R. H. WELLES.

HEADLIGHT.

APPLICATION FILED NOV. 15, 1909.

981,045. Patented Jan. 10, 1911.

2 SHEETS—SHEET 1.

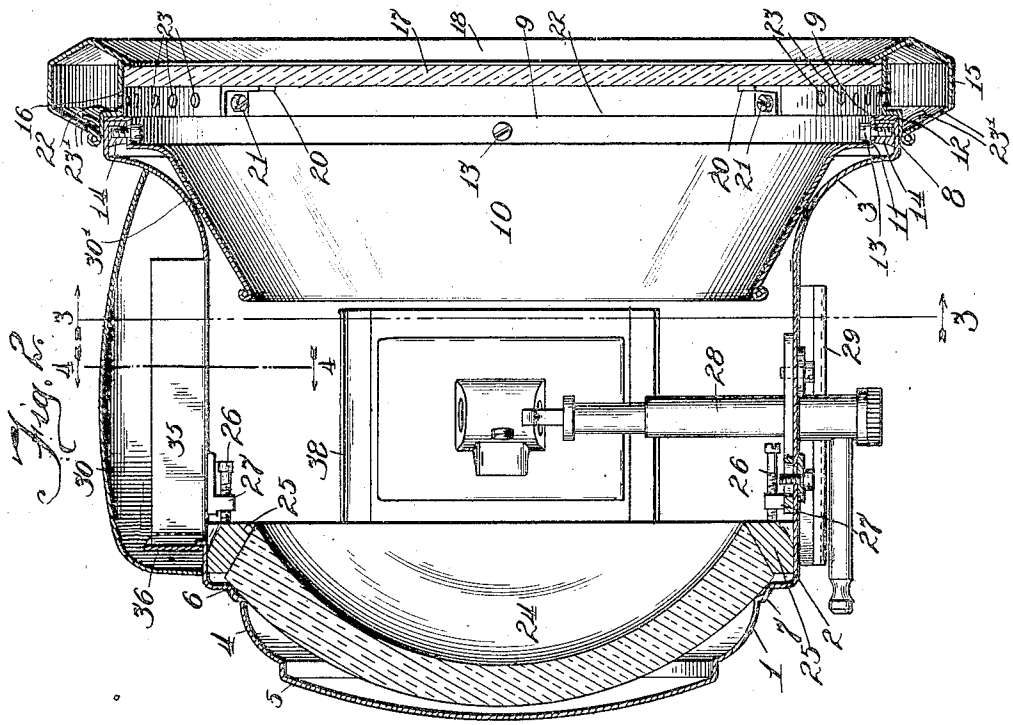

Fig. 2.

