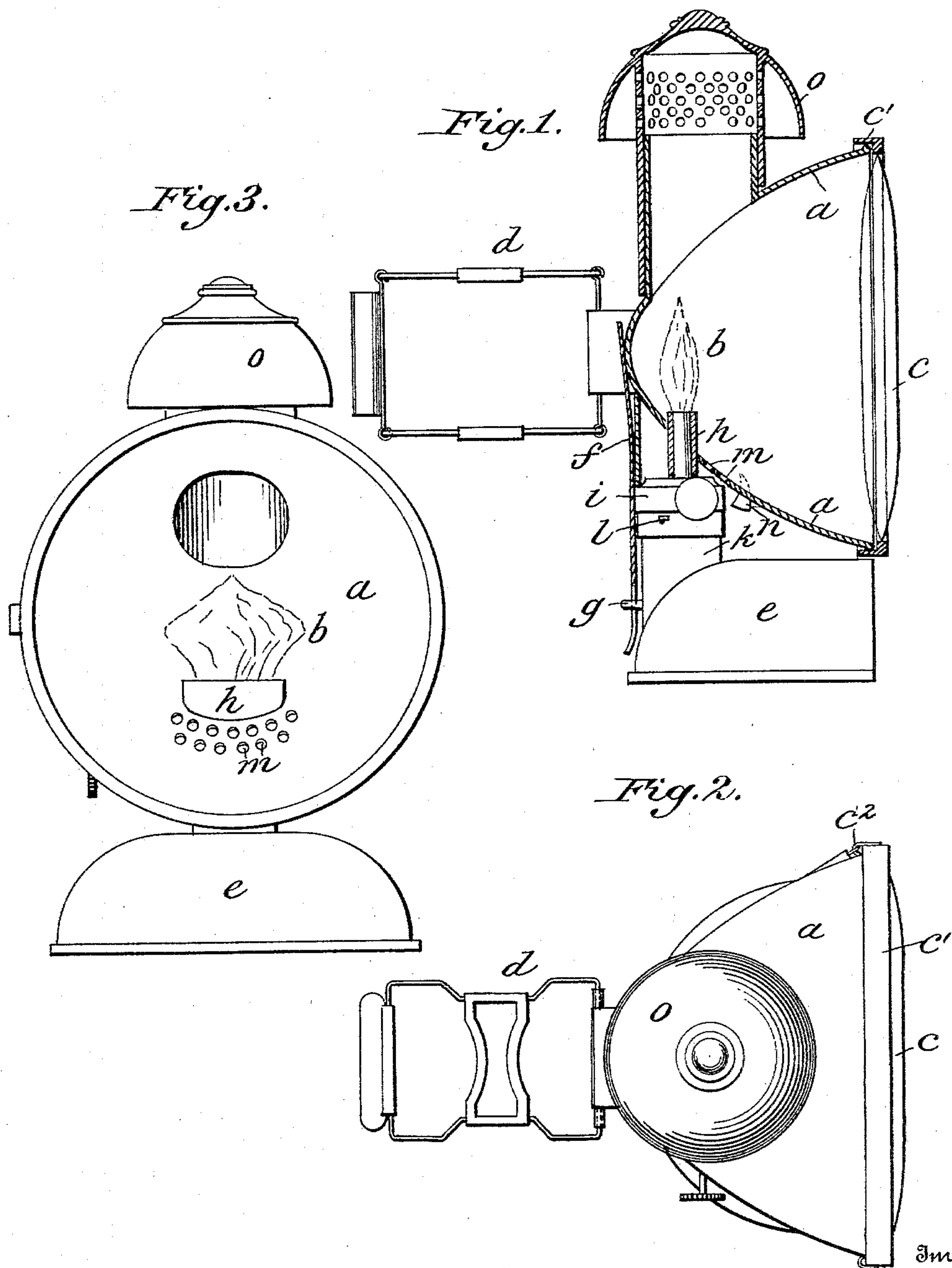


(No Model.)

O. SCHWARZ.
BICYCLE LANTERN.

No. 593,281.

Patented Nov. 9, 1897.



Witnesses

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OSCAR SCHWARZ, OF MUNICH, GERMANY.

BICYCLE-LANTERN.

SPECIFICATION forming part of Letters Patent No. 593,281, dated November 9, 1897.

Application filed December 5, 1896. Serial No. 614,564. (No model.)

To all whom it may concern:

Be it known that I, OSCAR SCHWARZ, a citizen of the German Empire, residing at Munich, in the Kingdom of Bavaria and Empire of Germany, have invented certain new and useful Improvements in Bicycle-Lanterns; 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 lanterns for vehicles, and in particular such as are designed to be attached to bicycles and velocipedes.

