

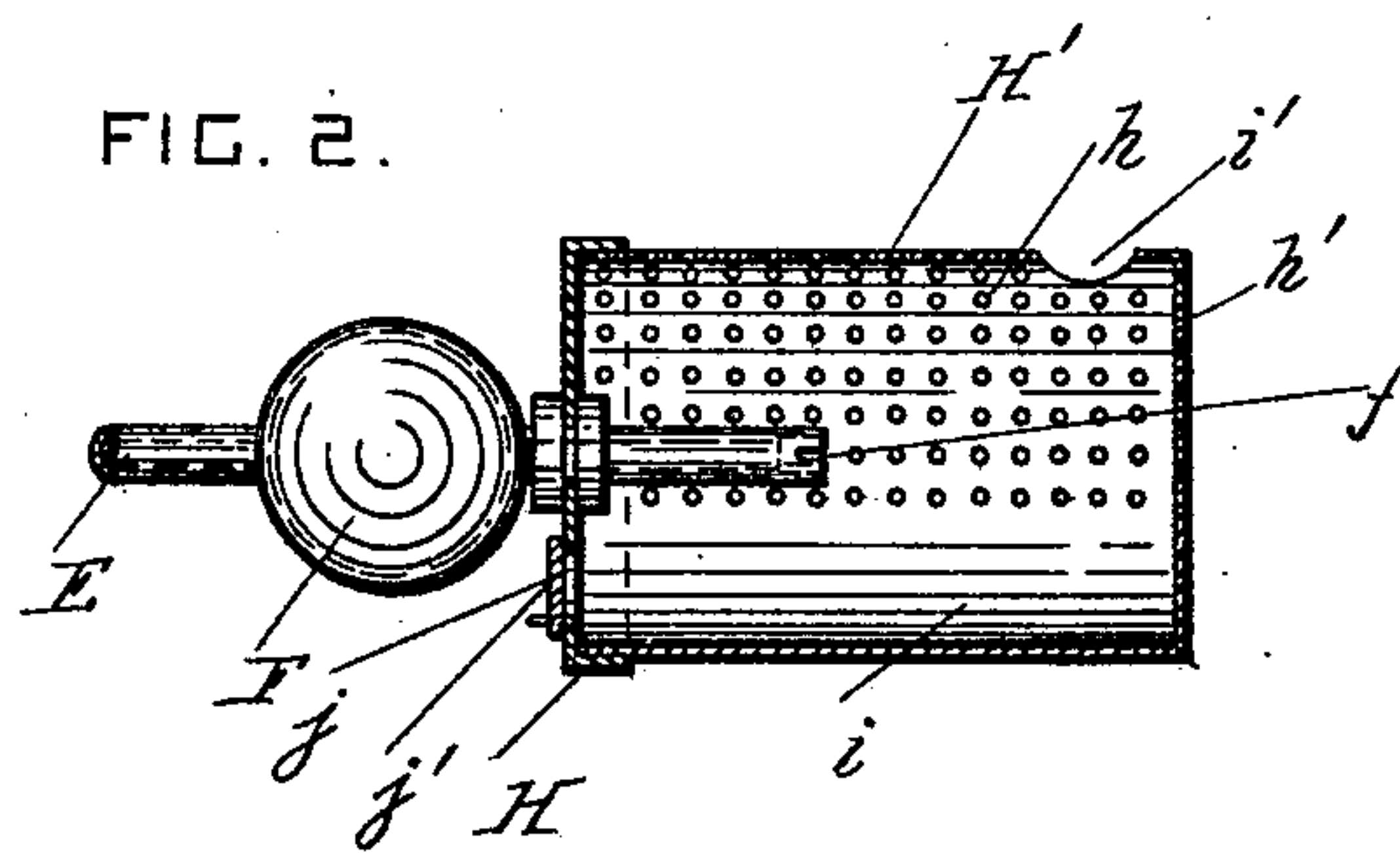
