

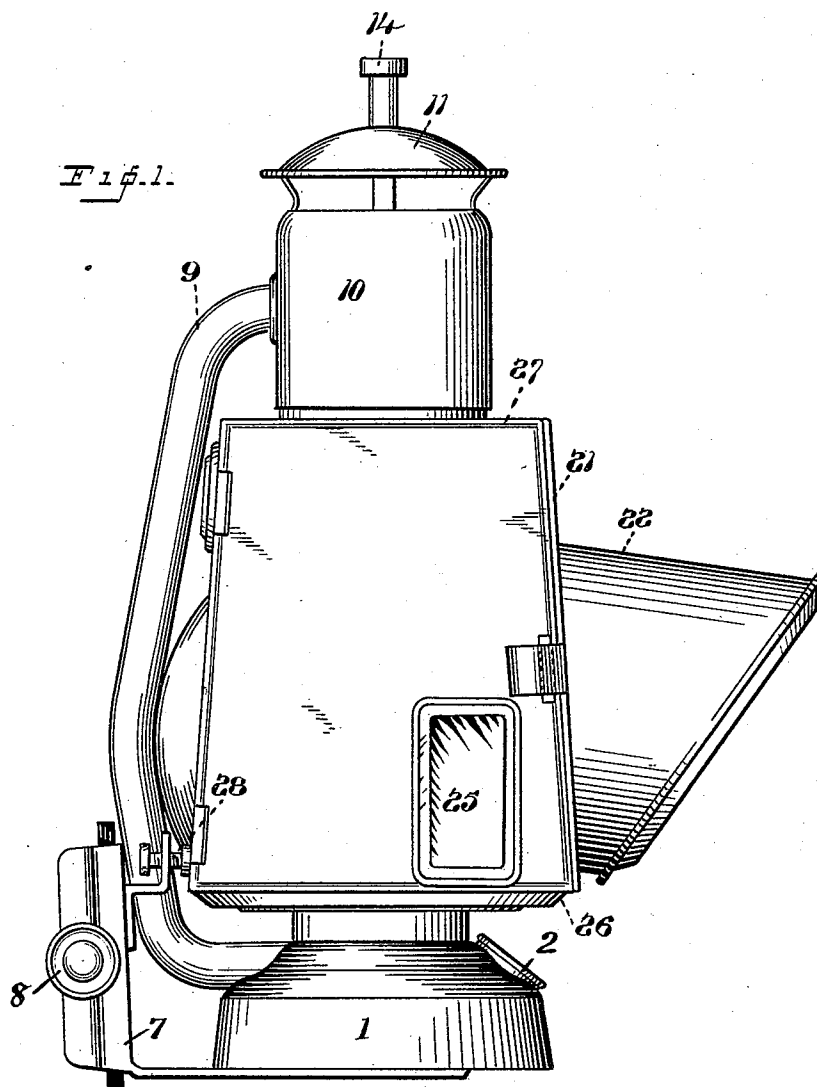
(No Model.)

3 Sheets—Sheet 1.

F. RHIND.
BICYCLE LANTERN.

No. 499,440.

Patented June 13, 1893.



WITNESSES:

C. M. Newman
A. J. Tanner.

INVENTOR:

