April 9, 1929. R. A. WOOD 1,708,459

TRAFFIC INDICATOR

Filed June 6, 1928

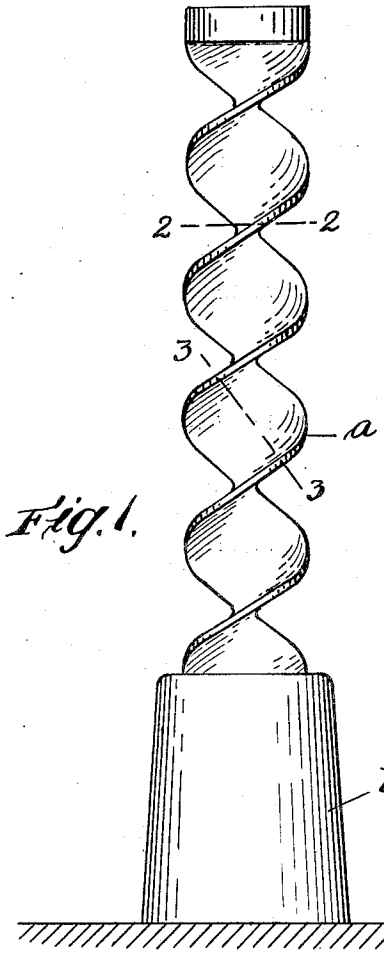


Fig. 1.

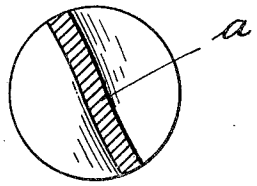


Fig. 2.

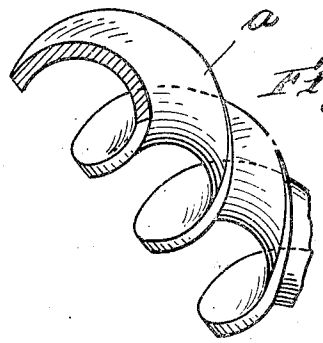


Fig. 3.

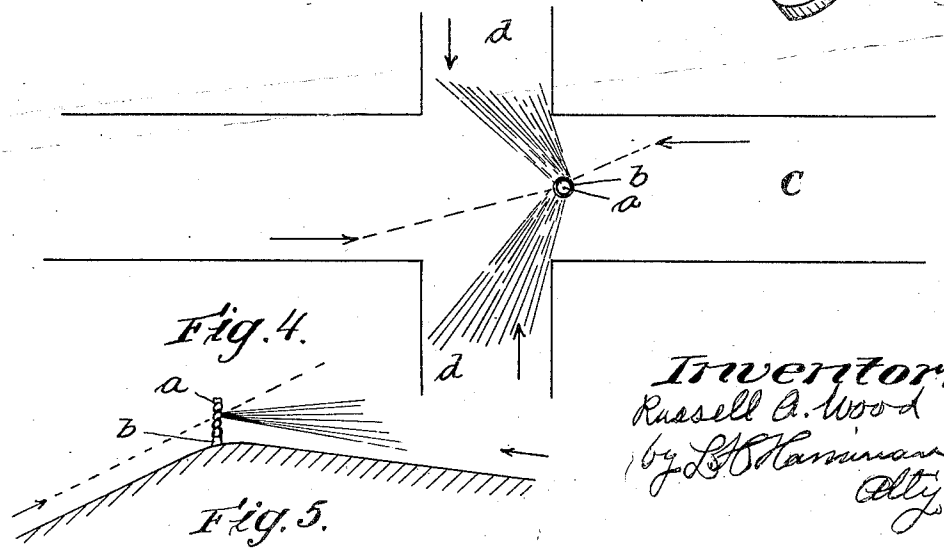


Fig. 4.

Fig. 5.

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UNITED STATES PATENT OFFICE.

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TRAFFIC INDICATOR.

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This invention relates to that class of reflecting signals which are designed to be located at street intersections and, by casting reflections, to indicate the approach of a vehicle from one direction to the driver of another vehicle moving in a transverse or opposite direction.

While certain devices for this general purpose have been produced which will reflect light rays directed along one street into an intersecting street under certain conditions, an objection thereto is that the conditions under which they will thus reflect are limited, so that they do not include all conditions which are likely to arise. Also, so far as I am aware, these devices are ineffective in directing the light rays in any direction except horizontally, so that where the street intersection is at, for example, the crest of a hill, so that the rays from the source of light are directed obliquely upward, then the reflected rays will usually be directed upward at a still greater angle, so that they would be unseen from another position at or below the level of the reflecting position.

