

H. WELLINGTON.  
Street-Lamp.

No. 162,728.

Patented April 27, 1875.

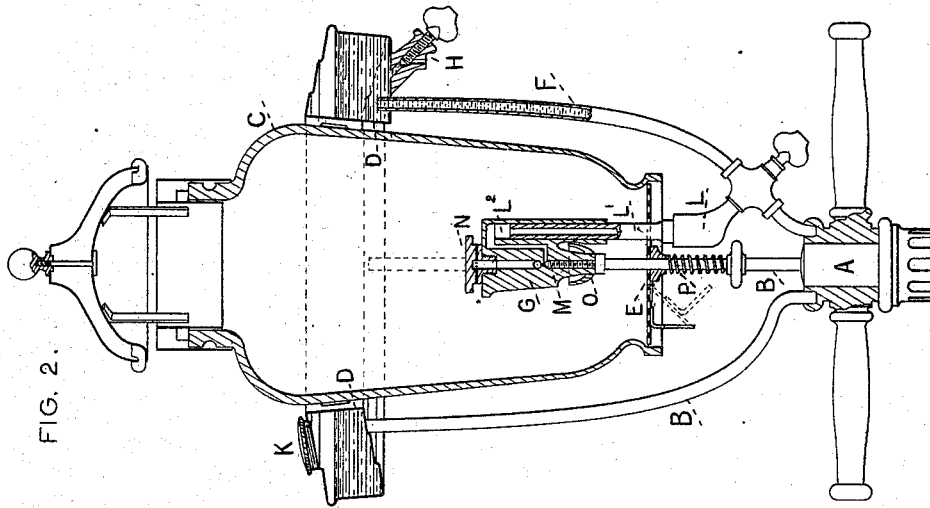


FIG. 2.

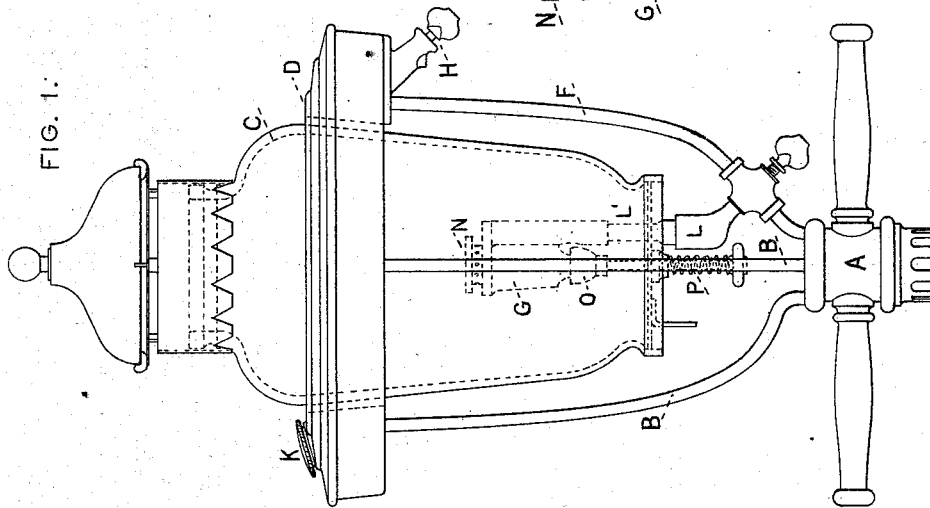
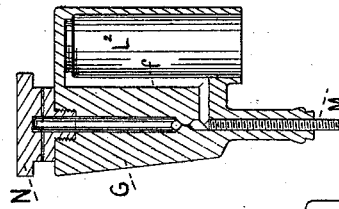


FIG. 1.

FIG. 3.



WITNESSES.

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# UNITED STATES PATENT OFFICE.

HENRY WELLINGTON, OF NEW YORK, N. Y.

## IMPROVEMENT IN STREET-LAMPS.

Specification forming part of Letters Patent No. 162,728, dated April 27, 1875; application filed March 10, 1875.

*To all whom it may concern ;*

Be it known that I, HENRY WELLINGTON, of the city, county, and State of New York, have invented certain Improvements in Street-Lamps, of which the following is a specification:

This invention pertains to certain improvements in street-lamps for burning the volatile oils or hydrocarbons of petroleum, or similar substances; and the invention consists, first, in the combination of a reservoir for the burning-fluid with the frame that supports the shade or glass cylinder that surrounds the burner, in such a manner that the base of said reservoir may serve as a reflector for the rays from the burner or light-producing agent; and, second, the invention also consists of certain improvements in connecting the burner with said reservoir and its vaporizing-chamber; and, third, said invention consists in providing a hinged screen for the base of the shade, so that it may be readily opened in the operation of lighting a lamp, as will hereinafter appear; and, fourth, said invention pertains to certain improvements in the chimney or ventilating apparatus at the top of the shade.

