Nov. 11, 1924. 1,514,787

W. C. PROTZ

TINSEL ORNAMENT AND METHOD OF MANUFACTURE THEREFOR

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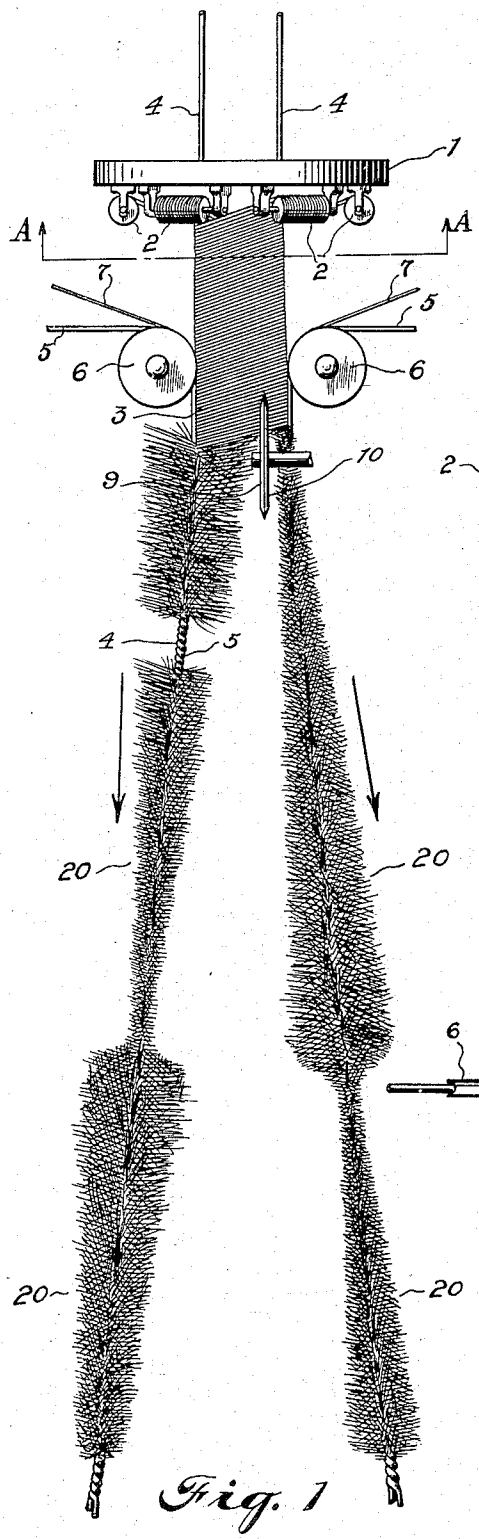