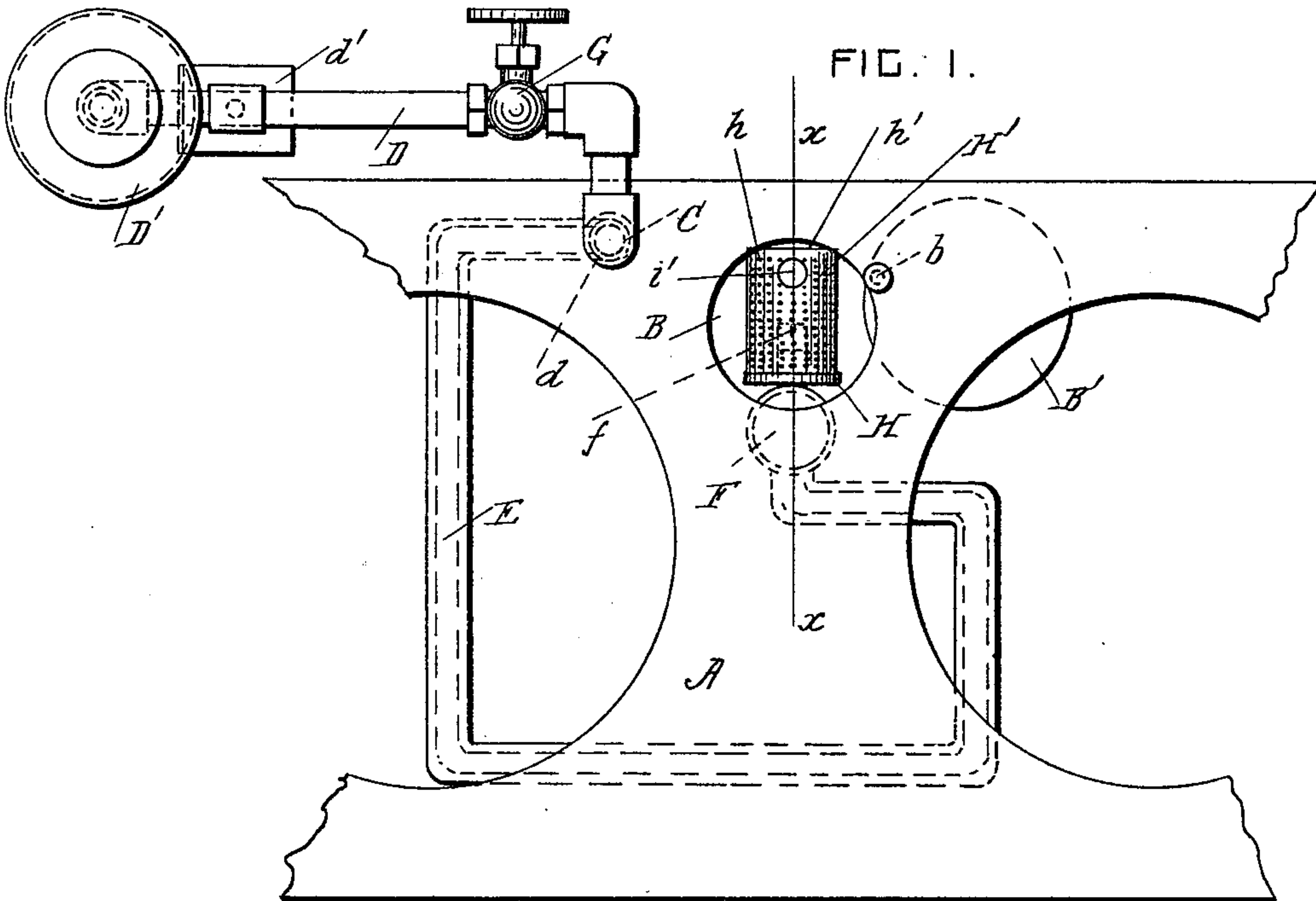
No. 631,274.

