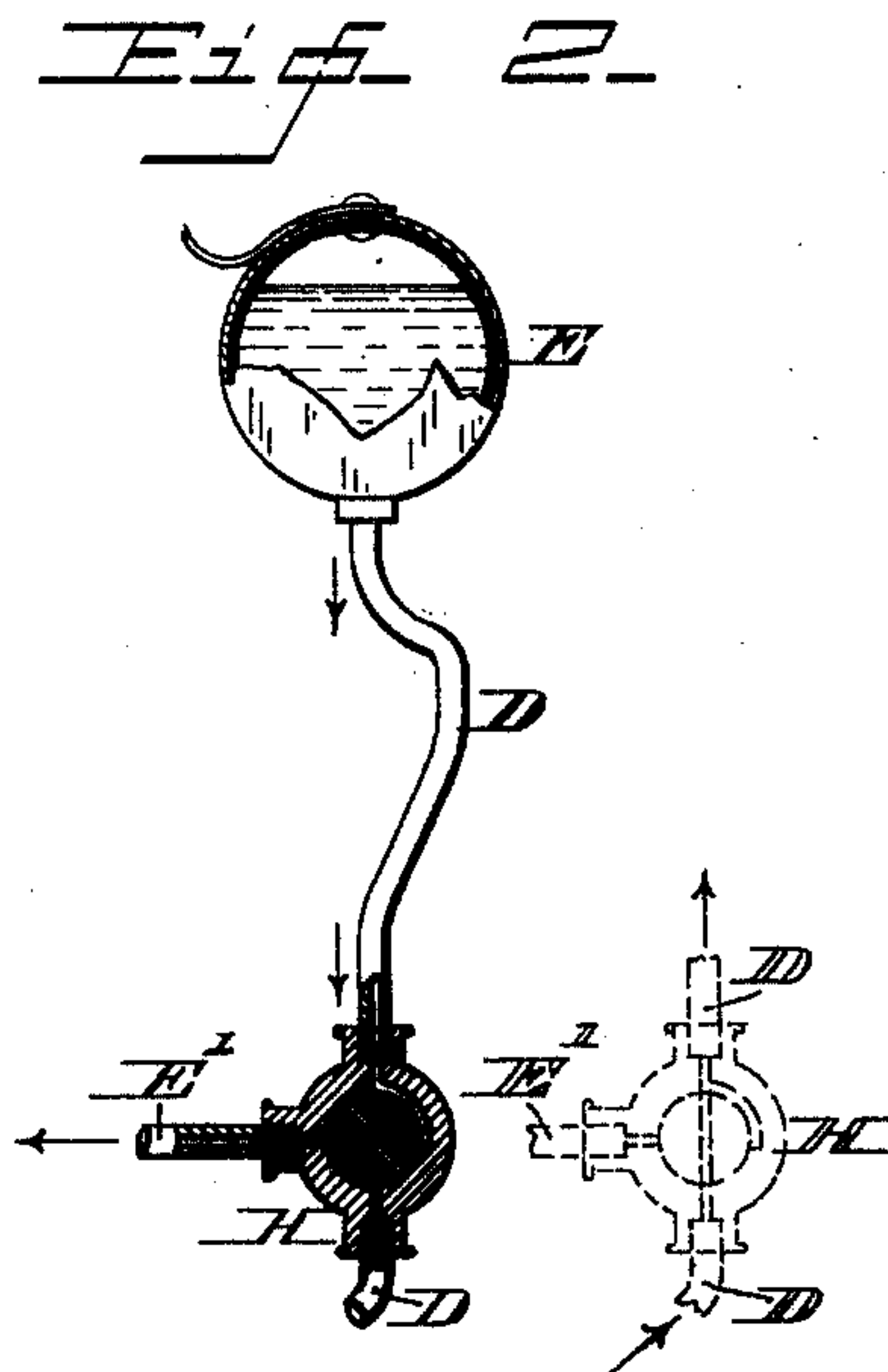
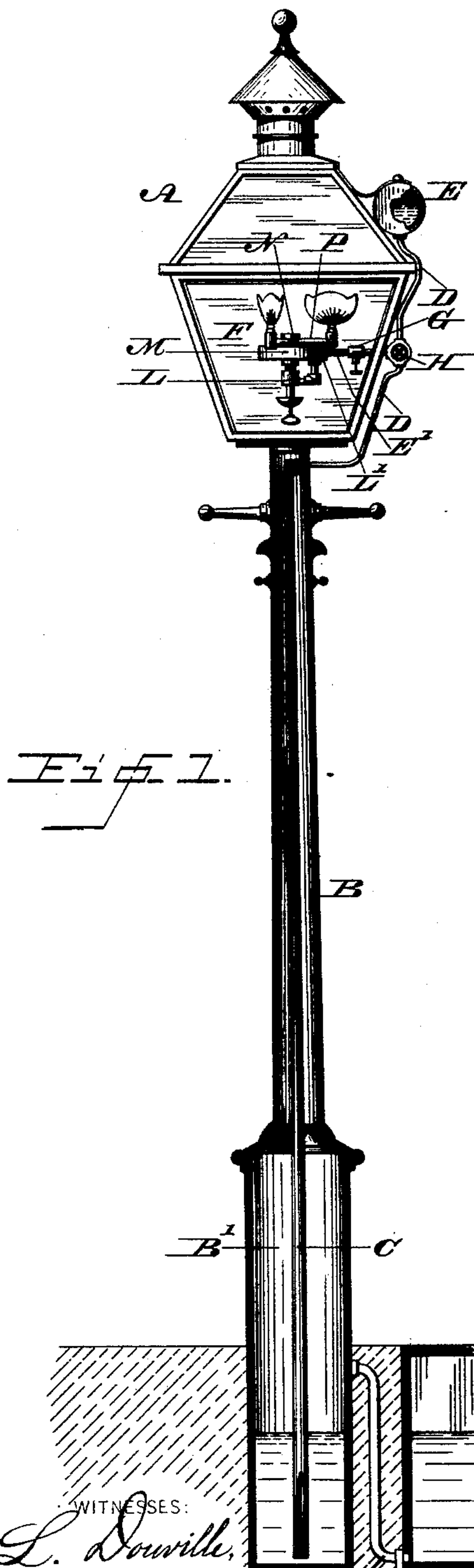


