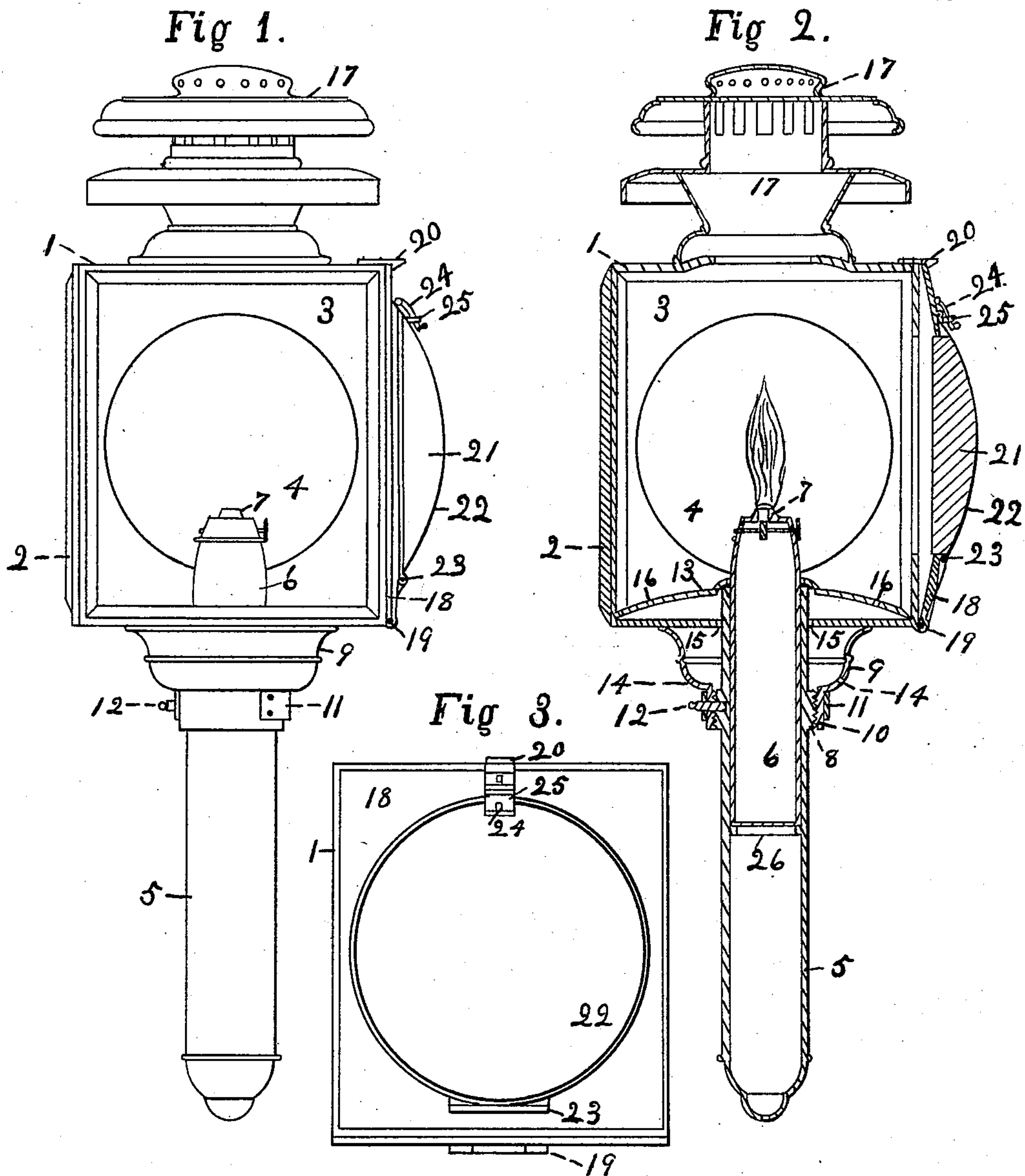


(No Model.)

F. A. JOHNSON.  
CARRIAGE LAMP OR LANTERN.

No. 427,028.

Patented Apr. 29, 1890.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

FRANK A. JOHNSON, OF DENVER, COLORADO.

## CARRIAGE LAMP OR LANTERN.

SPECIFICATION forming part of Letters Patent No. 427,028, dated April 29, 1890.

Application filed March 25, 1889. Serial No. 304,683. (No model.)

*To all whom it may concern:*

Be it known that I, FRANK A. JOHNSON, a citizen of the United States of America, residing at Denver, in the county of Arapahoe and State of Colorado, have invented certain new and useful Improvements in Carriage Lamps or Lanterns, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to a new and improved form and construction of lamps or lanterns for use upon carriages and other vehicles. Its object is to furnish such a lamp or lantern in which provision is made for throwing, when desired or deemed necessary, light over a space to the rear of the lamp or lantern, that the door or steps of the vehicle may be illuminated, and a person entering or alighting from the vehicle may have light to guide his or her footsteps; to which ends the invention consists in the features and arrangements more particularly hereinafter described and claimed.

In the drawings is illustrated an embodiment of the invention, in which—

Figure 1 is a side view or elevation of a lamp or lantern constructed according to the invention; Fig. 2, a central vertical section thereof; Fig. 3, an elevation of the rear door or side of the lamp or lantern detached therefrom.

