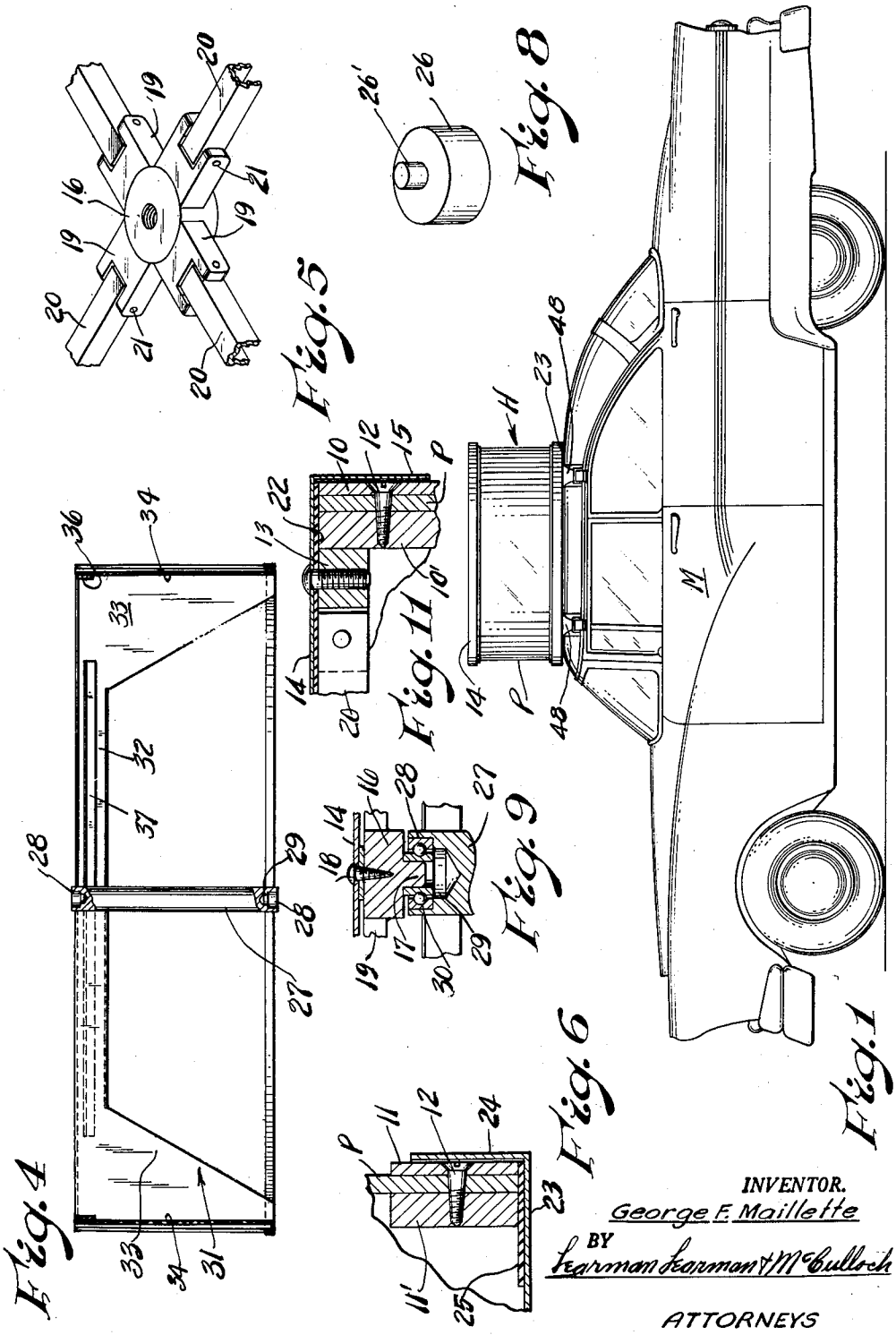
Jan. 29, 1963 G. F. MAILLETTE 3,075,311

ADVERTISING DISPLAY DEVICE

Filed Aug. 26, 1960 2 Sheets-Sheet 1



INVENTOR.
George F. Maillette
BY
Fearman Fearman & McCulloch
ATTORNEYS

Jan. 29, 1963 G. F. MAILLETTE 3,075,311

ADVERTISING DISPLAY DEVICE

Filed Aug. 26, 1960 2 Sheets-Sheet 2

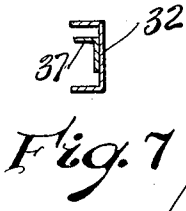


Fig. 7

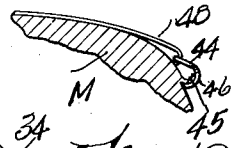


Fig. 10

Fig. 3

Fig. 12

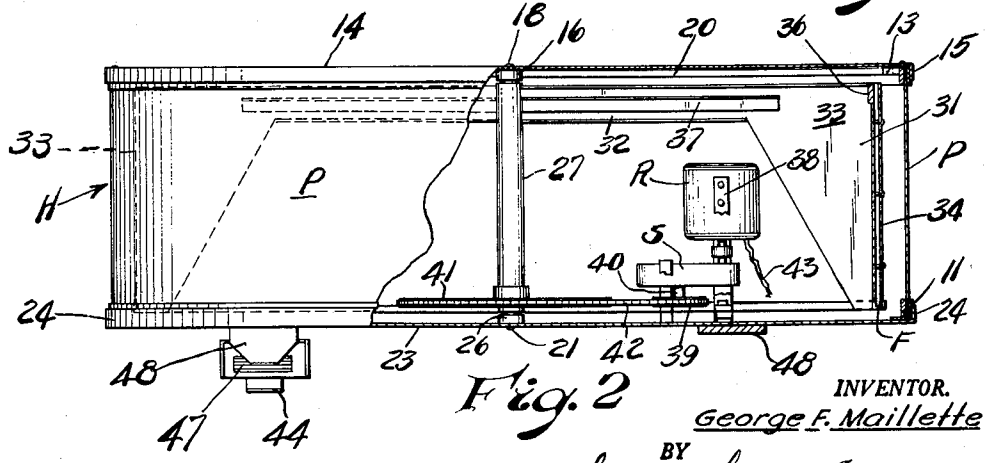


Fig. 2

INVENTOR.
George F. Maillette
BY
Fearman Fearman & McCulloch.
ATTORNEYS

United States Patent Office 3,075,311 Patented Jan. 29, 1963

3,075,311

ADVERTISING DISPLAY DEVICE

George F. Maillette, 813 N. Jackson St., Bay City, Mich.

Filed Aug. 26, 1960, Ser. No. 52,265
10 Claims. (Cl. 40—129)

This invention relates in general to a portable, revolvable advertising display device for mounting on taxis and vehicles in general, and more particularly to a revolvable member mounted in a housing and adapted to be driven from the power plant of a vehicle.

One of the prime objects of the invention is to design a simple, practical and neat appearing device equipped with transparent side walls with a revolvable frame structure mounted therein, and in which a plurality of individual signs or displays are arranged, so that each of the individual signs is successively presented to view of persons, either riding or walking, as the vehicle is driven over the highways, or is parked at certain points or locations, or mounted on a stationary support where it is exposed to view of the public.

Another object of the invention is to design a portable, revolvable display board or sign unit which can be easily and quickly mounted and secured in position on a vehicle, which is driven from the vehicle power plant or other driving means, and in which the signs can be readily mounted and removed, or other signs inserted in place thereof

