

No. 724,169.

PATENTED MAR. 31, 1903.

F. W. DRESSSEL.
SIGNAL LAMP FOR RAILWAY CARS.

APPLICATION FILED SEPT. 9, 1902.

NO MODEL.

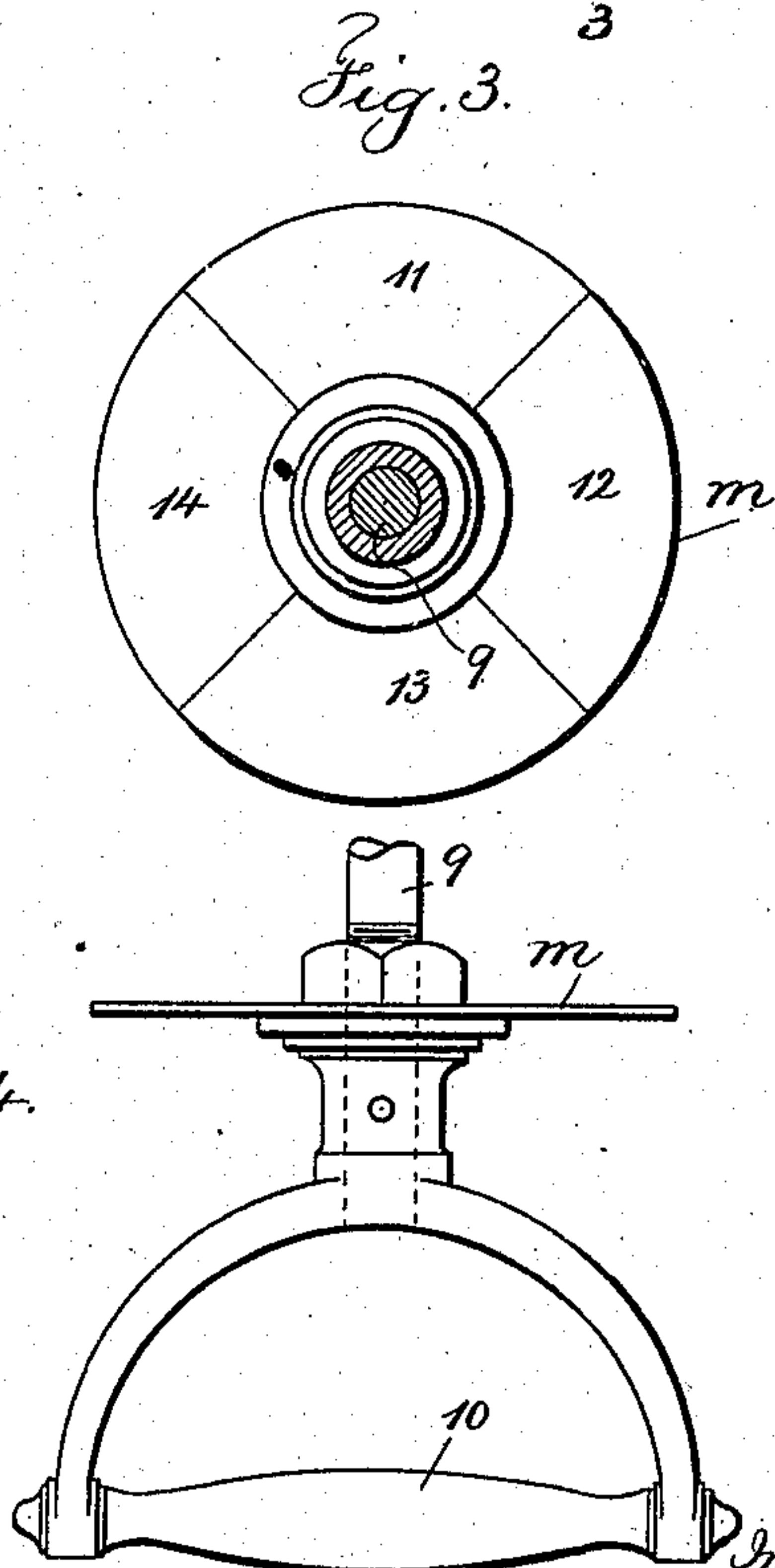
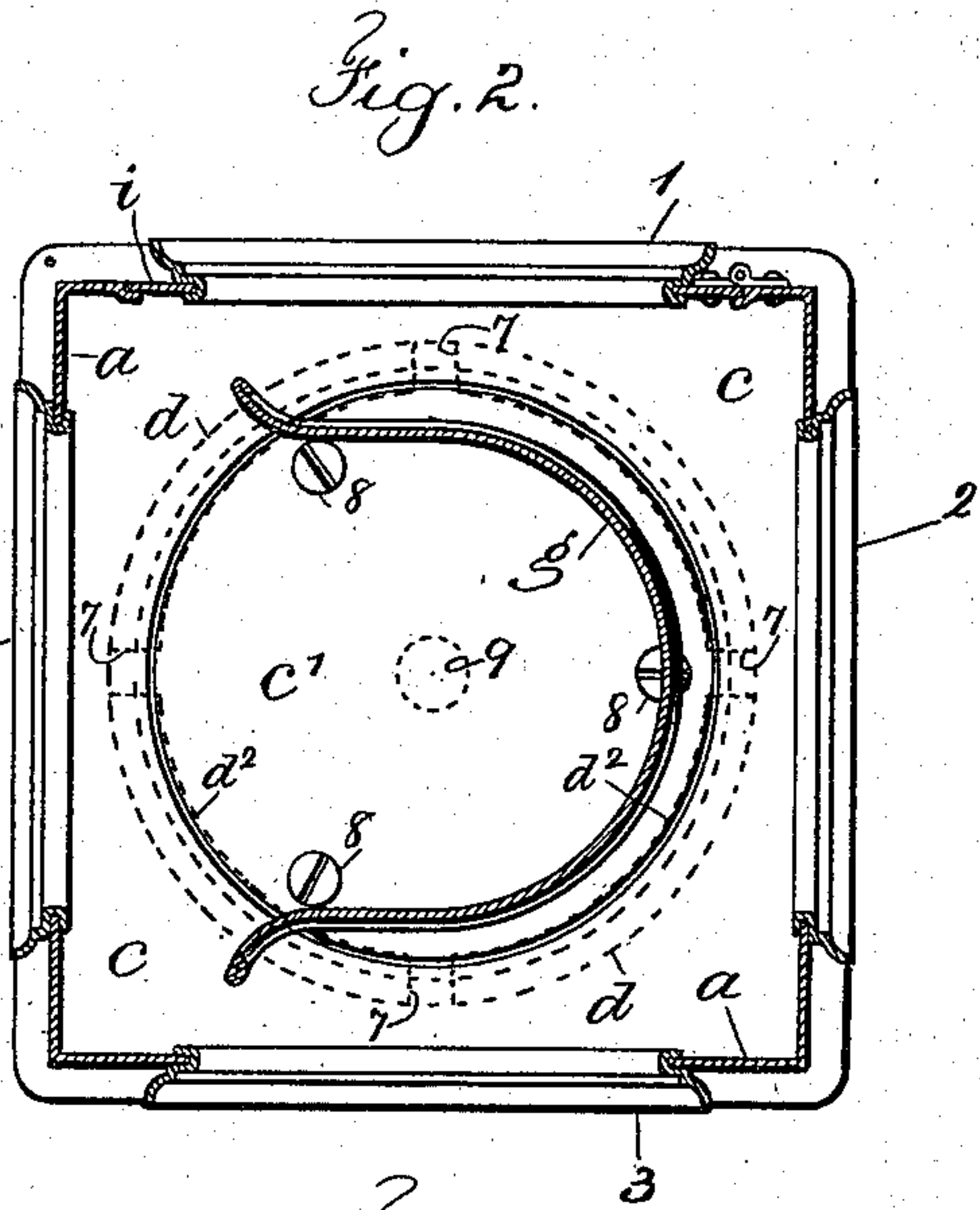
