

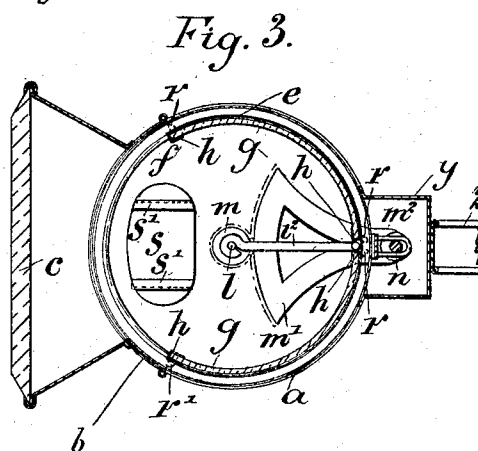
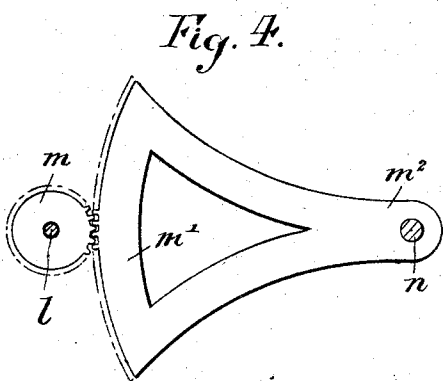
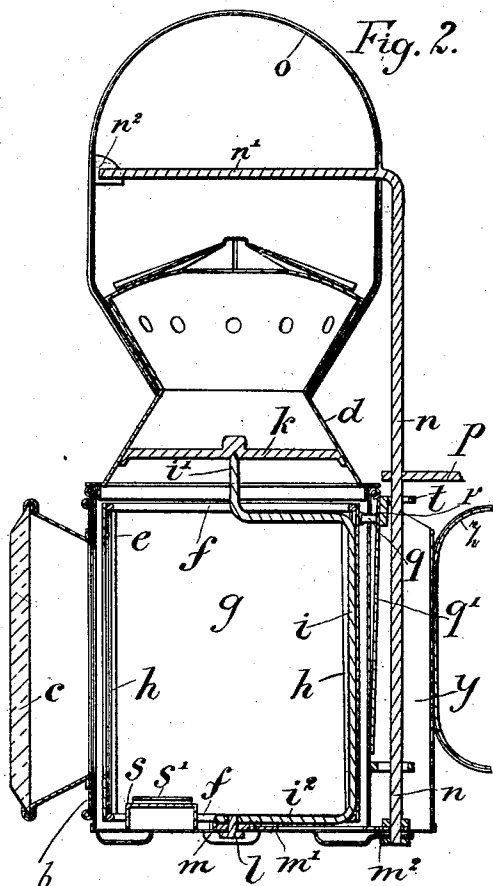
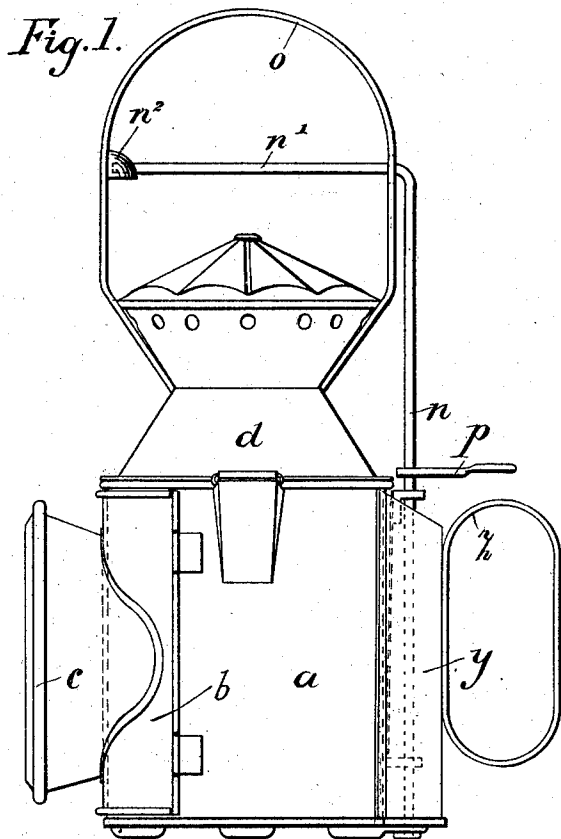
No. 637,912.

