2 Sheets
[55.]

No 1

WILLIAM WESTLAKE.

Improvement in Lanterns.

No. 119,549. Patented Oct. 3, 1871.

Fig 1

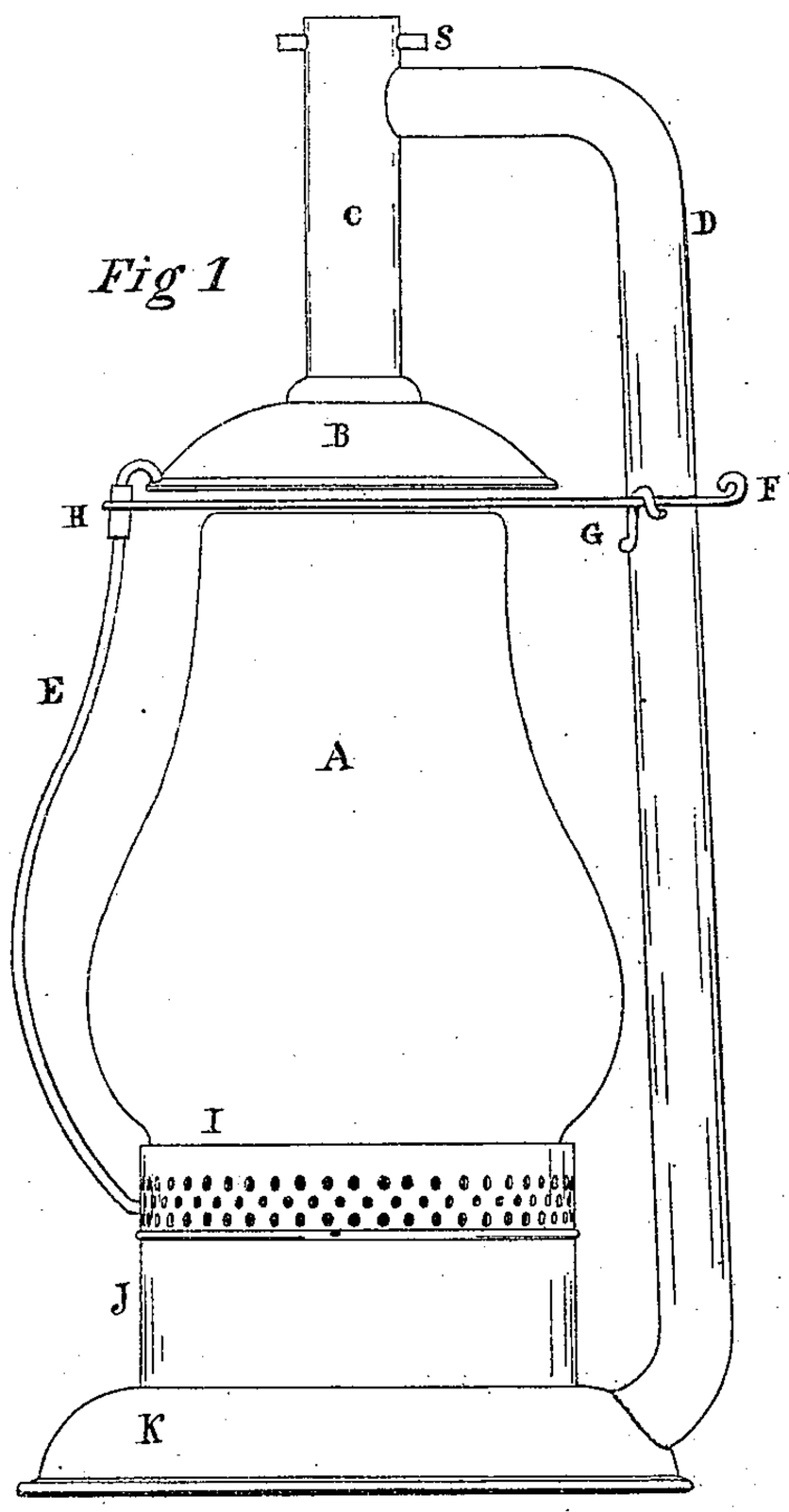

Fig 2

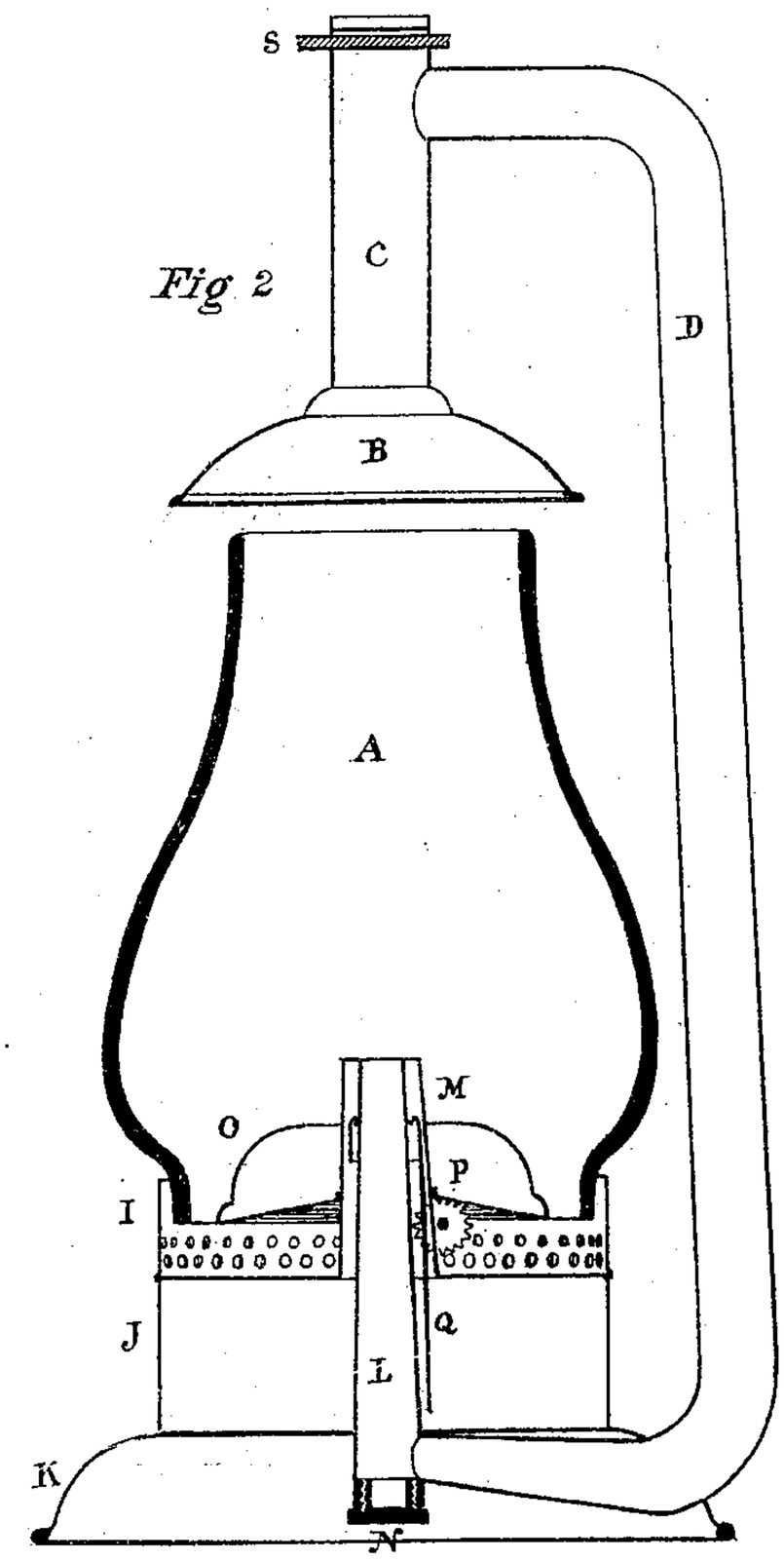

Fig 3

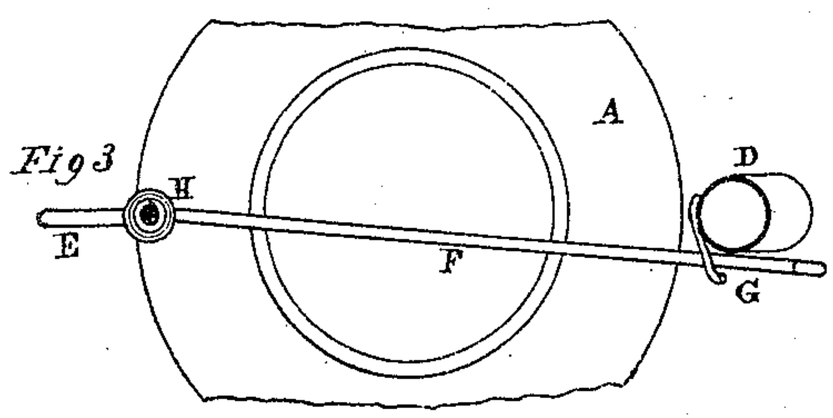

Fig 4

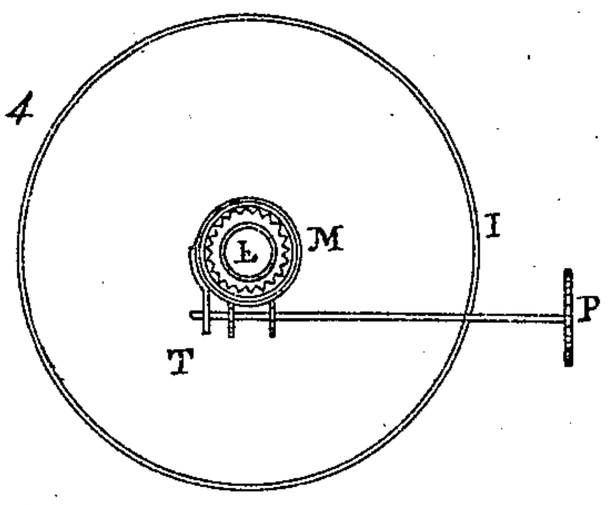

