

(No Model.)

J. H. WHITE.
LAMP FOR BICYCLES OR OTHER VEHICLES.

No. 585,609.

Patented June 29, 1897.

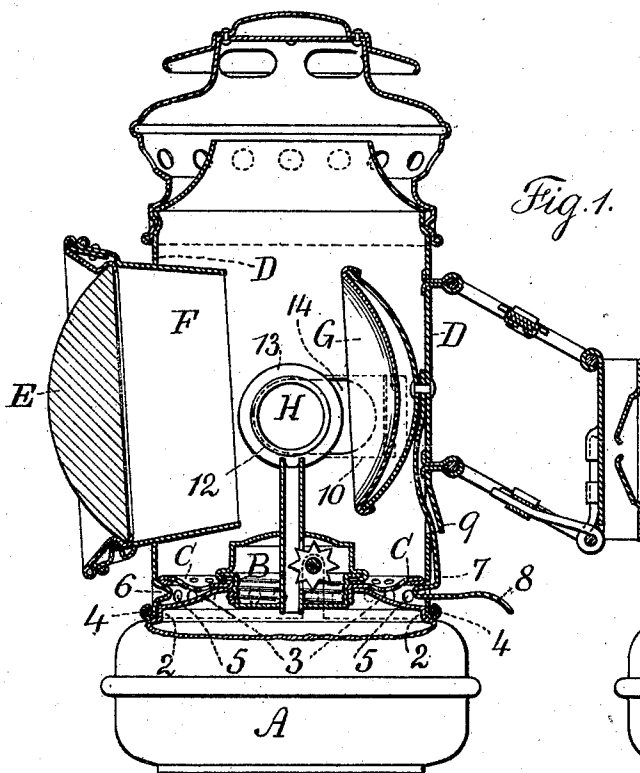


Fig. 1.

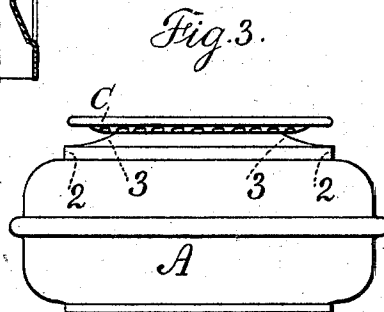


Fig. 3.

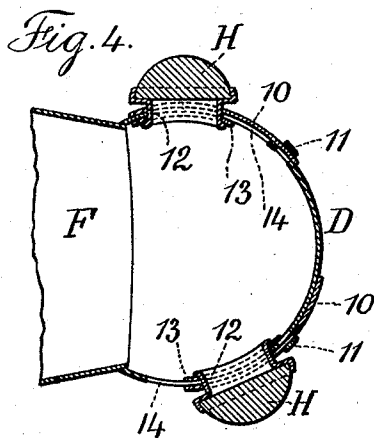


Fig. 4.

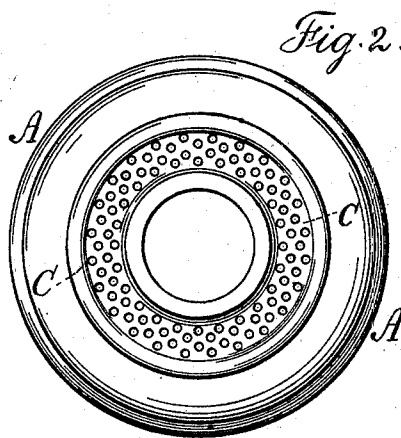


Fig. 2.

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UNITED STATES PATENT OFFICE.

JAMES H. WHITE, OF BROOKLYN, NEW YORK, ASSIGNOR TO THE MANHATTAN BRASS COMPANY, OF NEW YORK, N. Y.

LAMP FOR BICYCLES OR OTHER VEHICLES.

SPECIFICATION forming part of Letters Patent No. 585,609, dated June 29, 1897.

Application filed December 26, 1896. Serial No. 616,969. (No model.)

To all whom it may concern:

Be it known that I, JAMES H. WHITE, a citizen of the United States, residing at Brooklyn, in the county of Kings and State of New York, have invented an Improvement in Lamps for Bicycles or other Vehicles, of which the following is a specification.