Patented Nov. 28, 1899.

H. G. G. WILKINS.
LAMP FOR SIGNALING PURPOSES.

(Application filed July 7, 1899.)

(No Model.)



Witnesses:
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UNITED STATES PATENT OFFICE.

HENRY GEORGE GASTRILL WILKINS, OF LONDON, ENGLAND.

LAMP FOR SIGNALING PURPOSES.

SPECIFICATION forming part of Letters Patent No. 637,912, dated November 28, 1899.

Application filed July 7, 1899. Serial No. 723,093. (No model.)

To all whom it may concern:

Be it known that I, HENRY GEORGE GASTRILL WILKINS, a subject of the Queen of Great Britain and Ireland, residing at Bolingbroke, Ealing Common, London, England, have invented certain new and useful Improvements in Lamps for Signaling Purposes; and I do hereby 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 or connected with tricolor hand signal-lamps, and refers more particularly to the special arrangement of the movable parts, whereby the different colors may be readily turned on or off by the operator with one hand either by means of a handle arranged at the top or at the back of the lamp. By the arrangement of the mechanism of this lamp the desired color is retained and locked in position, while it allows of it being readily released and another color turned on when required.

In order that this invention may be fully understood, I will now proceed to describe same with reference to the accompanying drawings, in which—

Figure 1 is a side elevation of the lamp. Fig. 2 is a longitudinal section through same. Fig. 3 is a cross-section, and Fig. 4 is a detail view, of a part of the operating mechanism.

Like letters of reference indicate corresponding parts throughout the several views.

In carrying this invention into practical effect the lamp comprises an outer cylindrical body or case *a*, fitted with a hinged front plate *b*, carrying the lens and lens-tube *c*, and a hinged top *d*, secured in position by means of a suitable catch, so as to allow of its being opened when required. These parts are of very ordinary and well-known form of construction and are not possessed of novel features.

Within the body of the lamp an internal drum or cylinder *e* is arranged, preferably constructed of thin sheet metal and strengthened by means of wire rings *f*, arranged at the top and bottom thereof. This drum or cylinder is open in the front for about one-third of its circumference to allow of the light clearly passing through the same, while the

other two-thirds is equally divided into two parts, each of which is furnished with an opening or window, and behind each of which a curved plate of suitably-colored and transparent material *g* is arranged within carriers *h*, soldered or secured in any other suitable manner to the body of the drum or cylinder. To the back of the said drum or cylinder *e* a stout wire *i* is soldered, the upper end of which is bent over to the center and then upward at right angles, as at *i'*, where it takes a bearing in a cross-piece *k*, secured to the hinged top or lid *d* of the lamp, while at its lower extremity it is also bent out toward the center of the lamp, as at *i''*, in and around the top of a pin *l*, passing through the bottom of the lamp, and in this manner the internal drum or cylinder is centrally pivoted so as to be free to turn or revolve.

The operating mechanism by means of which the internal drum or cylinder *e* is turned or revolved comprises a small pinion *m*, mounted on the pin *l* and secured to the arm *i''* of the wire *i*, and a toothed quadrant *m'*, the extremity *m''* of which passes through the back of the lamp and is secured to an upwardly-projecting spindle or rod *n*, pivoted to the bottom of the lamp in such a manner as to be free to turn or revolve. This rod *n* extends up parallel with the side of the lamp and is of sufficient length to allow of its being bent over the top, as at *n'*, where it passes through a suitable opening in the upper handle *o*, and it is furnished at a convenient point with a thumb-piece *p*, by means of which it may be readily turned or revolved, as required, and to the necessary degree.