Fig 5

Witnesses

L. L. Bond

O. W. Bond

William Westlake

Inventor

2 Sheets

[55.]

№ 2

WILLIAM WESTLAKE.

Improvement in Lanterns.

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Fig 6

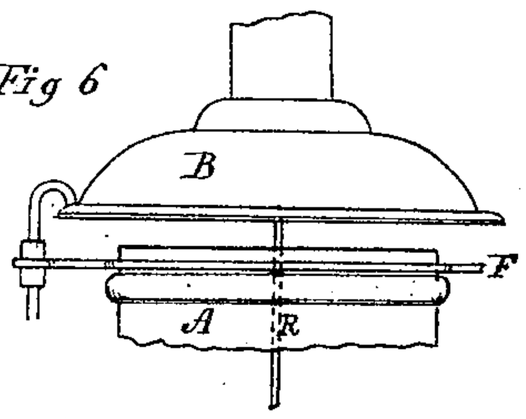


Fig 7

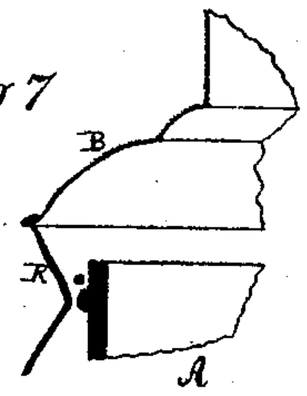


