(No Model.)

F. B. WIGLE.

VAPOR BURNER.

No. 318,151. Patented May 19, 1885.

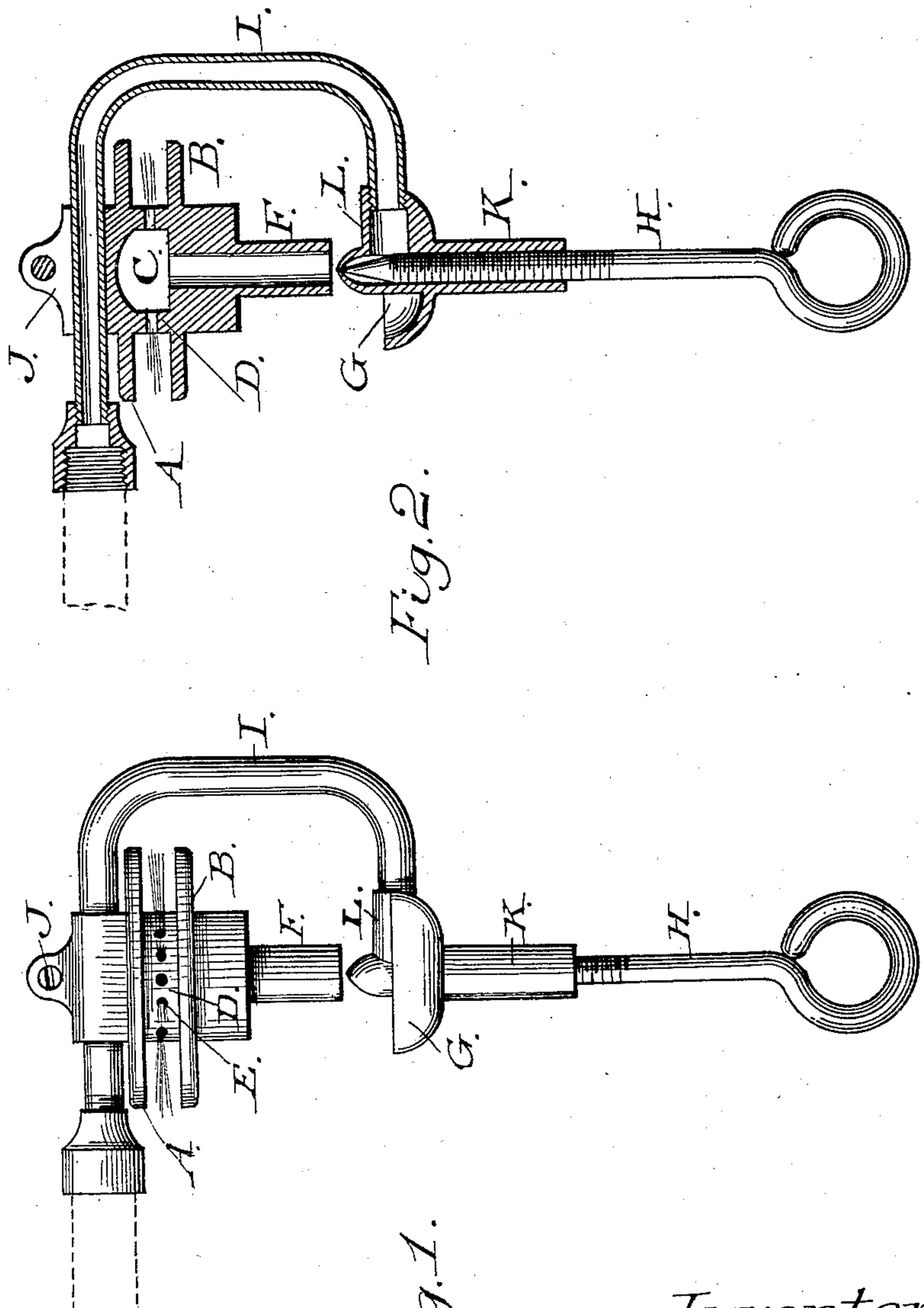

Fig. 2.

Fig. 1.

Witnesses;
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Frederick B. Wigle,
by his Attorney
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UNITED STATES PATENT OFFICE.

FREDERICK B. WIGLE, OF MANSFIELD, OHIO.

VAPOR-BURNER.

SPECIFICATION forming part of Letters Patent No. 318,151, dated May 19, 1885.

Application filed June 13, 1884. (No model.)

To all whom it may concern:

Be it known that I, FREDERICK B. WIGLE, a citizen of the United States, and a resident of Mansfield, in the county of Richland and State of Ohio, have invented certain new and useful Improvements in Vapor-Burners, of which the following is a specification.

The invention relates to improvements in vapor-burners, and particularly to that class of vapor-burners employed for lighting purposes.

It consists, essentially, in a novel construction and arrangement of the burner and conducting-tube, supplied at its lower end with the pan and regulator screw, whereby the heat from the burner may be utilized to generate the gas in that portion of the tube in contact with the upper plate of the burner, without additional jets, all as hereinafter pointed out.

The burner which is the subject of this application is illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation, and Fig. 2 is a central vertical section of same.

In the drawings, A B respectively denote the upper and lower plates of the burner, which plates form a chamber, C, between them and are connected by a vertical wall, D, having an annular line of perforations, E, whereat ignition takes place. The periphery of the plates A B extends beyond that of the wall D, as shown, and to the chamber C passes a tube, F, the lower end of which terminates centrally over the pan G and the upper end of the regulating-screw H. The conducting-tube I is firmly secured in contact with the upper surface of the plate A of the burner by the sleeve J or other suitable means, and the outer end of the tube will be connected in any suitable manner with a source of supply of the liquid hydrocarbon, while its lower portion passes downward from the plate A to the pan G. A vertical tube, K, inclosing the regulating-screw H, extends through the pan G, and this vertical tube is intersected by the smaller internally-threaded horizontal tube L, in which the lower threaded end of the conducting-tube I is secured.

The burner is so simple in construction that its operation will be apparent. When the burner is in use the heat from the flame will be conducted by the top plate, A, to that portion of the conducting-tube K located upon and adjacent to the same, whereby the gas will be generated without additional jets of flame, and will pass thence in the usual manner to the burner.

I am aware that burners have been constructed with the tube and burner made integral, as shown in patent to Wellington, No. 304,387, September 2, 1884; but such construction has been found faulty, in that after the burner, from constant use, becomes worthless, it cannot be detached, thereby rendering the tube worthless; and, further, that burners have been made in two or more pieces, as shown in patent to Billings, No. 238,633, March 8, 1881, which makes the manufacture of such very expensive, and therefore I make no claim to such construction; but

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

In a vapor-burner, the combination, with the burner, consisting of the plates A B and perforated wall D, made integral with each other, and forming a chamber, C, of the tube I, sleeve J, securing the tube I to the burner, tube F, leading into the chamber C, tubes K L, drip-pan G, and the screw H, the above parts being combined and adapted to operate substantially as set forth.

Signed at Mansfield, in the county of Richland and State of Ohio, this 24th day of May, A. D. 1884.

FREDERICK B. WIGLE.

Witnesses:
THOS. E. BARROW,
W. BARNETT.