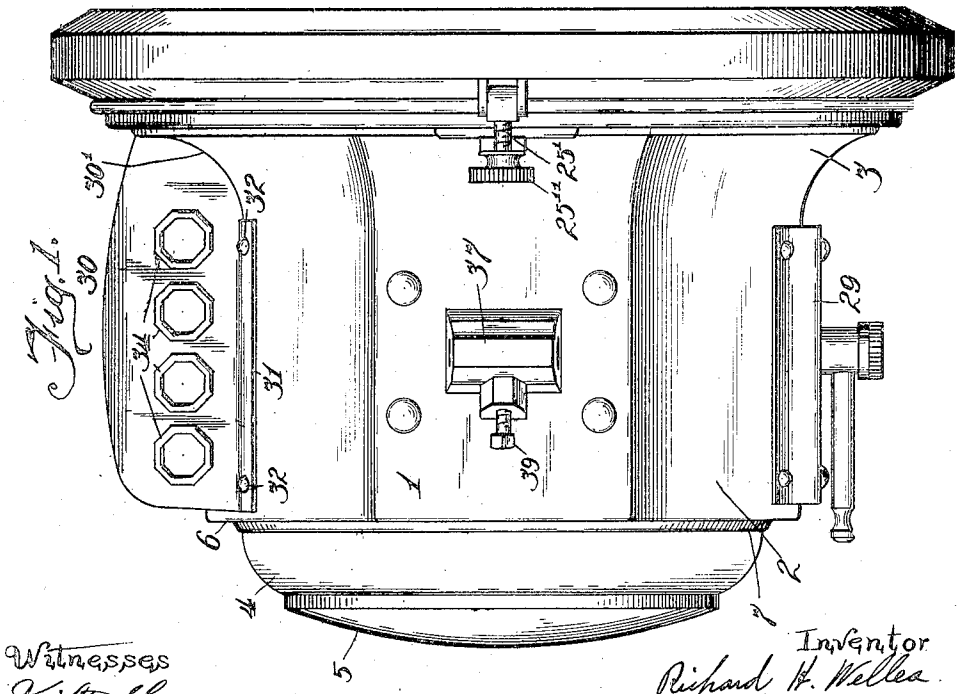

Fig. 1.

Witnesses
Milton Lenoir
F. L. Belknap

Inventor
Richard H. Welles
By Offield, Towle, Graves & Offield
Attorneys

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Fig. 3.

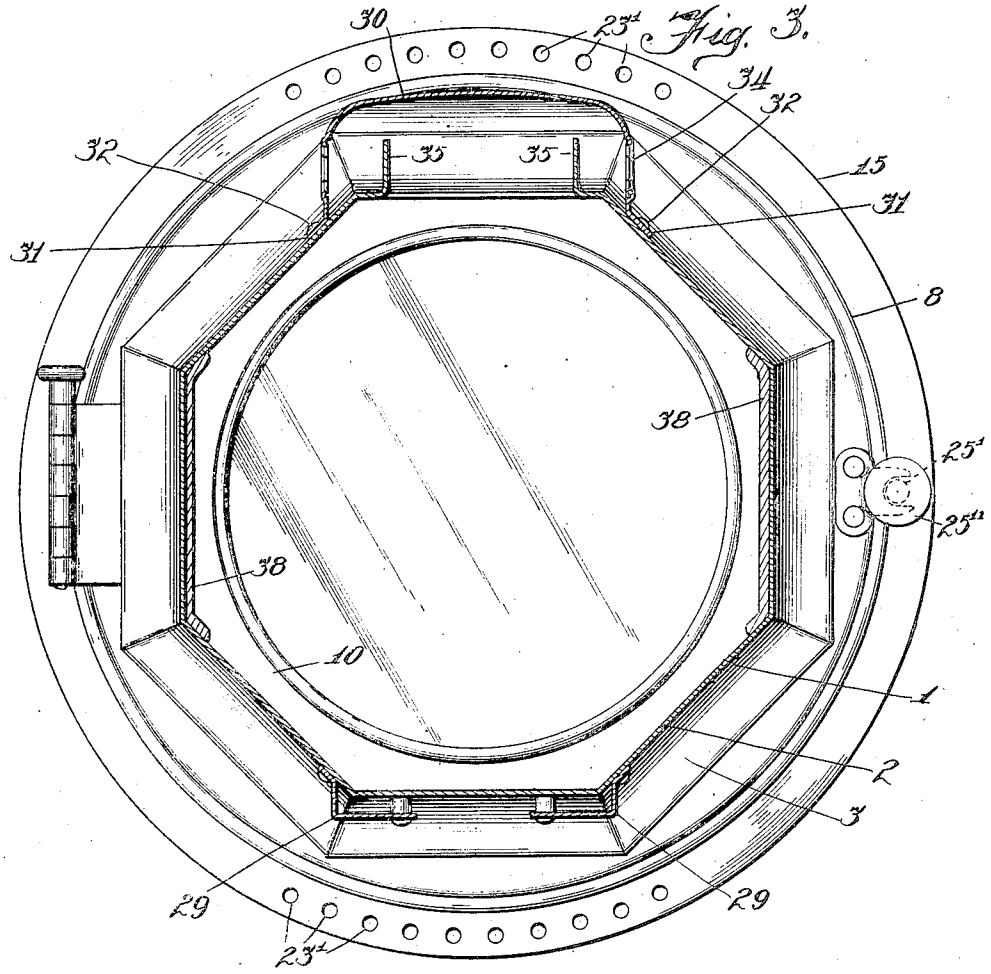
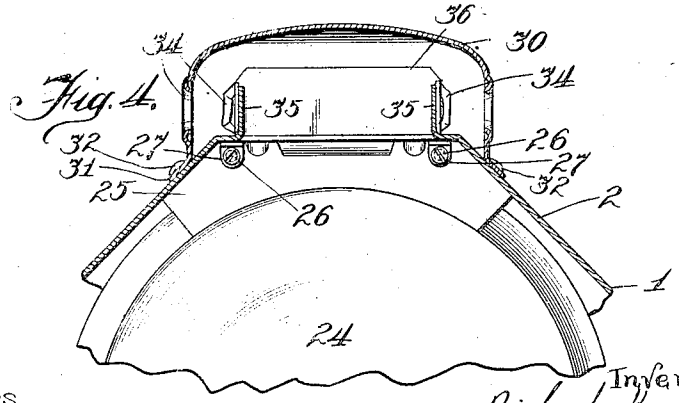


