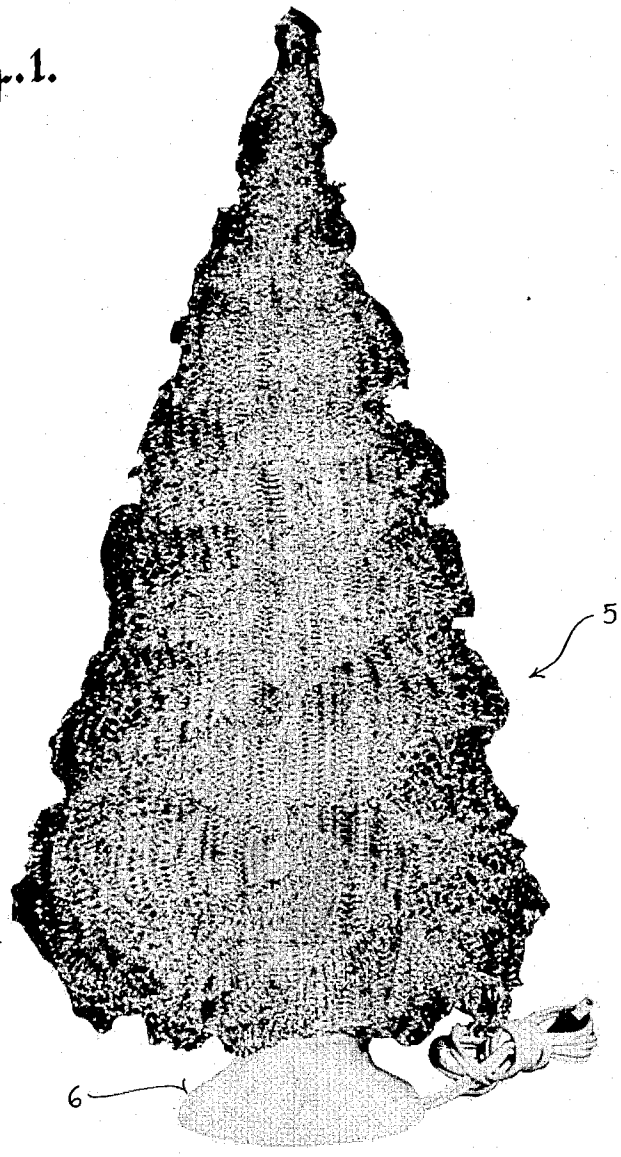
Feb. 16, 1954 G. B. SMITH 2,669,049

ARTIFICIAL CHRISTMAS TREE

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Fig. 1.



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Fig. 2.

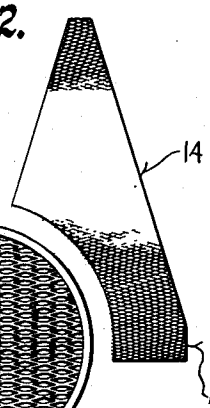


Fig. 2a

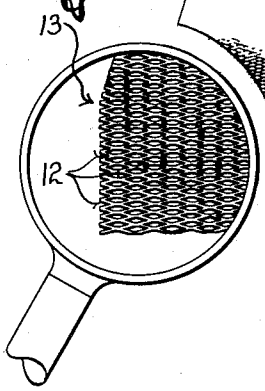


Fig. 3.

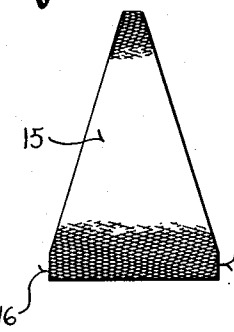


Fig. 4.

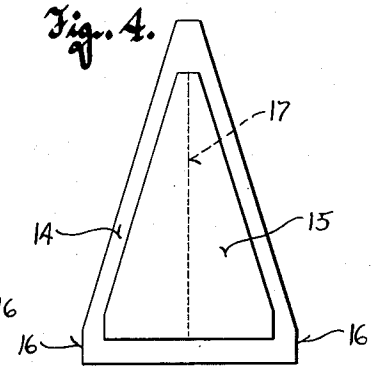


Fig. 5.

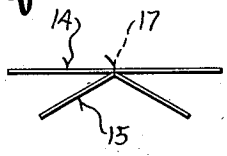


Fig. 6.

