

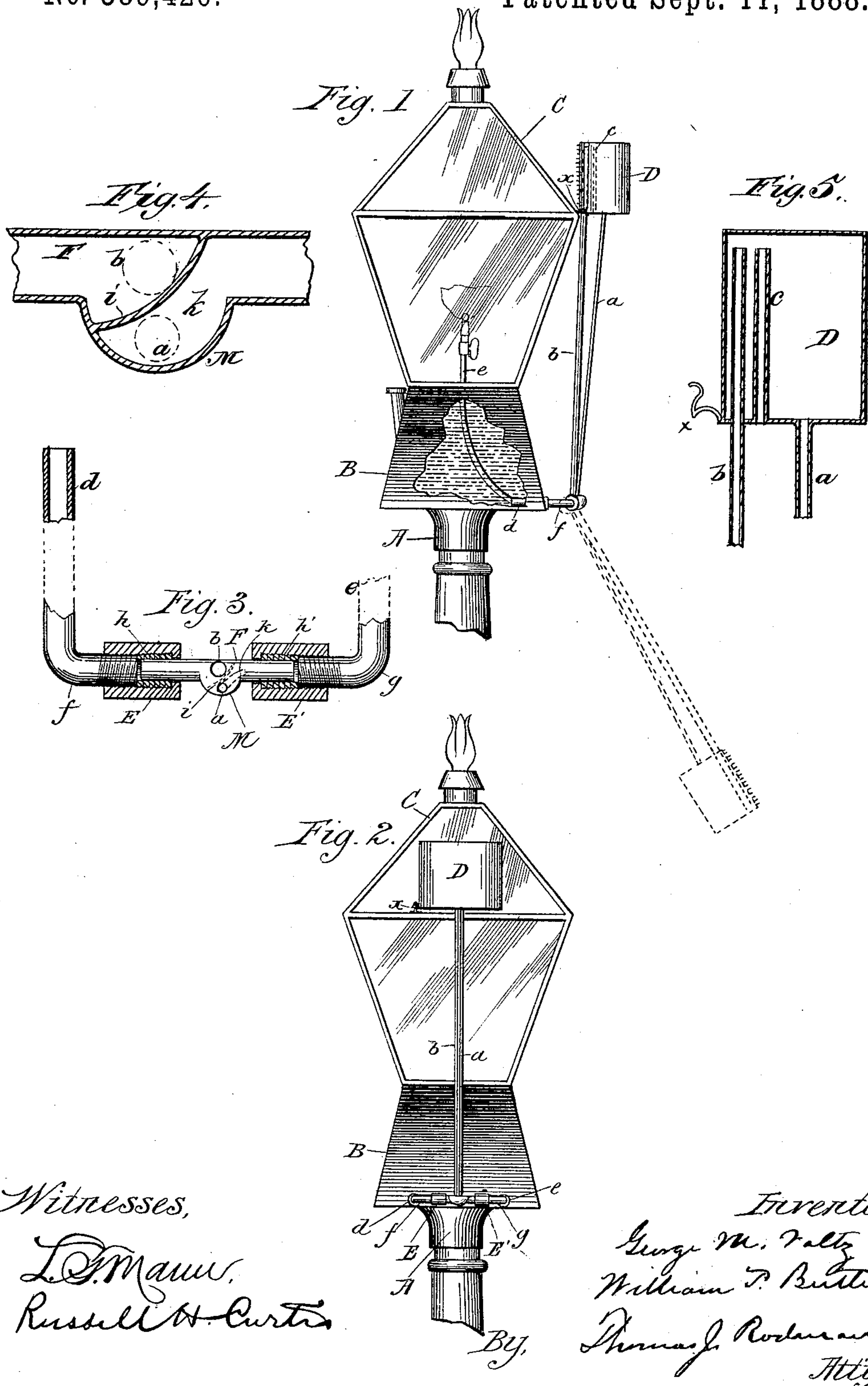
(No Model.)

G. M. VOLTZ & W. P. BUTLER.

OIL RESERVOIR FOR STREET OR OTHER LAMPS.

No. 389,426.

Patented Sept. 11, 1888.



Witnesses,

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UNITED STATES PATENT OFFICE.

GEORGE M. VOLTZ, OF ST. JOSEPH, MISSOURI, AND WILLIAM P. BUTLER, OF CHICAGO, ILLINOIS; SAID VOLTZ ASSIGNOR TO SAID BUTLER.

OIL-RESERVOIR FOR STREET OR OTHER LAMPS.

SPECIFICATION forming part of Letters Patent No. 389,426, dated September 11, 1888.

