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H. C. JENSEN

CATOPTRIC LIGHT

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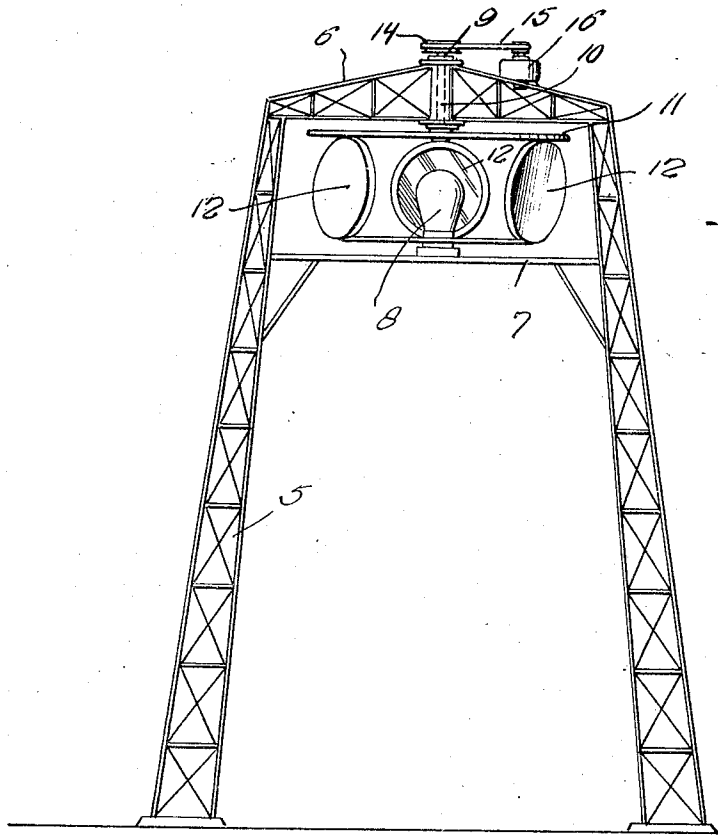


Fig: 1.

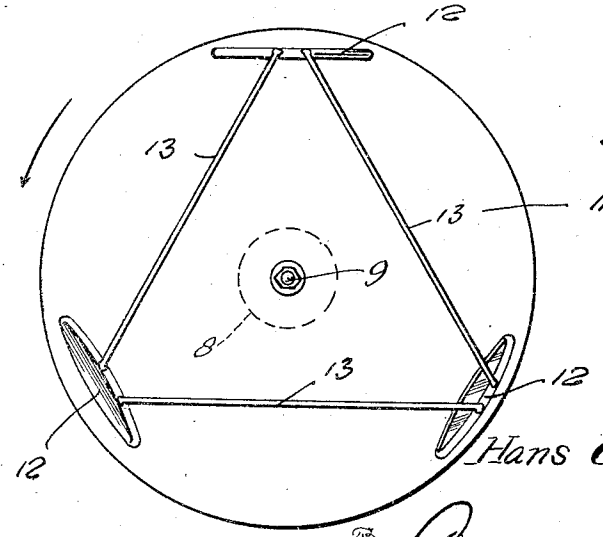


Fig: 2.

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HANS C. JENSEN, OF PORT CLINTON, OHIO.

CATOPTRIC LIGHT.

Application filed October 7, 1925. Serial No. 61,086.

This invention relates to an illuminating means of the general type known as catoptric light, and has for its primary object to provide a mechanism whereby the rays from a stationary source of illumination are directed across a relatively great area for obviously permitting for the illumination of said relatively great area, without the necessity of requiring more than one source of illumination.

An additional object of the invention is to substantially improve and simplify mechanism for this same general character and this, without requiring a complex mechanism or complicated system of reflectors as is now generally the case in mechanisms of this same general type.

Other objects will become apparent when the nature of the invention is better understood by reference to the following specification in accompaniment with the drawing, wherein:—

Figure 1 is an elevational view of my improved light.

Fig. 2 is a bottom plan view of the invention, per se.

Like reference characters indicate corresponding parts throughout both of the views.

The present catoptric light mechanism is supported above the ground surface through the medium of a suitable skeleton tower 5 of any conventional size, shape, or construction, that includes a cross beam 6 at its upper end and a source of illumination supporting means 7 beneath said cross beam at a suitable spaced relation thereto, centrally of which is disposed a source of high candle power illumination 8.

My invention per se, constitutes the provision of a vertical shaft that is journaled in a suitable bearing 10, formed upon or otherwise associated with the cross beam 6 of the skeleton tower 5. Formed upon or otherwise associated with the lower end of said shaft 9 is a disk 11 that has dependent therefrom at a plurality of spaced points at its perimeter, reflecting mirrors 12 preferably of circular shape. The lower edges of these mirrors are inter-connected by brace rods 13, which together with said reflecting mirrors 12 surround the source of illumination 8. Mirrors 12 are preferably arranged at various angles with respect to the vertical plane as more clearly shown in Fig. 2 for obviously increasing the cross sectional area of the light beams that will be reflected in a circular manner throughout a relatively great area at all points from the supporting tower 5 during the rotation of the mirror carrying disk 11.

The upper projecting end of the shaft 9 is equipped with a belt pulley 14, that is inter-connected through the medium of a belt 15 with a pulley upon the end of the armature shaft of an electric motor 16 that is supported upon the cross beam 6 of the tower 5, Fig. 1.

It will be obvious that during the operation of my catoptric lighting mechanism the light rays from the illuminating source 8 will be directed through a relatively great area in all directions due to the rotation of the reflecting mirrors 12 around the source of illumination which is occasioned by the rotation of the shaft 9 thru the medium of the electric motor 16.

The present invention may be employed for a number of purposes, the most notable one of which to my mind would be in the illumination of an aeronautic landing field although the device is not limited to such a particular use.

Minor changes may be made in the invention, without departing from the spirit and scope of the appended claims.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent is:

1. In an illuminating structure of the class described, a support including a cross beam at its top provided with a bearing, a shaft journaled for rotation in said bearing and depending below said beam, a circular plate carried by said shaft, a plurality of circumferentially spaced mirrors carried by the peripheral portion of said plate, brace rods connecting said mirrors together, and means for rotating said mirrors about a single source of illumination.

2. In a structure of the class described, a supporting tower including a cross beam at its top provided with a centrally disposed vertically extending bearing, a shaft journaled for rotation in said bearing, said shaft being provided at its upper end with a pulley, a circular plate connected to the lower

end of the shaft, said plate being disposed beneath said beam, a plurality of circumferentially spaced mirrors carried by the peripheral portion of the plate and depending from said plate, cross rods connecting said mirrors together, and a supporting rod carried by said tower together with a lamp supported on the central portion of said last named rod and located at equi-distant points from the reflecting surfaces of said mirrors.

In testimony whereof I affix my signature.

HANS C. JENSEN.