April 15, 1958 H. T. HUTCHENS 2,830,395

CAROUSEL SIGN

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FIG. 1

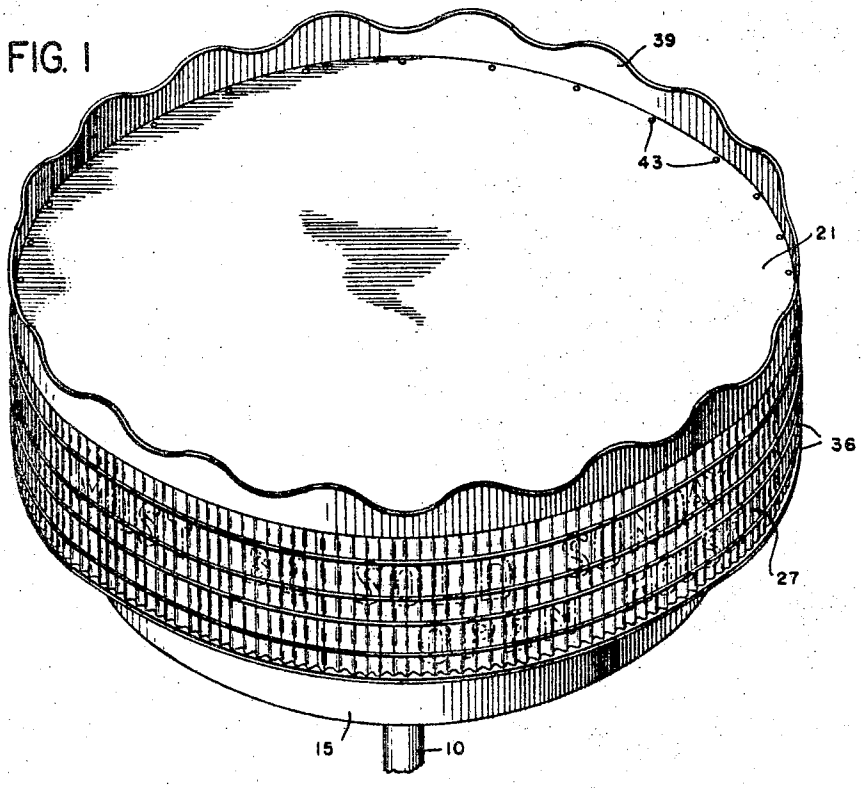
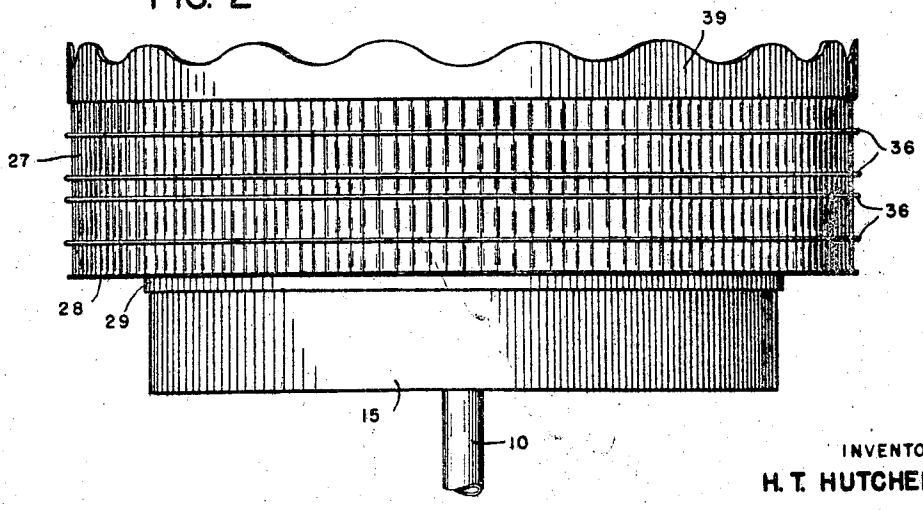


