 30.

A small amount or a dab of clear adhesive material 37 is applied to the portions of strand material disposed at

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the top and bottom ends of the conical core 30 to anchor the strand material to the core 30 and prevent unwinding thereof.

A hanger element 20' identical to the previously described hanger element 20 of the ball form of ornament is partially inserted within the upper elongated bore 33 with the flexible chenille-like stem or pipe-cleaner element 22' thereof frictionally engaging the walls bounding the elongated bore 33 formed in the core 30 to releasably secure the hanger element 20' in place. The lower end of the decorative wire element 23' preferably pierces the inner blind end of the elongated bore 33 to be embedded within the interior of the conical core 30 for insuring releasable retention thereof. Decorative members in the form of simulated foliage 24' and fruits 25' of a red-berried holly plant adorn the decorative wire element 23' being attached about the upper end thereof protruding outwardly of the strand-wrapped conical core 30.

A simulated bell clapper is frictionally received within the lower elongated bore 35, the bell clapper including a tapered pin 40 for insertion in the elongated lower bore 35 and a spherical member 41 on the lower end of the pin 40 so as to be exposed on the bottom end of the strand-wrapped conical core 30. In the latter respect, the lower bore 35 serves as a guide to properly position the simulated bell clapper so that the tapered pin 40 thereof may be frictionally received within the lower bore 35 and forced upwardly to become embedded in the interior of the conical core 30 with the spherical member 41 shielding the exposed exterior core surface bounded by the concentrated strand windings and depending from the strand-wrapped conical core 30, the spherical member 41 preferably possessing a shiny or otherwise lustrous outer surface to attract attention thereto.

As in the ball form of decorative ornament illustrated in FIGURES 1-7, inclusive, the bell ornament of FIGURES 8-12, inclusive, preferably includes an outer covering 36 for the conical core 30 comprised of two layers of strand windings, and in any event, the layers of strand windings comprising the outer covering 36 should not exceed three in number, if lumps and irregularities are to be avoided in the outer covering 36 to produce a smooth surface for the outer covering 36 possessing relatively high reflectivity.

In each form of the invention, the preformed bores provided in the respective cores for the decorative ornaments and the particular manner in which the strand windings are arranged about the cores to expose the open ends of such bores permit hanger elements to be readily inserted in the cores for the purpose of suspending the ornaments from the branches of Christmas trees without injuring the strand windings about the cores in any way. It will be further appreciated that the hanger elements and decorative wire elements shield or mask any exposed surface area of the cores in which they are inserted.

In the drawings and specification there have been set forth preferred embodiments of the invention and, although specific terms are employed, they are used in a generic and descriptive sense only and not for purposes of limitation, the scope of the invention being defined in the claims.

I claim:

1. An ornament comprising
 - (a) a solid, generally spheroidal shaped core of molded cellular polystyrene material having an outer skin forming a smooth exterior core surface,
 - (b) said core having an elongate axially extending bore provided in one end thereof,
 - (c) yarn material having a high sheen and being spirally wound about the smooth exterior surface of said core in side by side relationship and providing an outer covering for said core of extreme smoothness and high reflectivity, said outer covering comprising individual windings of said yarn material disposed

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around said core and lying in respective planes disposed at an acute angle to the axis of said core along which said bore extends and intersecting this axis at a point located closer to the end of said core opposite said bore than to the end having said bore provided therein to provide an opening in said outer covering bounding said bore for free access to said bore without disturbing and damaging the yarn material, and

- (d) a dab of adhesive applied to the last few windings of yarn material in said outer covering adjacent each end of said core to anchor these windings and thereby prevent unwinding thereof.
2. An ornament as defined in claim 1 including
 - (e) an elongate hanger element having a portion thereof disposed in said bore and the remainder thereof extending outwardly from said bore for attachment to a support from which the ornament is adapted to be supported.
3. An ornament as defined in claim 2 wherein
 - (f) said yarn material comprises rayon acetate and said outer covering comprises two layers of said windings, and including
 - (g) a decorative element having a portion thereof disposed in said bore with said hanger element and the remainder thereof extending outwardly of said core, said remainder of said decorative element providing an appearance simulating foliage.
4. An ornament simulating a bell comprising
 - (a) a solid, generally conical shaped core of molded cellular polystyrene material having an outer skin forming a smooth exterior core surface,
 - (b) said core having oppositely directed, elongate bores in opposite ends thereof and extending longitudinally along the longitudinal axis of said core,
 - (c) yarn material having a high sheen and being spirally wound about the smooth exterior surface of said core in side by side relationship and providing an outer covering for said core of extreme smoothness and high reflectivity, said outer covering comprising individual windings of said yarn material disposed around said core and lying in respective planes disposed at an acute angle to the longitudinal axis of said core and intersecting this axis at a point closer to the small end of said core than the large end thereof to provide openings in said outer covering bounding said bores in said core to provide free access to said bores without disturbing and damaging the yarn material, the opening in said outer covering at the large end of said core being larger than the opening in said outer covering at the small end of said core,
 - (d) a dab of adhesive applied to the last few windings of yarn material in said outer covering adjacent each end of said core to anchor these windings and thereby prevent unwinding thereof,
 - (e) an elongate hanger element having a portion thereof disposed in the bore at the small end of said core and the remainder thereof extending outwardly from said core for attachment to a support from which the ornament is adapted to be supported, and
 - (f) a decorative element having a portion disposed in the bore in the large end of said core and the remainder thereof extending outwardly from said core, said remainder of said decorative element being spheroidal in shape simulating a bell clapper and being of a diameter exceeding the diameter of the opening in said outer covering at the large end of said core.
5. An ornament as defined in claim 4 wherein
 - (g) said yarn material comprises rayon acetate and said outer covering comprises two layers of said windings, and including
 - (h) a decorative element having a portion thereof disposed in said bore in the small end of said core with said hanger element and the remainder thereof extending outwardly of said core, said remainder of

said decorative element providing an appearance
simulating foliage.

2,591,016
2,618,901

References Cited in the file of this patent

UNITED STATES PATENTS

424,916	Wilmsen	Apr. 1, 1890
1,904,470	Kelman	Apr. 18, 1933
1,979,888	Kranz et al.	Nov. 6, 1934
2,346,824	Cohen	Apr. 18, 1944

5

587,697
1,158,713

Schoenherr ----- Apr. 1, 1952
Braun ----- Nov. 25, 1952

FOREIGN PATENTS

France ----- Sept. 6, 1924
France ----- Oct. 17, 1956

OTHER REFERENCES

Modern Plastics, vol. 27, No. 12, August 1950, pp.
56-60 relied on.