Oct. 21, 1958 E. A. STEC 2,857,507

ELECTRIC LAWN ORNAMENT

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FIG. 1

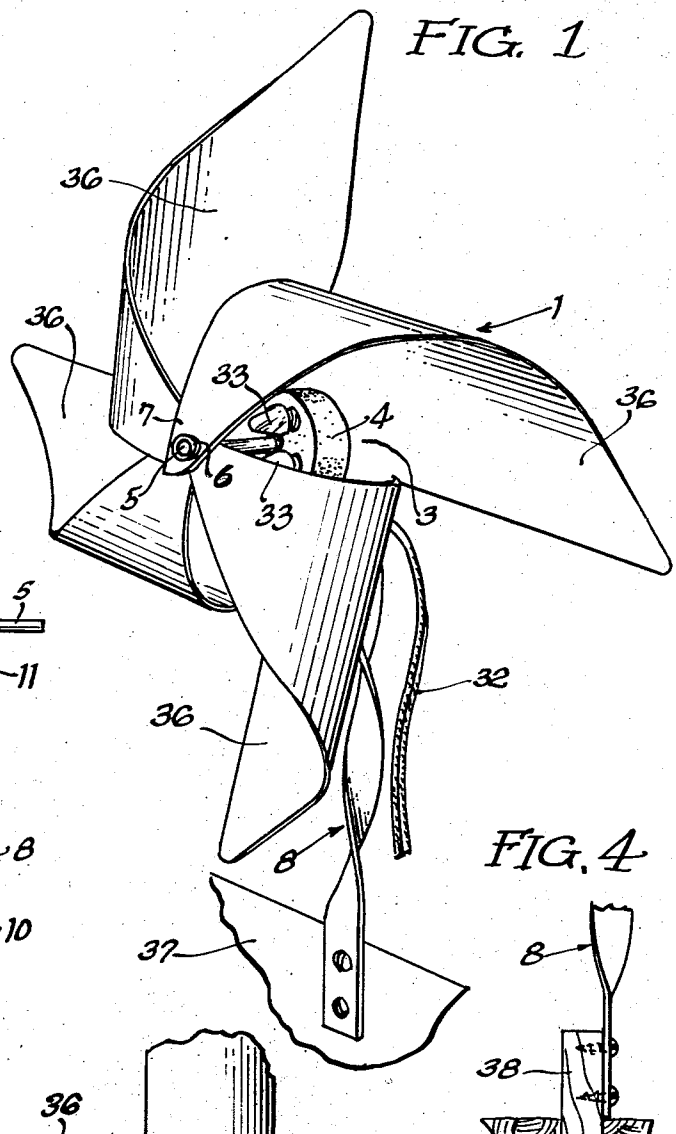


FIG. 2

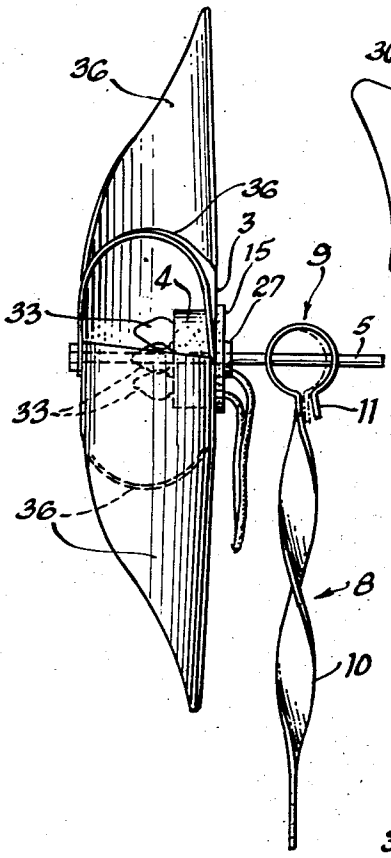


FIG. 4

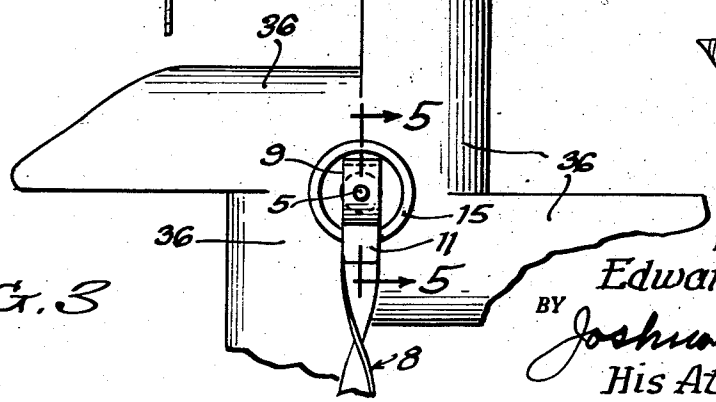


