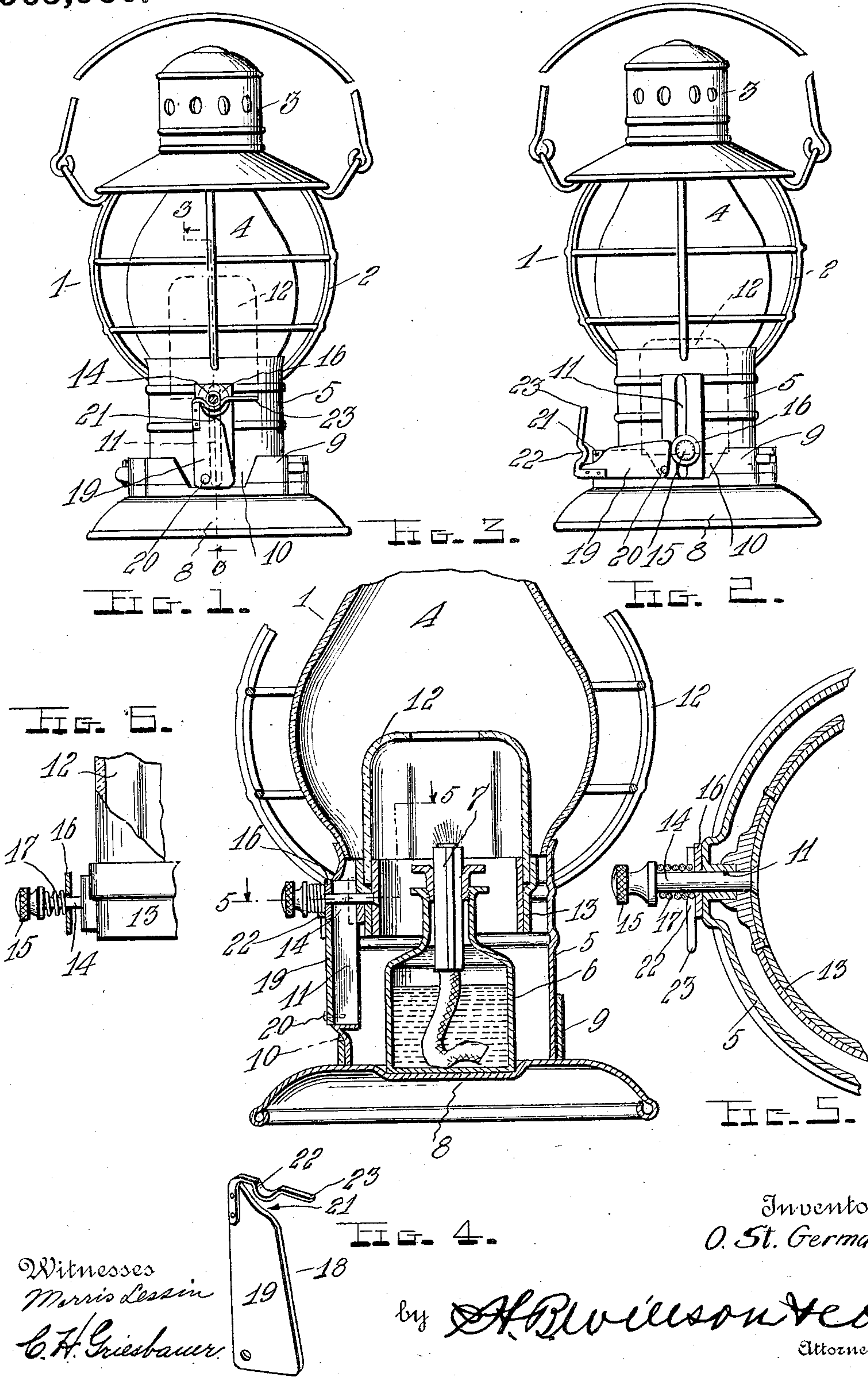


O. ST. GERMAIN.
SIGNAL LANTERN.
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965,960.

Patented Aug. 2, 1910.



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UNITED STATES PATENT OFFICE.

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SIGNAL-LANTERN.

965,960.

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To all whom it may concern:

Be it known that I, OLIVER ST. GERMAIN, a citizen of the United States, residing at Havre, in the county of Chouteau and State of Montana, have invented certain new and useful Improvements in Signal-Lanterns; and I do declare the following to be a full clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in signal lanterns which are equipped with an adjustable colored shade whereby it may be made to display a white or a colored light at the will of the user.

The object of the invention is to provide a simply constructed and efficient device of this class in which the colored cylinder may be readily raised and lowered when desired and which is provided with simple and efficient means capable of performing the double function of a cylinder support and as a shield for excluding excessive draft from the lantern to prevent its being extinguished.

With this and other objects in view, the invention consists of certain novel features of construction, combination and arrangement of parts as will be more fully described and particularly pointed out in the appended claims.

In the accompanying drawings: Figure 1 is a front elevation of a lantern constructed in accordance with this invention with the colored cylinder in elevated position and the draft plate or shield closed, Fig. 2 is a similar view with the cylinder in lowered inoperative position and the shield open. Fig. 3 is a detail vertical sectional view taken on line 3—3 of Fig. 1, Fig. 4 is a perspective view of the shield detached. Fig. 5 is a detail horizontal sectional view taken on line 5—5 of Fig. 3; Fig. 6 is a detail vertical sectional view.