FIG. 2



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FIG. 3

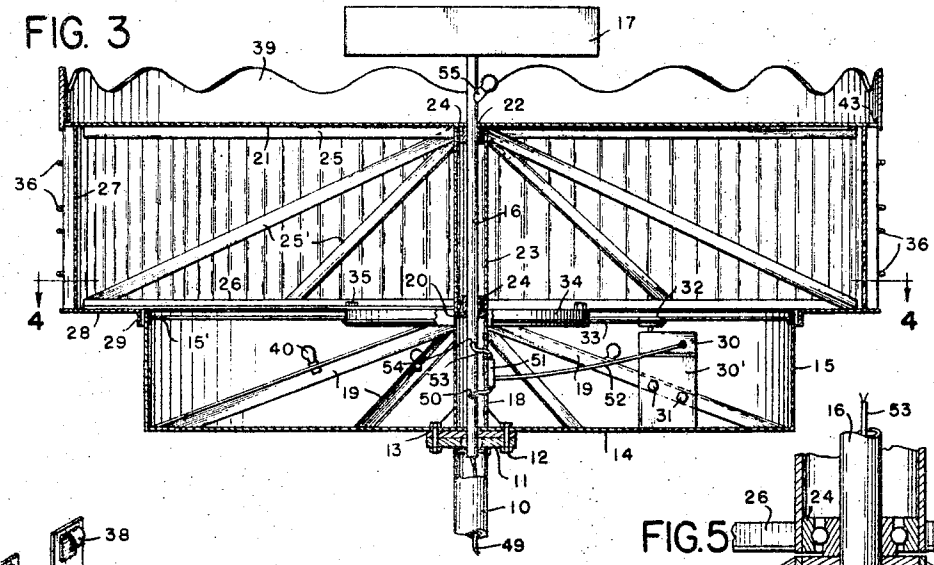


FIG. 5

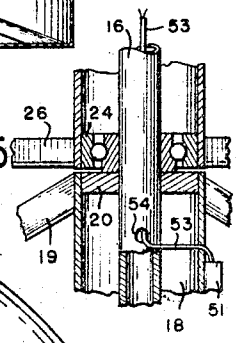


FIG. 6

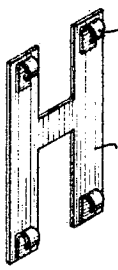
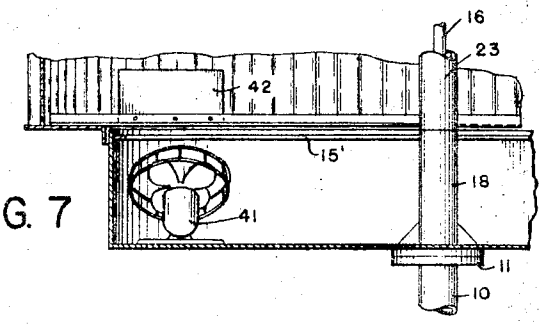


FIG. 4

FIG. 7



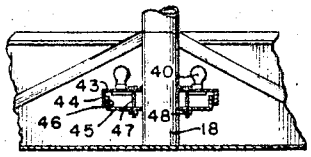


FIG. 8

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United States Patent Office 2,830,395 Patented Apr. 15, 1958

2,830,395

CAROUSEL SIGN

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Application March 19, 1957, Serial No. 646,994

3 Claims. (Cl. 40—77)

This invention relates to the art of advertising, to the manner or method employed in attracting and retaining the attention of the public, to the subject advertised and to the mechanism including signs of various kinds and other equipment employed in the promotion and advertising of a subject whether tangible or intangible.

The invention relates particularly to signs having something movable associated therewith or having relatively movable parts in order to give animation to the sign and thereby attract and retain the attention of the observer for a prolonged period of time so that the existence of the sign and the thing advertised will be impressed upon and remain in the mind of the observer and consequently contribute to the goal sought by the owner of the sign.

Many of the signs heretofore in use have been dull, lifeless and unattractive, and otherwise lacking the appeal necessary to cause the public to give further consideration to the product advertised. Many of the signs also have been motionless and lacked any intimation of life. Efforts have been made to produce signs which would be moved by the wind or other source of power but these have been complicated, expensive, and otherwise failed to perform the complete function for which they were intended.

It is an object of the invention to overcome the objections enumerated and to provide a simple, inexpensive, sign of light weight, attractive appearance, capable of being readily manufactured, installed and operated, by which advertising can be made to attract the attention of the public, to retain such attention, and to contribute materially to the sale of a commodity.