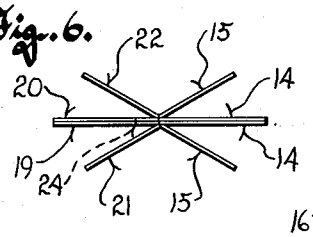


Fig. 7.

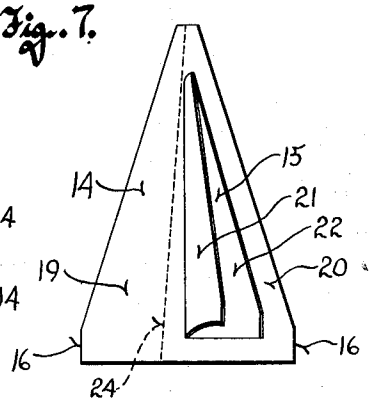


Fig. 8.

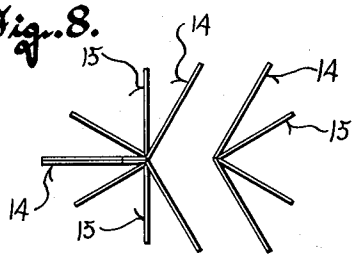


Fig. 9.

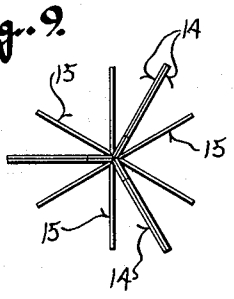
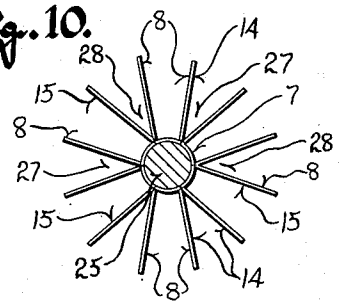


Fig. 10.



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ARTIFICIAL CHRISTMAS TREE

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Fig. 11.

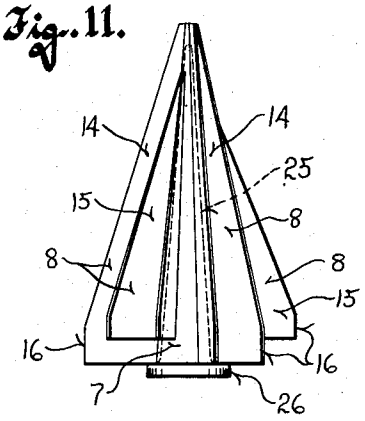


Fig. 12.

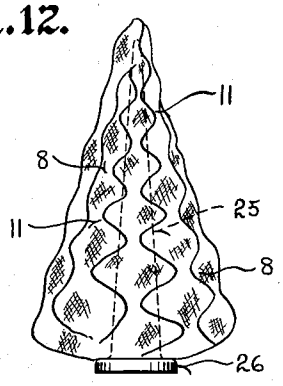


Fig. 13.

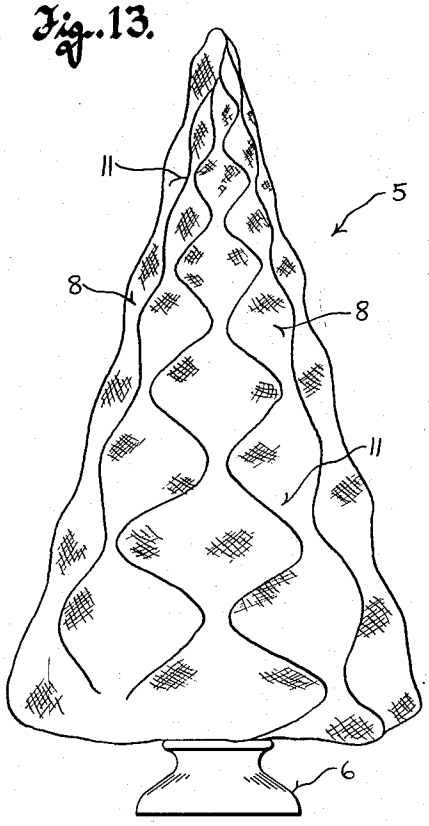
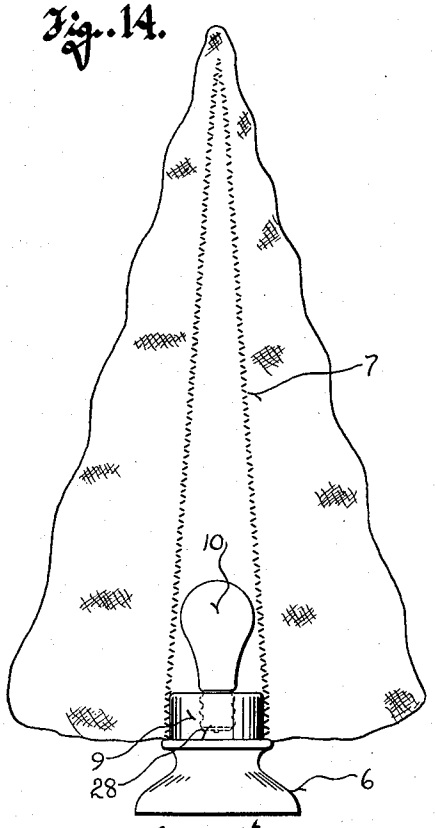