In the embodiment illustrated a signal lantern 1 is shown constructed similar to the ordinary railroad lantern and comprising a frame 2, a cap 3, a transparent shade or chimney 4, a cylindrical casing 5 arranged within and connected to the frame 2, and a removable oil cup 6 arranged within the cylindrical casing 5 and having a wick tube 7. This oil cup 7 is mounted on a supporting base 8 being preferably made integral therewith. An annular upwardly

projecting flange 9 is fixed to the supporting base 8 and spaced laterally a suitable distance from the oil cup 6 to receive the casing 5, said casing being detachably connected with said flange by any suitable means. This flange 9 has one of its side walls cut out as shown at 10 for a purpose to be described. The casing 5 is provided at the front thereof with a longitudinally disposed slot 11 which extends throughout the greater portion of the width of said casing and is designed to form a guide for a stud carried by the signal cylinder hereinafter to be described.

A cylinder or shade 12 is mounted for vertical adjustment within the casing 5 and shade 4 and is composed of glass, mica or any other suitable material and is preferably colored red to indicate danger. This cylinder 12 is mounted at its lower end on a heavy metallic band 13 and is provided on its outer face with a laterally extending stud 14 which is adapted to project through the slot 11 in the casing 5. The outer end of this stud 14 is provided with a head or knob 15 and a washer 16 is loosely mounted thereon and adapted to move therewith in the slot 11. A coiled spring 17 is arranged on said stud 14 between the head or knob 15 thereof and the washer 16 and is adapted to hold the cylinder yieldably in adjusted position against wobbling. This colored shade 12 may be of any desired shape in cross-section and is preferably contracted or drawn in at its top with a small opening of about one inch in diameter to provide for the passage of the smoke from the wick tube. This cylinder 12 surrounds the oil cup and rests on the base 8 when not in use, and is adjustable vertically between the casing 5 and said cup being operable by means of the headed stud 14. When the cylinder 12 is in elevated operative position as shown clearly in Fig. 1 the full length of the slot 11 will be open and the draft passing therethrough is liable to extinguish the lantern unless some means is provided for closing this slot. In the embodiment illustrated a slot shield and cylinder support 18 is shown preferably constructed as shown in detail in Fig. 4, and comprises a plate 19 of any suitable material preferably sheet metal which is pivotally connected at one end to the casing 5 it being here shown connected at its lower left hand corner to said casing by a suitable

pivot 20. This plate 19 is preferably made of a length approximately equal to the length of the slot 11 and is provided at its upper end with a cut out or recessed portion 5 21 to adapt it to swing under the knob 15 of the stud 14. A spring clip 22 is preferably mounted on the upper end of this plate 19 and extends laterally therefrom and is designed to extend under and engage the 10 stud 14 for supporting it in elevated position and thereby reliably holding the cylinder against accidental displacement. When in operative position this plate swings laterally over the slot 11 and closes the same 15 thereby preventing excessive draft within the lantern and the liability of its being extinguished. When it is desired to lower the cylinder 12 the extended end 23 of the clip 22 which forms a finger piece is depressed to 20 disengage the clip from the stud 14 and the plate 19 is swung out of engagement with the stud and slot and the cylinder may then be lowered into inoperative position.

From the foregoing description taken in 25 connection with the accompanying drawings, the construction and operation of the invention will be readily understood without requiring a more extended explanation.

Various changes in the form, proportion 30 and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention as defined in the appended claims.

35 I claim as my invention.

1. A signal lantern having a lamp arranged therein, a casing surrounding said lamp and provided with a vertically extending slot, a transparent shade mounted on 40 said casing, a vertically movable colored shade arranged within said casing and adapted to project upwardly into the transparent shade and provided at its lower end with a laterally extending headed stud 45 adapted to project through the slot in the casing and a spring mounted on said stud between said head and casing for holding said colored shade yieldably in adjusted position.

50 2. A signal lantern comprising a supporting base having a casing extending upwardly therefrom, lighting means arranged within said casing, a transparent shade mounted at the upper end thereof, said casing having a longitudinally extending guide 55 slot formed in one wall thereof, a vertically movable colored shade surrounding the lighting means within said casing and adapted to be raised above the top of said 60 casing, said shade having a laterally extend-

ing stud at the lower end thereof adapted to project through the slot in the casing and provided at its free end with an operating knob, a washer loosely mounted on said stud outside of said casing and a coiled spring 65 arranged on said stud between said knob and said washer to hold said colored cylinder yieldably in adjusted position.

3. A signal lantern comprising a supporting base, lighting means arranged on said 70 base, a metallic casing surrounding said lighting means and provided at its upper end with a transparent shade, said casing having a longitudinally extending slot extending through the greater portion of its 75 length, a vertically movable colored shade arranged within said casing and adapted to project upwardly into the transparent shade when in elevated position, a stud extending 80 laterally from the lower portion of said colored shade through the slot in said casing and a slot shield and casing support mounted to slide over said slot and adapted to extend under said stud when in elevated position to close the slot and support the colored 85 shade in raised or elevated position.

4. A signal lantern provided with a transparent and a colored shade one of which is movable relatively to the other, a casing arranged at the lower end of the fixed shade 90 and a stud extending laterally from the movable shade and projecting through a longitudinally disposed slot within said casing and a shield plate pivotally connected at one end at one side of said slot and adapted to 95 extend under said stud to hold the movable shade in elevated position and close the slot against excessive draft.

5. A signal lantern comprising a transparent and a colored shade one of which is 100 movable relatively to the other, an opaque casing arranged at the lower end of said fixed shade and provided with a longitudinally extending slot, the movable shade being mounted to move vertically within said 105 casing and said fixed shade and provided with a laterally extending stud adapted to project through the slot in said casing, a slot shield and shade support pivotally mounted 110 at one side of said slot and adapted to swing laterally under said stud when in operative position, said shield having a laterally extending clip for engaging said stud.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses. 115

OLIVER ST. GERMAIN.

Witnesses:

E. K. BRADLEY,
E. C. LOUMIER.