

Feb. 12, 1924.

1,483,067

C. T. BERRY

INTERCHANGEABLE AND ADJUSTABLE SIGN

Filed Jan. 19, 1923

2 Sheets-Sheet 1

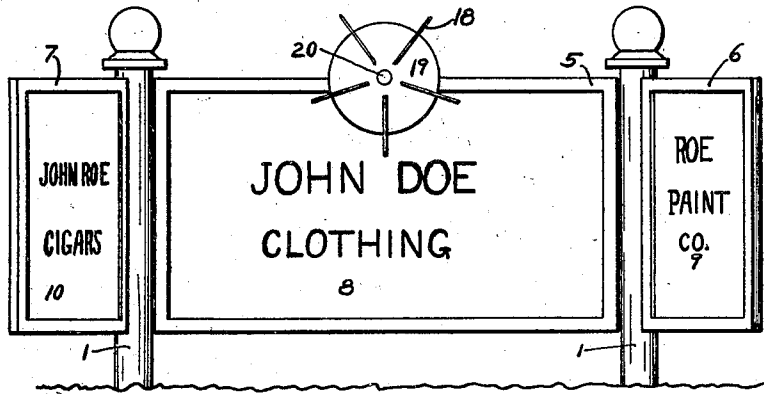


FIG. 1

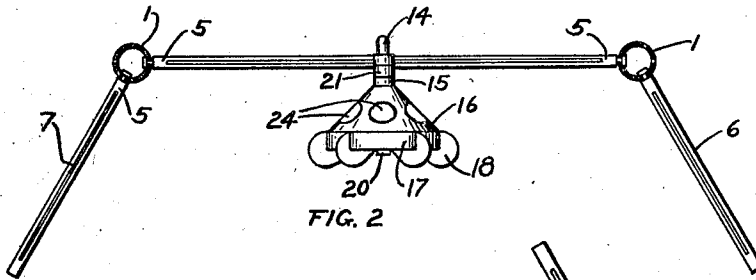


FIG. 2

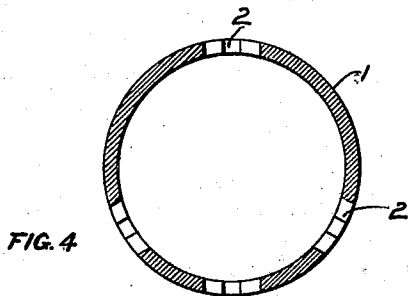


FIG. 4

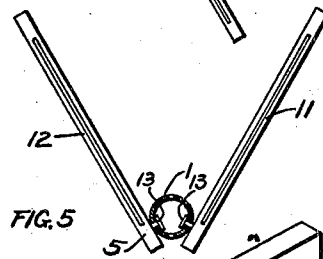


FIG. 5

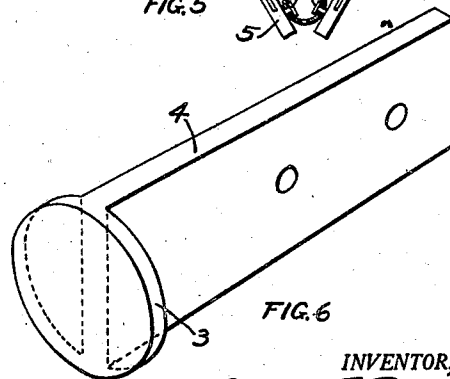


FIG. 6

WITNESS:
William B. Hornell

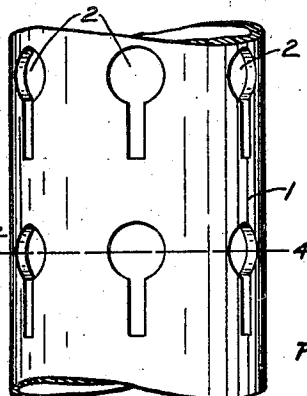


FIG. 3

INVENTOR,
Cullpe T. Berry,
BY
Howard A. Smith,
ATTORNEY.

Feb. 12, 1924.

