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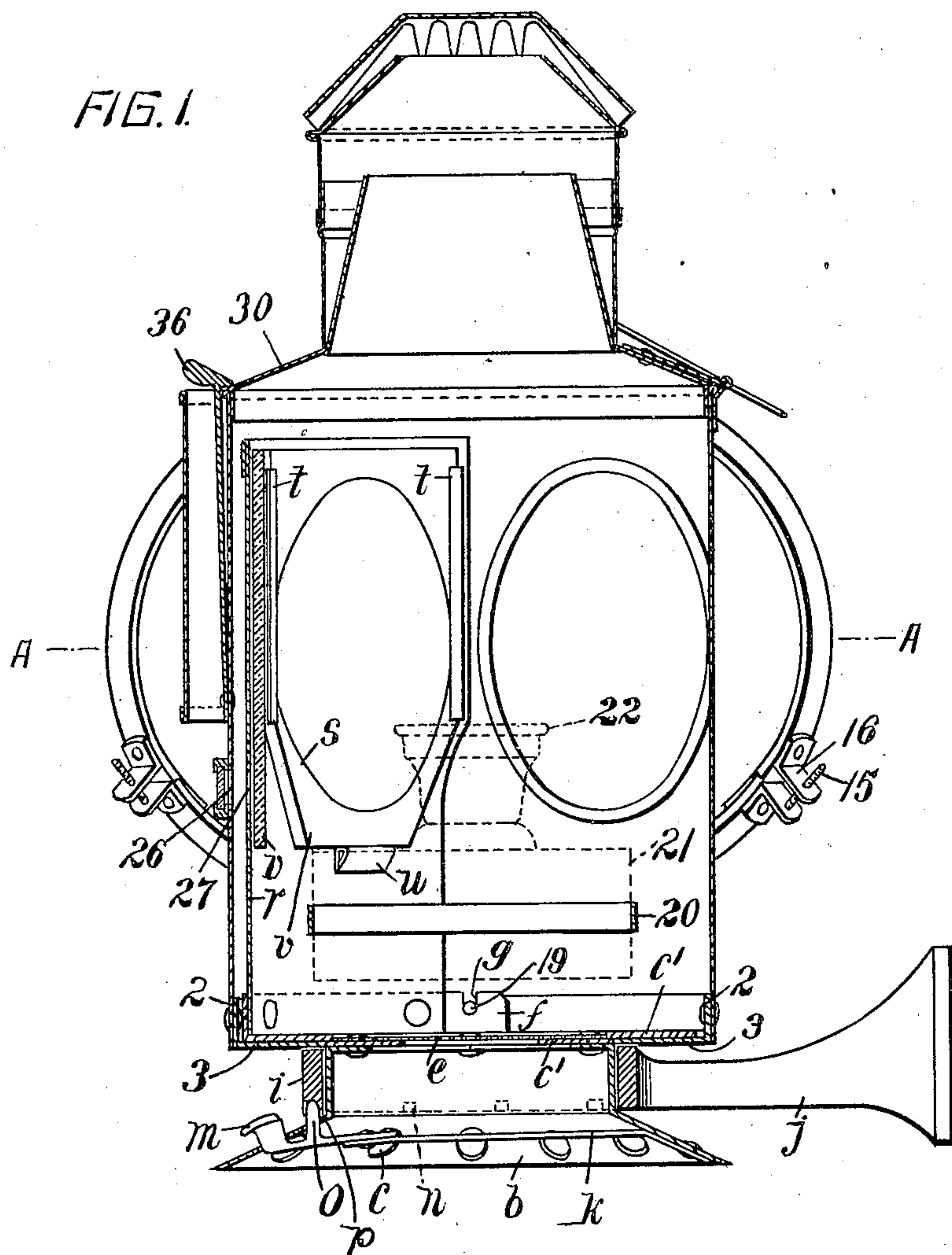
PATENTED MAY 12, 1908.

H. L. PIPER.

CLASSIFICATION AND MARKER RAILWAY LAMP.