The operation of the parts is as follows: Upon turning the rod or spindle *n*, either by the right-angled arm *n'* or by the thumb-piece *p*, in one direction or the other the toothed quadrant *m'* is also caused to revolve, which movement is imparted to the pinion *m*, thereby causing the inner drum or cylinder *e* to also turn or revolve and bringing one or other of the transparent colored plates *g* between the illuminator and the lens and lens-tube *c*, and in this manner a white light or either one of two colors may be shown. The internal drum or cylinder *e* is preferably locked in the required position upon releasing the operating rod or spindle *n* by means of a small

pin *q*, projecting from the upper extremity of a spring-plate *q'*, which is suitably secured to the back of the lamp. The pin *q* passes through a hole or perforation in the body of the lamp and in the normal position—viz., when a white light is showing—takes between two stops *r*, projecting from the outer surface of the drum or cylinder, while when the said drum or cylinder is turned so as to interpose one of the colored plates *g* between the illuminator and the lens *c* it is locked in position by the pin *q* engaging with a projecting part *r'*, which prevents movement in one direction, while movement in the other direction is prevented by the arm *i*² of the wire *i* coming into contact with the body *s*.

When it is required to release the internal drum or cylinder so as to allow it to be revolved, the rod or spindle *n* is drawn back either by raising the right-angled arm *n'* or by applying pressure to the thumb-piece *p*, when the spring-plate is also drawn back, freeing the pin *q* from the projection *r* or *r'* through the connection-piece *t*.

s is a raised body furnished with grooves or slides *s'* and to which is secured an illuminator or burning lamp of any suitable and well-known construction by means of a projecting part of the lamp or a plate projecting from the bottom thereof taking beneath the slides *s'*, and in this manner it can be readily removed when required.

The lower portion of the rod *n* and the mechanism for locking the internal drum or cylinder *e* in position is inclosed in a metal case *y*, projecting from the back of the lamp and to which a second handle *z* is secured. Stops *n*² are provided on the handle *o* to indicate the central position of the operating-rod *n*.

Having now described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a signal-lamp, the combination, with the lamp-casing, of an internal cylinder provided with openings for varying the light, and a rod or wire secured to the periphery of the cylinder and provided with laterally-project-

ing arms at its ends which are pivoted to the casing, substantially as set forth.

2. In a signal-lamp, the combination, with a lamp-casing having a lens in front and a case *y* projecting at its back, and a handle secured to the said case; of a shutter pivoted in the casing, a toothed pinion secured to the shutter, an operating-rod journaled in the case *y* between the said handle and the lamp-casing and provided with a thumb-piece which projects over the said handle, and a toothed segment secured on the said rod and gearing into the said pinion, substantially as set forth.

3. The combination with a signaling-lamp containing a centrally-pivoted internal drum or cylinder designed to be turned or revolved by a pinion such as *m*, quadrant such as *m'*, through an operating rod or spindle *n* by its right-angled arm *n'* or thumb-piece *p*; of locking mechanism comprising a spring-plate *q'*, projecting pin *q* passing through the back of the lamp and engaging with stops *r* *r'*; and a connection-piece *t*, substantially as set forth.

4. The improvements in signaling-lamps consisting in the arrangement of a centrally-pivoted internal drum or cylinder such as *e* carried by the right-angled extensions *i*¹ and *i*² of the wire *i*, furnished with a front opening and side openings covered by transparent colored plates such as *g* and caused to turn or revolve by a quadrant such as *m'* engaging a pinion *m* and turned by operating-rod *n* through the right-angled arm *n'* or thumb-piece *p* and locked in the required position by a pin *q* projecting from spring-plate *q'* passing through the back of the lamp and engaging stops *r* *r'*, and operated through the connection-piece *t*, the whole combined, arranged and operated substantially as herein described and shown with reference to the accompanying drawings.

In testimony whereof I affix my signature in presence of two witnesses.

HENRY GEORGE GASTRILL WILKINS.

Witnesses:

FREDK. GEO. CASSELL,
WM. H. WOODCOCK.