Dec. 22, 1953 R. G. OWEN 2,663,106

DECORATIVE STREAMER

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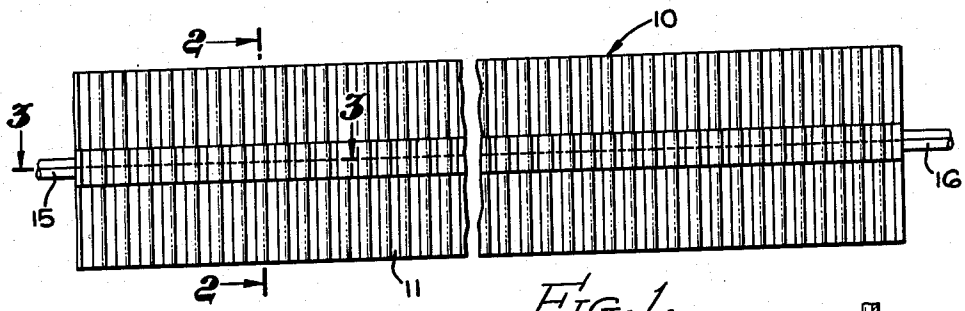


FIG. 1.

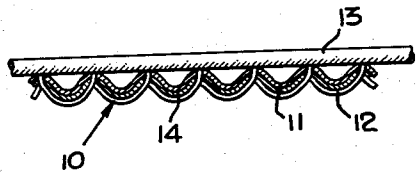


FIG. 3.

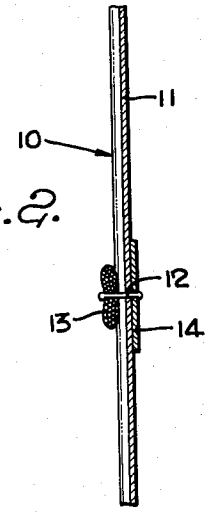


FIG. 2.

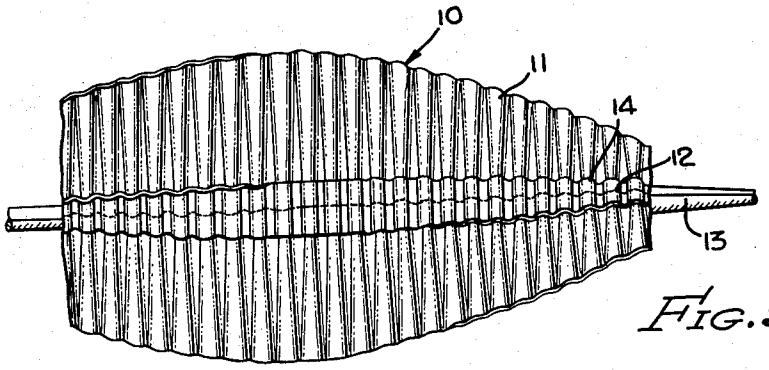


FIG. 5.

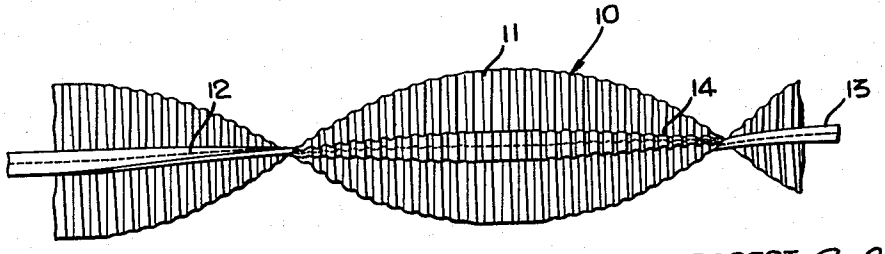


FIG. 4.

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DECORATIVE STREAMER

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3 Claims. (Cl. 41—10)

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This invention relates to decorative devices and has particular reference to a decorative streamer.

One of the principal objects of my invention is to provide a novel decorative streamer which is especially adapted for use in out-of-doors decorating and advertising.

Another object of my invention is to provide a novel decorative device in the form of a twisted or helical strip of metallic foil or the like.

Another object of my invention is to provide a decorative streamer having novel means whereby a substantially permanent twisted or helical shape may be imparted to the strip without the use of special tools or skill.

A further object of my invention is to provide a decorative streamer which is simple and adapted to be manufactured economically on a quantity basis.

Other objects and advantages of this invention it is believed will be readily apparent from the following detailed description of a preferred embodiment thereof when read in connection with the accompanying drawings.

In the drawings:

Figure 1 is a plan view of the decorative streamer before it has been twisted preparatory to installation.

Figure 2 is an enlarged sectional elevation taken substantially on the line 2—2 of Figure 1.

Figure 3 is an enlarged sectional elevation taken substantially on the line 3—3 of Figure 1.

Figure 4 is a plan view illustrating the decorative streamer after it has been twisted for installation.

Figure 5 is a plan view, on an enlarged scale, of a portion of the twisted streamer.