APPLICATION FILED MAR. 19, 1906.

3 SHEETS—SHEET 1.



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3 SHEETS—SHEET 2

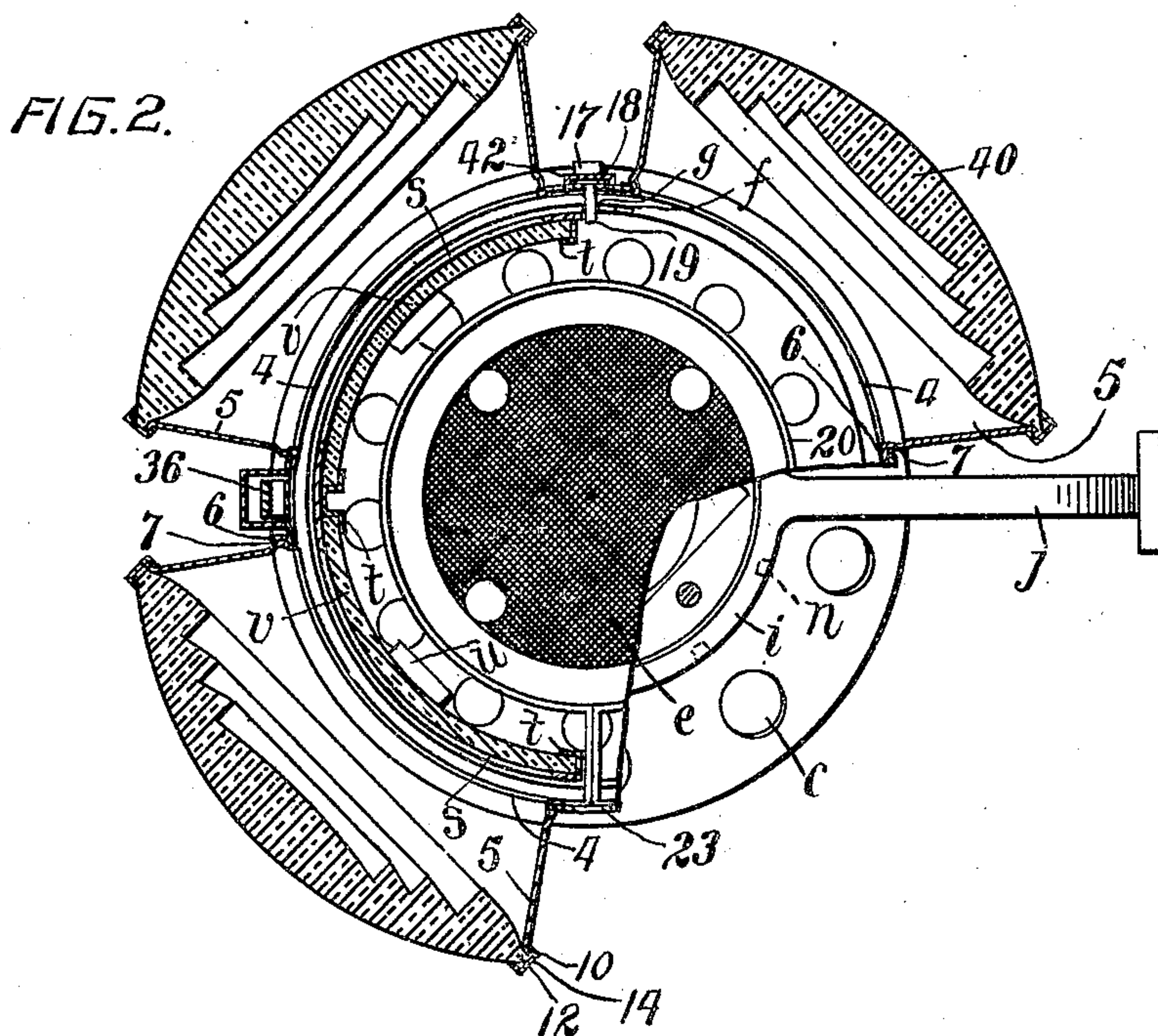
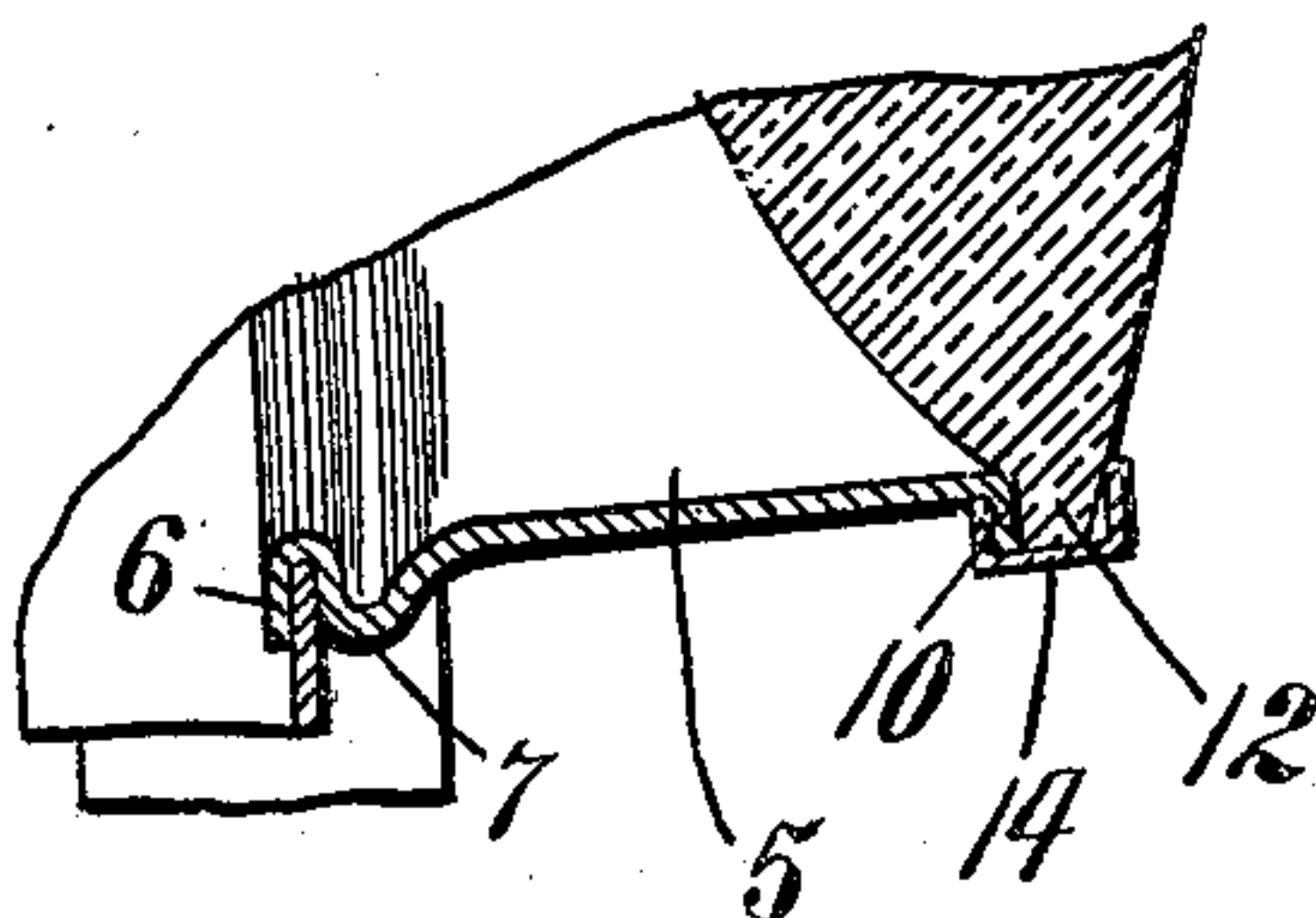