Another object of the invention is to provide a sign resembling a carousel, which rotates and is interesting to watch, and which is so constructed that it is durable, inexpensive to maintain and operate, and in which the advertising can be changed to suit the needs.

A further object of the invention is to provide a sign having parts which move to give animation but in addition a sign illuminated in such a manner that the lights seem to dance over the same.

Other objects and advantages of the invention will be apparent from the following description taken in conjunction with the accompanying drawing wherein:

Fig. 1 is a perspective illustrating one application of the invention;

Fig. 2, a side elevation;

Fig. 3, a central vertical section;

Fig. 4, a section on the line 4—4 of Fig. 3;

Fig. 5, an enlarged fragmentary detail;

Fig. 6, a rear perspective of one of the letters and its mounting means;

Fig. 7, a fragmentary detail of a modified driving means; and

Fig. 8, a fragmentary detail illustrating a modified illuminating means.

Briefly stated the present invention is a rotary sign having an axially externally corrugated plastic cylinder mounted upon and rotatable about an upright post as an axis and with letters of the alphabet or other indicia detachably carried on the exterior face of the cylinder which forms the sign so that the advertising can be changed. The rotatable sign is driven by an electric motor and through a belt and pulleys from a source of electric power and the interior of the sign also may have lights located with such driving mechanism in a stationary concentric open top pan. If preferred the sign may be provided with baffles to be operated from a natural breeze or a breeze artificially induced, as, for example, by an electric fan.

With continued reference to the drawings, the sign of the present invention comprises a center post **10** which may have its lower end anchored in the earth either permanently or removably in any desired manner or the sign may be suspended or otherwise supported.

To the upper end of the post **10** is attached an annular flange **11** on which is adapted to be mounted by means of bolts **12** a similar mating flange **13** fixed to the bottom of an open top pan composed preferably of a bottom **14** and an annular wall **15** to form a fixed housing adapted to support suitable lighting and driving mechanisms.

Centrally of the mating flange **13** is a fixed hollow shaft **16** on the upper end of which preferably is removably secured any desired object such as, for example, an illuminated sign **17** or other object. About the shaft **16** is mounted a concentric sleeve or housing **18**, the lower end of the shaft being slidably received in the flange **13** and through the flange **11**. A series of braces **19** extend from the outer portion of the bottom of the pan to the top of the sleeve. With the upper end of the sleeve **18** around the shaft **16** is a collar **20** so that the sleeve and shaft are solidly braced.

About the shaft **16** above the housing **14** is mounted a rotatable sign. Such sign has a top in the form of a disk **21** which forms a cover and having an opening **22** through which the shaft **16** projects. The cover **21** has welded or otherwise attached centrally beneath the same a sleeve **23** in the upper and lower ends of which are disposed bearings **24** to permit the sleeve to rotate with minimum friction around the shaft **16**. In order to properly support the sign a framework composed of a series of radial angle braces **25** and **26** are provided, the braces **25** and the braces **26** all being preferably radially disposed. Also, a series of angularly disposed or diagonal braces **25'** which provide triangulation to give additional strength are attached to the sleeve **23**. The braces **25** are attached to the top **21** of the sign and the braces **26** being attached to the bottom of the sign.

A cylindrical sign is provided of corrugated translucent plastic glass **27** attached to and suspended beneath the cover **21** in any suitable manner and supporting at its lower edge a flat ring **28** having a downwardly turned flange **29** at its inner edge. The flange **29** is circular and is slightly larger in diameter than the annular wall **15** of the fixed pan. Thus, the cylindrical sign **27** is free to rotate on the bearings **24**.

In order to cause rotation of the sign **27** a fractional horsepower motor and reducing gear box **30** is fastened by bolts **31** to braces **19** and mounted on an angle bracket **30'**, such motor having a pulley **32** which drives a belt **33** driving a larger pulley **34** mounted by bolts **35** on radial angle braces **26**. If desired the pulley **34** may be omitted and the belt allowed to engage directly the bolts **35**.