The objects of the invention are to provide a lantern which is elegant and tasteful in shape and light in weight, and also to make the parts of the same separable, so that the lamp may be taken apart to facilitate cleaning of the same.

With these objects in view a lantern embodying my invention comprises a concave reflector to which both the lamp and a chimney-hood, as well as the front window, are removably attached.

My invention also comprises such other features as will be hereinafter set forth, and pointed out in the claims.

In the annexed drawings, which represent my preferred embodiment of my invention, Figure 1 represents a longitudinal vertical section through the lantern, while Fig. 2 is a top plan, and Fig. 3 a front elevation, of the same.

From the drawings it will be seen that my lantern consists in a concave and preferably paraboloidal reflector *a*, in whose focus the flame *b* is arranged to burn and to which reflector the other parts of the lantern are directly attached, the paraboloidal reflector being free and uncovered—that is to say, not inclosed within a casing of greater or less size in the usual manner. The window of the lantern is formed by a lens *c* in the usual manner, the said lens being mounted in a circular flanged frame *c'*, hinged to the reflector at *c''* and secured in place when closed by a spring-catch *c'''*.

The lantern is secured to the vehicle or bicycle by the well-known spring parallelogram frame *d*.

The lamp, comprising the oil-receptacle *e*

and burner *i*, is secured to the lantern in such a manner as to be easily removable and so that either the oil-receptacle alone or the said receptacle together with the burner may be withdrawn from the lantern. Said receptacle is held fast by a spring-tongue *f* on the reflector, with which a stud or pin *g* on the oil-receptacle engages. The paraboloidal reflector is provided at its under side with a flat sleeve *h*, into which the wick-tube of the burner *i* is inserted when the burner is put into place and in which it is retained by friction. This burner *i* is connected in an easily-removable manner with the neck *k* of the oil-receptacle—*e. g.*, by a bayonet-joint *l*, as shown—so that after disengaging the stud *g* from spring-tongue *f* the oil-receptacle *e*, with neck *k*, may be removed either alone or together with the burner *i*.

The air is supplied to the flame through a series of air holes or vents *m* in the parabolic reflector, deflectors or guards *n* being arranged with relation to the vents laterally and in front, so as to protect the flame against wind, sudden gusts of air, and atmospheric disturbances of any kind.

The chimney is surmounted by a removable hood *o*, provided with air-holes, as shown, and hence the same may be readily cleaned of dirt and soot. This arrangement and construction of the parts results in giving a pleasing appearance to the lantern and in reducing its weight to a minimum. Its manipulation, moreover, is very simple and convenient, the removability of the parts permitting the same to be easily and thoroughly cleaned and overhauled.

The arrangement whereby the burner-tube of the lamp is inserted into the sleeve *h* of the reflector instead of inserting the wick directly into said sleeve results in the great advantage that the exuding oil does not run into the interior of the lantern-space, where it would tarnish and impair the luminosity of the reflector, but finds its way out of said interior between the sleeve *h* and burner-tube.

Finally, it is to be observed that in consequence of my novel way of connecting the fuel-receptacle *e* with the lantern the danger of heating said receptacle and vaporizing its contents is effectually avoided.

What I claim, and desire to secure by Letters Patent, is—

1. In a lantern for bicycles and the like, the combination, with a reflector provided with a sleeve, of a lamp provided with a wick-tube arranged to engage the sleeve, and means for detachably locking the lamp to the reflector.

2. In lanterns for bicycles and other purposes, a concave reflector provided with a sleeve at its bottom and a spring-tongue in combination with a lamp provided with a stud for engaging the spring-tongue, the wick-tube of said lamp engaging the sleeve in the reflector.

3. In a lantern for bicycles and the like, the combination, with a reflector provided with a sleeve, of a lamp-burner having a wick-tube arranged to enter said sleeve, an oil-receptacle detachably connected to the burner,

and means for detachably holding the oil-receptacle to the reflector, substantially as set forth.

4. In a lantern for bicycles and the like, the combination with a free and uncovered reflector provided with a chimney at its upper portion, and a sleeve at its lower portion, of means for supporting said reflector, a removable hood arranged to slide onto the chimney, a lamp provided with a wick-tube arranged to enter said sleeve, and means for detachably locking the lamp to the reflector, substantially as set forth.

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

OSCAR SCHWARZ.

Witnesses:

A. M. CUISUCHUNG,

E. GRAF.