A further object is to design a portable housing unit adapted for mounting on a vehicle, or other stationary or portable support, which is exceptionally compact for the display space provided; which is composed of a minimum number of parts of simple yet rugged construction, all of which can be easily assembled and arranged.

A still further object is to provide a driven display board or sign unit having a plurality of individual frames or windows in which the individual signs can be easily inserted and/or removed, and provide means for protecting said signs from the weather so that they remain clear, clean, and fresh, so that they can be easily read and present a neat and attractive arrangement.

Still another object is to design an advertising display device or unit which can be readily mounted in position on a vehicle, which provides maximum visible display space; which is designed to minimize wind resistance when driving; which does not affect or interfere with the normal driving of the vehicle, and which is of neat and pleasing appearance.

With the above and other objects in view, the present invention consists in the combination and arrangement of parts, hereinafter more fully described, illustrated in the accompanying drawings, and more particularly pointed out in the appended claims, it being understood that changes may be made in the form, size, proportion and minor details of construction without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawings:

FIG. 1 is a side elevational view of a conventional vehicle showing my revolvable display device in place thereon.

FIG. 2 is an enlarged, part-sectional, side elevational view of the device, parts being broken away to more clearly show the construction.

FIG. 3 is a top plan view thereof with the cover member broken away.

FIG. 4 is a part-sectional, side elevational view similar to FIG. 2 with the outer shell omitted.

FIG. 5 is an enlarged perspective plan view of the upper bearing member.

