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P. P. BLANA

2,228,437

DISPLAY DEVICE

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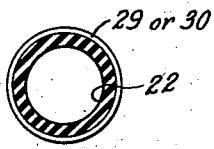


Fig. 3.

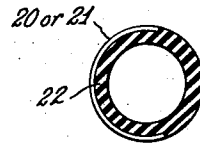


Fig. 4.

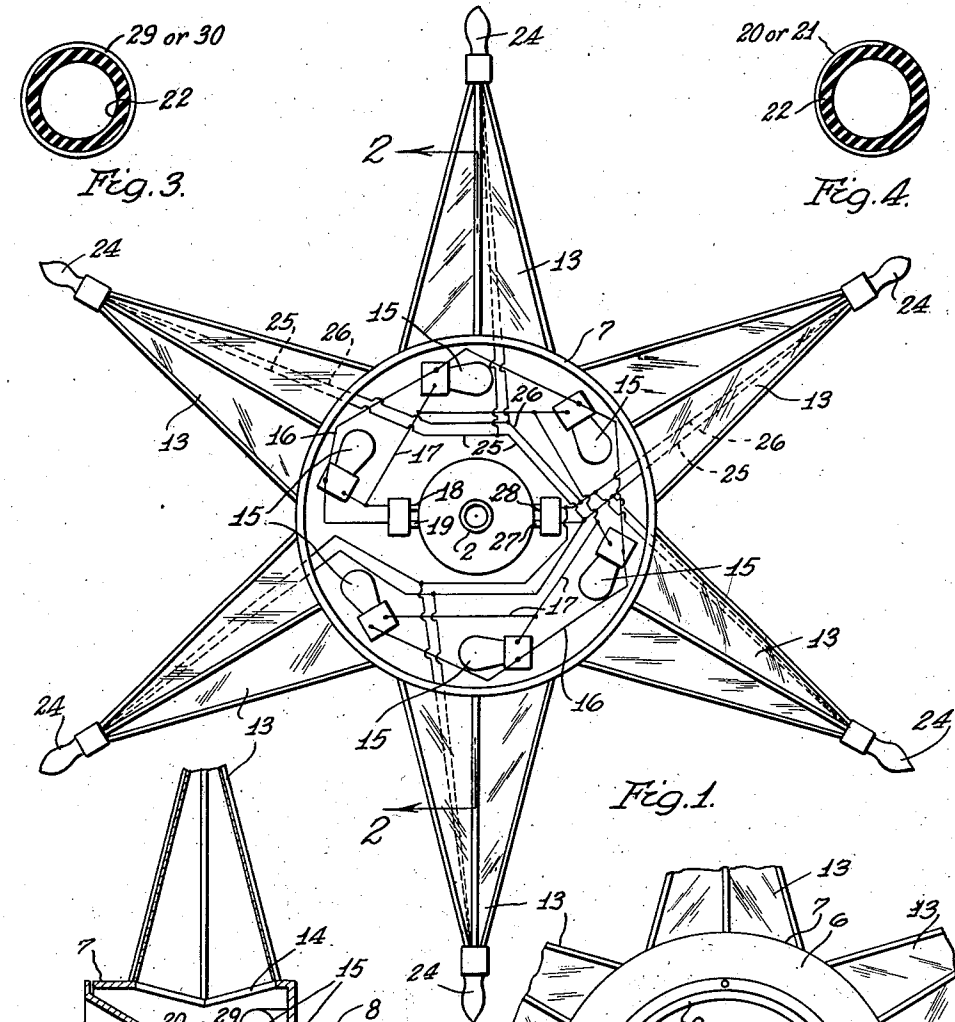


Fig. 1.