FIG. 3



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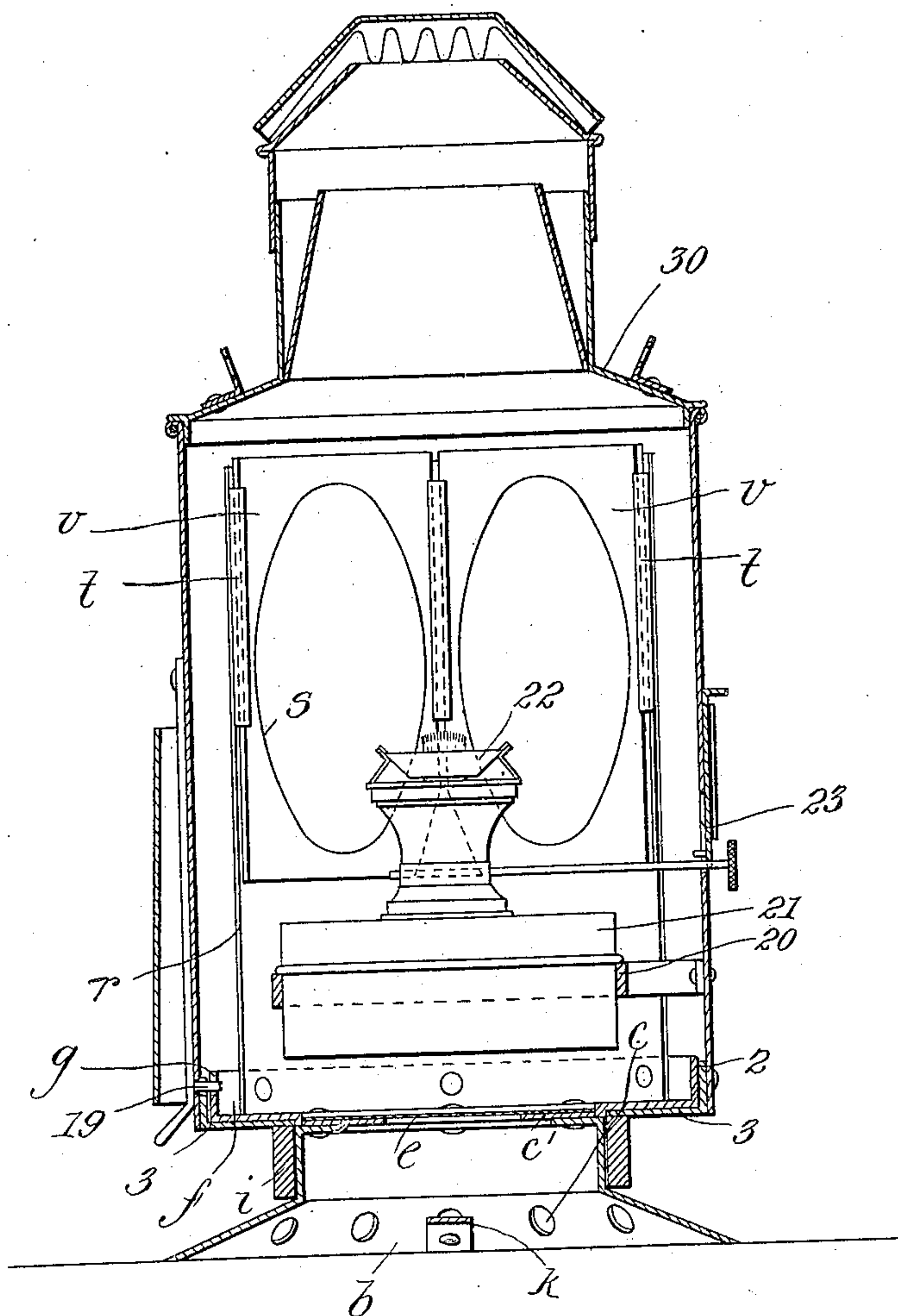


Fig. 4.

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CLASSIFICATION AND MARKER RAILWAY-LAMP.