FIG. 6 is an enlarged, fragmentary, sectional view

showing the lower cover member, retainer rings, transparent wall and gasket.

FIG. 7 is a transverse sectional view taken on the line 7—7 of FIG. 3.

FIG. 8 is an enlarged perspective view of the lower bearing.

FIG. 9 is an enlarged sectional view of the upper bearing, center shaft and anti-friction bearing.

FIG. 10 is a fragmentary view of the vehicle top showing the drip trough and strap connection.

FIG. 11 is an enlarged sectional view similar to FIG. 6 showing the upper retaining rings, etc.

FIG. 12 is an enlarged fragmentary plan showing the mounting of the advertising matter in one of the panels.

In advertising display it is highly desirable to provide traveling advertising material or signs, and present such material in an attractive manner in which the signs, or displays, come into view in orderly succession to continuously attract the attention of the observers and hold their attention, the travel of the signs together and natural tendency or curiosity of the observers to view the complete series, insuring a relatively high percentage of interested observers maximum advertising value and/or dissemination of information.

A device of the nature herein referred to can be formed of any desired material and comprises an outer housing H, preferably cylindrical in shape, and mounted on a conventional motor vehicle M in a manner to be presently described. The circular side wall W of the housing H is preferably formed of Plexiglas or other transparent material P, and the upper and lower edges are secured between upper and lower pairs of inner and outer retainer members 10—10' and 11—11' respectively, and are secured thereto by means of screws 12, and the inner face of the ring 10 is formed with inwardly projecting forked lugs 13 and for a purpose to be presently described.

A cover member 14 forms a closure for the open upper end of the housing H and is flanged as at 15 to snugly fit over the outer retainer ring 10, and protect the interior of the housing from weather and the elements.

A centrally disposed bearing block 16 is mounted in the cover 14 and has a reduced pin section 17 formed integral therewith, said bearing block being secured by means of a screw 18 and forked lugs 19 radiate therefrom. Cover braces 20 are secured to the lugs 13 and 19 by means of screws 21, these braces serving to reinforce and stiffen the cover, and a cover gasket 22 is provided directly adjacent the flange 15 to eliminate noise and seal the housing against weather.

A bottom plate or cover 23 forms a closure for the lower end of the housing and is flanged as at 24 to snugly fit the outer lower retainer ring 11, and a gasket member 25 is provided at the outer periphery of the bottom plate to form a tight, noise-proof joint thereat.

A centrally disposed lower bearing block 26 is provided in the lower cover plate 23 and is formed similar to the upper bearing 16, excepting that it has no radiating lugs 19; it, too, has a reduced pin section 26a, and the block is secured in position by means of a screw 21 in the usual manner.

A vertically disposed center shaft 27 is mounted on the bearing blocks 16 and 26, the ends of said shaft being internally bored as at 28 and is also counterbored as at 29 to accommodate the pin end 17 of the bearing blocks 16 and 26, and anti-friction ball races 30 are mounted in the bored ends 28 and accommodate the pin ends of the bearing blocks therein.

The display or sign carrying members are mounted on the center shaft 27 and comprise a rotating spider 31 which is securely fixed on the shaft 27, and is formed as clearly shown in FIGS. 3 and 4 of the drawings, being

preferably constructed of lightweight metal such as sheet aluminum, and includes a plurality of radiating spoke members 32, the horizontally disposed section of each spoke member being preferably channel-shaped in cross section (see FIG. 7 of the drawings), each spoke terminating in a depending leg section 33, with a U-shaped member 34 secured to the outer end thereof, flanges 35 being formed on this member, and a circular channel-shaped member F is secured to the flanges 35. A flat strip 36 forms a backing for the upper edge of the advertising card or material A which is mounted in the channel F, each of the horizontally disposed spoke sections being reinforced by means of an angle 37 to reinforce the assembly.

A motor R is mounted on the bottom plate 23 of the housing by means of stirrups 38 or the like or in any approved manner, and a speed reducer S, of conventional design, is connected to the electric motor in the conventional manner. A drive sprocket 39 is provided on the shaft 40 of said speed reducer, said sprocket being drivingly connected to a driven sprocket 41 mounted on shaft 27 by means of a chain 42, wires 43 lead to the vehicle battery (not shown), and as the motor R is energized from the battery, the shaft 27 will be driven accordingly.

The number of display spaces or panels is governed by the number of spokes in the spider 31 and while in the instant application I have shown but four spokes, it will be understood that any reasonable number can be provided.