Fig. 4.



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F. L. Belknap

Inventor
Richard H. Welles
By Offield, Towle, Graves & Offield
Attorneys.

UNITED STATES PATENT OFFICE.

RICHARD H. WELLES, OF KENOSHA, WISCONSIN, ASSIGNOR TO THE BADGER BRASS MANUFACTURING COMPANY, OF KENOSHA, WISCONSIN, A CORPORATION OF WISCONSIN.

HEADLIGHT.

981,045. Specification of Letters Patent. Patented Jan. 10, 1911.

Application filed November 15, 1909. Serial No. 527,970.

To all whom it may concern:

Be it known that I, RICHARD H. WELLES, a citizen of the United States, residing in the city of Kenosha, county of Kenosha, and State of Wisconsin, have invented certain new and useful Improvements in Headlights, of which the following is a specification.

This invention relates to improvements in headlights and refers to a device more particularly adapted for use with automobiles, motor boats and the like.

Among the salient objects of the invention are to provide a construction in which the main shell of the headlight consists of a single piece of sheet metal, the side body or barrel of which is of exteriorly polygonal form, and the ends of which are so curved and beaded as to secure a more finished and attractive appearance; to provide in a conproved form of door structure and an improved form of top ventilator, each peculiarly adapted to the present invention; to provide a supplementary reflector seated in the front of the main body of the headlight and which is preferably made of highly burnished metal; to provide a construction which presents a relatively smooth exterior surface substantially free from protruding parts whereby it may be more readily polished and which does not accumulate dirt, dust, etc.; to provide improved details in the construction and arrangement of the various parts; and in general to provide an improved construction of the character referred to.

The invention consists in the matters hereinafter described and more particularly pointed out in the appended claims.

In the drawings—Figure 1 is a side elevation of my improved construction; Fig. 2 is a vertical sectional view of the same; Fig. 3 is a transverse sectional view taken on lines 3—3 of Fig. 2 and looking in the direction of the arrows; Fig. 4 is a detail sectional view taken on lines 4—4 of Fig. 2 and looking in the direction of the arrows.