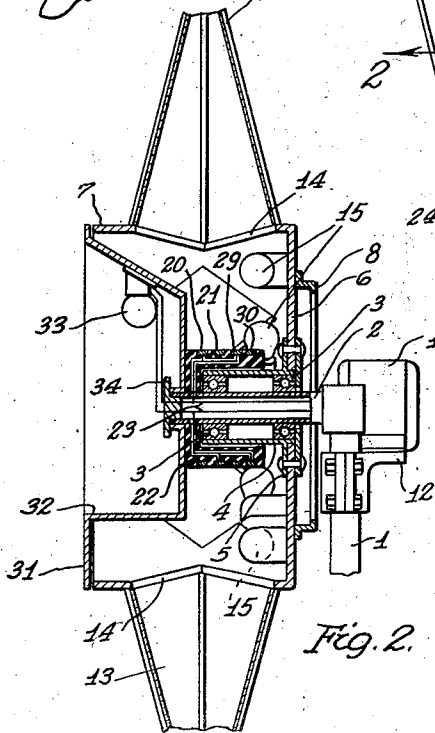


Fig. 2.

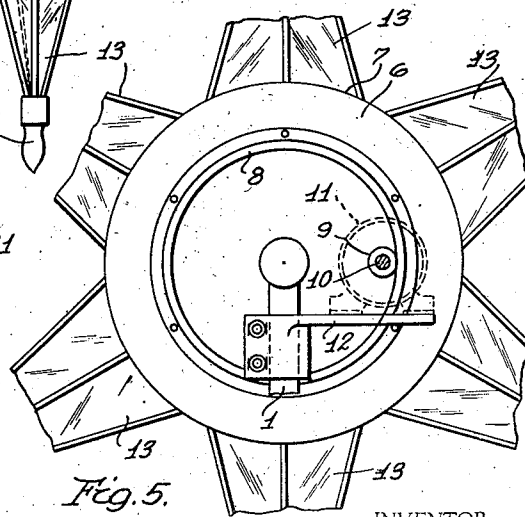


Fig. 5.

INVENTOR.

Paul P. Blana

BY

Winston Davis
ATTORNEY.

UNITED STATES PATENT OFFICE

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DISPLAY DEVICE

Paul P. Blana, Detroit, Mich.

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6 Claims. (Cl. 240—10.1)

This invention relates to display devices and has for its primary object to provide an animated, illuminated device, which is pleasing in appearance and, therefore, useful for ornamental purposes, and which is capable of attracting attention and, therefore, useful for advertising purposes.

Another object is to provide a display device embodying a rotating element equipped with ornamental radially extending elements formed of translucent ornamental material, and means for automatically illuminating said elements intermittently incident to rotation of said rotating element.

Another object is to provide lamps at the terminals of said radially extending elements and means for constantly energizing said lamps while the rotatable element is rotating.

Another object is to provide a shelf-like member stationarily mounted within the rotating element, which serves the dual purpose of concealing the mechanism within the drum as well as providing a support for articles to be displayed.

Another object is to provide for illumination of the articles displayed on the support above mentioned.

Other objects and advantages will become more fully apparent as reference is had to the accompanying drawing, wherein my invention is illustrated, and in which:

Fig. 1 is a front elevation of the device with a front closure element removed to reveal the parts ordinarily concealed thereby,

Fig. 2 is a section taken on the line 2—2 of Fig. 1,

Figs. 3 and 4 are cross sections of a contact device, and

Fig. 5 is a fragmental rear elevation, illustrating the driving means.

More particularly, 1 designates a support or standard upon which is mounted a horizontal shaft 2. The shaft 2 is hollow in order that the electric wires hereinafter described may extend therethrough, and supports two spaced sets 3 of roller bearings. Rotatably supported upon the bearings 3 is a sleeve 4 having a radiating end flange 5 to which the end wall 6 of a cylindrical drum 7 is attached.

On the end wall 6 is mounted a ring 8 which is contacted by a friction disc 9 on the drive shaft 10 of an electric motor 11. The motor 11 is mounted on the support 1 in any suitable manner, for example, by a bracket 12 clamped on the support 1. Obviously, with the motor 11 operating the drum 7 is caused to rotate, and because the

diameter of the ring 8 is several times that of the disc 9 the drum is caused to rotate slowly.

The drum 7 is provided with a multiplicity of symmetrically arranged radial arms 13 which are so tapered that they provide a star-like appearance. The arms 13 are hollow and semi-transparent, being preferably formed of paper with suitable reinforcing means. Paper is preferred because it may be inexpensively provided with ornamentation, such as by printing or any other convenient method of applying the ornamentation, and also because when illuminated as hereinafter described the paper diffuses the light satisfactorily.