No. 887,122.

Specification of Letters Patent.

Patented May 12, 1908.

Application filed March 19, 1906. Serial No. 306,887.

To all whom it may concern:

Be it known that I, HIRAM LUCAS PIPER, of the city of Montreal, Province of Quebec, Canada, have invented certain new and useful Improvements in Classification and Marker Railway-Lamps.

My invention has for its object to provide a combined classification and marker lamp adapted to be adjusted to enable either two white or two green lights or two green lights and a red light to be shown without adding any parts thereto or removing parts therefrom.

For full comprehension, however, of my invention reference must be had to the accompanying drawings forming a part of this specification, in which similar reference characters indicate the same parts and wherein

Figure 1 is a vertical sectional view of a lamp constructed according to my invention; Fig. 2 is a horizontal sectional view taken on line A. A. Fig. 1; Fig. 3 is a detail sectional view illustrating the connection between the lens-ring and the shell, and Fig. 4 is a vertical sectional view of the lamp, illustrating particularly the manner of supporting the illuminating device.

My improved lamp comprises a base mounted rotatably in a bracket and carrying colored glasses, and a cylindrical shell mounted rotatably upon such base and carrying lenses, and an oil burner or other device for radiating light, carried preferably by the shell a short distance above the base which is perforated to admit air.

The base consists of a circular section with a downwardly flared edge *b* formed with a series of holes *c*, and the middle thereof is upset and has riveted thereto a circular plate *c'* with its central portion depressed and conforming to the upset portion of the section such upset and depressed portions conjointly constituting an annular recess to be presently further alluded to. The circular plate *c'* is formed with a central opening covered with a sheet *e* of gauze stretched across the same. Slightly more than one half of the edge of this circular plate is formed with an upwardly projecting flange *f* having a pair of notches *g* at diametrically opposite points relatively to the base. The neck of this base is encircled and rotatably supported by the collar *i* of the usual marker bracket *j* adapted to be inserted in either one of the sockets ordinarily carried by the locomotive or car.

A latch carried by the base and adapted to

engage the collar consists of a resilient strip *k* of metal secured at one end to the underside of the flared edge *b* and has a thumb piece *m* projecting upwardly through one of the holes in the said flared edge. The lower edge of the collar is notched as at *n* and a pin projection *o* upon the resilient strip normally projects through a hole *p* in the base and engages one of the notches in the collar, thereby retaining the base (and consequently the complete lamp) in any desired horizontal angular position to which it may be adjusted.

A member for carrying colored glasses is mounted rigidly upon the base and consists of a curved plate *r* having a pair of oval openings *s* at each side of each of which a pair of guiding ribs *t* are located, and a pair of small brackets *u* are secured to the plate beneath the oval openings, while a pair of curved green glasses *v* are slid into the guiding ribs *t* and rest upon the brackets *u*.

A shell encircling the member above mentioned is mounted rotatably upon the base concentrically to such member and carries the lenses of which there are preferably three. This shell is of cylindrical form and its lower end is riveted to an upwardly projecting flange 2 formed integrally with an annular plate 3 set rotatably within the annular recess (above mentioned) of the base. This shell is formed with, preferably, three oval apertures 4 to the edges of which the flared lens-rings 5 are rigidly secured by having their edges formed with flanges 6 and their perimeters adjacent to such edges having beads 7, the edges of the said apertures are received between the beads and flanges and the latter are flattened against such edges thereby firmly clamping the said edges of the apertures and retaining the lens-rings rigidly in place without the use of solder, rivets or the like. The outer edges of the lens-rings are formed with radially extending concave flanges 10 serving as seats for the lenses which have flanges 12 to secure an even fit between such lenses and seats. Interiorly concave open rings 14 are adapted to be drawn tightly around the edges of the seats and the lenses thereon by screws 15 screwed through a pair of brackets 16 secured rigidly to each ring one at one end thereof and the other a short distance from the opposite end. Two of these lenses are made of colorless glass to enable them to, when necessary, show a white light and the other lens (40) is made to (when not neutralized) always show a red

light the latter consisting preferably of red glass.