Referring to the drawings, 1 designates as a whole the main shell of the headlight comprising a polygonal barrel or side body 2, in the present instance octagonal in form, a flaring front 3, and a generally convex end wall or closure 4, having a rearwardly offset central portion 5. As an important feature of the invention, the main shell or body 1 is drawn out from a single piece of metal and in such a way as to secure a smooth exterior surface having at the same time the novel exterior configuration shown in the drawings. For example, the convex end wall 4 is integrally connected with the hexagonal rim 6 of the shell by means of the annular bead 7 so as to avoid any angles or sharp edges. In a similar manner the flaring front 3, which is itself octagonal in form, curves gradually and evenly into the adjacent end of the barrel 2. The front end of this flaring front 3 is provided with an annular integral channeled seat 8, the outer face 9 of which serves as a seat for a supplementary reflector designated as a whole 10. This reflector comprises an interiorly concave tapered ring preferably made of highly burnished metal in order to more effectively reflect a part of the light rays and at the same time give the front of the headlight a more finished appearance. This ring is provided with an annular offset portion 11 which seats within the channeled extension 8 of the flaring front, and an outturned flange 12 which abuts against the face 9 of the channel. The ring is detachably locked in position by means of screws 13 which extend through the offset portion of the ring and engage socket members 14 carried by the channeled extension 8. The latter also serves as a seat for the door structure designated as a whole 15. As a feature of the invention, this door structure is likewise polygonal in form in cross section, but circular in contour and consists essentially of a narrow hollow ring, the inner periphery of which is provided with an annular seat 16 which receives the front crystal or glass 17. The latter is confined in position between an inturned flange 18 integral with the main body of the door structure, and a plurality of brackets 20 detachably locked in position by means of screws 21. The rear end of the door structure is provided with an internal ledge or shoulder 22 which fits over the seat ring 8.

The door is provided with two sets of air holes designated 23, 23′ respectively; the arrangement being such that the dirt and dust will be caught within the hollow ring 15 before the air passes into the main body of the headlight. The door may be locked

in closed position by means of the usual threaded bolt and thumb nut designated 25′, 25″ respectively.

The reflector 24 is seated as usual in the rear end of the headlight and is detachably confined in position by means of two segmental wedge blocks 25 and locking screws 26 mounted in brackets 27 secured to the inner side of the barrel 2. The headlight is provided with the usual burner 28 and bottom ventilator 29.

The top ventilator designated as a whole 30 is of generally inverted box-like shape, open at its lower end and provided with side flanges 31 by which it is riveted as shown at 32 to the barrel of the headlight. The front ends of the side walls of the ventilator are curved to conform to the flaring front 3 as shown at 30′. The arrangement is such as to secure a dust proof connection and at the same time present a finished appearance. The sides and rear of this ventilator are provided with octagonal sided apertures 34 to permit the air to enter the end walls of the headlight in the usual manner. In order to prevent the detritus and moisture from entering the headlight, the interior of the ventilator 30 is provided with side baffle members 35 formed by striking up a portion of the upper end of the barrel, and a rear baffle member 36 suitably secured in position.

The headlight as a whole is designed to be supported upon forks in the usual manner and is provided with supporting lugs 37. Each of these lugs extends through a suitable aperture in the side of the barrel 2 and is provided at its inner end with a laterally supporting flange 38 riveted to the interior of the shell. The lugs are locked to the forks by means of the set screws 39.

The invention is not limited to the details of construction shown, except as set forth in the appended claims.

I claim as my invention:

1. In a head-light, the combination with a body member having a flaring front portion, the latter terminating in a channeled seat, and a concave ring secured at its wider edge to said seat and extended into the interior of the main body portion, a reflector in the rear of said body portion, a burner mounted between the reflector and said ring, and a door for closing the front end of the head-light.

2. In a headlight, the combination with a body member having a flaring front portion, the latter terminating in a seat portion, a concave ring extending into the interior of the main body portion and having an annular off-set portion at its wider edge, means for securing said off-set portion to said seat, a reflector in the rear of said body portion, a burner mounted between the reflector and ring, and a door for closing the front end of the headlight.

RICHARD H. WELLES.

Witnesses:
ANNA O'BRIEN,
FRANK L. BELKNAP.