The object of my invention is to provide a device of the character above referred to which will reflect rays of light directed from an automobile head light in or on a roadway not only thru such a wide horizontal arc, or sector that it may be seen by the driver of another automobile travelling in an intersecting roadway, regardless of the relative positions thereof in the roadways, but also will reflect the light rays thru a sufficiently wide vertical arc, within the horizontal arc, that they may be seen from points at a considerably lower elevation than that of the reflecting device, even though the rays are projected from the source to the reflecting device, which is also at a considerably lower elevation than that of the reflecting device.

I accomplish these objects by providing a form of post or column adapted to be erected at a street intersection, which is provided with horizontally projecting, vertically and spirally extending, transversely concave reflecting surfaces, so arranged that they will reflect light thru wide sectors, both horizontally and vertically at an infinite number of points.

For a more complete disclosure of the invention, reference is made to the accompanying drawing, in which:—

Fig. 1 is a front elevation of a reflecting signal post embodying my invention.

Fig. 2 is a sectional view at line 2—2 of Fig. 1.

Fig. 3 is a sectional view at line 3—3 of Fig. 1.

Fig. 4 is a plan view in diagram illustrating its location and operation at a street intersection.

Fig. 5 is a diagram view in elevation illustrating the operation when the roadway is inclined.

According to my invention, I provide a post, or column *a* which is mounted in a vertical position on a suitable base *b*, said post consisting of a strip of sheet material or web, having a reflecting surface on both sides and bent into regular twisted form, thereby providing a pair of alternately arranged, spirally extending, transversely concave surfaces each of which are adapted to reflect light efficiently.

In practice the post is mounted in the middle of the main street, or boulevard *c*, in a position which is slightly to one side of the line of a cross street *d*, in which position rays of light projected from a head light on a car approaching from either direction on the main street will be reflected into the side street at the side of the main street from which the light rays are projected, as indicated in Fig. 4. Also, in case the post is located in such a position that the roadways, any one or all, decline therefrom, then the light rays would be reflected thru wide sectors vertically from various points, whether the light rays were projected downward or upward or horizontally to the reflecting device, as partly indicated in Fig. 5. The above described device may thus be advantageously employed at the crest of a hill in a straight road, as well as at any street intersection where any one or all the roadways decline from the point of intersection. Consequently whatever the direction from which the light rays are projected against the various surfaces of the post, some surface will be encountered which will reflect the rays into each portion of wide horizontal and vertical sectors, having their centers in some point on the post.

As practically all the surfaces which will intercept the light rays from the source will be oblique to the direction thereof, the rays will not be reflected back to the source to any substantial extent.

With the above described construction there will be a plurality of surfaces, one for each

convolution of the spiral grooves, which will reflect concentrated light rays to the observer, so that the observer will usually see a vertical row of light spots on the post, indicating the approach of the source of light, from practically all directions, before the source of the light itself is visible.

The beads or spots of light will also be more likely to attract attention than a single light spot and thus will better serve the purpose of attracting attention.

The result will be practically the same, whether the source of light is approaching the post in the main street from one side, or the other thereof, as indicated in Fig. 4. Light rays from a source moving along the side street from either side of the main street towards the post will also be reflected into the main street in a similar manner.

The post may be moved rotatably about a vertical axis, but the only effect produced by such rotation would be to cause the row of light spots or patches above referred to, to appear to move up or down, according to the direction of rotation.

The above described device is primarily designed to reflect light rays, as the reflection of an image, thereby will usually be distorted. It will, however, reflect an image in some form in a manner which will make the device serviceable in the day time as well as in the night time.

I claim:

1. A street traffic indicator consisting of a vertically disposed post having a spirally extending, transversely concave light reflecting surface.

2. A street traffic indicator consisting of a vertically disposed post having oppositely disposed, spirally extending, transversely concave light reflecting surfaces, said surfaces appearing in alternate arrangement from any point.

3. A street traffic indicator consisting of a vertically disposed post having a transversely horizontal, and spirally and vertically extending light-reflecting surface.

4. A street traffic indicator consisting of a post having a laterally projecting and longitudinally and spirally extending web provided with a continuous light reflecting surface.

5. A street traffic indicator consisting of a post having a laterally projecting and longitudinally and spirally extending web provided with a continuous light reflecting surface on each side thereof.

In testimony whereof, I have signed my name to this specification.

RUSSELL A. WOOD.