A resilient vertical strip 17 is secured at its upper end to the shell in vertical line with the hole 18 in the latter, and normally lies with a stud 19 thereon projecting through such hole into position to engage either one of the notches *g* in the flange *f* of the base. This strip is protected from damage by a tubular guard 42 soldered to the exterior of the shell.

A bracket 20 is bolted to the inside of the shell and supports the oil receptacle 21 and burner 22 mounted on the latter, while an opening 23 in such shell allows the handle for raising and lowering the wick to be projected therethrough.

Peep holes 26 and 27 are formed respectively in the shell and the member which carries the colored glasses, the former (26) being closed by a glass disk. The purpose of these peep holes is to enable the burner to be viewed without opening the lamp.

The cover 30 may be of any ordinary construction, and it is locked closed by a spring latch 36 as usual.

When my combined classification and marker lamp is used as a classification lamp, two lamps as usual employed, and, as before mentioned, they are carried in sockets one on each side of the boiler or on the hand rails.

To change the signal given by my improved lamp the stud 19 should be disengaged from the flange *f* thus freeing the shell which can then be swung round until the lenses coincide with the required colored glasses and when in proper position the stud will engage the other notch of the flange *f* and the shell and the member carrying such green glasses will be locked in this relation. The thumb-piece *m* is then depressed thereby disengaging the pin projection *o* from the notches in the collar *i*, and while still holding the pin projection out of engagement, the complete lamp is turned to the required signaling position.

When necessary the permanent red light can be turned towards the engine or train and will then be invisible from ahead, rear, or the side, while the said permanent red can be neutralized when occasion requires by one of the green glasses.

To signal that the train or engine is "backing up" the lenses and green glasses are left in the same relative positions as for "forward section", and the complete lamp is swung to positions (relatively to the direction of travel of the train or engine) with red shown towards the rear, green forward and green to the side.

The main construction may be used as a marker lamp.

What I claim is as follows:—

1. A combined classification and marker railway lamp comprising a base, a bracket horizontally rotatably supporting such base,

means detachably retaining the base in different angular positions relatively to the bracket, a member carried by the base, colored glasses carried by such member, a shell encircling such member and mounted rotatably upon the base, means detachably retaining the shell in different angular positions relatively to the base, a plurality of lenses carried by the shell, a bracket projecting from the shell, illuminating means carried by such bracket and a spindle for operating the illuminating device projecting through the shell.

2. A combined classification and marker railway lamp comprising a base, a bracket horizontally rotatably supporting such base, means detachably retaining the base in different angular positions relatively to the bracket, a member carried by the base, colored glasses carried by such member, a shell encircling such member and mounted rotatably upon the base, means detachably retaining the shell in different angular positions relatively to the base, a plurality of lenses carried by the shell, and illuminating means within the shell.

3. A combined classification and marker railway lamp comprising a base, a bracket horizontally rotatably supporting such base, means detachably retaining the base in different angular positions relatively to the bracket, a curved member secured rigidly upon the base concentrically thereto and near its periphery, a pair of colored glasses carried by such member, a shell encircling such member concentrically and mounted rotatably upon the base, means detachably retaining the shell in different angular positions relatively to the base, a pair of colorless lenses and a permanently colored lens, all of such lenses being carried by the shell, and illuminating means within the shell.

4. In a combined classification and marker railway lamp, the combination of a base consisting of two members secured together and presenting a horizontal annular recess, a shell, a horizontal annular interiorly projecting flange at the lower end of such shell and contained revolubly in the said recess, a plurality of colorless lenses mounted in the perimeter of such shell, illuminating means within the shell, a device mounted rigidly upon the base between the shell and illuminating means and having colored glasses mounted therein, means locking the shell in different positions to which it may be revolved relatively to the base.

In testimony whereof, I have signed my name to this specification, in the presence of two subscribing witnesses.

HIRAM LUCAS PIPER.

Witnesses:

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S. CLELAND KING.