Patented Aug. 22, 1899.

A. A. BROWER.
ATTACHMENT FOR STOVES.

(Application filed May 29, 1899.)

(No Model.)



WITNESSES

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ATTACHMENT FOR STOVES.

SPECIFICATION forming part of Letters Patent No. 631,274, dated August 22, 1899.

Application filed May 29, 1899. Serial No. 718,723. (No model.)

To all whom it may concern:

Be it known that I, ASHER A. BROWER, a citizen of the United States, residing at Topeka, in the county of Shawnee and State of Kansas, have invented certain new and useful Improvements in Attachments for Stoves; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to attachments for ordinary cook-stoves heated by solid fuel, so that the stove can be heated by gas when it is desirable not to use solid fuel.

This invention consists in the novel construction and combination of the parts hereinafter fully described and claimed.

In the drawings, Figure 1 is a plan view of a portion of the top plate of a cook-stove, showing the attachments. Fig. 2 is a longitudinal section taken on line *xx* in Fig. 1.

A is a portion of the top plate of an ordinary cook-stove.

B is an additional hole for draft formed in the back part of the top plate at about the middle of its length.

B' is a damper-plate pivoted to the top plate A by a pin *b* and operating to regulate the area of the draft-passage through the hole B.

C is a small additional hole formed in the top A near the hole B.

D is an oil-pipe provided with an oil-reservoir D' and arranged outside the stove.

E is a tortuous vapor-pipe arranged below the top plate A inside the stove and connected to the pipe D by a nipple *d*, which is arranged in the hole C. The oil-pipe is also connected to the top plate A by a clamp *d'* of any approved construction.

F is an enlargement or vaporizing-bulb formed in the pipe E near its free end. The free end of the pipe E has a small hole or slit *f*, through which oil can issue when the gas-pipe is cold.

G is a regulating-valve arranged in the pipe D outside the stove.

H is a circular flanged head secured on the free end portion of the pipe E.

H' is a removable cylinder which fits in the flange of the head H. The cylinder H' has a head *h'* at its outer end, and the upper and

middle portions of the cylinder H' and head *h'* are provided with a large number of small perforations *h*. The lower parts of the said cylinder and head have no perforations and therefore form a trough *i*, which extends under the end portion of the pipe E. The cylinder H' has a lighting-hole *i'* in its upper side, arranged under the draft-hole B. A hole *j* is formed in the lower part of the head H and is provided with a pivoted regulating-plate *j'* for regulating the entrance of air to mix with the vapor in the cylinder. These devices are attached to the cook-stove in summer-time or whenever it is not desirable or requisite to use solid fuel and they are removed when solid fuel is used.

A little oil is first allowed to pass through the valve G and pipe E into the trough *i*. The oil is lighted in the trough by inserting a lighted match or taper through the holes B and *i'*. The oil burns in the trough *i* and heats the end portion of the pipe E as far back as the vaporizing-bulb. The oil is converted into vapor in the end portion of the pipe E and in the bulb, and the vapor becomes mixed with air in the cylinder. The mixed vapor and air burns outside the cylinder, and the air to support combustion passes downward through the draft-hole. The products of combustion pass up the stove-chimney in the ordinary way and are controlled by the ordinary dampers of the stove the same as when solid fuel is used.

What I claim is—

1. The combination, with the top plate of a stove provided with a draft-hole having a damper-plate; of a tortuous vapor-pipe arranged under the said top plate and provided with a vaporizing-bulb, an oil-pipe connected to the said vapor-pipe, an oil-reservoir and a regulating-valve connected to the said oil-pipe, and a cylinder inclosing the free end portion of the said vapor-pipe and provided with small perforations in its upper part, said cylinder having also a lighting-hole and an air-inlet hole, substantially as set forth.

2. The combination, with a top plate of a stove provided with a draft-hole having a damper-plate; of a tortuous vapor-pipe arranged under the said top plate and provided with a vaporizing-bulb, an oil-pipe connected to the said vapor-pipe, an oil-reservoir and a

regulating-valve connected to the said oil-pipe, a flanged head secured on the said vapor-pipe and provided with an air-inlet hole and a regulating-plate, and a removable cylinder engaging with the flange of the said head and provided with small perforations in its upper part and a lighting-hole, the lower part of the said cylinder constituting a trough for oil, substantially as set forth.

10 3. The combination, with the top plate of a stove provided with a draft-hole having a damper-plate; of a vapor-pipe arranged under the said top plate and provided with a vaporizing-chamber; an oil-pipe, a regulat-

ing-valve, and an oil-reservoir, all connected 15 with the said vapor-pipe; and a perforated mixing-chamber for air and vapor arranged below the said draft-hole and inclosing the free end portion of the vapor-pipe and provided with a lighting-hole, substantially as 20 set forth.

In testimony whereof I affix my signature in presence of two witnesses.

ASHER A. BROWER.

Witnesses:

S. E. PARHAM,

L. THISTLETHWAITE.