(No Model.)

P. J. FITZGERALD.
VAPOR LAMP.

No. 410,407.

Patented Sept. 3, 1889.



WITNESSES:
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PETER J. FITZGERALD, OF SHARON HILL, PENNSYLVANIA.

VAPOR-LAMP.

SPECIFICATION forming part of Letters Patent No. 410,407, dated September 3, 1889.

Application filed June 19, 1888. Serial No. 277,554. (No model.)

To all whom it may concern:

Be it known that I, PETER J. FITZGERALD, a citizen of the United States, residing at Sharon Hill, in the county of Delaware, State of Pennsylvania, have invented a new and useful Improvement in Vapor-Lamps, which improvement is fully set forth in the following specification and accompanying drawings.

My invention consists of a vapor-lamp having means for conveniently supplying the reservoir thereof with hydrocarbon or other illuminating-fluid.

It also consists of means for preventing volatilization of the fluid and escape of the same from the reservoir, due to the action of the heat of the sun thereon.

Figure 1 represents a partial side elevation and partial vertical section of a vapor-lamp embodying my invention. Fig. 2 represents a view of a detached portion thereof.

Similar letters of reference indicate corresponding parts in both figures.

Referring to the drawings, A represents a lantern, which is supported on the post B, the latter being hollow and closed on all sides excepting at the top. The lower portion forms a chamber B' for containing oil or hydrocarbon fluid, or may have a separate chamber for said purpose. Within the post is a pipe C, which passes through the top thereof, and is connected by a branch D with the reservoir E, the latter being sustained on the lantern. Connected with the branch D is a supply-pipe E', leading to the burner F, said pipe having a plug or cock G for regulating the supply of fluid to the burner. The branch D is provided with a two-way cock H for controlling the supply of fluid from the pipe C to the reservoir E. Connected with the chamber B' is a pipe J, which leads from a tank K, the latter being located in the ground or elsewhere and containing hydrocarbon fluid under pressure, the pressure being produced by means of a pump or other suitable apparatus or means. The pipe J, it will be noticed, enters the chamber B above the opening in the lower end of the pipe C, and the said opening is near the bottom of the chamber. By this construction impurities which have passed into the chamber B through the said pipe J do not pass into the pipe C unless the oil in the chamber is lower than the said opening. An-

other advantage of the said chamber B is that it aids in securing a more uniform flow of oil in the pipe C. It will be seen that when the cock H is opened the fluid from the tank is forced into the chamber B', and from thence through the pipe C and branch D into the reservoir E. When the latter is filled, the cock H is turned, whereby communication with the pipe C is closed and communication with the pipe E' opened, so that the fluid enters said pipe E' and may be directed to the burner when the cock G is opened.

The reservoir E is covered or jacketed with asbestos, whereby said reservoir is prevented from becoming materially heated during the day-time while exposed to the sun, and thus volatilization of the fluid contained in the reservoir and consequent escape of the vapor at the joint of the supply cap or cover of said reservoir are prevented.

I am aware that it is not new to place a water-jacket above the reservoir of the lamp to protect the contents of the same from the heat of the flame, but with such it is necessary to provide a basin or other device to contain the said water; but in the invention herein set forth the asbestos is placed upon the top of the reservoir, and, owing to its adhesive qualities, remains thereon without mechanical devices being required.

The matter described and shown herein relating to the burner proper is reserved, being made the subject of another application, filed June 15, 1889, and bearing Serial No. 314,437.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The pipe C, connected with the reservoir E, a place of supply of fluid under pressure, and a chamber connected therewith, the branch D, with the cock H, and the pipe E', with the cock G, combined and operating substantially as described.

2. A supply-tank adapted to contain liquid under pressure, a chamber connected by a pipe with said supply-tank, a supply-pipe leading from said chamber and having a two-way cock therein, a reservoir connected with said supply-pipe, and a pipe leading from said cock and having a cock and burner, said parts being combined substantially as described.

3. The tank K, adapted to contain liquid

under pressure, a chamber connected with said tank, the pipe C, leading from said chamber and having the branch pipe D, with the two-way cock therein, the reservoir E, communicating with the said branch pipe D, and the pipe E', with cock H and burner F, said parts being combined substantially as described.

4. The tank K, in combination with a separate chamber, the post B, the pipe C, leading from said chamber and to said post, the branch pipe D, having the cock H, the reservoir E, supported by a frame connected with

the post B, and the pipe E', leading from the two-way cock H and provided with the cock G and burner F, said parts being combined substantially as and for the purpose described.

5. A lamp with a reservoir above the flame of the same, the said reservoir having a coating of asbestos on the upper surface thereof, substantially as and for the purpose set forth.

PETER J. FITZGERALD.

Witnesses:

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