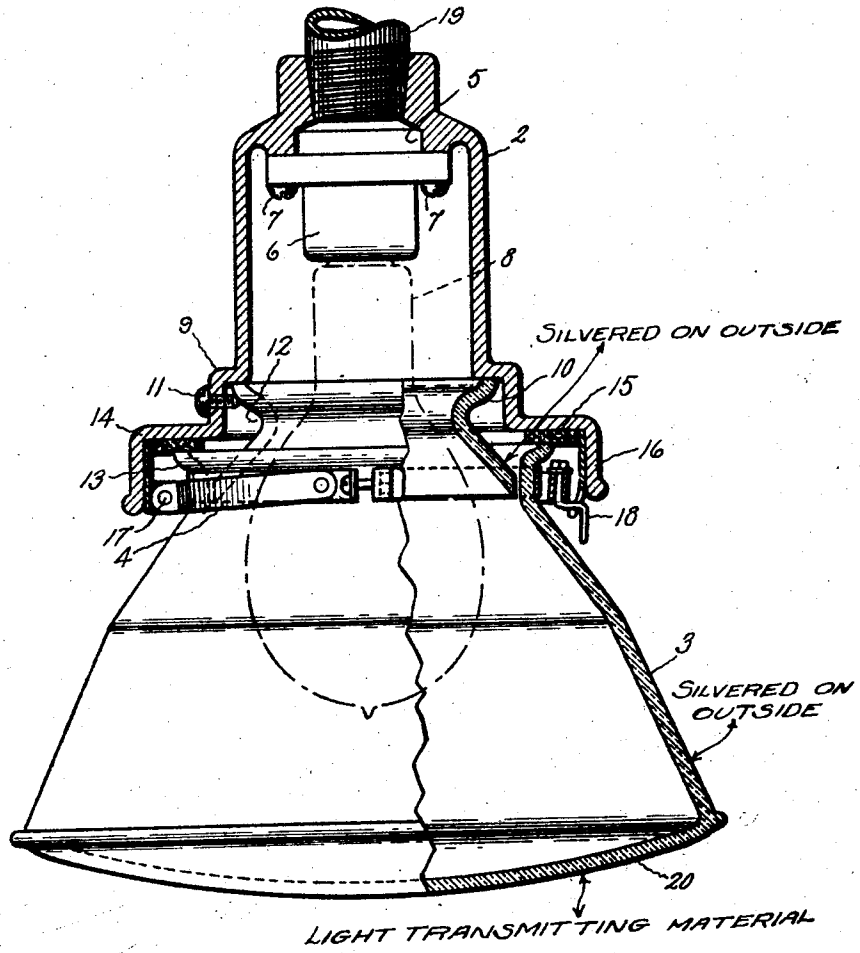
Jan. 11, 1927. 1,614,121

C. A. B. HALVORSON, JR

ILLUMINATING UNIT

Filed Jan. 25, 1924



Inventor,
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UNITED STATES PATENT OFFICE.

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ILLUMINATING UNIT.

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My invention relates to lighting units. More particularly, it relates to an improved form of lighting unit especially adapted for industrial lighting.

Heretofore, units for this purpose have been so constructed that they easily become coated with dust and dirt on the inside. Efforts have been made to produce dust-proof units, but the construction has always been more or less expensive.

Among the objects of my invention are the following: to provide a unit practically dust-proof and especially adapted for interior lighting of industrial plants; to provide a unit so constructed that the various elements may be easily replaced or removed and of such a construction that all the elements are easily accessible while maintaining a high efficiency in illumination; to provide a construction comparatively cheap to make; and to provide other details of improvement tending to increase the efficiency and serviceability of a unit of this character.

The means for accomplishing the foregoing results are hereinafter more fully set forth and claimed, reference being had to the accompanying drawing which is a view in elevation and partly in section of the device of my invention.

In the construction as shown, I provide a holder 2, a hood 3, suitably pivoted to said holder. Around the neck of the hood, I provide a band 4 which is clamped to the hood and pivotally secured to the holder by the pin 17. The holder flares out in terrace fashion with three ledges. To the innermost ledge 5 is secured the electric lamp socket 6 through the medium of the screws 7. This socket of course receives the electric lamp 8. The second ledge 9 is adapted to receive the reflector 10. The reflector 10 is clamped in position as indicated by means of suitable clamping screws 11. This reflector as is shown, is provided with an opening through which the neck of the lamp projects into the socket 6. As indicated in the drawing, the lamp is secured in the socket 6. The neck of the lamp is sufficiently long to allow the lower or bulb portion to fall within the enclosure formed by the globe 3 and the reflector 10. It will be seen therefore that the reflector 10 and the bulb are both enclosed by the hood 3 and the holder 2. The hood 3 has only one opening in the upper part the rim of which is snugly pressed against the third ledge 14 of the holder. Preferably, a gasket 15 is interposed between the rim of the dome and the ledge 14. On the outside a latching device 18 is provided by means of which the dome is latched in its closed position. It will be seen therefore that the holder 2 and the hood 3 in combination form a closure which has only one opening. This opening is in the holder and into it the cable conduit 19 is shown projecting. Obviously, therefore, the unit is dust-proof, with the construction shown, in order to remove the bulb 8, the hood 3 must be unlatched and allowed to fall back about the pivot 17 under the rim 16. By making the reflecting area of the reflector 10 as large as possible, that is, by making the opening through which the bulb projects as small as possible, I utilize the maximum amount of light which is reflected downward and which passes through the transparent lower surface 20 of the hood. In the construction shown, the sides of the hood 3 between the lower edge of the reflector 10 and the lower face 20 is silvered on the outside. Therefore the sides of the dome are constructed as a reflector and all of the light produced by the unit passes downward through the lower side 20 of the hood.

I wish to emphasize that my invention is not to be limited to the specific structure shown in the drawing inasmuch as in view of the specification and disclosure, other modifications will readily suggest themselves to those versed in this art which will fall within the scope of the claims appended hereto.

What I claim as new and desire to secure by Letters Patent of the United States, is,—

1. A dust-proof lighting unit comprising a hollow holder, an opening at one end of the holder, and a lamp socket secured inside the holder and serving to seal said opening, said holder having a flaring mouth at the other end with a pair of offset ledges one larger than the other, the larger ledge being nearer the end and a globe secured to said larger ledge serving to seal the mouth of the holder, the sides of the globe being in the form of a reflector and the end of the globe being formed of light transmitting material whereby a beam of light is projected through the end of the globe, and an aux-

iliary reflector secured to the second ledge and serving as a continuation of the reflector sides of the globe to increase the intensity of the beam, the whole forming a unit substantially sealed against dust.

2. A dust-proof lighting unit comprising a hollow holder, an opening at one end of the holder, and a lamp socket secured inside the holder and serving to seal said opening, said holder having a flaring mouth at the other end with a pair of offset ledges one larger than the other, the larger ledge being nearer the end and a globe secured to said larger ledge serving to seal the mouth of the holder, the sides of the globe being in the form of a reflector and the end of the globe being formed of light transmitting material whereby a beam of light is projected through the end of the globe, and an auxiliary reflector secured to the second ledge and serving as a continuation of the reflector sides of the globe to increase the intensity of the beam, said globe being provided with a hinge, the latter secured to the holder whereby the globe may be disengaged from its ledge and yet retained secured to the holder whereby the light source may be removed, and a latch for locking the globe in engagement with its ledge.

In witness whereof, I have hereunto set my hand this 21st day of January 1924.

CROMWELL A. B. HALVORSON, Jr.