

F. M. CARTER.
 ROTATING SIGN ILLUMINATING DEVICE.
 APPLICATION FILED NOV. 11, 1908.

949,111.

Patented Feb. 15, 1910.

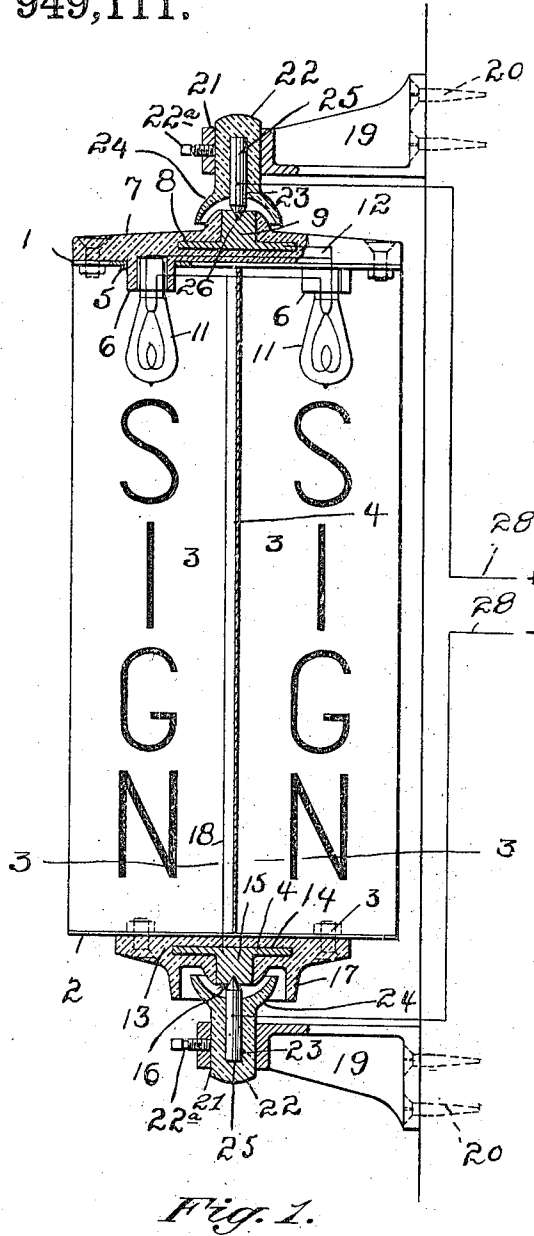


Fig. 1.

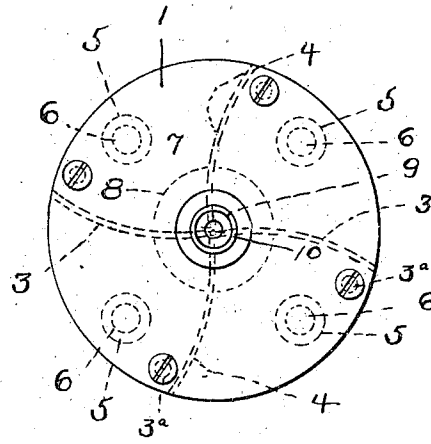


Fig. 2.

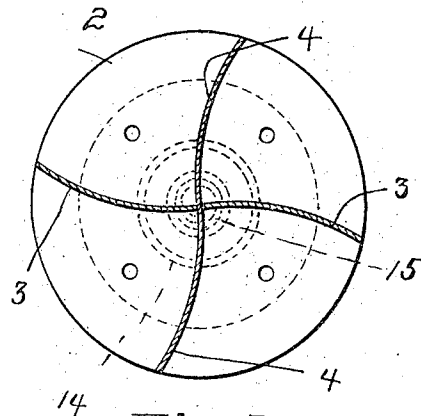


Fig. 3.

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UNITED STATES PATENT OFFICE.

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ROTATING SIGN-ILLUMINATING DEVICE.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, FRANK M. CARTER, a citizen of the United States, residing at Oakland, in the county of Alameda and State of California, have invented certain new and useful Improvements in Rotating Sign-Illuminating Devices, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to signs of the type which are rotated by wind pressure, and has specially in view a novel type of illuminating connections therefor that will permit of the lights being rotated with the sign so that all parts thereof may be visible at night.

In carrying out the object of the invention generally stated above it will, of course, be obvious that the essential features thereof are susceptible of modifications of details and structural arrangements as comes firmly within the scope of the appended claims, but a preferred and practical embodiment of the same is shown in the accompanying drawings, wherein—

Figure 1 is a vertical central sectional view of the improved sign and its bracket connections. Fig. 2 is a top plan view of the sign detached from its supporting brackets. Fig. 3 is a horizontal sectional view of the sign, taken on the line 3—3, Fig. 1.

Like characters of reference designate corresponding parts in the several figures of the drawing.

The improved sign is composed primarily of the upper and lower circular plates 1 and 2 which carry the vertically arranged blades 3 and 4 that are relatively arranged so as to be acted upon by the wind from any direction to impart a rotary movement to the sign, in a manner well known.