Frank Rhind,
BY
S. A. Hubbard,
ATTORNEY

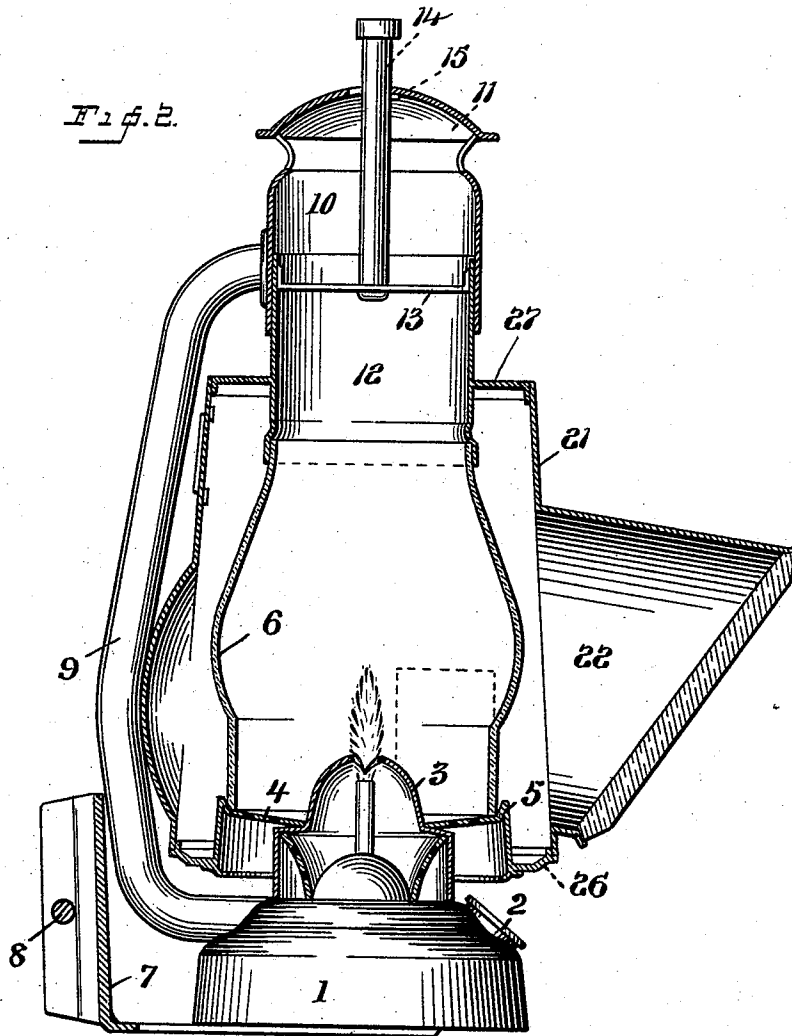
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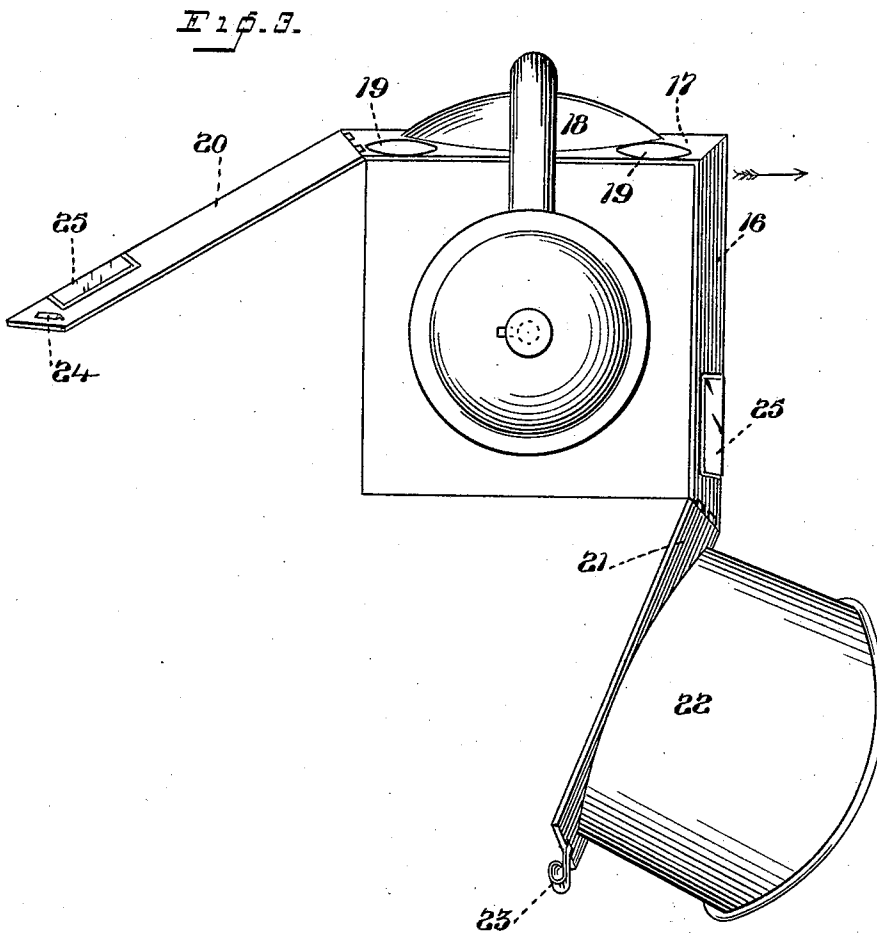
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UNITED STATES PATENT OFFICE.

FRANK RHIND, OF MERIDEN, ASSIGNOR TO THE BRIDGEPORT BRASS
COMPANY, OF BRIDGEPORT, CONNECTICUT.

BICYCLE-LANTERN.

SPECIFICATION forming part of Letters Patent No. 499,440, dated June 13, 1893.

Application filed June 11, 1892. Serial No. 436,348. (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 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 certain novel and useful improvements in bicycle lanterns.

In addition to the production of a simple and efficient lantern at moderate cost my invention has for its object to provide a lantern of this description in which kerosene oil may be safely and efficiently used; in which the light shall be unaffected by any jar or quick movement to which the lantern is subjected, and in which, for purposes of cleaning and repairing, the casing, the chimney and other parts may be readily removed; and with these ends in view my invention consists and resides in the construction and combination of elements which I will hereinafter explain in detail and then particularly specify in the claims.

Referring to the several drawings which form a part of this specification, and to the numerals marked upon said drawings, I show in Figure 1, a side elevation of my improved lantern. Fig. 2, is a central vertical section. Fig. 3, is a plan view.