Figure 1 is an elevation of the lamp with all its attachments in proper position. Fig. 2 is a sectional view of the same; and Fig. 3 is a section of the burner, as used in said lamp.

At A is shown the top of the lamp-post, to which are attached rods B for supporting the shade C or band D that supports the shade, and upon the upper ends of said rods is mounted the band to surround the shade, the inner face of which serves as a support for the shade, as represented in the drawings; and upon the said inner face of said band are placed studs or projections to serve as points to hold the shade in a vertical position, while its lower end rests upon a slightly-yielding base, as at E.

In the plans here shown the reservoir is directly attached upon the rods that form the supports for the shade, and one of said rods is hollow, as at F, to serve as a conduit for the fluid to the burner, which is shown at G, and in this case the reservoir becomes the support of the shade in a vertical position. Said reservoir is also furnished with a cock, as at H, to draw off from a depression in the bottom

any water that may collect therein and settle below the burning fluid. It is also furnished with an opening, as at K, through which to fill it, and with a suitable plug or stopper to close the same. The tube F is provided with a cock to control the flow of the fluid to the burner, which is connected therewith by a bracket, as at L, which supports a tube, as at L<sup>1</sup>, which extends upright to receive the burner and hold it in a fixed and working position by fitting nicely, as by a ground joint, in a vertical socket formed on the side of the burner, or, properly, the gas-generating chamber. Said socket is shown at L<sup>2</sup>, in Fig. 3, without the supporting-tube inserted therein, and a channel is also there shown, as at f, which extends down from the top of said socket, and which would be along the side of the tube L<sup>1</sup> when it is inserted therein; and, said channel serves as the vaporizing-channel or gas-generator, and leads directly to the valve at M, which controls its outlet to the burners at N. This means of connecting the burner with the supply-tube by a socket and grooved joint without a screw or packing, is very essential, and in practice is found to furnish a most excellent vaporizing-chamber.

The other parts of the burner being old need not be further referred to, except to say, that at O is fitted a cap around the base of the vaporizing-chamber, in which to place spirits to heat the parts for lighting the lamp. This, however, may be dispensed with by the use of a torch made expressly for the purpose.

The bottom of the glass shade, as shown in the drawings, is formed with a swell inward so as to form a shoulder to rest upon a disk of metal, as at E, and said disk is mounted upon a spring that surrounds the valve-stem, as at P, which depends from the burner, and thereby, to a certain degree, supports the bottom of the shade.

Said metal disk E is also perforated to admit air to the burner, and, at the same time, serve as a screen from the blasts that might disturb the light. Said disk is also divided in two parts, and hinged together, as shown in the section at Fig. 2, so that the hinged portion may be depressed by the lamp-lighter pressing against a pin projecting below, and which may

be forced down, as indicated by the dotted lines at Fig. 2, so that a torch may be inserted to the burner.

It will be observed in the section at Fig. 2, and also by the dotted lines at Fig. 1, that the glass shade is made thicker toward the top, or that portion where the greatest liability exists for being broken by hail, &c., and the upper end is provided with a groove by which the chimney may be attached and fastened, and the lower end, as shown, also projects below the supporting-base E, to serve as a dripping-edge for the water, &c.

The chimney and cover at the top, are made double, as shown, and arranged so that the inner shell serves to secure the soot and the heat, and protect the outer parts from injury, and one part is made to slide within the other, and the two other parts of the cover are held together by a screw, which also holds an ornament on the top, which makes a neat finish to the lamp.

The entire combination of the several parts is such as to furnish a very neat and useful street-lamp for towns and villages where gas-works are not erected, or where parties prefer to supply their own light for their walks and grounds.

I therefore claim—

1. The combination, in a street-lamp, of a reservoir for holding the burning-fluid with the frame that supports the glass shade surrounding the shade and forming part of the supporting frame, substantially as described.
2. The vaporizing-chamber consisting of the tube L<sup>1</sup>, the socket L<sup>2</sup>, and the channel *f* communicating with the said socket and the burner, substantially as described.

HENRY WELLINGTON.

Witnesses:

BOYD ELIOT,  
JOHN WM. RIPLEY.