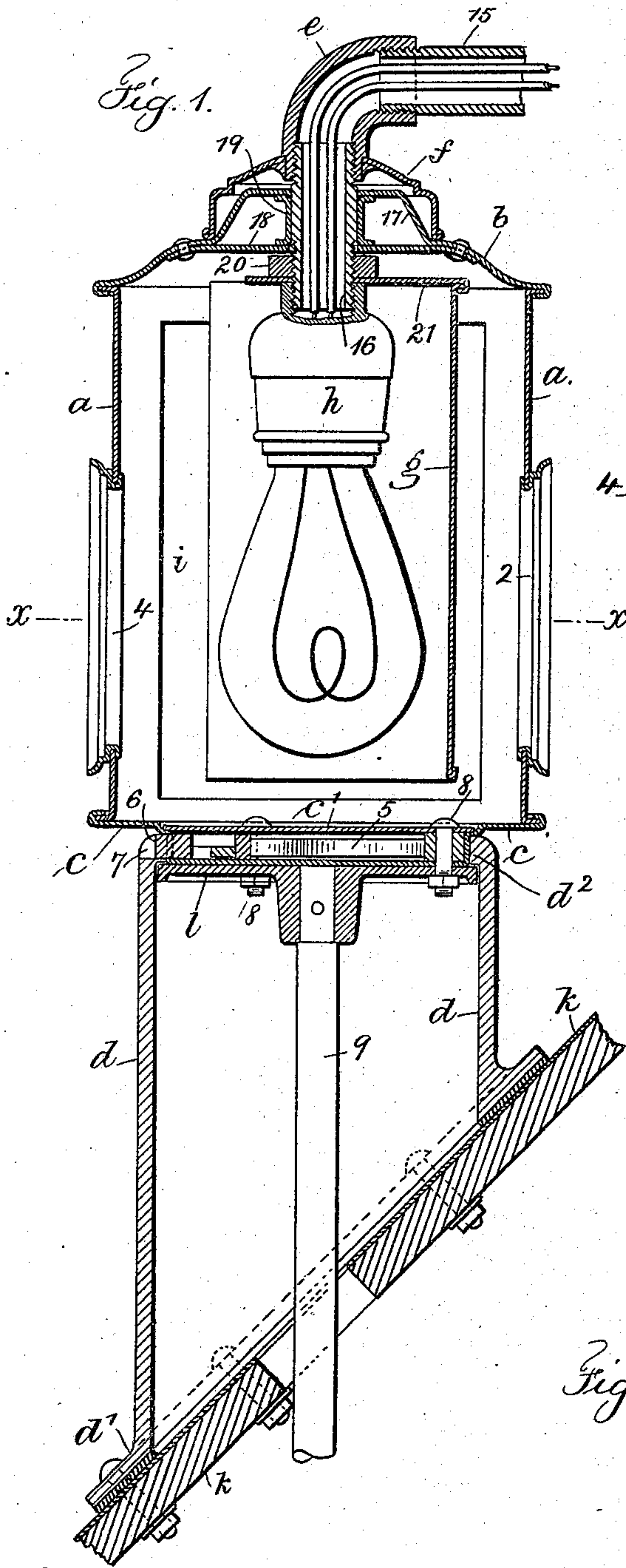
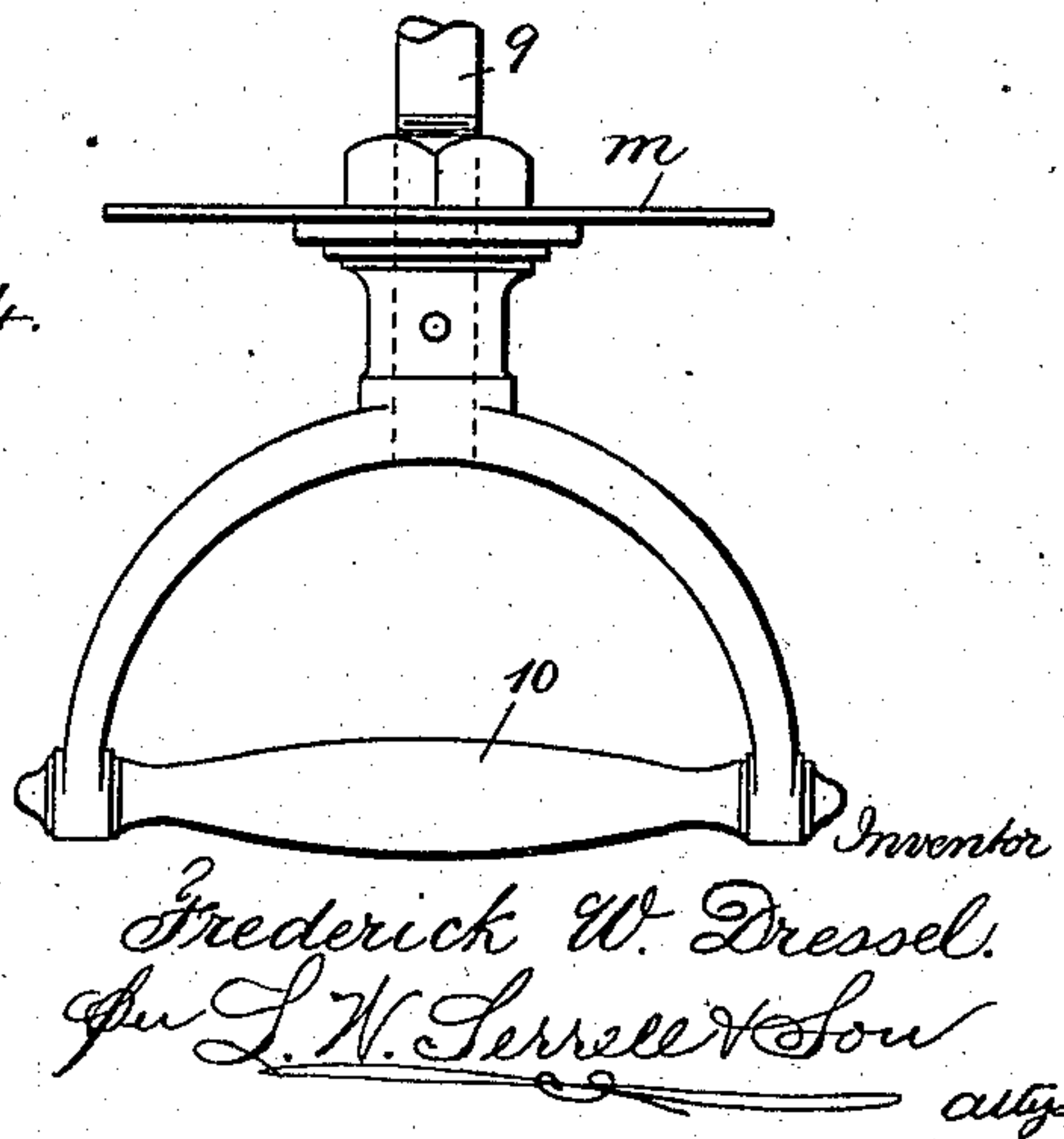