FIG. 3

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FIG. 5

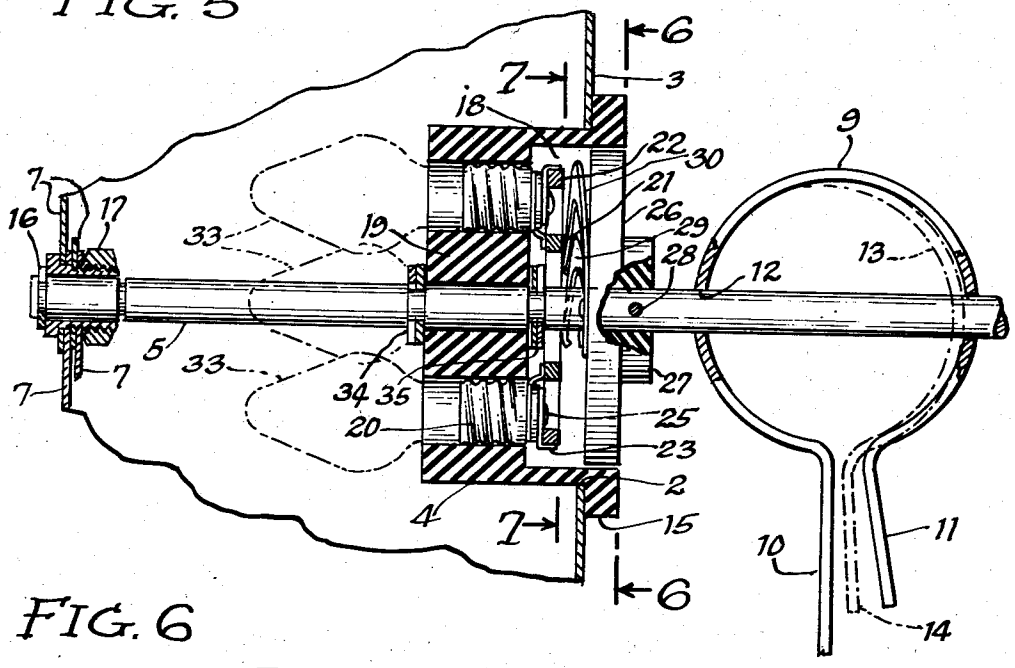


FIG. 6

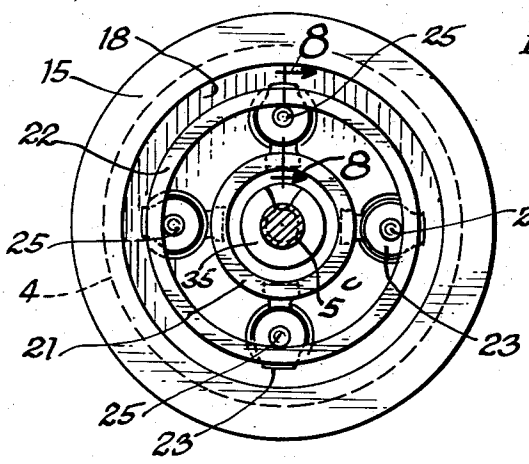


FIG. 7

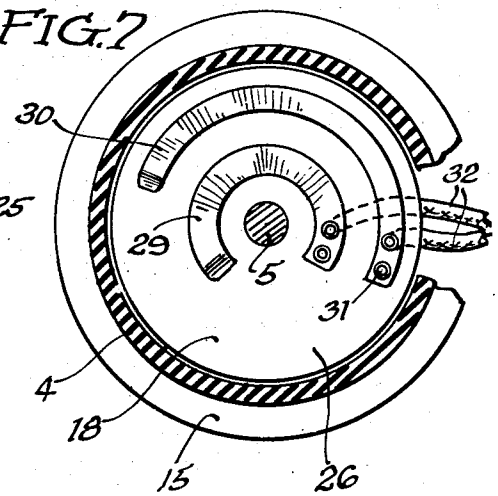
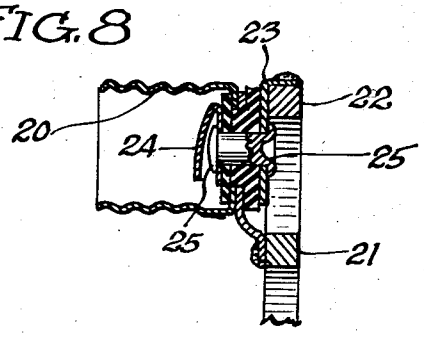