C. T. BERRY

1,483,067

INTERCHANGEABLE AND ADJUSTABLE SIGN

Filed Jan. 19, 1923

2 Sheets-Sheet 2

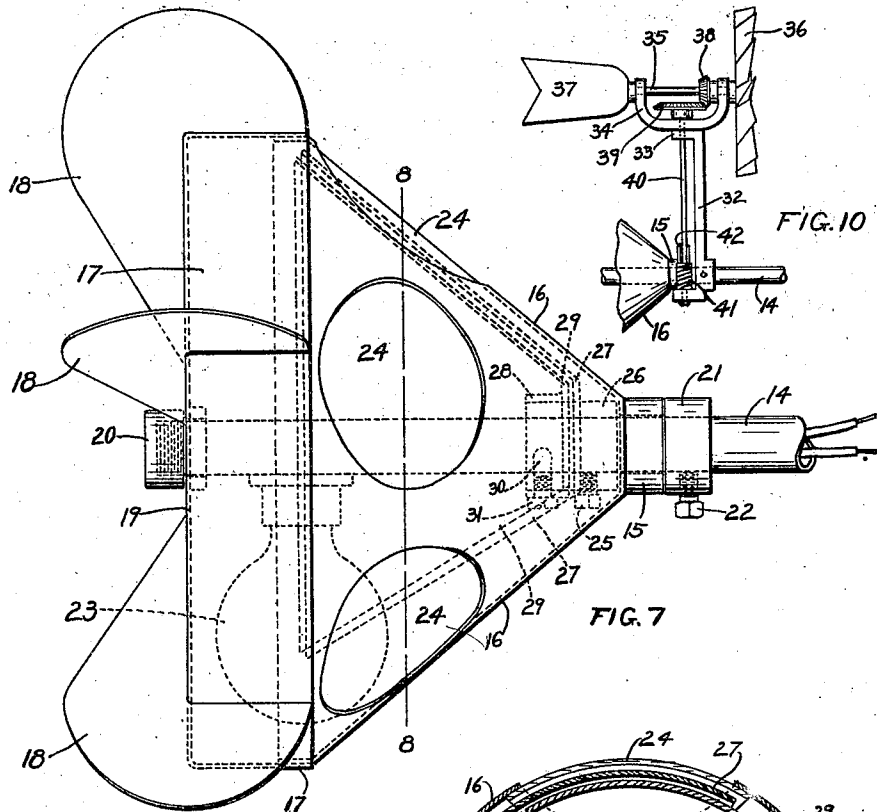


FIG. 7

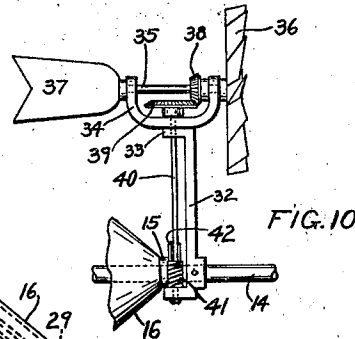


FIG. 10

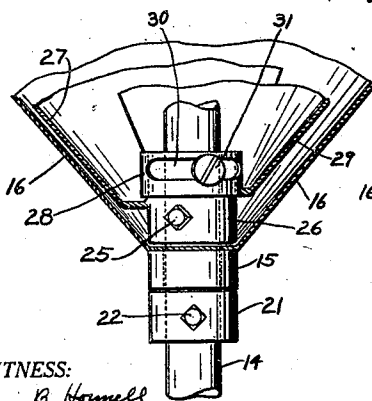


FIG. 9

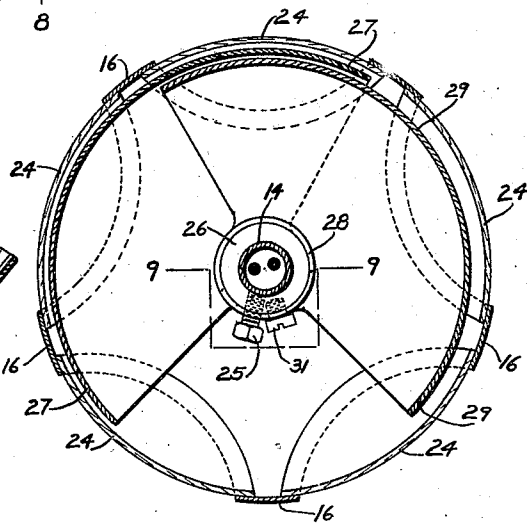


FIG. 8

WITNESS:
William B. Hornell

INVENTOR,
Cullage T. Berry,
BY
Howard A. Smith,
ATTORNEY.

Patented Feb. 12, 1924.

1,483,067

UNITED STATES PATENT OFFICE.

CULLYE T. BERRY, OF MONTGOMERY COUNTY, NEAR DAYTON, OHIO.

INTERCHANGEABLE AND ADJUSTABLE SIGN.

Application filed January 19, 1923. Serial No. 613,790.

To all whom it may concern:

Be it known that I, CULLYE T. BERRY, a citizen of the United States, residing in the county of Montgomery, near the city of Dayton, State of Ohio, have invented certain new and useful Improvements in Interchangeable and Adjustable Signs, of which the following is a specification.

It is one of the principal objects of my invention to provide for highways and other places, an interchangeable and adjustable sign which may be economically constructed and maintained, and which may be easily and quickly changed. The invention contemplates the provision of circular posts which contain in their faces slots that are so arranged as to receive one or more sign-receiving frames, or the signs themselves, for display in positions which are parallel to, or at an angle with, a road or street. Each post preferably contains four rows of slots so that the signs which they receive may be supported in a large number of different angular relations to each other, including an arrangement whereby one post may support two signs that together form the letter V.