Fig 8

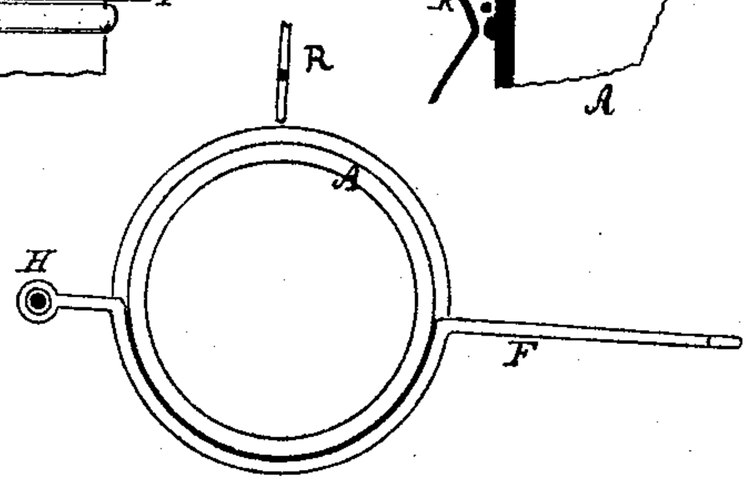


Fig 9

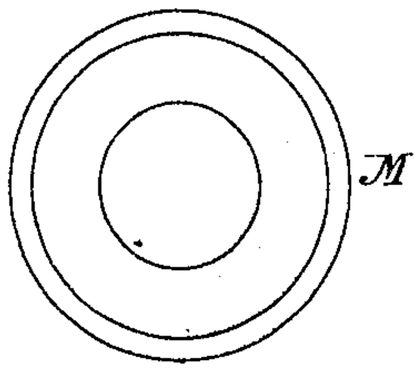
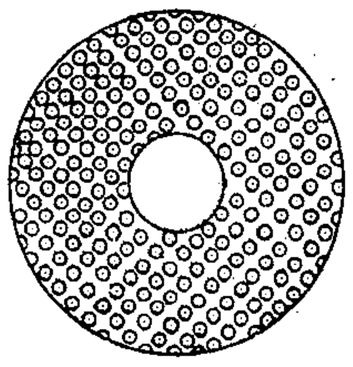


Fig 10



Witnesses
L. L. Bond
C. W. Bond

William Westlake
Inventor

UNITED STATES PATENT OFFICE.

WILLIAM WESTLAKE, OF CHICAGO, ILLINOIS.

