Sept. 7, 1937. R. NIELSEN 2,092,520

CHRISTMAS TREE APPENDAGE

Filed Oct. 14, 1936

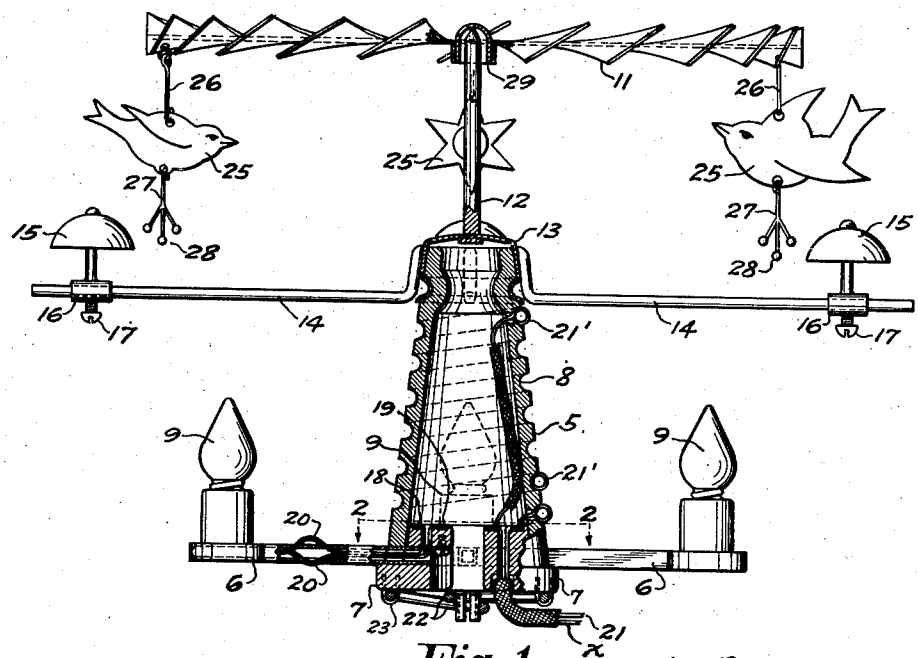


Fig. 1.

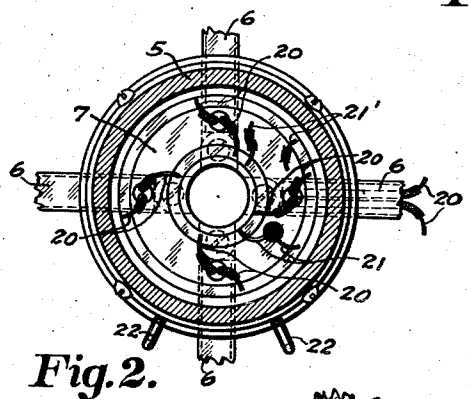


Fig. 2.

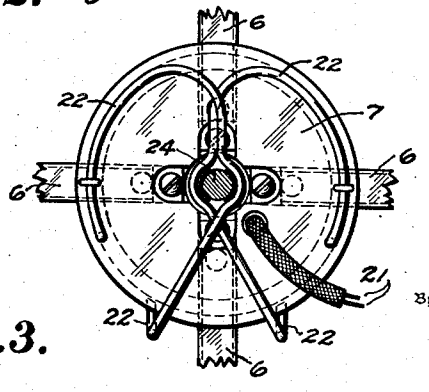


Fig. 3.

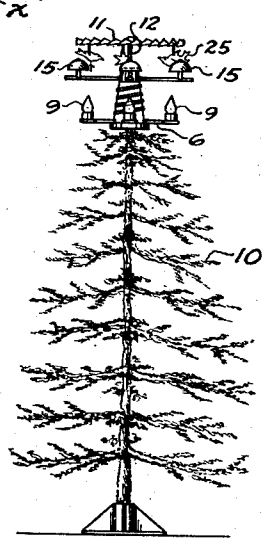


Fig. 4.

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CHRISTMAS TREE APPENDAGE

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3 Claims. (Cl. 240—10.1)

This invention relates to an appliance for Christmas trees, and has for its object, broadly, to provide a movable article which may be conveniently mounted on a limb or other part of the tree to add brilliancy thereto and cause it to be more interesting and attractive.

Another object is to provide an appendage for this purpose consisting of few and simple parts so that it may be manufactured practically and at a limited cost.

Still another object is to use demountable parts, so that after these parts have been separated they may be packed as a complete bundle without injury for use on other occasions as may be desired.

Other objects of the invention will appear in the following description in connection with the drawing, and as claimed, it being understood that I may make changes in form, size, proportions and minor details as may be found to be of advantage, said changes being within the scope of the invention as claimed.

In the drawing, Fig. 1 is a view in side elevation, partly in section, of the device.

Fig. 2 is a view in transverse section of the invention, on line 2—2 of Fig. 1.

Fig. 3 is a bottom plan view of the cone-shaped heater or support, the radially disposed arms for the electric lamps being broken away.

Fig. 4 is a view of a Christmas tree with the device mounted thereon.

Referring now to the drawing for a more particular description, the appendage consists, in part, of an upright, hollow heater or support preferably of cone-shape, provided at its base with radially disposed tubular arms 6, said hollow support preferably being constructed of porcelain or similar material and provided with a hollow plug 7 of wood or other suitable electrical non-conducting material projecting outwardly from its bottom, and preferably having a spiral groove 8 opening on its sides.

