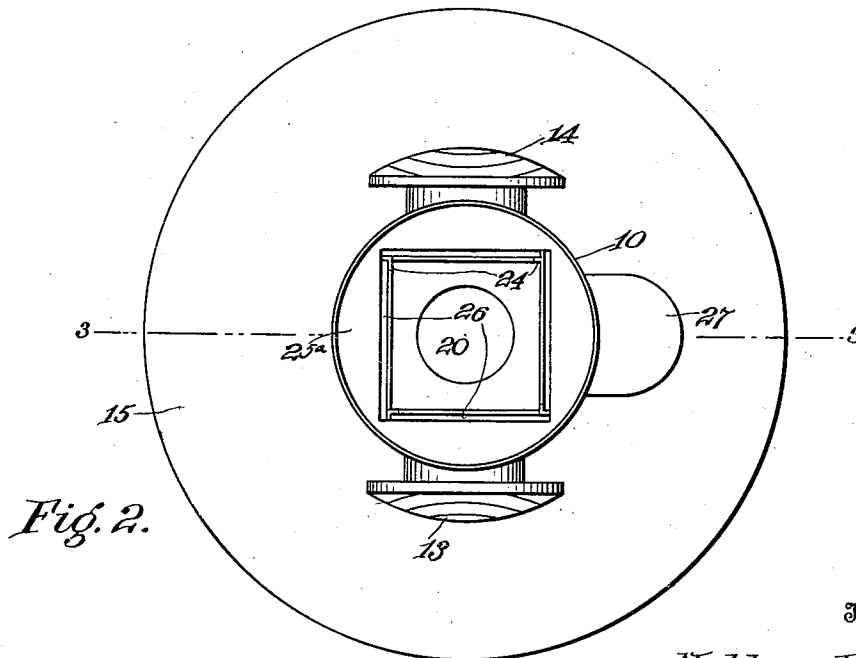
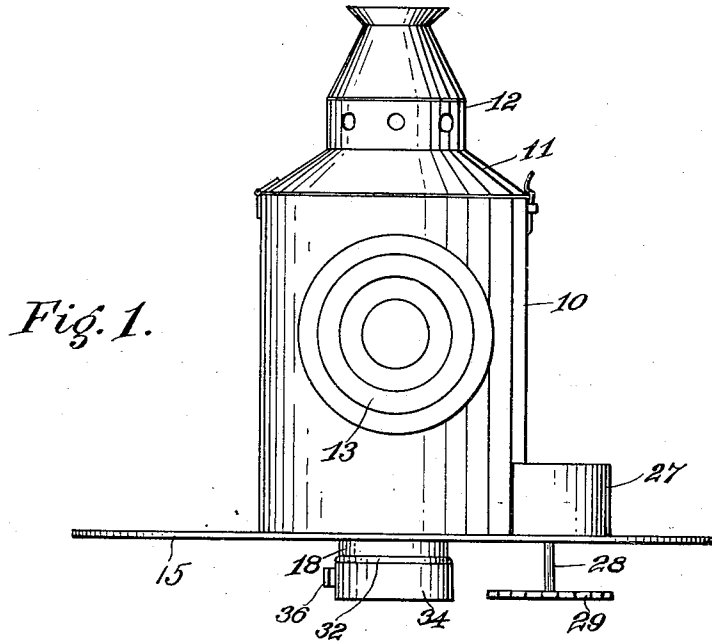


N. KRAUS & C. A. PHELPS.
SIGNAL LAMP.
APPLICATION FILED AUG. 19, 1912.

1,064,230.

Patented June 10, 1913.
2 SHEETS—SHEET 1.