The sign **27** is preferably corrugated as shown in the left hand corner of Fig. 4 and of translucent plastic glass sheet material which forms the rim of a wheel of which the angular members **25** and **26** are the spokes. Around the surface of the cylindrical sign **27** are mounted a plurality of pairs of spaced rings **36** for the reception of letters of the alphabet or other indicia **37** having mount-

ing clips 38 for attaching the same to the spaced rings 36. In order to improve the appearance of the sign a valance or scalloped top ring 39 may be welded or otherwise secured to the cover 21.

The top 21, braces 25 and 26, rings 36 and crown or valance 39 preferably are of lightweight material as is also true of the pan having the bottom 14 and the upstanding side 15, a stiffener ring 15' is welded or otherwise fastened within the top of the side 15 to add stiffness to such side 15.

The rotatable sign is so constructed that it revolves upon bearings 24 with a minimum of resistance so that the motor 30 has little work to perform. The device is preferably provided with illuminating means 40 mounted on the braces 19 within the pan 14, the inside of the pan being preferably coated with a light reflecting material.

If desired, the device may be rotated by a blast of air from a 1/100 H. P. fan 41 set to blow against a series of air baffles 42, one on each of the braces or spokes 26 of the device. By adjusting the angles of the baffles in the face of the blast the speed of the wheel can be varied.

A series of drainage holes 43 may be provided in the cover 21 to permit water to drain from the top and down the outside face of the corrugated plastic ring 27 thereby disposing of any water on the top and washing the face of the plastic at the same time.

As illustrated in Fig. 8, a hollow ring may be disposed around the sleeve 18. The upper portion 43 which has a turned down flange 44 may be attached to the sleeve 18 by welding or other suitable means and the lower portion 45 provided with an upwardly turned flange 46 fits inside of the flange 44 and is secured to the upper portion by bolts 47 and nuts 48. Thus a compact, relatively water tight, easily accessible conduit box is provided for safety and ease of replacement.

Electrical energy which provides power to the motor, fan or other driving means and the illuminating means is supplied from an outside source not shown. Electricity is carried into the sign by lines 49 through the post 10 and hollow shaft 16 and enters the fixed housing through aperture 50 in the hollow shaft and into a conventional junction box 51 mounted on the sleeve 18. Energy is distributed from the junction box to the various appliances as, for example, by the line 52 to the motor. Illumination for the stationary sign on top of shaft 16 is provided by line 53 from the junction box through the aperture 54 in the hollow shaft 16 to the weatherproof socket 55 slightly below the sign 17.

It will be obvious to those skilled in the art that various changes may be made in the invention which is not limited by that which is illustrated in the drawings and described in the specification, but only as indicated in the accompanying claims.

What is claimed is:

1. An advertising sign comprising a generally cylindrical casing of plastic having axial light disseminating corrugations along its surface, spaced rings carried by and encircling said casing for detachably mounting parts of a sign thereon, a cover for the upper end of said casing, a cylindrical open top pan forming a depending housing disposed centrally of said casing, spaced braces mounting said housing and said casing, a supporting shaft disposed centrally within said housing, bearings between said shaft and said casing to permit free rotation of said cylindrical casing about said shaft, lighting means in said cylindrical casing, an electric motor for rotating said sign, electrical conductors received in said hollow shaft for supplying electrical energy from a source of electric power to said lighting means and said motor.

2. An advertising sign comprising a generally cylindrical casing of material through which light rays can readily pass and with axial light disseminating corrugations along its surface, mounting means carried by said casing on the exterior thereof for the support of selective indicia, light-obstructing closure means for the ends of said casing, means for rotatably mounting said casing, drive means for causing said casing to revolve, and means for illuminating said casing interiorly, the construction being such that said sign is of attractive, sturdy and durable appearance without unsightly struts and braces and when installed and operating will appear prominent to the observer and will attract attention by its motion until its message is repeatedly brought to the mind of the observer.

3. An advertising sign comprising a generally cylindrical casing of material through which light rays can readily pass, spaced rings carried by and extending around said casing for detachably mounting parts of the sign thereon, light obstructing closure means for the ends of said casing, means for rotatably mounting said casing, drive means for causing said casing to revolve and means for illuminating said casing interiorly whereby a sign is provided which is of attractive sturdy and durable appearance without unsightly struts and braces and which when installed and operated will appear prominent to the observer and due to its motion will attract attention until its message is repeatedly brought to the mind of the observer.

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