Numerals 9 indicate incandescent lamps mounted on the arms 6, these lamps being for the purpose of illuminating the Christmas tree 10 and to aid in supplying heat for rotating the fan-wheel 11 which is disposed horizontally and journalled centrally thereof on the end of the standard 12, said standard being provided at its bottom with a split hood or cap 13 adapted to be removably mounted on the top of the support 5.

Numerals 14 indicate supporting-rods which are secured at their inner ends to the cap and extend radially therefrom, and at 15 are indicated bells which are mounted on sleeves 16 which are slidably mounted on said rods and may be secured rigidly thereon by means of set-screws 17.

Numeral 18 indicates an electrical contact-member consisting of a metallic ring disposed in the insulating plug 7, and suitably insulated from the ring 18 and disposed in said plug 7, and inwardly of the ring 18 is a second insulated metallic ring 19. Numerals 20 indicate electrical wires leading from the metallic rings 18 and 19 to the lamps 9.

The electrical service conductor is indicated at 21, and after extending upwardly through the plug 7 it energizes the ring 18 and it operates as a resistance-coil 21' disposed in the spiral groove 8, that part of the coil 21', near the top of the cone-shaped support being extended into the hollow part thereof as shown in Fig. 1 and disposed in contact with the metallic ring 19, this last named ring being provided with a suitably grounded wire *x*.

In order that the fan-wheel 11 may rotate on the spindle and that operation of parts may be satisfactory the spindle 12 must be maintained in a vertical position, and for this purpose the bottom of the plug 7 is provided with clamping means so that the device may be secured to the tree 10. Means for this purpose may consist of any ordinary clamp, the means shown in Fig. 3 consisting of a pair of spring wires of loop-form, each secured near one of its ends to the bottom of the plug 7 by a staple 23, the opposite ends of the springs being unattached, the operation being that the free ends of the springs may be pressed toward each other for receiving a part of a limb 24 of the tree, and when released, said opposed springs will move toward each other for firmly securing the device in operative position.

As thus described, all of the parts are stationary except the fan-wheel and parts attached thereto.

Numerals 25 indicate display-objects carried by the fan-wheel 11, links 26 being loosely attached to the fan and swingably attached to the display-objects, and links or clappers 27 being loosely attached to the lower parts of the display-objects and provided with weighted strands 28 adapted to strike the bells while the fan is moving.

Any suitable number of display-objects may be attached to the periphery of the fan-wheel, and they may have forms representing birds, angels, stars or other subjects to appear attractive while moving in a horizontal plane, the weights on the strands striking the bells during operation.

Since the fan-wheel 11 is provided centrally with a socket 29 the friction of these journalled bearings on the end of the spindle will not be appreciable.

During operation the heat furnished by the electric coil and lamps will be adequate to cause rotation of the fan, and it will be noted that the bells are disposed in vertical planes outwardly of the movable objects carried by the fan-wheel to allow for centrifugal force. When the fan rotates, the centrifugal force will cause the display-objects to swing outwardly sufficiently to cause the weighted strands to strike the bells.

If the rotation of the fan-wheel is greater or lesser than ordinary an adjustment of the sleeves 16 on the horizontal rods 14 may be made so that the bells will be located at suitable radial distances from the center of rotation corresponding with the centrifugal force produced by the heat.

I claim as my invention,—

1. A Christmas tree appendage comprising an upright, hollow, cone-shaped support, arms provided with lamps and projecting from the base of the support at right-angles to the vertical axis thereof, an electrical resistance-coil in communication with the lamps and mounted on the support, a coupling-cap on the support provided with a standard and having rods projecting radially therefrom, bells mounted upon and arranged to be adjusted longitudinally of said rods, a fan-wheel mounted to permit rotary movements on the standard, display-members below and movably attached to the fan-wheel, and bell-clapper members loosely attached to the display-members and provided with weighted strands for striking said bells.

2. A Christmas tree appendage comprising an upright cone-shaped support, a plurality of arms extending radially from the base of the support and provided with incandescent lamps, an electrical resistance coil spirally disposed on the cone-shaped support in electrical communication with said lamps, a standard projecting above and having a cap removably mounted on the support, supporting-rods disposed parallel with said arms and extending radially from the standard, a fan-wheel journalled centrally on the spindle to permit rotatable movements, display-members below and pivotally attached to the periphery of the fan-wheel for movements therewith, a plurality of bells mounted on the supporting-rods, and bell-clappers pivotally attached to said display-members for striking the bells, and means for adjusting the bells longitudinally of the supporting-rods.

3. A Christmas tree appendage comprising a tubular upright support of electrical insulating material, an insulating plug in the bottom of said support, a clamping-member mounted on the insulating-plug, a plurality of radially disposed arms extending from the bottom of the support and provided with incandescent lamps, an electrical resistance coil carried by the upright support and in communication with said lamps, a detachable cap on the top of said upright support having a standard disposed in line with the axis of the tubular support and having supporting rods projecting radially therefrom, sleeves adjustably mounted on said rods and provided with bells, a fan-wheel mounted centrally thereof on the standard to permit rotation of said fan-wheel by force of heat from said lamps and resistance coil, display-members pivotally attached to the fan-wheel, and clapper-members carried by said display-members.

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