Referring now to the drawings, the decorative streamer which embodies my invention is generally indicated 10 and includes a base web 11 of transversely corrugated or crimped metallic foil. Secured centrally of the web 11, by means of stitching or thread 12, is a longitudinal substantially straight strip or strand 13 of twine or the like, made up of a plurality of individual strings. I have found that, on a quantity production basis at least, it is rather difficult to securely sew the strand 13 to the metallic foil, due in part at least, to the relatively low shear strength of the metallic foil. Unless very carefully sewn, the stitches tend to cut through the metallic foil and pull out. Accordingly, I have provided a relatively tough backing strip 14 which is positioned on the side of the metallic foil remote from the strand 13. As shown clearly

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in Figure 2, the thread 12 extends through the backing strip and the individual stitches are thereby prevented from pulling out. While it has been found convenient, from the point of view of simple assembly and neat appearance, to use as the backing strip a commercially available transparent tape having on one side a pressure-sensitive adhesive, other strip materials can of course be used, and they need not necessarily include an adhesive, since disassembly is prevented by means of the stitching.

In making decorative streamers embodying my invention, the metallic foil base is first corrugated or crimped in a conventional crimping machine. It is desirable to use a foil which is relatively stiff, but still somewhat pliable; I prefer to use a foil having a thickness of approximately 0.003–0.005 inch, although this of course is not critical. The backing strip 14 is then applied to the foil, adhesive side down, and that portion of the foil covered by the strip is recrimped to insure firm and continuous adhesion of the strip to the foil. The strand 13 is then sewn onto the foil as shown, with the strand extending a few inches from each end of the streamer 10 forming attachment portions 15 and 16. Streamers made in accordance with my invention may be provided in short lengths of the order of one or two feet, or may be provided in long lengths of fifty feet or more.

In forming the streamer 10 into a spiral or helix preparatory to installation, the attachment portions 15 and 16 of the twine 13 are held firmly, and simultaneously with the application of tension to the twine, it is twisted about an axis longitudinal of the twine. The streamer 10 will then assume the helical shape shown in Figures 4 and 5, and it will permanently retain this shape. As shown clearly in Figure 5, as the twine, and hence also the entire streamer 10, is twisted in the manner described above, the central portion of the corrugated foil remains substantially undistorted or unaffected in length, since the relatively non-stretchable twine is secured to and confines the foil. However the stress set up by the twisting action causes the outer, unconfined portions of the corrugated foil to uniformly spread or fan out. The foil, being substantially non-resilient, remains thus and so long as enough tension is applied to the twine to maintain it in substantially a straight line, or even in a curve of substantial radius, the streamer 10 retains a substantially true helical shape.

A single operator, by holding one of the at-

tachment portions 15 and 16 in each hand, can very easily twist the shorter streamers. However, for long lengths, over about four feet, one of the attachment portions may be anchored at a suitable point and the other held and twisted by the operator, or two operators may perform the twisting, one on each end of the strip. When the streamer has been twisted as described above, it is secured at each end between a pair of posts or like objects, preferably by means of a pair of lengths of attaching string or the like (not shown) which are each tied at one end to one of the attachment portions and at the other end to one of the posts or like objects. Even small gusts of wind will then cause the decorative streamers to bodily rotate about the longitudinal axis through the twine, presenting a highly decorative and eye-catching sight. As the streamer 10 rotates, it causes the attaching strings to be twisted, and the rotation of the strip continues until the torsion in the strings overcomes the force of the wind, whereupon the strings cause the strip to be rotated in the other direction, until the wind force overbalances the torsion in the string, and the process is repeated. In order to enhance the eye-catching effect of the motion, the streamers 10 are provided in various combinations of color, that is, one side of the metallic foil may be a metallic silver color, while the other may be red or some other bright color. To permit free oscillatory rotation of the decorative strings, they are installed with a slight sag so that a considerable number of revolutions may be obtained before sufficient torsion is set up in the attaching strings to reverse the direction of rotation.

While I have shown and described a specific embodiment of my invention, I do not limit myself to the exact details of the construction set forth, and the invention embraces such changes, modifications and equivalents of the parts and their formation and arrangement as come within the purview of the appended claims.

I claim:

1. In a decorative streamer, a base web of transversely corrugated metallic foil, said foil being relatively stiff but pliable, a longitudinal backing strip of material having a high shear strength relative to the strength of said foil, said backing strip being adhesively secured to said web centrally thereof, a strand of fibrous material, and stitching securing said strand to the central longitudinal portion of said web, the stitching extending through the backing strip, and said strand having a portion extending outwardly from each end of said web.

2. In a decorative streamer, a base web of metallic foil provided with a plurality of parallel transverse corrugations extending completely thereacross, said web being adapted to be twisted into a helical shape and to maintain said helical shape; a longitudinal backing strip adhesively secured to one side of the web and centrally thereof; a substantially nonstretchable strip element; and stitching securing said strip element to the other side of the web centrally and longitudinally thereof, said strip element contacting only the crests of the corrugations and being straight relative to the corrugations of said web, said stitching extending through said backing strip, and said strip element having a twistable portion extending outwardly from each end of said web.

3. In a decorative streamer, a base web of metallic foil provided with a plurality of parallel transverse corrugations extending completely thereacross, said web being adapted to be twisted into a helical shape and to maintain said helical shape; a substantially nonstretchable strip element; and stitching securing said strip element to one side of the web centrally and longitudinally thereof, said strip element contacting only the crests of the corrugations and being straight relative to the corrugations of said web, and said strip element having a twistable portion extending outwardly from each end of said web.

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References Cited in the file of this patent

UNITED STATES PATENTS

Number	Name	Date
336,149	Noyes	Feb. 16, 1886
1,458,624	MacDaid	June 12, 1923
1,872,661	Bramhall	Aug. 23, 1932
1,915,202	Rowe	June 20, 1933
1,976,093	Raymond	Oct. 9, 1934
2,107,748	Cohn	Feb. 8, 1938
2,240,274	Wade	Apr. 29, 1941