Fig. 1

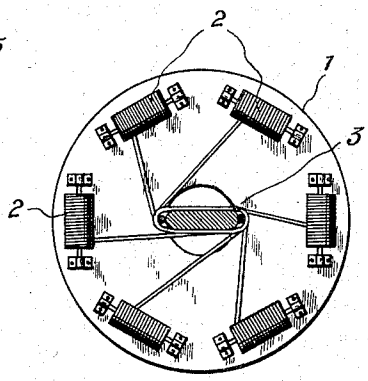


Fig. 2

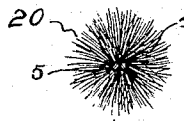


Fig. 5

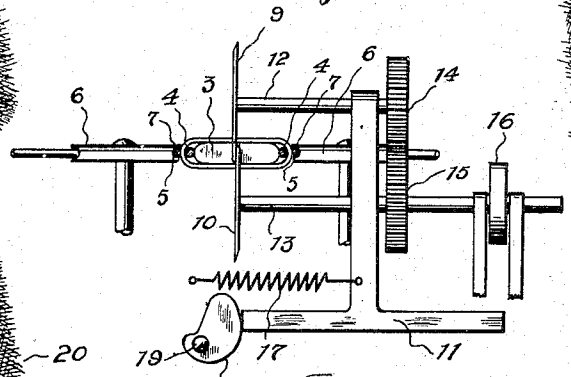


Fig. 3

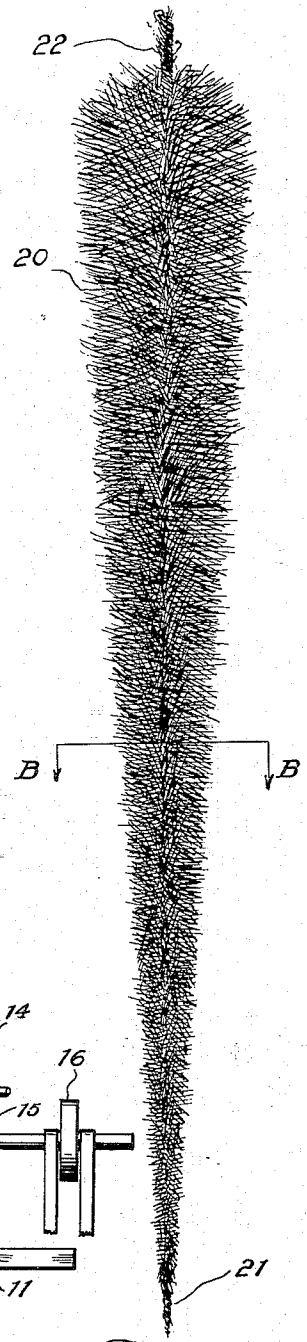


Fig. 4

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UNITED STATES PATENT OFFICE.

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TINSEL ORNAMENT AND METHOD OF MANUFACTURE THEREFOR.

Application filed April 11, 1924. Serial No. 705,942.

To all whom it may concern:

Be it known that I, WILLIAM C. PROTZ, a citizen of the United States, residing at Manitowoc, in the county of Manitowoc and State of Wisconsin, have invented certain new and useful Improvements in Tinsel Ornaments and Methods of Manufacture Therefor, of which the following is a specification.

The present invention relates to tinsel ornaments and methods of making the same.

More particularly the invention relates to new and attractive reflecting tinsel ornaments of novel shape and structure, which may be used for ornamentation of costumes and Christmas trees, and for advertising, theatrical and like displays, where attractive appearances at relatively low cost are highly desirable; and to methods of making the same rapidly in quantities, and at relatively low cost.

An object of the invention is the provision of novel and attractive forms of ornament.

A further object is the provision of new and improved methods of making the ornaments rapidly and in large quantities.

Further objects of the invention will appear in the following detailed disclosure of preferred embodiments thereof.

Referring to the drawings—

Fig. 1 is a diagrammatic disclosure of a tinsel making machine for manufacturing the bodies of the ornaments.

Fig. 2 is a sectional view, diagrammatic in nature, taken along line A—A of Fig. 1.

Fig. 3 is a diagrammatic view showing an arrangement of cutting knives for the tinsel.

Fig. 4 is an elevation showing the completed ornament.

Fig. 5 is a sectional view taken along line B—B of Fig. 4.

As is well known, ordinary tinsel rope is made on machines comprising a rotatable lead 1 carrying a plurality of rotatably mounted spools of tinsel strands 2. The number of spools on the head may be varied, and the number of strands of tinsel on each spool ordinarily varies from 3 to 12 in accordance with the grade or quality of tinsel desired. The head 1 is arranged to rotate about a fixed tongue 3 and a cord 4 is fed through head 1 on each side of and adjacent to tongue 3. A cord 5 and if desired wires 7 pass over guide wheels 6 as shown, and each pair of cords 4 and 5 is secured to a longitudinally traveling and twisting head, not shown, which pulls the cords 4 and 5 in the direction of the arrows in Fig. 1, at angles with respect to each other and simultaneously twists cords 4 and 5 and wire 7 together in well known manner. The tinsel from spools 2 is laid around tongue 3 and over cords 4 at different angles as shown in Fig. 1, and the movement of cords 4 due to the angular pull of the twisting heads carries the tinsel past guide wheels 6 where the cords 5 and wire 7 are fed parallel with the cords 4 and outside of tinsel as laid over the tinsel. Fine binding wire 7 may be passed over wheels 6 or in with cords 4, and secured to the twisting heads with cords 4 and 5. From pulleys 6, the cords 4 and 5, wires 7 when used, and the tinsel moves off the end of the tongue 3 into rotary cutting knives 9 and 10. In the manufacture of tinsel rope, knives 9 and 10 are fixed in the central part of the tongue. However, to carry out the present invention these knives are carried on a movable support diagrammatically indicated by 11 (Fig. 3) and may be rotated by means of shafts 12 and 13, through gears 14 and 15 and driven by a fixed pulley 16 through a sliding key connection, or in any other suitable manner. Suitable means for giving the support 11 and the rotating knives 9 and 10, a traveling movement across the end of tongue 3 are provided, such for example as by a spring 17 and cam 18 carried by a rotating shaft 19. The movement of the tinsel off tongue 3 into the knives causes cutting of the tinsel, and as the tinsel is cut, the rotation on the twisting heads causes the cut tinsel strands to be twisted between cords 4 and 5 and wires 7. The twisting action is substantially confined to the points where the tinsel is cut due to the pull or tension exerted by and the rotation of the twisting heads and as the movement proceeds beyond the point of cutting, the bound in portions of tinsel simply rotate. The speed of operation and of the twist are regulated so that a substantially uniform distribution of projecting tinsel strips occurs, as shown in Fig. 5, and the travel of the cutting knives is so regulated that two strings of connected substantially conical shaped radiating tinsel bodies, appearing substantially circular in cross sec-