In the figures the reference-numeral 1 indicates the metal framing of the lamp or lantern, made of any suitable metal and in any desired style. It carries the ordinary front glass 2 and side glass 3, of any approved contour, and has or may have the usual reflector 4 upon its inner side, or side next to the vehicle-body, while its top is formed with the perforated crown 17, of known construction. Within the body is to project the burner 7 of the oil vessel or lamp 6, and in such position that the flame may be protected and the light therefrom pass through the glass plates, and such vessel or lamp-body is supported and secured within the case 5, depending from the body of the lamp or lantern, and the vessel or lamp-body should fit snugly, even friction-tight, in such case, that it may not rattle nor shake around therein.

From the base of the lamp or lantern body depends a support 9 for the case 5, such sup-

port 9 ending in or carrying at its lower end an interiorly-threaded band 10. Upon the exterior of the case 5 is formed or is secured a threaded portion, such being here shown as the exteriorly-threaded band 8, secured upon the case, the point of securement being such that when the screws of the bands 8 and 10 are in engagement the burner 7 shall be in proper position within the lamp or lantern. This secures the lamp and its case to the frame or body in such manner that they may be removed therefrom from the outside thereof, and secures all the parts together so rigidly that there is no rattle or shake of such parts among themselves, which generally occurs when the lamp must be placed in position or withdrawn therefrom through a door and from the interior of the body or frame. While the means of securement herein shown are screw-threads and grooves, any other means of engagement of the lamp case and frame adapted to hold them against longitudinal disengagement may be used— such, for instance, as a bayonet-joint. It is desirable, however, to also guard against lateral movement of the parts relatively to each other, lest such lateral movement, if permitted, bring them to the point of disengagement, to which end a spring ribbon or band 11 is secured to and passes around the band 10 at the base of support 9, being slightly larger than such band, that it may be drawn from a circular form to a slightly oval or elliptical one therearound. Such spring band or ribbon carries a pin 12, having an outer projecting head, by which it may be grasped, its inner end taking in perforations made in the bands 8 and 10, when such bands are turned so that their perforations register, they being formed to register when the case and its contained lamp are in proper position.

It is evident that the spring 11 need not necessarily encircle the whole of the band 10, but might extend over only a portion of the circumference thereof and be fastened thereto, or that the pin 12 might be acted on by a coiled spring, after the well-known way of constructing spring-pins, and that either form or any other form of spring-acted-on pin would lock the parts against lateral or rotary movement.

Within the case 5 is a shoulder or stop 26,



limiting the downward movement of the lamp-body therein, the portion of the case below the lamp-body forming a chamber, into which will fall any fluid escaping from the lamp-body by "sweating," as it is ordinarily termed, really siphonage by the wick, and whence such escaped fluid passes by an aperture in the bottom of the chamber, that the exterior of the lamp or lantern may not be soiled or fouled by oil thereon.

Within the body or frame of the lamp or lantern, and near the bottom therefor, is an extra plate 13, forming what may be termed a "second" or "false" bottom, and preferably curved somewhat, as seen in Fig. 2. Through it is an aperture just permitting the passage therethrough of the portion of the lamp vessel or body projecting from the case 5, but not permitting the passage of the latter, whose upper edge, when the case is in proper position, abuts against the under side of the plate 13 around the aperture.

For the inlet of the air necessary for combustion, apertures 14 are made in the wall of support 9, apertures 15 in the bottom of the lantern or lamp frame or body, and apertures 16 in the extra plate 13. By arranging these inlets relatively to each other after the manner shown, the entering air is caused to take a somewhat devious course, and is delivered at a point somewhat remote from the burner, the result being that there is no sudden or forcible impingements of blasts upon the flame, no drafts thereat, simply an equable flow of the necessary air thereto, and the flame is kept bright and steady.

At the rear side of the lantern frame or body a door is placed, as usual, the door itself, however, being of unusual construction. Such door is the door 18, hinged on one side to the frame at 19, and having on its opposite side or edge a fastening device 20, by which it is held in closed position, and such fastening device may be the resilient strip shown, formed at its end to snap over the bead or edge of the lantern-frame, or any other suitable and effective catch. The central portion of the web of

this door is cut away to form an aperture thereat, or the door is formed of a frame whose members leave an aperture, to which is fitted a transparent or translucent plate or a bull's-eye lens, the aperture, as herein shown, being fitted with the lens 21. Pivoted or hinged at 23 to the body of the door 18 is a door or flap 22, adapted to cover the glass 21. At its edge opposite to its hinged or pivotal point means are provided for retaining it in position over the glass plate, that normally no rays of light may be thrown to the rear. Such means may be of any approved construction, herein typified by a strip or hasp 25, hinged or pivoted on the door 18, and a pin or staple 24, secured to the door or flap 22, the strip or hasp part 25 having an aperture passing over the pin or staple. Then, when desired, the flap or cover may be let down and the rays of light permitted to pass out by the plate or lens 21, illuminating the steps and the ground adjacent thereto.

It is to be noted that the oil vessel or chamber 6 is preferably made of glass, and as an oblong glass vessel of a contour corresponding in cross-section to that of the depending case 5, which receives and protects it. This in effect forms a lamp of a glass oil-vessel and a case entirely inclosing the same of metal or other non-easily frangible material. At the same time a drip-chamber is formed below, by which any fluid escapes without soiling the exterior of the lamp.

Having thus described my invention, what I claim is—

A carriage lamp or lantern having a main door opening on its rear side with a glass or transparent center, and a second door or flap hinged to such main door and adapted to cover the glass or transparent portion thereof, substantially as set forth.

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

FRANK A. JOHNSON.

Witnesses:

Z. F. WILBER,  
B. L. POLLOCK.