Fig. 4.



Witnesses

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UNITED STATES PATENT OFFICE.

FREDERICK W. DRESSEL, OF NEW YORK, N. Y., ASSIGNOR TO THE DRESSEL RAILWAY LAMP WORKS, A CORPORATION OF NEW YORK.

SIGNAL-LAMP FOR RAILWAY-CARS.

SPECIFICATION forming part of Letters Patent No. 724,169, dated March 31, 1903.

Application filed September 9, 1902. Serial No 122,646. (No model.)

To all whom it may concern:

Be it known that I, FREDERICK W. DRESSEL, a citizen of the United States, residing in the borough of Manhattan, city, county, and State of New York, have invented an Improvement in Signal-Lamps for Railway-Cars, of which the following is a specification.

My invention relates to railway signal-lamps, and particularly to rotatable signal-lamps placed on the tops of cars and adapted to be turned horizontally in either direction from within the cars; and the same is an improvement upon the device shown and described in Letters Patent No. 570,156, granted to C. H. Dressel, October 27, 1896. In the device of this patent the lamp-body was supported by a ring provided with feet or legs secured to the roof of the car or caboose and the operating-rod simply passed through the roof. In winter snow and ice were liable to collect beneath the lamp, and at all seasons water was liable to follow down the rod and enter the car. My present invention relates especially to devices for overcoming these difficulties, to means for holding the light stationary within the rotatable lamp-body, and to means for shutting the light off from all but one of the number of lenses which the lamp-body may contain.

In carrying out my invention I employ a lamp-body provided with suitable lenses of different colors, a tubular cylindrical support of cast metal having one end formed at an inclination and flanged for connection to the roof of a car or caboose and the other and upper end with a notched inwardly-extending flange, the said lamp-body being connected to and fitting rotatably within the said support and there being a connection from the said lamp-base to the interior of the car for rotating the lamp-body. I also employ a stationary cap covering the lamp-body and connected to the support for the light or lamp employed within the lamp-body, and a stationary shield is secured to the lamp-support, which shield extends partially around said lamp and shuts off the light from all but one of the lenses in the lamp-body, the shield also acting as a reflector.