tion are produced. One of the strings is drawn from the machine with the large ends of the cones coming out first, and the other string is reversed with the small ends coming out first.

When the twisting heads approach the end of their longitudinal travel, the machine is stopped, the strings of conical bodies are removed, the heads are brought to the front of the machine, and new strings are started.

The cones are then severed into sections 20, and the ends of the sections are given a finished appearance, and any loose ends of cords 4 and 5 and wires 7 are secured by twisting the ends of the projecting tinsel strips at 21 to form an attractive point and at 22 to form a convenient and attractive end for securing the ornament in position. As the tinsel strips comprise a metal base, such for example as copper, this twisting of the ends is secure enough for ordinary usage. If desired, however, a securing of wire of suitable material may be tied around the twisted ends 21 and 22.

The tinsel strips utilized may be surfaced with silvery reflecting material, or may have various colored reflecting surfaces. The radiating strips of tinsel are bound in a manner to assume various reflecting angles and the center made up of cords 4 and 5 and wire 7 is flexible. The result is a streamer of conical shape and a bright shimmering or scintillating appearance which will sway in a gentle breeze, or with any movement of a body to which it is attached.

Various attractive effects may be produced by mingling tinsel of different colors with silvery reflecting tinsel. This is accomplished effectively and uniformly by winding the colored and the silvered strands on spools 2 so that each spool carries the desired proportion of each kind of strand. The cone bodies produced in this manner are masses of intermingled projecting reflecting tinsel of various colors, and the silvered strips reflect back light from the colored strips giving a mottled scintillating and shimmering reflecting effect of colors and bright silvery reflections.

Having described and shown preferred embodiments of the invention what is desired to be secured by Letters Patent and claimed as new is:

1. An ornamental structure comprising a central core, a substantially conical shaped body made up of a plurality of short projecting tinsel reflecting strips secured to said central core, and a tip for said conical shaped body comprising strips of reflecting tinsel twisted around the end of said central core.

2. An ornamental structure comprising a central core, a substantially conical shaped body made up of a plurality of short projecting tinsel reflecting strips secured to said central core, a securing end for said tinsel ornaments comprising strips of reflecting tinsel twisted around a section of said central core projecting from the large end of said conical body.

3. The method of making tinsel ornaments which comprises the steps of forming a pair of complementary shaped strings of tinsel made up of a central core with regularly varying lengths of reflecting tinsel strips projecting therefrom, severing complementary sections of said strings, and finishing the ends of said severed sections to form ornamental tips and securing ends therefor.

4. An ornamental structure comprising a central flexible core made up of a plurality of strands of material, and a plurality of short strips of reflecting tinsel of regularly decreasing length twisted between said strands and extending substantially radially from said central core in a manner to form a bushy flexible conical reflecting ornament.

5. The ornamental structure as set forth in claim 4 in which said reflecting strips are of different colors, and said different colored strips are intermingled.

In testimony whereof I affix my signature.

WILLIAM C. PROTZ.