The upper plate 1 is provided with a plurality of socket openings 5, arranged so that one of such openings will be in the spaces formed between each pair of blades of the sign, and through which sockets 6 of an insulating covering 7 extend, said insulating covering being preferably formed of porcelain and having molded therein a conductor plate 8 provided with an upstanding central bearing lug 9 the end of which has a depression 10 formed therein. It will be observed by reference to Fig. 1 of the accompanying drawings that the central portion of the insulating covering is raised to

surround the sides of said bearing lug, and that the top portion of said covering gradually slopes off to the outer edge thereof, thereby assuring of the water being shedded off said top to avoid any danger of short circuiting, as will be explained later on. Lamps 11 are carried by the sockets 6 and have an ordinary wire connection 12 with said conductor plate 8. The bottom plate 2 is also provided with an exterior coating of insulating material 13 and has embedded therein a conductor plate 14 carrying an outstanding bearing lug 15 which has a central depression 16. An annular flange 17 surrounds the said bearing lug 15 and extends below the plane of the lower edge thereof so as to shield the same from inclement weather. The conductor plate 14 has a wire connection 18 with the lamp wires 12 in the upper part of the sign.

Upper and lower supporting brackets 19 have a detachable connection 20 with a wall or other support, their outer ends being each provided with an opening 21 in which a slidable holder 22 is mounted and held in the desired adjustment by means of a set screw or equivalent 22^a. Said holders each have a longitudinal opening or recess formed therein the entrance to which is surrounded by an enlarged cup shaped flange 24, said flange also surrounding the bearing lugs carried by the insulating material on both conductor plates, as is shown more clearly in Fig. 1. A pivot pin 25 is mounted in each of said longitudinal openings 23 the pointed end 26 of which projects beyond the entrance to said opening and is seated in the bearing depressions formed in each bearing lug. Said pivot pins are formed of good conductive material and each has a wire connection 28 with the source of electrical current supply, not shown.

It will be seen that the lighting circuit of the sign is through the upper pivot pin and its bearing lug and plate, to the lamps, thence to the lower plate and lug, and through the lower pivot pin. This arrangement of current supply is such that the conductors thereof are utilized to form the bearings for the rotation of the sign, all of the parts of which are effectually shielded from water or other foreign material that would be likely to produce a short circuit.

Another distinctive feature of the invention is in the form of brackets and holders used, which readily permit of the sign to

be removed therefrom when necessary, and which also permit of adjustments of the pivot pins to compensate for wear upon the point thereof incident to the continued rotation of the sign.

Claims:—

1. A device of the character described, comprising upper and lower supporting brackets, a holder adjustably mounted in each bracket, and having a cup shaped end, a pivot pin mounted in each of said holders and having its end protected by said cup shaped end, upper and lower plates, wind blades supported by said plates, insulating material carried by each plate, bearing lugs embedded in said insulating material and each having its outer end shielded by the cup shaped end of the holder and lamps carried by the upper plate and in a lighting circuit through said pivot pins, and the bearing lugs.

2. In a device of the class described, the combination with a wind actuated sign, of a plurality of brackets, a holder in each bracket provided with an elongated body portion terminating at one end in a downwardly-flanged substantially cup-shaped portion, a pivot pin fixedly secured within each holder and having its lower end tapered and extending below the body and surrounded by said cup-shaped portion, contacts carried by said sign and adapted to engage each pivot pin, lights carried by said sign, means forming an electrical circuit through said pivot pins, contact means and lights, and means for detachably securing said holders to said brackets.

3. In a device of the class described a wind actuated sign, brackets supporting said sign, said sign comprising a plurality of blades, and end plates with insulating material mounted thereon, bearing plates

embedded in said insulating material and provided with a laterally-extending flange around the end thereof and with a projecting body portion provided upon the outer end thereof with a socket, said insulating material covering the bearing plates and being flush with the outer portion thereof, means carried by said brackets provided with a shield, contact means carried by said last-mentioned means and adapted to engage said sockets in said bearing plates, lamps carried by said sign, and means forming an electric circuit through said bearing plates, contact means and said lamps for supplying a current therethrough.

4. In a device of the class described supporting brackets, a holder adjustably mounted in each bracket, a rotatable sign comprising a plurality of blades and end plates, insulating material carried by said end plates, contact plates embedded in said insulating material, pivot pins embedded in said holders and engaged with said contact plates, said holders provided with a cup-shaped inner end adapted to shield the outer end of said contact plates, said lower insulating material provided with a socket or channel extending around the contact plate, said cup-shaped end of said holder supported by the lower end adapted to fit in said channel and said channel acting as a shield for said cup-shaped end, lights carried by said insulating material, and means forming an electric circuit through said pivot pins, contact plates and lamps for supplying a current therethrough.

In testimony whereof I hereunto affix my signature in presence of two witnesses.

FRANK M. CARTER.

Witnesses:

MARTIN CARTER,

EDWARD M. PETERSON.