Witnesses
Q. M. Minnegen
S. J. Lehrer

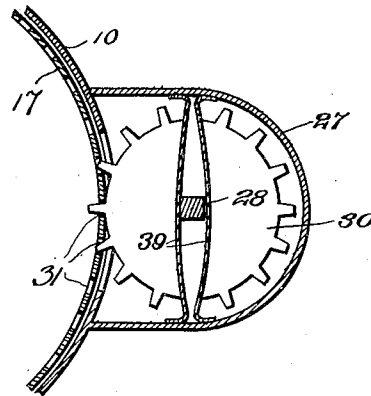
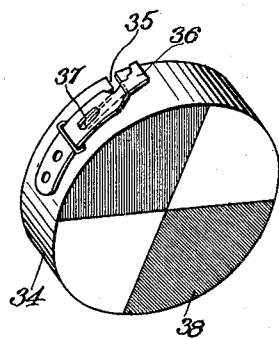
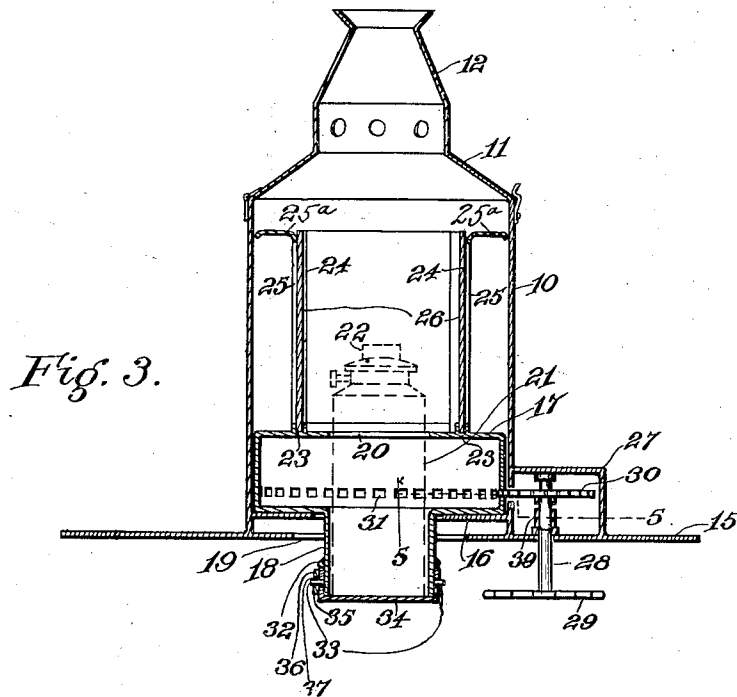
Inventors
and Nathan Kraus.
Clarence A. Phelps.
By Eugene H. Brown
Attorney

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2 SHEETS—SHEET 2.



Inventors:

Nathan Kraus.
and Clarence A. Phelps.

Witnesses
R. M. Minwergen
S. J. Leher

Engineer

Attorney

UNITED STATES PATENT OFFICE.

NATHAN KRAUS, OF INDIANA HARBOR, AND CLARENCE A. PHELPS, OF HAMMOND,
INDIANA.

SIGNAL-LAMP.

1,064,230.

Specification of Letters Patent.

Patented June 10, 1913.

Application filed August 19, 1912. Serial No. 715,815.

To all whom it may concern:

Be it known that we, NATHAN KRAUS and CLARENCE A. PHELPS, citizens of the United States, residing at Indiana Harbor and Hammond, respectively, in the county of Lake and State of Indiana, have invented certain new and useful Improvements in Signal-Lamps, of which the following is a specification.

10 This invention relates to lamps of that kind which are mounted on the roof of a caboose, and are adapted to throw different colored rays of light to the front or the rear.

It is the object of the present invention to simplify the color-slide shifting means, so that by turning a hand-wheel, the operator, while in the caboose, may change the position of the slides and rest assured that the desired colors are in display position.

20 With this object in view, the invention consists in a novel combination and arrangement of parts to be hereinafter described and claimed, reference being had to the accompanying drawings, in which—

25 Figure 1 is an elevation of the lamp. Fig. 2 is a plan view thereof. Fig. 3 is a vertical section on the line 3—3 of Fig. 2. Fig. 4 is a detail in perspective showing the indicating device. Fig. 5 is a horizontal section on the line 5—5 of Fig. 3.

30 Referring specifically to the drawing, 10 denotes the casing of the lamp, the same having a hinged cover 11 provided with a ventilator 12 as usual. The side of the lamp casing is provided with two opposite lenses 13 and 14, respectively, and at the base of the casing is a circular plate 15 which serves as a support for the lamp.

40 In the lower part of the lamp casing is an annular shelf 16, said shelf being mounted on the casing wall. On this shelf is supported a slide carrier comprising a hollow drum 17 having a cylindrical tube 18 depending from the bottom, at the center thereof, said tube passing through a central opening 19 in the base plate 15. The top of the drum has a central opening 20 having the same diameter as the tube 18, said tube and opening being in alinement, and designed to hold the oil font 21 and the burner 22.

55 Soldered or otherwise fixed to the top of the drum 17 are short flanges which form guide grooves 23, four in number, which are arranged and connected to form a square.