The housing H can be readily mounted in position on the vehicle by means of carrier brackets 44 which are detachably secured to the drip mold 45 provided on the vehicle, each bracket comprising a hook-shaped leg 46 which is secured over the drip mold, the upper free end of said bracket being enlarged and having a plurality of elongated slots 47 for attachment by the carrier straps 48, these carrier straps 48 span the roof of the vehicle M and are secured to the lower cover plate 23 by means of bolts 49 or the like, the ends of these straps being hook-shaped as at 50 to facilitate connection in one of the slots 47 provided in the brackets 44, thus securely holding the device in position on the vehicle.

From the foregoing description, it will be obvious that I have perfected a very simple, practical, compact, effective revolving display structure or sign in which the signs can be easily mounted and removed, which provides for a plurality of signs, all of which can be effectively and pleasingly displayed.

What I claim is:

1. An advertising display device adapted for mounting on the top of an automotive vehicle for continuous rotation thereon comprising a stationary housing including a continuous transparent side wall encircling said housing, top and bottom cover members forming a weather-proof closure for said housing; a centrally disposed, vertical shaft interposed between and journaled on said top and bottom member respectively; a spider mounted on said shaft and including a plurality of radiating arms formed with depending legs on the outer end thereof; means on the outer ends of said legs forming a frame in which advertising matter is mounted; means for driving said shaft, and readily detachable means for securing said housing in position on a vehicle.

2. The combination defined in claim 1 in which the driving means is mounted in said housing and is geared to said vertical shaft, said means being energized from the battery of the vehicle on which the device is driven.

3. The combination set forth in claim 1 in which each end of the vertical shaft is bored to accommodate an anti-friction bearing therein, and bearing blocks mounted on said top and bottom members and formed with pin ends extending into said anti-friction bearings.

4. The combination defined in claim 1 in which the outer wall of the housing is circular in shape, with the upper edges interposed between the inner and outer retainer ring; means securing said wall to said rings, and flexible gaskets interposed between the top and bottom cover members and the edges of the retainer rings respectively.

5. The combination defined in claim 4 in which inwardly projecting lugs are provided on the inner retainer ring, and horizontally disposed brace members connected to said lugs and to the upper bearing block respectively.

6. An advertising display device adapted for mounting on the top of an automotive vehicle comprising a stationary housing having a continuous transparent side wall, upper and lower members forming a weather-proof closure for said housing, bearing blocks rigid on the inner face of said upper and lower members and formed with reduced vertically projecting end pins; a centrally disposed, vertical shaft having bored ends journaled on said bearing blocks; an anti-friction bearing mounted in said bored ends and accommodating the end pins therein; a spider mounted on said shaft and having radiating arms terminating in vertically disposed legs, a channel-shaped member connecting the lower ends of said legs; a plurality of display signs mounted in said legs and channel-shaped member, and means for driving said vertical shaft and spider.

7. The combination set forth in claim 6 in which straps are secured to the lower face of the housing, and brackets releasably secured to the drip mold in a vehicle and releasably engagable with said straps.

8. The combination defined in claim 6 in which a plurality of substantially L-shaped spokes form a part of said spider, and means on said spokes for securing advertising material thereto.

9. The combination defined in claim 6 in which the driving means comprises a motor energized from the vehicle on which the device is mounted, said motor being supported on the lower cover member of said housing and drivingly connected to said vertical shaft.

10. An advertising display device adapted to be mounted on the top of an automotive vehicle comprising, a stationary housing having a transparent circular side wall, inner and outer retainer rings secured to the upper and lower edges of said circular side wall, top and bottom cover members forming a closure for said housing and flanged to fit over said outer retaining rings to form a leakproof connection thereat; centrally disposed, upper and lower bearing blocks mounted on said cover members and formed with reduced vertical pin ends; a centrally disposed drive shaft, bored at both ends to accommodate an anti-friction bearing therein, and in which the pin ends of the bearing blocks are mounted; a spider mounted on said shaft and formed with radially projecting spokes terminating in vertically disposed depending leg sections; a continuous channel-shaped member connecting the lower ends of the leg sections; means for securing advertising display to said leg sections and channel member respectively; driving means connected to the battery of the vehicle on which the device is mounted for driving said shaft, and strap members secured to said housing and releasably secured to the roof of the vehicle on which the device is mounted.

References Cited in the file of this patent

UNITED STATES PATENTS

1,351,913	Klunder	Sept. 7, 1920
2,482,475	Gerber	Sept. 20, 1949
2,615,266	Wallin et al.	Oct. 28, 1952
2,888,763	Roycroft	June 2, 1959