In bicycle-lamps the reservoir or oil-holder has been applied at the bottom end of a metal chimney or body having a glass in front, and difficulty has been experienced in connecting the reservoir in a strong and reliable manner to the bottom end of the body and allowing for the easy removal of the same, and in addition to this the movement of the lamp is liable to cause the oil to spread more or less upon the exterior of the wick-tube and the parts adjacent to the same, so that it becomes necessary to wipe off such oil and other accumulations in keeping the lamp in a condition in which it is not liable to smell and become offensive. Besides the foregoing it is important to be able to light the lamp without the risk of the wind blowing the same out, and in addition to the front glass or lens side glasses, usually colored, have been provided of a prismatic character.

In the present invention an air-distributor in the form of a circular plate or ring is permanently fastened to the conical upper portion of the oil-reservoir, and the same is of a size to set within the metal body or chimney of the lamp, and the fastening device for the body engages the edge of the air-distributor, and the metal body sets down around the air-distributor and rests upon the top of the reservoir. Hence the parts can be made very strong and there is opportunity to wipe off the under surface of the air-distributor as well as the upper surface to remove oil or other accumulations, and a spring upon the lamp-body is used to catch under and engage the edge of the air-distributor for firmly connecting the parts. I also provide a slot in the side of the lamp-body and an eyelet-shaped frame for holding the glass, there being a slide with an opening at the end for the tubular portion of the frame to pass through and a ring within the lamp-body, so as to hold the glass in its position, but allow it to be slid back and forth for opening or closing the

slot in the side of the lamp-body for introducing a match or for blowing out the light.

In the drawings, Figure 1 is a vertical section of the lamp complete. Fig. 2 is a plan view of the reservoir detached. Fig. 3 is a side view of the same, and Fig. 4 is a sectional plan of the side glasses and the eyelet-shaped frames and slides for supporting the same.

The reservoir A is of any desired size and character, but it is provided with a shoulder 2 and a conical or flaring upper portion 3 around the screw-threaded neck that receives the burner and wick-tube B, said burner and wick-tube being of any desired character.

The air-distributor C is made as a nearly-flat ring, with the edge preferably strengthened by folding over the sheet metal, and the inner portion of this air-distributor ring is permanently fastened to the top of the reservoir A, preferably by soldering the same in its position beneath the flange of the screw-threaded neck, so that the parts are strong and permanently connected, and it is advantageous to make the under side of the air-distributor ring convex, as represented, so as to give facility for wiping the same and removing greasy or foreign substances by a cloth introduced between the flaring portion 3 of the reservoir and the under side of the air-distributor.

The body D of the lamp is usually of sheet metal and advantageously in the form of a vertical cylinder, the lower end of which is wired at 4 to strengthen the metal, and the same sets around the air-distributor C and rests upon the reservoir adjacent to the shoulder 2, and there are perforations 5 around the lower end of the lamp-body and below the air-distributor for the free admission of atmosphere, and in consequence of the holes in the air-distributor being numerous and quite small the air passes upward to the flame in a finely-subdivided condition, so that the risk of blowing out the flame or causing the same to flicker is reduced to a minimum.

The wick-raising shaft projecting above the air-distributor passes through a notch provided for it in the lower end of the lamp-body D. In order to hold the reservoir and air-distributor to the lower end of the lamp-body,

an inward projection or lug 6 is provided at one side to pass below the air-distributor, and a spring 7 is provided at the other side, such spring having a hook end that engages below the air-distributor, and it is advantageous to pass the upper portion of the spring through a mortise in the metal of the lamp-body, so that the upper part of the spring is within the lamp-body and is riveted at the upper end and the lower part of the spring is outside the lamp-body, with the hook end passing through a mortise to engage the air-distributor, there being a projection 8 or thumb-piece at the outer end of the spring for drawing back the latch, and the portion 9 of the lamp-body that projects behind the spring forms a stop to lessen the risk of the spring being bent and injured when it is acted upon by the thumb or finger to liberate the air-distributor and disconnect the same and the reservoir. The glass or lens E at the front of the lamp is preferably held by a hinged frame at the front of the conical reflector F, and the metal reflector G is behind the flame.