At the juncture of each arm 13 with the drum, the drum has an opening 14 and an incandescent lamp 15 is mounted on the rear wall 6 adjacent each opening. The several lamps 15 thus provided are connected by wires 16 and 17 to a pair of brushes 18 and 19 which engage two contact rings 20 and 21, mounted on an insulating element 22 carried by the hollow shaft 2. The rings 20 and 21 are connected to lead-in wires 23 which extend through the hollow shaft.

As may be seen in Fig. 4, the contact rings 20 and 21 are interrupted, or might better be described as having portions thereof removed. As the drum rotates, the brushes 18 and 19 are caused to travel over the contacts 20 and 21, thereby causing illumination of the lamp 15 during a fraction of each revolution.

An incandescent lamp 24 is mounted on the outer end of each arm 13 and the several lamps thus provided are connected by wires 25 and 26 to brushes 27 and 28, respectively. The brushes 27 and 28 engage contact rings 29 and 30 also mounted on the insulating element 22, and also connected to the lead-in wires 23. When the lead-in wires 23 are energized the lamps 24 are constantly illuminated as a result of engagement of the brushes 27 and 28 with the rings 29 and 30.

Mounted upon the shaft 2 is a closure element 31, formed with a shelf 32 for the reception of articles to be displayed, and having a lamp 33 in circuit with the lead-in wires 23. The exposed end of the shaft 2 is covered by an ornament 34.

Although a specific embodiment of the invention has been illustrated and described, it will be understood that various changes may be made within the scope of the appended claims without departing from the spirit of the invention, and such changes are contemplated.

What is claimed is:

1. In a display device, a stationary support, a drum mounted on said support for rotation about

an axis, hollow elements symmetrically arranged about the drum, said hollow elements extending outwardly radially and being formed of semi-transparent material, means for rotating the drum, lamps within said drum for illuminating said hollow elements, and intermittent means for illuminating said lamps incident to rotation of the drum.

2. In a display device, a stationary support, a drum mounted on said support for rotation about an axis, hollow elements symmetrically arranged about the drum, said hollow elements extending outwardly radially and being formed of semi-transparent material, means for rotating the drum, lamps within said drum for illuminating said hollow elements, lamps on the extremities of said arms, and independent means for illuminating the first and second named lamps respectively.

3. In a display device a stationary support, a drum mounted on said support for rotation about an axis, hollow elements symmetrically arranged about the drum, said hollow elements extending outwardly radially and being formed of semi-transparent material, means for rotating the drum, lamps within said drum for illuminating said hollow elements, lamps on the extremities of said arms, means for illuminating the first named lamps intermittently incident to rotation of the drum, and means for constantly illuminating the second named lamps during rotation of the drum.

4. In a display device a stationary support, a drum mounted on said support for rotation about an axis, hollow elements symmetrically arranged about the drum, said hollow elements extending

outwardly radially and being formed of semi-transparent material, means for rotating the drum, lamps within said drum for illuminating said hollow elements, means for illuminating said lamps during rotation of the drum, and a stationary closure element for an end of said drum, said closure element being mounted on said stationary support and having a shelf portion for the reception of articles to be displayed.

5. In a display device a stationary support, a drum mounted on said support for rotation about an axis, hollow elements symmetrically arranged about the drum, said hollow elements extending outwardly radially and being formed of semi-transparent material, means for rotating the drum, lamps within said drum for illuminating said hollow elements, means for illuminating said lamps during rotation of the drum, a stationary closure element for an end of said drum, said closure element being mounted on said stationary support and having a shelf portion for the reception of articles to be displayed, and a lamp illuminating said shelf portion.

6. In a display device, a stationary support, a shaft fixed on said support, a sleeve rotatably mounted on said shaft, said sleeve having a radial flange, a cylindrical drum having an end wall, means securing said end wall to said flange, means for rotating said drum, and a stationary closure element for the other end of said drum, said closure element being mounted on said shaft and having a shelf portion for the reception of articles to be displayed.

PAUL P. BLANA.