It is another object of my invention to provide slotted frames for support by the circular posts, so that a sign may be easily withdrawn from a frame for replacement by another without necessitating the removal of the frame from a post or posts.

It is still another object of my invention to provide for my improved sign, illuminating means which are adapted to be set in motion by the wind to project the rays of a light through different colored lenses, so that the sign may be brilliantly illuminated by different colored lights. Such an illuminating device, deriving its propulsion power from the wind, is care free and can be operated at no expense save that required for the electric current which illuminates the electric lamp.

Other important and incidental objects will be brought out in the following specification, and particularly set forth in the subjoined claims.

In the accompanying drawings, Figure 1 is a front elevational view of my interchangeable and adjustable sign, showing the illuminating means therefor. Figure 2 is a top plan view thereof, partly in section. Figure 3 is a perspective view of a portion of one of the circular posts, showing the

keyhole slots in its face part. Figure 4 is a cross sectional view taken through one of the circular posts on the line 4—4 of Figure 3. Figure 5 is a top plan view of two sign-supporting frames which are held in V-relation to each other by a circular post, the latter being shown in section. Figure 6 is a perspective view of one of the sign-supporting bracket members. Figure 7 is a perspective view of the movable electric-light reflector. Figure 8 is a cross-sectional view taken through the same on the line 8—8 of Figure 7, showing the adjustable shutter means. Figure 9 is a detail view of the inner end of the electric-light reflecting device. And Figure 10 is a side view of a modified form of wind-propelling means therefor.

Throughout the specification and drawings, similar reference characters denote corresponding parts.

Referring to the accompanying drawings for a detailed description of the form of embodiment of my invention illustrated therein, the numeral 1 designates a sign-supporting post which is circular in cross section as shown in Figure 3. This post 1, which may be used by itself or with another post to support one or more sign-holding frames, or the signs themselves, has formed in each face a series of vertically disposed keyhole slots 2.

Adapted to be inserted in the round portion of each slot 2 is a disc-shaped head of a bracket member 4 to which one end of a sign-supporting frame 5 is adapted to be securely attached. The neck portion of the bracket member is adapted to descend readily to the bottom of the slot to form, with the head 3 which bears against the inside surface of the post, a firm support for the sign-holding frame.

Each circular post 1, which is hollow, preferably contains in its face portion four rows of keyhole slots 2, three rows of which are vertically disposed relatively close together, with the middle row equally distant between the other two and diametrically opposite the fourth row. A greater or a less number may be provided in a post, or they may be arranged in any other suitable manner therein, without departing from the spirit of the invention. In arranging the rows of slots as I have just outlined, three signs may be supported by two posts for view from widely dif-

ferent directions as shown in Figures 1 and 2, or two signs may be supported by one post in a manner wherein they form with each other the letter V, as shown in Figure 5. In the circular form of post four rows of slots may be readily provided. Furthermore, a circular post is desirable from the standpoint of economy, for it may be easily made or obtained. However, any other form of post may be employed if desired.

The sign-holding frames which I prefer to employ are those which contain a longitudinal slot in their top members through which a sign may be readily inserted and withdrawn. As in Figure 1, it may be desirable to leave the sign-supporting frame 5 in its position between the two posts, and the sign-supporting frames 6 and 7 in their positions on their respective posts, which positions for all three frames are probably the best ones to display their respective signs 8, 9 and 10 from widely different directions. Then, when it is desired to change a particular sign, it is only necessary to remove it from the frame and insert a new one in its place.

In Figure 5 I have shown two sign-supporting frames 11 and 12 which have right-angled bracket heads 13 similar in form to the brackets 4, for insertion in the key-hole slots that are substantially ninety degrees apart in a circular post 1. When so mounted on the post, the sign-supporting frames 11 and 12 will display the signs which they receive at an approximate V angle to one another. They also permit one sign to be mounted in such a position between two posts that it may be viewed by persons passing it as in the case of the sign 8 in Figure 1, and the mounting of two signs 9 and 10 on said posts in such a manner that they may be within the plain view of persons approaching them.

For the purpose of illuminating the signs 8, 9 and 10 by different colored lights, I have provided the following device, although any other may be employed if desired. Referring to Figures 1 and 2, there is mounted upon the top of the frame 5 a wire-receiving tube 14 which forms, in front of the sign 8, an axis upon which there freely turns the hub 15 of a conical reflector 16 which terminates at its front end in a cylindrical rim portion 17 on which are adjustably mounted a series of fan blades 18. The latter are shown on the drawing as being straight with the axis of the reflector like the blade on a windmill, so that they may be turned by the wind when it is blowing at different angular directions upon them. However, the ends of said blades may be curved like those of an electric fan, if desired. At its outer end the cylindrical rim portion is closed by an integral face 19 through a hole in the center

of which the tube 14 loosely passes, terminating in a threaded part to receive a retaining nut 20 which restrains the outward movement of the reflector 16. Its inward movement on the tubular shaft 14 is limited by a collar 21 that may be firmly secured in an adjusted position on the latter by a set screw 22.