FIG. 8



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ELECTRIC LAWN ORNAMENT

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Application June 30, 1954, Serial No. 440,330

4 Claims. (Cl. 240—10.1)

The invention relates to lawn ornaments and more particularly to ornaments which are used in celebrating holiday periods and is in the class of mechanically controlled celebrating equipment and more particularly to equipment which utilizes light by producing and moving shafts of different color lights for an attractive and pleasing effect.

During the Christmas season it has become an accepted practice among house dwellers to add to the spirit of the season's occasions by having appropriate artistic showings placed on the front of their house and lawn, front porches and windows which may be enjoyed by passersby. Fourth of July and Decoration Day may also be celebrated in part by provisions of this kind as well as family celebrations which may be livened by devices of this nature, it also being remembered that people of different faiths and nationalities celebrate or make other showings upon occasion which may be enchanced by effects of this kind.

An object of the invention is to provide light action equipment which embodies movable light elements of different colors and to provide unique reflectors for such lights which move with same.

It is also an object to provide such reflectors in the form of wind wheel blades so that when the device is placed out of doors and more especially on one's lawn the wind blowing against the same will propel the blades and lights in rotary movements and produce an interlacing of different color light shafts.

It is an important object to provide for using electrical light bulbs of different colors on a wind driven rotor and to provide frictional elements which communicate current for such lights from a stationary connection which communicates with a source of current supply.

It is also an object to produce a device for the above purposes which may be very economically constructed, and which will be very durable in operation.

It is a further object to provide for quickly mounting the device for immediate use so that it may be readily moved from one mounting location to another, and be removed from mounting provisions at will.

The above and other objects are attained by the structure illustrated in the accompanying drawing in which similar characters of reference designate similar parts throughout the different views.

Fig. 1 is a perspective view of the invention in operating position.

Fig. 2 is a side view of the invention.

Fig. 3 is a view from the rear showing a part of the supporting means.

Fig. 4 is a detail view indicating one choice of mounting arrangement.

Fig. 5 is an enlarged cross sectional view taken in the proximity of line 5—5 of Fig. 3.

Fig. 6 is a view taken in the proximity of line 6—6 of Fig. 5 with some of the parts removed.

Fig. 7 is a cross sectional view taken in the proximity of line 7—7 of Fig. 5.

Fig. 8 is an enlarged fragmentary cross sectional view taken in the proximity of line 8—8 of Fig. 6.

Referring to Fig. 1, the numeral 1 designates the wind wheel of the invention which in this instance is conveniently produced from a single piece of four cornered sheet metal preferably aluminum slit and formed in the manner of an old and well familiarized four bladed wind wheel which children have made for many years from paper. A relatively large central hole 2 in the rearward wall 3 of said wind wheel is fitted over the insulating commuter housing 4, the stationary shaft 5 mounting said housing and concentrically engaging the hub member 6 which engages each one of the flaps 7 through a suitable hole in the end of each.

Referring to Fig. 2, Fig. 3 and Fig. 5 it will be observed that the shaft 5 extends rearwardly to engagement with the supporting bracket 8 which is made from a length of steel bar stock, the normally upper end being bent flatways into a circular band formation 9 having a leg 10 from which said formation continues at substantially right angles thereto and terminates in the straight right angle section 11 which serves as a thumb lever and is spaced from said leg and approximately parallel thereto. The shaft 5 is disposed diametrically across said formation and through the bar material at two opposite points thereof, the two holes 12 being provided to thus receive said shaft.

Before said shaft is assembled as shown in Fig. 2, Fig. 3 and Fig. 5, the formation 9 is contracted as indicated by lines 13 by pressing the thumb lever 11 towards the leg 10 as indicated by lines 13. The shaft 5 is then inserted and the holes 12 are of proper size to bind on said shaft when said thumb lever is released; the shaft is thus locked in position on the bracket 8.

The commuter housing 4 is of cylindrical character and has a flange 15 at its rearward end and the wheel 1 is confined longitudinally between this flange and the flange 16 at the forward end of the hub member 6. Said hub member is threaded exteriorly and the other end is provided with a nut 17 which serves to hold the wind wheel flaps 7 snugly together.

