Nov. 10, 1959 V. SIMON 2,911,745

NOVELTY DISPLAY DEVICE

Filed July 2, 1956

Fig. 1

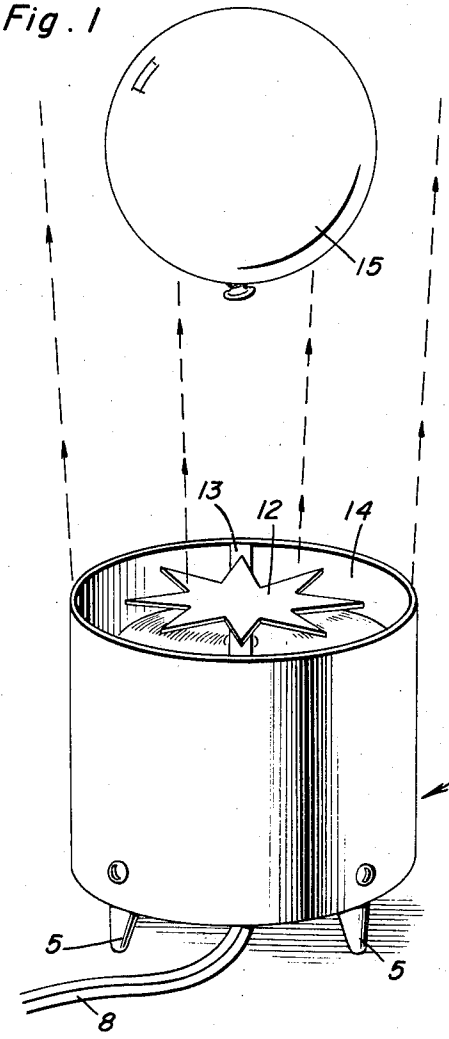
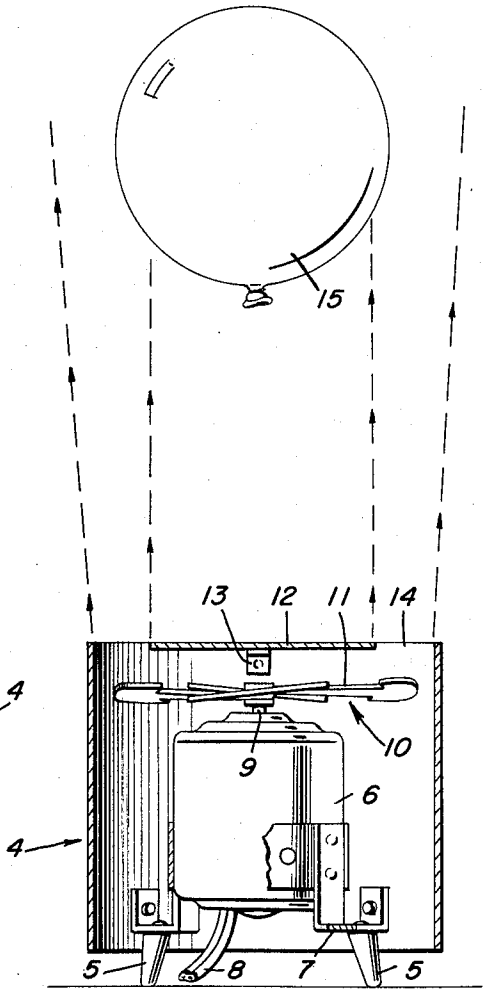


Fig. 3



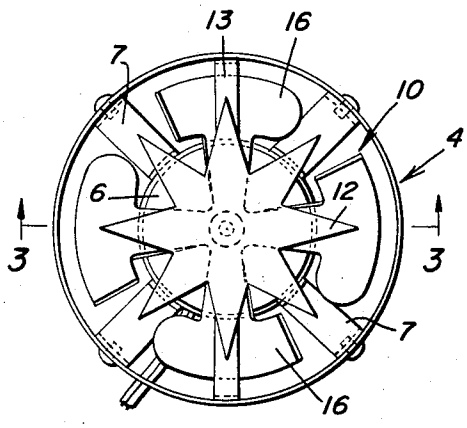


Fig. 2

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United States Patent Office 2,911,745 Patented Nov. 10, 1959