In the drawings, Figure 1 is a vertical section illustrating my invention. Fig. 2 is a

sectional plan on the line xx of Fig. 1. Fig. 3 is an inverted plan of the disk, and Fig. 4 is an elevation of the disk and handle by which the lamp-body is rotated.

a represents a lamp-body, preferably made of sheet metal and conveniently square in cross-section. The lamp-body is provided with frames 1 2 3 4, secured in openings and adapted to receive different-colored lenses.

b represents the cover of the lamp-body a , and c its base. I provide a tubular cylindrical support d , the lower end of which is formed at an inclination and provided with a flange d' , adapted to be connected to the roof k of a car or caboose in any desired manner, with an intervening washer of waterproof material. The upper end of the support d has an inturned flange d^2 , and the base of the lamp-body fits within this inturned flange and is revoluble therein.

The base c is depressed and is provided with a plate c' , between which parts are a spring 5 and catch-plate 6, and the inturned flange d^2 of the support is provided with notches 7. A disk l , in diameter agreeing with the interior diameter of the support d , comes close to the under surface of the flange d^2 , and this disk is connected to the base c and plate c' by means of bolts 8, which also secure the spring 5 and catch-plate 6 in place. A rod 9 is connected at its upper end to the disk l and extends down through the tubular support d to the interior of the car and terminates in a handle 10, by which the rod and lamp-body are rotated. The rod 9 is fitted with a disk m , preferably divided into quadrant surfaces 11, 12, 13, and 14, which are colored correspondingly to the colors of the respective lenses and which in position upon the rod 9 come directly below the lenses of corresponding colors in order that the light being used as a signal may be indicated from the interior of the car. Some of the parts heretofore described are the same as those shown, described, and claimed in Letters Patent No. 584,110, granted June 8, 1897, to C. H. Dressel.

The stationary lamp-support comprises an elbow e , a tubular connection 15, which extends to and is secured in the roof of the car, and a tubular extension 16, secured to the elbow e . The cover of the lamp-body has a

raised integral portion 17 and a plate 18, and centrally between these parts a sleeve 19 is employed, and these parts are preferably connected by solder. The extension 16 passes
5 through the parts of the cover *b* and the sleeve 19, and the position of the extension 15 at its free end is determined thereby and vertical movement prevented by a nut 20, the lower part of the extension 16 being adapted
10 to receive a lamp-socket *h*.

g represents a shield partially surrounding the lamp contained in the socket *h*. The shield is provided with an integral top 21 and may be securely held in place by passing over
15 the extension 16, between the nut 20 and the lamp-socket *h*; but I prefer to permanently connect the nut 20 and shield together.

f represents a cap which is secured to the elbow *e* and fits over the raised portion 17 of
20 the cover *b* to make the lamp-body both water and dust proof. One of the sides of the lamp-body may be conveniently provided with a door *i*, by which access to the interior of the lamp-body is easily gained for the purposes
25 of changing lamps or cleaning the reflector.

In the operation of the structure the extension 15, elbow *e*, tubular part 16, shield *g*, nut 20, socket *h*, and lamp remain stationary and fixed, while the lamp-body, with the colored
30 lenses, changes position as rotated by the rod 9 and handle 10, the position of the lamp-body being determined by the relative position of the colored disk *m*, as hereinbefore described.

35 I claim as my invention—

1. In a railway signal-lamp adapted for use on the roofs of cars, the combination with a fixed support, of a revoluble lamp-body mounted thereon and adapted for varicolored
40 lenses, means for rotating the lamp-body and for determining its several positions, a cover for the lamp-body having a tubular portion forming a guide, a stationary support for an incandescent or other lamp or light secured
45 to the roof of the car, a tubular extension thereof passing through the top of the lamp and means supported thereby within the lamp-body for directing the light through only one of the lenses thereof at a time.

50 2. In a railway signal-lamp adapted for use on the roofs of cars, the combination with a fixed support, of a revoluble lamp-body mounted thereon and adapted for varicolored lenses, means for rotating the lamp-body and
55 for determining its several positions, a cover for the lamp-body having an integral raised portion, a cross-piece secured thereto and a centrally-located sleeve between the raised portion and the cross-piece forming a guide, a stationary support secured to the roof of
60 the car for an incandescent or other lamp or light, an extension-piece therefrom passing through the sleeve in the top of the lamp-body and guided thereby, a cap secured to said lamp-support and fitting over the integral raised portion of the cover, and means
65 secured to said stationary support for direct-

ing the light through only one of the lenses at a time.

