

(No Model.)

F. RHIND.  
SIGNAL LANTERN FOR BICYCLES.

No. 520,659.

Patented May 29, 1894.

Fig. 1.

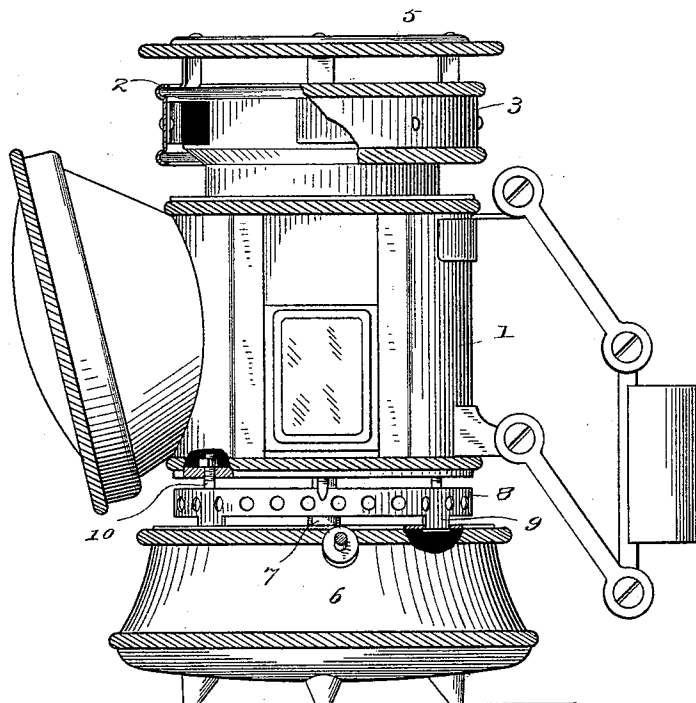
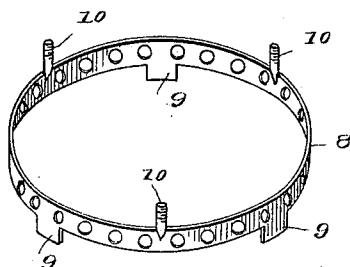


Fig. 2.



WITNESSES

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# UNITED STATES PATENT OFFICE.

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## SIGNAL-LANTERN FOR BICYCLES.

SPECIFICATION forming part of Letters Patent No. 520,659, dated May 29, 1894

Application filed October 26, 1893. Serial No. 489,185. (No model.)

*To all whom it may concern:*

Be it known that I, FRANK RHIND, a citizen of the United States, residing at Meriden, in the county of New Haven and State of Connecticut, have invented certain new and useful Improvements in Signal-Lanterns for Bicycles, &c.; 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.

My invention is applicable to lanterns generally but is especially adapted for use upon signal lanterns such as are used upon bicycles, boats, railway cars, &c., and has for its object to so improve the construction of the lantern as a whole that neither the reservoir nor the body shall become heated in use.

With these ends in view I have devised the novel construction of which the following description in connection with the accompanying drawings is a specification, numbers being used to designate the several parts.

Figure 1 is an elevation of my novel lantern partially broken away to show the details of construction, and Fig. 2 is a perspective illustrating the mode which I have adopted of connecting the reservoir to the body, the special object being to place the body and reservoir in close proximity to each other leaving an air space between them, but at the same time to give the greatest length to the metallic connections that is possible within the space by which the body and reservoir are separated.

1 denotes the body of the lantern, 2 the top plate, 3 the top ring, 5 the outer perforated plate, 6 the reservoir, 7 the wick tube, and 8 connections between the reservoir and body.

The special object of my novel construction is to make the points of attachment to the reservoir as far distant from the points of attachment to the body as the construction will permit, it being of course apparent that the air space between the reservoir and body is a non-conductor of heat, and that while metal is a comparatively good conduc-

tor, the greater the distance between the points of attachment of the connections themselves, the less heat will be conducted from the body to the reservoir. This is especially true in the present instance where the connection is fully exposed to the air. The connection is shown as made from a single piece of sheet metal which is perforated to give free passage to the air and is of course so formed as not to come in contact with either the body or the reservoir except at the points of attachment. The connection is provided on its under side with lugs 9 for attachment to the reservoir and on its upper side with lugs 10 for attachment to the body. It will be noticed that lugs 9 by which the connection is attached to the reservoir are placed intermediate lugs 10 by which the connection is attached to the body thereby placing the respective points of attachment as far apart as possible so that in practice the temperature of the oil in the reservoir will not be raised to any perceptible degree by heat conducted from the body.

Having thus described my invention, I claim—

In a lantern of the class described the combination with a body and a reservoir having an air space between them, of a metallic connection 8 by which said body and reservoir are joined together, said connection being made from a single piece of sheet metal so shaped as not to come in contact with either the body or the reservoir and provided on its under side with lugs 9 for attachment to the reservoir and on its upper side with lugs 10 for attachment to the body, said points of attachment to the body being placed intermediate the points of attachment to the reservoir, as and for the purpose set forth.

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

FRANK RHIND.

Witnesses:

A. M. WOOSTER,  
PEARL REYNOLDS.