The reservoir 1 is of any ordinary construction and is provided with a filling opening 2. The burner 3 provided with a suitable wick tube and wick-lift, is supported upon the top of the reservoir, as clearly appears at Fig. 2. 4 denotes a distributor plate which surrounds the burner, and the upturned outer edge of this plate forms a chimney gallery 5 for the support of the chimney 6 shown in section at Fig. 2. From the bottom of the reservoir extends outward and then upward a clamp bracket 7 which is furnished with a clamping screw 8 for the attachment of the clamp to the support provided therefor upon the vehicle. From the rear of the reservoir a curved tubular brace 9 extends upward to a point above the top of the chimney, and upon the upper end of this brace is supported a tubu-

lar smoke-hood 10 having a cover 11, with an intervening space through which the smoke and heat may issue. Inside the part 10 is a vertically movable sleeve 12 whose lower end, as shown at Fig. 2, is provided with a seat for the upper end of the chimney. From side to side of this tube extends a cross bar 13 from which a pivotally connected stem 14 rises through a central opening in the cover in which it has a bearing.

As will be readily understood, the combination of parts just described permits the chimney to be held tightly in position between the chimney gallery 5 and the lower end of the part 12, or to be removed by lifting the part 12 out of engagement with its upper extremity.

For the purpose of providing a suitable reflector and the side and rear lights required I use in connection with the parts previously described a body or casing whose construction is most clearly shown at Fig. 3. It consists of a side 16 and a back piece 17, which latter is provided with a concave reflector 18 and openings 19 for the rear lights. The side and back are rigidly connected together at their meeting edges. To the free edge of the back 17 is hinged a side wall 20, and to the edge of the side 16 is hinged a front 21 from which projects a light hood 22. The edges of the parts 20 and 21, which when closed, as shown at Fig. 1, form a close joint, are provided with co-operating clasp members 23 and 24. The sides 16 and 20 respectively are provided with openings 25 in which are inserted the red and green side lights. This inclosing case is supported upon a flanged holder which projects outwardly from the burner and is numbered 26 at Fig. 2. The upper edges of the side walls of the casing clasp about and make a close joint with the outer edges of a top wall 27 which is connected to and may be raised and lowered with the tubular part 12.

In the operation of my invention when it is desired to open the lamp for the purpose of cleaning or the like, the sides 20 and 21 are first swung outwardly to substantially the position shown at Fig. 3, and then the back and the side 20, being nearly in line, may be withdrawn laterally in the direction indicated by the small arrow on Fig. 3. For the release of

the chimney the tubular chimney-holder is first raised, the locking pin 15 on the stem 14 being turned into coincidence with the slot in the top 11, to permit of its upward movement. 5 The chimney is then released and may be freely removed. With the casing removed and the chimney taken off the parts of the lantern are all exposed and accessible and may be cleaned as required, and the casing 10 also is perfectly open and the reflector, glasses, &c., may be readily cleaned.

As above described the body of the lamp is clasped about the top and bottom and when the hinged section is fastened the body is 15 locked in place and before the body can be removed it is necessary to unclasp the hinged section 20, and move it back into line with the back 17, and then the body can be moved laterally.

20 For the purpose of lighting the lamp, the tubular chimney holder may be raised so as to free the chimney, which latter may then be lifted high enough off from its seat to admit a match between its lower edge and the 25 chimney gallery. For the purpose of holding the casing securely in place I provide it with a screw 28 passing through the rear bracket and engaging the back, thereby permitting both the hinged front and hinged side 30 to be opened without danger of accidental displacement of the casing. This, however, is not essential—but is convenient for the purpose indicated.

With the casing removed the remaining 35 parts constitute an excellent hand lamp, the brace serving as the handle.

I claim—

1. The combination in a bicycle lantern, of the reservoir and smoke-hood connected to- 40 gether by the brace as described, the vertically movable chimney-holding sleeve having

a lifting pin or stem connected therewith which extends through the smoke-hood, the chimney, the burner having a gallery to support the chimney, and a sectional removable 45 casing fixed at its upper end to the chimney-holding sleeve and provided with reflectors and suitable light openings, said casing being removably attached at its lower end to the burner, substantially as and for the pur- 50 pose specified.

2. In a bicycle lantern, having a reservoir and smoke-hood connected by a brace as shown, and having the vertically movable chimney-holding sleeve and the burner with 55 a chimney-supporting gallery, the combination therewith of a sectional casing having reflectors and light opening, which casing surrounds the chimney, and is fixed at its upper end to the chimney-holding sleeve and has a 60 side and front wall hinged to the main body in such manner as to permit them to be swung open to allow the removal of the chimney after the sleeve is elevated, substantially as and for the purpose set forth. 65

3. In combination in a lantern, the top and bottom portions thereof, the brace connecting them, and the detachable body portion extending between the top and bottom and removable laterally therefrom, said body com- 70 prising sides bearing on the outer edges of the top and bottom one of said sides being hinged and adapted to clasp the body to the top and bottom and also to unclasp the body therefrom and permit its removal, substan- 75 tially as described.

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

FRANK RHIND.

Witnesses:

S. H. HUBBARD,

M. C. HINCHCLIFFE.