Application filed September 20, 1886. Serial No. 213,970. (No model.)

To all whom it may concern:

Be it known that we, GEORGE M. VOLTZ, residing at St. Joseph, in the county of Buchanan and State of Missouri, and WILLIAM P. BUTLER, residing at Chicago, in the county of Cook and State of Illinois, citizens of the United States, have invented new and useful Improvements in Oil-Reservoirs for Street or other Lamps, of which the following is a full description.

Our invention relates to hydrocarbon-burners using liquid fuel; and the object of our invention is to construct a compound reservoir for street or other lamps and hydrocarbon-burners which shall be of large size, easy to fill, and in street-lamps do away with the necessity of mounting the lamp-post oftener than to fill the large reservoir, as will be more fully shown hereinafter. We attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a side view of a street-lamp with our improved reservoirs in place and with the side of the larger broken away to show its interior; Fig. 2, a front view of the same; Fig. 3, a detail view of the turn-tube with the pack-nuts shown in section. Fig. 4 is an enlarged sectional view of the turn-tube. Fig. 5 is an enlarged sectional view of the upper reservoir.

Similar letters refer to similar parts throughout the several views.

Attached to the top of the lamp-post A, in any convenient way, is the reservoir B, of sufficient size to hold several nights' supply of lighting-fuel, upon the top of which rests and is fastened the lamp C. From the bottom of the reservoir B, as shown in Fig. 1, extends a pipe, *d*, which passes outward through the reservoir and has connected with it the pipe *f*, the other end of the latter being screwed into the pack-nut E. The pack-nuts E E' are so constructed as to admit the pipes *f* and *g* of inside diameter equal to the outside diameter of the turn-tube F.

Surrounding the ends of the turn-tube F, and inside the pack-nuts, are the washers *h h'*, composed of asbestos or other substance to resist the action of the lighting-fuel. The washers *h h'* and pack-nuts E and E' are respectively provided with external and internal threads, so that when the pack-nuts are screwed up they

compress the washers *h h'* tightly around the end of the turn-tube F by pressure against the ends of the pipes *f* and *g* and internal shoulders of the pack-nuts. The turn-tube F is provided with the lug M, barrier *i*, channel *k*, and shoulders into which are screwed the pipes *a* and *b*. The pipes *a* and *b* extend upward from the turn-tube F into the reservoir D, the former just passing through the bottom of the reservoir D, while the latter passes through it to a point near its top, as shown in Fig. 5. Through the bottom and extending upward to near the top of the reservoir D is the air-outlet pipe *c*. The reservoir D is provided with the catch *x* for holding it in position. The pipe *g* is bent so as to connect with the burner-pipe *e*, the latter passing upward through the reservoir B, as shown in Fig. 1, and being provided at its upper end with a burner.

Our improved compound reservoir operates as follows, viz.: The reservoir B being charged with lighting-fuel, the same flows into and through the pipes *d* and *f* and the turn-tube F, and is checked by the barrier *i*. The reservoir D is then released, and is turned down to about the position shown by the dotted lines in Fig. 1. This position enables the lighting-fuel to flow from the turn-tube F, through the pipe *b* into the reservoir D until the latter is full, the air within the same being allowed to escape through the pipe *c*. The reservoir D being then turned back to its first position and held there by the catch *x*, the fuel passes downward through the pipe *a*, the channel *k*, turn-tube F, and pipes *g* and *e* to the burner. Care should be taken not to turn the tank D down to such a level as to cause the liquid fuel to obstruct the mouth of the air-outlet pipe *c*. If this should be done, the tank may be turned upward to clear the pipe.

What we claim as our invention is—

1. The combination, with a hydrocarbon-burner, of the reservoir B, the turn-tube F, having barrier *i*, and channel *k*, the tubes *d e*, connected with the ends of said turn-tube, said tube *d* communicating with said reservoir and the tube *e* with the burner, the pipes *a b*, connected with the center of the turn-tube on opposite sides of the barrier *i*, the supplemental reservoir D, connected with the pipes *a b*, and a catch for holding the supplemental

reservoir in an elevated position, substantially as described.

2. The combination, with a lamp-post A, reservoir B, and movable supplemental reservoir D, provided with air-inlet *c*, of the turn-tube F, having barrier *i* and channel *k*; the tubes *d e*, connected with the ends of the turn-tube, said tube *d* communicating with said reservoir and the tube *e* with the burner, and the pipes *a b*, extending from the supplemental

reservoir to opposite sides of the barrier in the turn-tube, substantially as described.

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