Fig. 14.



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Patented Feb. 16, 1954 2,669,049

UNITED STATES PATENT OFFICE

2,669,049

ARTIFICIAL CHRISTMAS TREE

Garland B. Smith, Madison, Wis.

Application April 27, 1950, Serial No. 158,349

4 Claims. (Cl. 41—15)

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This invention relates to novelty ornaments and refers more particularly to a decorative novelty made of foraminous metal foil and especially suitable for use as a Christmas decoration, and to the method of making the same.

It is an object of this invention to provide an attractive illuminated Christmas decoration of the character described having the general configuration and appearance of a sparkling Christmas tree.

Another object of this invention resides in the provision of a Christmas decoration of the character described which is made of expanded metal foil and is internally illuminated so that light shines through the foramina in the metal foil to create an unusually attractive sparkling and shimmering effect.

Still another object of this invention resides in the provision of an unusually light weight but substantial Christmas decoration of the character described which may be readily and inexpensively fabricated from a number of similar pairs of triangular blanks stitched together along a relatively few straight seams.

A further object of this invention resides in the provision of a relatively simple method of making the herein described novelty device.

With the above and other objects in view, which will appear as the description proceeds, this invention resides in the novel construction, combination and arrangement of parts substantially as hereinafter described and more particularly defined by the appended claims, it being understood that such changes in the precise embodiment of the hereindisclosed invention may be made as come within the scope of the claims.

The accompanying drawings illustrate one complete example of the physical embodiment of the invention constructed according to the best mode so far devised for the practical application of the principles thereof, and in which:

Figure 1 is a perspective view of the novelty ornament of this invention;

Figure 2 is a plan view of one of the two types of blanks from which the ornament is fabricated, a portion being shown enlarged;

Figure 2A is a plan view showing an enlarged portion of the blank illustrated in Figure 2;

Figure 3 is a plan view of one of the other of the two types of blanks from which the ornament is fabricated;

Figure 4 is a more or less diagrammatic plan view illustrating the first step in the fabrication of the ornament of this invention, that is, the joining together of two different size blanks;

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Figure 5 is a diagrammatic top view of the joined blanks shown in Figure 4;

Figure 6 is a top view similar to Figure 5 but illustrating the manner in which a pair of joined blanks is secured together in the second fabricating step;

Figure 7 is a view similar to Figure 4 but showing the blanks after the second fabricating step has been performed;

Figure 8 is a top view corresponding to Figures 4 and 5, but showing the manner in which joined blanks in the first and seconds stages of fabrication are combined for the third assembly step;

Figure 9 is a view similar to Figure 8, but showing the blanks completely assembled to one another;

Figure 10 is a diagrammatic bottom view, partly in section, showing the use of a mandrel to spread the completely assembled blanks;

Figure 11 is an elevational view of the assembled blanks in place on the mandrel;

Figure 12 is an elevational view of the assembled ornament after the surfaces of its leaves have been transversely fluted;

Figure 13 is an elevational view of the ornament of this invention completely finished and mounted on its base; and

Figure 14 is a longitudinal sectional view through the completed ornament.