IMPROVEMENT IN LANTERNS.

Specification forming part of Letters Patent No. 119,549, dated October 3, 1871.

To all whom it may concern:

Be it known that I, WILLIAM WESTLAKE, of the city of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Lanterns, of which the following is a full description, reference being had to the accompanying drawing making a part of this specification, in which—

Figure 1 is a front or side elevation; Fig. 2, a vertical section; Fig. 3, a cross-section at top of the globe; Fig. 4, a plan view of the parts with the deflector removed; Fig. 5, a detail of the wick-raiser; Figs. 6, 7, and 8, a modification of the device for holding the top of the globe; Fig. 9, a top view; and Fig. 10, a bottom view of the deflector.

This invention relates to that class of lamps and lanterns which has bells over the burner, and connected with the burner by tubes, so as to produce a slight blast upon the flame; and my improvements relate more particularly to the lamp shown in the French patent of Orry Nerry and De Cormeille, May 4, 1827, and in the English patent No. 11,546, to John Brathwaite, 1847. Its nature consists in a novel arrangement for supporting the top of the globe or protector; in supporting and strengthening the bell; and in an improved construction of the burner to adapt it to this class of lamps and lanterns.

In the drawing, A is the globe; B, bell; C D, tube; E, rod or wire connecting the bell to the base; F, hinged bar supporting the top of the globe; G, lock or catch; H, hinge; I, perforated band supporting the globe; J, oil-pot, forming part of the base; K, base flange; L, tube through oil-pot and burner; M, outer tube of burner; N, screw-cap on the tube L; O, deflector; P, wick-ratchet; Q, wick-raiser; R, additional bell-supporting wire; S, bail. The globe A, bell B, and tube C D are made in the ordinary form, except that the junction between the parts C and D is made angular instead of being curved, for the more convenient attachment of the bail. On the opposite side to the tube I attach a rod or wire, E, which is connected with the bell and base of the lamp or lantern, for the purpose of supporting the bell and keeping the parts in place when carried by a bail; and also for the purpose of forming part of the device for holding or steadying the top of the globe, I attach to this rod E a rod or wire, F, by means of a hinge or collar, H, upon which the rod F turns freely in a horizontal direction. When placed in position under the catch G this rod F presses upon the top of the globe with sufficient force to hold it steady. When used with a beaded globe, as shown in Figs. 6, 7, and 8, instead of making this rod F run across the top of the globe I curve it as shown at Fig. 8, so that it will rest against or press upon the bead of the globe, and on the opposite side I attach an additional wire or rod, connecting the bell with the base, which said additional wire is bent in near the bell so as to come in contact with the globe, as shown in Fig. 7. The perforated band P is made in one piece with the outer wall of the oil-pot J; but it may be made separate and soldered on, if desired, in the ordinary manner. The tube M which forms the outer cylinder of the burner is permanently attached to the upper plate of the oil-pot; the tube L, which forms the inner cylinder of the burner, is permanently attached to the lower plate or bottom of the oil-pot. This tube L is connected with the tube C D, as shown in Fig. 2, and its lower end is provided with a screw-cap, N, to facilitate cleaning. In the annular space, between the tubes L M, I place an ordinary wick-holder, Q, which is operated by the ratchet P, the stem of which said ratchet extends out through the band I, as shown at Fig. 4. This wick-ratchet is held in place by a lip or ear soldered onto the tube M; and by the band I an additional support may be given to it, if desired, but those shown will be sufficient. By connecting the tubes L and M with the oil-pot, as shown, I am able to make them of tin, and to materially simplify and cheapen the construction of an argand burner in its application to a lamp or lantern, as I dispense with all collars and screws heretofore used in connecting such burners with the lamp. The deflector O is located about one-half of an inch below the top of the tube M, as shown at Fig. 2. This location of the deflector I have found to be necessary, while its form may be varied without injury. It will, however, be advisable to extend it out nearly or quite to the wall of the lantern.

In the form shown an annular space of from one-fourth to one-half of an inch is left between it and the tube M, and it rests upon a lower perforated band or disk, which rests upon and is supported by the tube M. It may, however, be supported by wires connected with the tube M

or resting upon the top of the oil-pot, or in any other convenient mode; but I prefer supporting it upon the perforated plate, as shown.

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

1. The combination of the rod E with the tube D for supporting the bell and connecting it with the base, substantially as specified.

2. The combination of the hinged bar or rod F with the rod E and tube D for holding the top of the globe, substantially as described.

3. In combination with the tubes M and L, the latter being connected to the bell B by the tubes D and C, the air-deflector or regulator O, constructed and arranged to operate substantially as set forth.

WILLIAM WESTLAKE.

Witnesses:
L. L. BOND,
O. W. BOND. (55)