3. In a railway signal-lamp adapted for use
70 on the roofs of cars, the combination with a fixed support, of a revoluble lamp-body mounted thereon and adapted for varicolored lenses, means for rotating the lamp-body and for determining its several positions, a cover
75 for the lamp-body having an integral raised portion, a cross-piece secured thereto and a centrally-located sleeve between the raised portion and the cross-piece forming a guide, a stationary support secured to the roof of
80 the car for an incandescent or other lamp or light, an extension-piece therefrom passing through the sleeve in the top of the lamp-body and guided thereby, a cap secured to said lamp-support and fitting over the integral
85 raised portion of the cover, and a shield secured to the extension-piece of the stationary support and extending substantially three-quarters of the way around the light as a means for directing said light through only
90 one of the lenses at a time.

4. In a railway signal-lamp adapted for use on the roofs of cars, the combination with a fixed support, of a revoluble lamp-body mounted thereon and adapted for varicolored
95 lenses, means for rotating the lamp-body and for determining its several positions, a cover for the lamp-body having a tubular portion forming a guide, a stationary support for an incandescent or other lamp or light secured
100 to the roof of the car, a tubular extension thereof passing through the top of the lamp and means supported thereby within the lamp-body for directing the light through only one of the lenses thereof at a time, a handle with-
105 in the car connected to the means for rotating the lamp-body, and a disk having on the surface thereof various colors corresponding in tint and position with the various lenses so as to visually indicate within the car the
110 lens through which the light is caused to shine.

5. In a railway signal-lamp adapted for use on the roofs of cars, the combination with the lamp-body, a stationary support secured to
115 the roof of the car extending through the top of the lamp-body and carrying a light, of a tubular cylindrical support having one end formed at an inclination and adapted for connection to the roof of the car, and the other
120 and upper end with a notched inwardly-extending flange, and means connected to the bottom of the lamp-body and received within the upper end of the tubular cylindrical support whereby said lamp-body is revoluble in
125 said support, and means for turning the lamp-body, substantially as set forth.

6. In a railway signal-lamp adapted for use on the roofs of cars, the combination with the lamp-body, a stationary support secured to
130 the roof of the car extending through the top of the lamp-body and carrying a light, of a tubular cylindrical support having one end formed at an inclination and adapted for con-

nection to the roof of the car and the other
and upper end with a notched inwardly-ex-
tending flange, a disk within the tubular cy-
lindrical support and means for connecting
5 the same to the bottom of the lamp-body, a
spring pawl device adjacent thereto and en-
gaging the notched inturned flange of said
tubular cylindrical support, and a rod con-
10 nected to said disk and extending down
through the tubular cylindrical support and
opening in the roof of the car, within the car,
and means at the lower end of said rod for
turning the same and the lamp-body, sub-
stantially as set forth.

15 7. In a railway signal-lamp adapted for use
on the roofs of cars, the combination with the
lamp-body, a stationary support secured to
the roof of the car extending through the top
of the lamp-body and carrying a light, of a
20 tubular cylindrical support having one end
formed at an inclination and adapted for con-
nection to the roof of the car, and the other
and upper end with a notched inwardly-ex-
tending flange, a disk within the tubular cy-
25 lindrical support, and means for connecting
the same to the bottom of the lamp-body, a
spring pawl device adjacent thereto and en-
gaging the notched inturned flange of said

tubular cylindrical support and a rod con-
30 nected to said disk and extending down
through the tubular cylindrical support and
opening in the roof of the car, within the car
and a handle at the lower end of said rod to
be grasped by the hand, and a disk adjacent
35 to the handle having on the under surface
thereof colors in divisions agreeing in tint
and in location with the lenses of the lamp-
body, substantially as set forth.

8. In a railway signal-lamp adapted for use
on the roofs of cars, the combination with a 40
lamp-body, of a tubular cylindrical support
having one end formed at an inclination and
adapted for connection to the roof of the car,
a vertical rod passing through the tubular
cylindrical support and through the roof of 45
the car, devices connected to the upper end
of said rod within said tubular cylindrical
support, and connections therefrom to the
lamp-body whereby the lamp-body is sup-
ported and may be rotated as desired. 50

Signed by me this 5th day of September,
1902.

FREDERICK W. DRESSEL.

Witnesses:

A. H. SERRELL,
S. T. HAVILAND.