From each corner of the square rise two vertical guides 24 and 25, respectively, arranged side-by-side and at a right angle to one another. These guides extend nearly to the top of the lamp casing 10. Between the guides, and the wall of the lamp casing, at the top of the former, is a plate 25^a, the edges of said plate which abut against the casing wall and the guides being slightly rounded to curve downward.

60 The grooves 23 and guides 24 and 25 are adapted to hold transparent slides 26, and as four of the guide devices are provided, different colored slides may be employed. The burner 22 is surrounded by the slides. The rounding edges of the plate 25^a facilitate the insertion of the slides.

70 Upon turning the drum 17, the slides 26 will also turn, and it is therefore possible to place any two of the slides into display position between the burner 22 and the lenses 13 and 14.

75 The following means are provided for rotating the drum 17. To the outside of the lamp casing 10, at the base thereof, and above the plate 15, is soldered or otherwise fastened a housing 27 into which extends a rotatable vertical spindle 28 which passes through an opening in the plate 15, and has below the same a hand-wheel 29. On the spindle, inside the housing, is a toothed wheel 30 which extends through a slit in the wall of the lamp casing, and has its teeth in mesh with a circular series of apertures 31 in the slide of the drum 17. It will therefore be seen that the drum may be rotated by turning the hand-wheel 30 whereby the slides 26 are shifted for the purpose hereinbefore described.

90 Below the base plate 15, the tube 18 has an external annular bead 32 and below the latter two diametrically opposite projecting pins 33 for attaching the bottom or pan member 34 of the font 21, said pan having two diametrically opposite bayonet slots 35 to receive the pins. Adjacent to one of these slots is mounted a spring latch 36 having an aperture 37 in which one of the protruding pins is adapted to seat.

105 The under side of the pan 34 is marked off into four sectors 38 which are colored to correspond to the colors of the slides 26 directly above the respective sectors, so that the latter indicate which slides face the lenses 13 and 14, as the moving parts are rotated. In this 110

manner, the operator within the car may know whether the proper slides face the required direction.

In order to prevent the slide carrier from rotating when it is jarred while the car is in motion, there are provided two spring strips 39 which are mounted in the housing 27, said strips extending across the housing and being made fast at their ends to the wall thereof. The spindle fits between the spring strips intermediate the ends thereof, it being squared at this point as clearly shown in Fig. 5 of the drawing. The strips press against the two opposite sides of this squared portion of the spindle, in view of which, they will offer a resistance to the rotation of the spindle, so that the jar will not tend to rotate the slide carrier.

The lamp herein described is simple in construction and can be cheaply manufactured, and it effectually serves the purpose for which it is designed.

We claim:

1. A lamp comprising a casing containing a burner and an annular shelf, and fitted with lenses, a rotatable carrier mounted in the casing, said carrier comprising a hollow drum supported on the shelf, and having a top opening and a depending bottom tube in line with said opening, a font mounted in said tube and opening, means for detachably fastening the font to the tube, colored slides on the carrier, and means for rotating the carrier.

2. A lamp comprising a casing containing a burner, and fitted with lenses, a rotatable carrier mounted in the casing, said carrier comprising a hollow drum having

side apertures, and a top opening and a depending tube in line with said opening, a font mounted in said tube and opening, means for detachably fastening the font to the tube, colored slides on the carrier, a toothed wheel engageable with the side apertures of the drum, and means for operating the toothed wheel.

3. A lamp comprising a casing containing a burner, and fitted with lenses, a rotatable carrier mounted in the casing, said carrier comprising a hollow drum having side apertures, and a top opening and a depending tube in line with said opening, a font mounted in said tube and opening, means for detachably fastening the font to the tube, colored slides on the carrier, a toothed wheel engageable with the side apertures of the drum, means for operating the toothed wheel, and indicating devices on the font for the slides.

4. A lamp comprising a casing containing a burner, and fitted with lenses, a rotatable carrier mounted in the casing, colored slides on the carrier, a toothed wheel operatively engaging the carrier, a spindle carrying said wheel, said spindle having a squared portion, spring strips in engagement with opposite sides of the squared portion of the spindle to resist rotation thereof, and means for operating the spindle.

In testimony whereof we affix our signatures in presence of two witnesses.

NATHAN KRAUS.

CLARENCE A. PHELPS.

Witnesses:

H. G. BATCHELOR,

S. J. LEHRER.