2,911,745

NOVELTY DISPLAY DEVICE

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Application July 2, 1956, Serial No. 595,342

1 Claim. (Cl. 40—106.22)

The present invention relates to new and useful improvements in novelty display devices of the type comprising a sphere in the form of a light, hollow ball or balloon held in suspension without visible supporting means by an upwardly directed stream or blast of air. In the operation of prior devices of this nature the sphere, for various reasons, frequently escapes from the vertical air stream and falls. It is, therefore, the primary object of the present invention to provide, in a manner as hereinafter set forth, a display device of the aforementioned character comprising novel means for keeping the suspended sphere captive substantially centrally in the vertical stream of supporting air, thus ensuring uninterrupted operation.

Other objects of the invention are to provide a novelty display device of the character set forth which will be comparatively simple in construction, compact, highly amusing and entertaining and which may be manufactured at low cost.

These, together with other objects and advantages which will become subsequently apparent reside in the details of construction and operation as more fully hereinafter described and claimed, reference being had to the accompanying drawing forming a part hereof, wherein like numerals refer to like parts throughout, and in which:

Figure 1 is a perspective view of a display device constructed in accordance with the present invention;

Figure 2 is a top plan view thereof; and

Figure 3 is a vertical sectional view, taken substantially on the line 3—3 of Figure 2.

Referring now to the drawing in detail, it will be seen that the embodiment of the invention which has been illustrated comprises a vertical cylindrical tube of suitable material which is designated generally by reference character 4. The vertical tube 4, which may also be of any desired dimensions, is open at both ends and provided with supporting legs 5 for mounting said tube on a suitable surface in spaced relation thereto.

Mounted centrally in the vertical tube 4 is a vertical electric motor 6. Substantially U-shaped, radial brackets 7 support the motor 6 in the tube 4. The supporting legs 5 are secured beneath the bight portions of the brackets 7. Reference character 8 designates a conductor cord for connecting the motor 6 to a suitable source of electricity.

Mounted on the upper end portion of the vertical shaft 9 of the electric motor 6 is a fan or blower 10. The fan or blower 10 comprises a plurality of radial, substantially T-shaped blades 11.

Mounted centrally on the upper end portion of the vertical tube 4 is a substantially star-shaped horizontal baffle 12. A suitable bracket 13 supports the baffle 12 on the upper end portion of the tube 4. The baffle 12 defines a substantially circular air discharge opening or passage 14 at the upper end of the tube 4. Reference character 15 designates a balloon to be held in suspension by the upwardly directed stream of air.

It is thought that the operation of the device will be readily apparent from a consideration of the foregoing. Briefly, the electric motor 6 is energized for actuating the fan or blower 10. Thus, air is drawn into the tube 4 at the lower end thereof and expelled therefrom in an upward vertical blast or stream through the upper end of said tube. This upwardly flowing stream of air supports the balloon 15 in suspension. The stream of sustaining air is substantially circular and the velocity thereof is progressively reduced toward the center by the substantially star-shaped baffle 12 thus forming what may be considered a basket for centralizing the balloon 15 in the manner suggested in Figures 1 and 3 of the drawing. This action is furthered by the enlarged outer end portions 16 of the blower blades 11.

The foregoing is considered as illustrative only of the principles of the invention. Further, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction and operation shown and described, and accordingly, all suitable modifications and equivalents may be resorted to, falling within the scope of the invention as claimed.

What is claimed as new is as follows:

A novelty display device comprising: a vertical cylindrical tube open at both ends, a baffle mounted in the upper end portion of the tube in spaced, concentric relation thereto and defining, in conjunction therewith, an annular passage, an electric motor mounted vertically in the tube, a horizontal blower fixed on the upper end portion of the motor shaft for blowing a circular air stream upwardly from the tube through the passage, and a sphere for suspension in the air stream, said baffle being substantially star-shaped for progressively decreasing the force of the circular air stream to the center thereof for centering and retaining the sphere therein, said blower comprising radial blades including T-heads on the free ends thereof extending outwardly beyond the points of the baffle for increasing the force of the air stream to the outer periphery thereof.

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