The reflector 16 is free to be turned on the tubular shaft 14 around an incandescent lamp 23 secured to the front end of the latter. Its turning movement will be effected by the force of the wind acting upon its blades 18, and when the reflector is so rotated, the rays of the lamp 23 will pass through lenses 24 made of different colored glass set in the periphery of it. Each lens 24, which is substantially elliptical in shape, is preferably made of a different colored glass than the others so that when the reflector is rotated by the wind, a succession of different colored lights will be thrown upon the signs 8, 9, and 10. I preferably employ five of these lenses, to project five different colored lights upon the signs, although any greater or less number of lenses may be employed if desired. (See Figures 7 and 8.)

For the purpose of projecting the rays of light from the lamp 23 through one or more lenses, the following means are provided. Secured by a set screw 25 to the tube 14 within the reflector 16, is the hub portion 26 of a conical shield 27. The hub portion of this shield projects a sufficient distance within it to receive the sleeve portion 28 of a conical shutter 29 which turns within the shield 27 around its hub portion 26. (See Figures 7, 8 and 9.) Since the shutter 29 is free to turn within the shield 27, it is easily possible to so adjust it with reference to the latter that there may be left between them an opening of the desired width through which the rays of light from the lamp may be concentrated upon each lens 24 as it is carried past the opening by the reflector 16.

For the purpose of holding the shutter 29 in an adjusted position with reference to the shield 27, there is provided in its sleeve portion 28 an elongated circumferential slot 30 through which a retaining screw 31, having a head wider than the slot, is adapted to be screwed into a threaded hole in the hub portion 26 of the shield. (See Figures 8 and 9.)

In Figure 10 I have shown a modified form of wind-propelled means for rotating the reflector 16. Adapted to be secured to the tube 14 is an upright bracket member 32 having a top right-angled portion 33 upon which there is pivotally mounted a U-shaped bearing 34 for a shaft 35. Secured on one end of the latter is a wind-wheel 36, and on its other end there is secured a vane 37.

Fast on the shaft 35 between the ends of the bearing 34 is a bevel gear 38 which meshes with a horizontal bevel gear 39 fast on a vertical shaft 40 which projects downwardly through the bearing 34 and the right-angled part 33 of the bracket 32 to form the pivotal connection between them.

Mounted on the lower end of the vertical shaft 40 is a worm 41 which meshes with a worm gear 42 secured to the hub 15 of the reflector 16. It is thus seen that when the wheel 36 is rotated by the wind, it will turn the reflector 16 to project different colored lights upon the signs in the same manner as when rotated by the blades 18. The vane 37 serves to properly position the wheel 36 with the wind.

While I have shown the before described forms of means for rotating the reflector 16, any other form of wind-propelled or other power mechanism may be employed for this purpose if desired.

It will thus be seen that I have provided a sign which may not only be economically constructed and easily changed, but which may be adequately illuminated by the wind-propelled reflector that projects different colored rays upon it through the lenses 24.

I do not wish to be limited to the details of construction and arrangement herein shown and described, and any changes or modifications may be made therein within the scope of the claims.

Having described my invention, I claim:

1. In a device of the type described, the combination with a post circular in cross section having rows of circumferentially alined bracket-receiving holes in its face, of bracket devices insertible in said holes at different angular relations to each other, and

sign-supporting frames to which said bracket devices are secured.

2. In a device of the type described, the combination with a post circular in cross section having four rows of keyhole slots in its face, two rows of said slots being diametrically opposed to each other, the other two rows of slots being each at one side of, and substantially close to, one of the first rows of slots, of brackets adapted to enter said slots for support at different angular relations to each other, and sign-supporting frames to which said brackets are secured, two of said brackets adapted to enter the two last named rows of slots to support their sign-supporting frames in V relation to each other.

3. The combination with a sign, of a lamp for illuminating the same, a wire-containing conduit mounted on the sign for supporting said lamp in front of the latter, a conical reflector rotatably mounted on said conduit around the lamp, different colored lenses secured within the periphery of said reflector, means for rotating said reflector, a conical shield having a hub portion secured to said conduit within the reflector, and a conical shutter free to turn on said hub portion within the shield for the purpose of providing between it and the shutter an adjustable opening to project the rays of the lamp through each lens upon the sign when said lens is carried past the opening by the rotatable reflector.

In testimony whereof I have hereunto set my hand this 17th day of January, 1923.

CULLYE T. BERRY.

Witness:

HOWARD S. SMITH.