The commuter housing 4 forms a rearwardly facing round compartment 18 extending within said housing to the hub wall 19 which forms in this example four bulb socket holes parallel to the shaft 5. Each of said holes accommodates one of the forwardly facing light bulb sockets 20. All of said sockets share in mounting the smaller commuter ring 21 to which they are secured through conducting material such as solder or brazing. Said ring is concentric with said housing and the shaft 5. The other, or larger commuter ring 22 is likewise mounted concentrically by the brackets 23 which are insulated from the sockets 20 and conveniently communicated to the insulated central socket contacts 24 by the rivets 25 which serve to hold said sockets and brackets 23 together, it being understood that insulating material is suitably provided as required in the art.

A stationary insulating plate having a round flange 26 is mounted on the shaft 5 and is disposed clearingly within the compartment 18 approximately flush with the respective end of the housing 4. Said plate forms a hub 27 conveniently secured on the shaft 5 by the screw 28 which engages said shaft frictionally. Commuter brushes 29 and 30 are mounted on the forward face of said flange and ride the commuter rings 21 and 22, respectively. Said brushes are of arcuate plan as illustrated in Fig. 7 and are spirally tensioned against said rings as shown in Fig. 5, the mounted ends thereof being secured to the plate 26 by rivets 31, it being understood, of course, that said brushes are arranged so that the frictional drag of the commuter rings on said brushes is codirectional with the free ends of the same.

From the foregoing it will be understood that current is had from a source of supply through the conductors **32** to the light bulbs **33** by way of the brushes **29** and **30**, the commuter rings **21** and **22** and the respective socket elements aforementioned.

Referring again to Fig. 5, it will be observed that the split washer means **34** and **35** engage the grooves in the shaft **5** at the forward and rearward faces of the commuter housing wall **19** which prevents shifting of said housing endways on said shaft although it is free to turn with the wind wheel **1**, the light bulbs **33** being thus carried around with the wind wheel blades **36**.

In a true front view of the invention the light bulbs **33** are concealed by the flaps **7** which with the remaining structure of each of the blades **36** serve as individual light reflectors for the different bulbs so that each produces a controlled shaft of light and it will be realized that bulbs of different colors throw out fusing lights of corresponding colors and also by their combinations throw out lights differing in color from either of the original lights. As the wind wheel is conveniently made with four blades it has been found appropriate to provide the same number of bulb sockets in the hub structure **6**.

The invention may be installed temporarily or somewhat permanently for example fastening it to the window frame **37** by screws through holes in the bracket **8** as designated in Fig. 1. A more temporary installation is indicated in Fig. 4, in which said bracket is shown attached to a wooden stake **38**, driven in the ground.

One selection of colored bulbs to be used as described above would be red, blue, orange, and green, although different combinations may be used at will.

While I have shown and described the preferred form of the invention I do not wish to be limited to the precise details shown and described but wish to avail myself of all the variations coming fairly within the scope of the appending claims.

The invention claimed is:

1. A wind driven light ornament comprising a normally horizontal shaft, a bracket engaging one end of said shaft and fixedly mounting the latter, a commutator brush mounting removably fixed to said shaft, a hub rotatably circumposed about said shaft on the side of said brush mounting remote from said one shaft end, a plurality of lamp sockets in said hub opening away from said mounting, a plurality of lamps in said sockets and projecting from said hub away from said mounting, a first commutator ring on said hub facing toward said mounting and connected to said sockets, a second commutator ring

on said hub facing toward said mounting and electrically connected to the base contacts of said lamps, a pair of commutator brushes on said mounting adjacent to said hub and respectively frictionally contacting said commutator rings to feed current from a source of supply through said brushes to said rings for illuminating said lamps upon rotation of said hub, and wind driven blades projecting generally radially from said hub for rotation therewith and partially covering said lamps to successively obscure and expose said lamps to an observer upon rotation of said hub and blades.

2. A wind driven light ornament according to claim 1, said hub being formed with a recess facing toward said one shaft end, said commutator rings, brushes and mounting being located interiorly of said recess with said mounting substantially closing said recess.

3. A wind driven light ornament according to claim 1, said blades being fabricated of light reflective material, each of said blades partially covering a respective one of said lamps.

4. A wind driven light ornament according to claim 3, each of said blades being fabricated of an arcuately bent sheet adjacent to a respective one of said lamps having its concave surface facing toward said adjacent lamp and having opposite portions of said sheet respectively secured to said hub and rotatably connected to the other end of said shaft.

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