In the lamp-body, at one or both sides, a slot 14 is made, and there is a cover-plate 10, sliding through a loop 11, to close the slot, and the end of this cover-plate is formed as a ring, through which passes the metal frame 12 for the glass H, which frame is made similar to to an eyelet in shape, the edges of the metal frame receiving and holding the glass H, and the cylindrical body of such metal frame passes through the hole in the cover-plate 10 and also through a sheet-metal ring 13, which is on the inner side of the lamp-body D, and the end of the cylindrical portion of the metal frame being spread holds this ring 13 in its position, and the parts thus connected can be slid along, the cover-plate moving in the loop 11 and the metal frame 12 moving in the opening 14 in the body of the lamp, the ring 13 being on the inner side of the lamp-body, so as to keep the parts in their proper relative positions, and when slipped aside the opening is large enough for the insertion of a match in lighting the wick, or the flame may be blown out when the glass and cover-plate are moved aside, and when returned to a normal position the side of the lamp is effectually closed, so that air cannot blow in to extinguish the flame or cause it to flicker. The bracket or device for supporting the lamp may be of any desired character.

Between the circular projection or shoulder 2 and the air-distributor C upon the upper part of the reservoir the annular recess receives the inward projection 6 upon the body of the lamp at one side and the end of the spring 7 at the other side in holding the lamp-reservoir to the lamp-body when these parts are passed up into the lamp-body as the reservoir is applied in its place. The shoulder 2 and part 3 being formed with or connected to the reservoir insure great strength and reliability, and the projection and latch can pass into any part of the annular recess

whether the burner is screwed tightly into the reservoir or not, as the position of the reservoir to the wick-raiser shaft and the notch in the lamp-body for the same is immaterial.

I claim as my invention—

1. The combination with a lamp-body, of a reservoir having a shoulder upon the upper surface around which the lower end of the lamp-body rests, an air-distributing ring within the lamp-body and permanently connected to the reservoir around the collar or neck, and a latch for engaging the edge of the air-distributor and holding the same and the lamp-reservoir to the lamp-body, substantially as set forth.

2. The reservoir having an inclined or conical upper surface, and an air-distributor formed as a ring with numerous fine perforations and permanently connected at the inner portion to the top of the reservoir so that there is an open space below the air-distributor and between the same and the reservoir, in combination with a lamp-body setting around the edge of the air-distributor and resting on the reservoir and having holes for the admission of air below the air-distributor and a latch for hooking below the edge of the air-distributor and removably connecting the reservoir to the lamp-body, substantially as set forth.

3. The reservoir having an inclined or conical upper surface, and an air-distributor formed as a ring with numerous fine perforations and permanently connected at the inner portion to the top of the reservoir so that there is an open space below the air-distributor and between the same and the reservoir, in combination with a lamp-body setting around the edge of the air-distributor and resting on the reservoir and having holes for the admission of air below the air-distributor, a spring-latch having a hook-shaped lower end to engage the edge of the air-distributor and extending up within the lamp-body and fastened thereto at its upper end, the metal of the reservoir forming a stop for the spring-latch, substantially as set forth.

4. The lamp-body having a circular lower end in combination with the reservoir having a permanently-connected upward projection to pass into the lamp-body with an annular recess around the same and an inward projection at one side of the lamp-body to pass into such annular recess and a spring-latch at the other side of the lamp-body with its end passing into such annular recess to hold the reservoir and lamp-body together and allow of their easy separation, substantially as set forth.

5. The combination with the lamp-body having a mortise or opening in the side, of a glass, a cover-plate for the opening having a ring at the end thereof, a tubular metal frame receiving the edges of the glass and passing through the hole in the cover-plate and a ring within the lamp-body secured by the inner end of the tubular frame, there being a loop

in the metal of the lamp-body through which the cover-plate slides, substantially as set forth.

6. The combination with the lamp-body
5 having a circular lower end and holes through the same, of a reservoir having an upwardly-projecting shoulder around which the lower end of the lamp-body rests, a circular air-distributor permanently connected to the reser-
10 voir around the opening for the removable burner, the edge of such air-distributor being

within the lower part of the lamp-body, and the projection and spring-latch for removably connecting the lamp-body directly with the edge of the air-distributor, substantially as 15 set forth.

Signed by me this 21st day of December, 1896.

JAMES H. WHITE.

Witnesses:

GEO. T. PINCKNEY,

E. E. POHLÉ.