Referring now to the accompanying drawings, in which like numerals designate like parts throughout the several views, the numeral 5 designates generally the ornament of this invention, which preferably has the general configuration of an evergreen or Christmas tree and which is mounted on a base 6 of appropriate size and shape. The body portion of the ornament comprises a tapering tubular center post 7 (see Figures 11 and 14) from which radiate a number of triangular leaves or wings 8, each having one of its longitudinal side edges extending lengthwise along the center post; and, in fact, the center post is integral with certain of the leaves and comprises a portion of them, as will be seen presently.

The base has a cylindrical neck 9, shown in Figure 14, which telescopes upwardly into the open lower end of the center post and a socket in the neck receives an electric light bulb 10 which projects up into the center post. Both the center post and the leaves or wings of the ornament are made of foraminous metal foil, so that the rays of light shine out through the perforations of the post and the leaves are reflected on

the surface of the metal foil. The glint and sparkle of this illumination is enhanced by the fact that the leaves are fluted, or waved, transversely to the center post, as at 11, throughout their height.

While any foraminous sheet material may be employed for the ornament of this invention, expanded metal foil is preferably used. As is well known to those skilled in the art, this material comprises metal foil the entire area of which is provided with numerous short, parallel slits 12, as shown in Figure 2, disposed in staggered relation to one another, and which is drawn or expanded transversely to the slits, in the plane of the foil, to open the slits to a lozenge shape and create a sort of open basket-weave appearance, as best seen in the enlarged portion 13 in Figure 2. Especially interesting effects may be obtained if aluminum foil is colored on one side to contrast with the color on its other side.

Further details of the structure of the ornament are best understood in the light of the method of fabricating it, now about to be described.

A number of geometrically similar substantially triangular blanks 14 and 15 are first cut from expanded aluminum foil. Preferably these comprise three larger blanks 14 and three smaller blanks 15, although more than three of each can be used (providing the number of large and small blanks is equal), or six or more blanks of uniform size can be used provided there are an even number of blanks.

Each of the blanks has the shape of an isosceles triangle, the dimensions of the larger blanks corresponding roughly to those of the finished ornament; and the corners of all of the blanks are preferably cut off squarely, as at 16, or rounded, so as not to present unattractive sharp angles. As an example of the relative sizes of the blanks, the larger may be made 21 inches high and 13½ inches wide, and the smaller 16½ inches high and 10½ inches wide, although it will be understood that these proportions may be varied and the blanks may be made substantially larger or smaller than the dimensions given in order to produce a relatively larger or smaller ornament.

As a first step in the assembly of the ornament, one of the smaller blanks 15 is laid flatwise on each of the large blanks 14, as seen in Figure 4, with substantially equal marginal edge portions of the larger extending beyond the edges of the smaller and with the center lines of the two blanks coinciding. The two blanks are then fastened together on a seam 17 along their center lines, and this is most readily accomplished by stitching them on an ordinary sewing machine. The blanks of each pair are then in the condition illustrated in Figure 5.

When each of the smaller blanks has been thus secured to one of the larger ones, the larger ones are next sewed together. The left and right halves 19 and 20 respectively of the larger blank, and the corresponding halves 21 and 22 respectively of the smaller may each be considered as individual leaves or wings, and to enable the second assembly operation to be performed the left leaf 21 of one of the smaller blanks is rolled forwardly and to the right (as best seen in Figure 7) to expose the left leaf 19 of its attached large blank; and the right leaf 22 of another small blank is similarly rolled to the left to permit free access to the right wing 20 of the large blank to which it is secured. This enables the exposed leaves of these two larger blanks, 19 of one and 20 of the other, to be sewed together in flatwise back-to-back relationship, coterminously with one another, along a seam 24 spaced to one side of their center lines and converging upwardly toward the same. This condition is represented in Figures 6 and 7.

In the third fabricating step, joined blanks in their first and second stages of assembly are combined in the manner illustrated in Figure 8, and secured together as seen in Figure 9. To enable this to be done, the free leaves of the larger second stage blanks are folded outwardly, away from one another, along their center lines, as shown in Figure 8, and the larger left and right leaves of the first stage unit are brough between them and sewed to the correspondingly opposite leaves (i. e., the right and left leaves, respectively) of the other two blanks, in flatwise back-to-back relationship and coterminously with them.

In performing this latter step in the assembly the smaller leaves overlying the large ones to be connected are of course first rolled to one side, and the connecting seams are again disposed in spaced relationship to the centerlines of the blanks, converging upwardly toward the centerlines. The blanks are now assembled, and are in the condition shown in Figure 9, with all of their center lines coinciding and with each of the larger blanks connected with two other larger blanks, each of the larger leaves being in flatwise back-to-back relationship with the leaf of another large blank and fastened thereto along a seam spaced from the blank center line and converging upwardly toward the same.

The area of each large blank between the converging seams thereon may be considered as a medial zone of the blank, and the several medial zones define a central wedge shaped pocket of irregular cross section from which the several wings of the blanks radiate. This pocket, when suitably distended, forms the tapering tubular center post of the ornament, and to this end a tapering mandrel 25 is inserted upwardly into the pocket to spread and round out the converging medial zones of the larger blanks, so that each defines an arcuate segment of the center post.

The mandrel is preferably provided with a suitable working base 26, which is somewhat wider than the bottom of the mandrel, both to provide a stop to limit insertion of the mandrel (to preclude the possibility of tearing the foil in the neighborhood of the seams by inserting the mandrel too far) and to provide a working mount for the ornament while performing the next two operations thereon.

After the center post has been formed the connected leaves of the larger blanks are spread apart, as at 27 (see Figure 10), by folding them along the connecting seams, and the smaller blanks are also folded along their center line seams, as at 28, so that all of the wings of the several blanks extend substantially radially from the center post, at divergent angles to one another.

Next each of the wings is deformed in a series of laterally adjacent flutings, extending transversely to the center post, in such manner as to provide what may be aptly characterized as a "marcel wave" effect.

Finally the mandrel is removed and the ornament is mounted on its base 6 to complete it. The upwardly projecting cylindrical portion of the base (which contains the socket for the light

bulb (10) fits snugly into the bottom of the tubular center post and extends a substantial distance up into the same so that no adhesive is required to hold the ornament in place on the base, thus permitting the ornament to be removed therefrom to enable the light bulb to be changed or to enable the ornament to be stored more completely. The mounting base has a shoulder 28 which abuts the lower edge of the center post tube to thus hold the ornament at a suitable height above its supporting surface.

From the foregoing description, taken together with the accompanying drawings, it will be readily apparent that this invention provides an unusually attractive Christmas decoration made of expanded metal foil and provided with internal illumination which causes the entire ornament to sparkle and glitter, and that the invention also provides a simple and inexpensive method of making such an ornament.

What I claim as my invention is:

1. A metal foil novelty device comprising: a plurality of similar substantially triangular metal foil blanks, each folded along a pair of lines spaced at opposite sides of the vertical center line of the blank and converging upwardly toward the same, said folds dividing each blank into a longitudinally medial zone and a left and right wing; seams extending along said fold lines and fastening each of said blanks to a pair of other blanks with the left wing of each blank substantially coterminous with the right wing of its adjacent blanks; and the medial zones of said blanks being arcuately curved in cross section and cooperating to define a single thickness tapering tubular center post from which said wings extend substantially radially.

2. The novelty device of claim 1, further characterized by the fact that said blanks are formed from foraminous metal foil; and by the fact that said wings are fluted substantially transversely to the center post.

3. The novelty device of claim 1, further characterized by a plurality of smaller triangular metal foil blanks, similar in shape to said first named blanks and fastened to one of the first named blanks by means of a seam along the central portion of each smaller blank joining the same to the curved post defining portion of one of the larger blanks, said smaller blanks being folded substantially along their seams so that their wings extend substantially radially from the center post.

4. As an article of manufacture: a plurality of large triangular blanks and a corresponding number of smaller triangular blanks, each of said smaller blanks being fastened to one of the larger blanks along a seam on the vertical center lines of the two blanks, each of said larger blanks being connected with two other larger blanks along a pair of seams spaced at opposite sides of its centerline and upwardly convergent toward the same, with each half (as defined by the vertical centerline) of one of said larger blanks flatwise overlying and coterminous with the correspondingly opposite half of another blank, so that the vertical centerlines of all of said triangular blanks coincide with one another.

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