

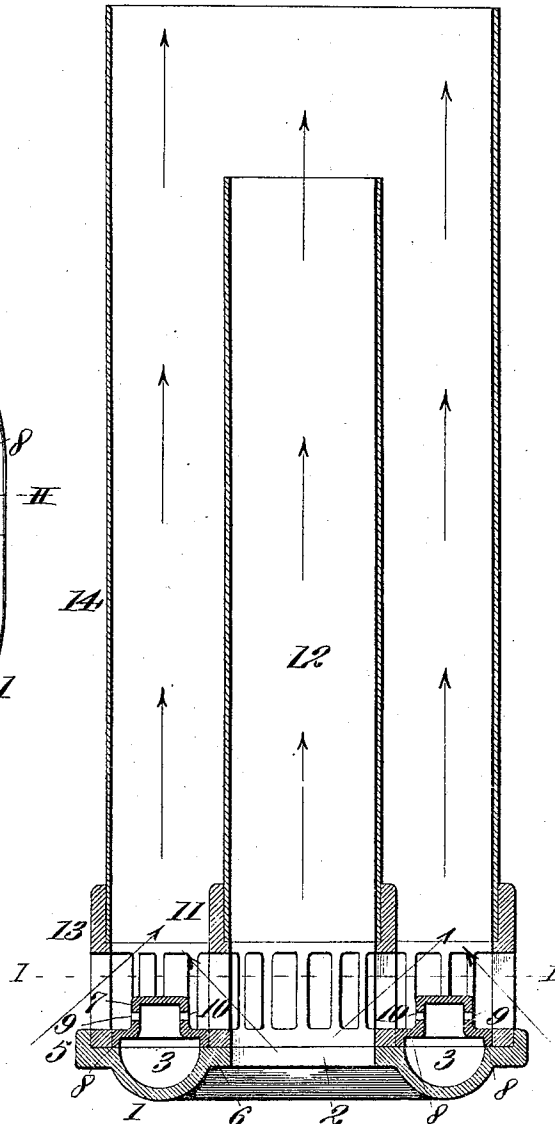
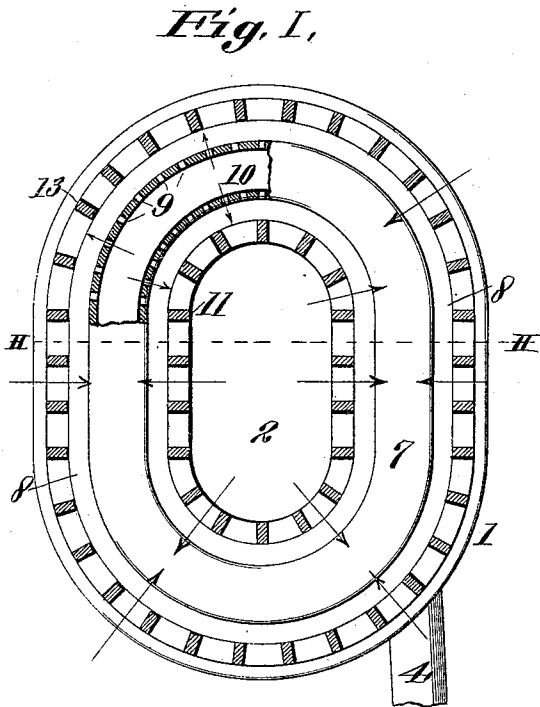
(No Model.)

B. S. KOLL.
VAPOR BURNER.

No. 578,246.

Patented Mar. 2, 1897.

Fig. II.



Attest,
B. L. Frederick.
Stanley Stoner

Inventor,
Benjamin S. Koll.

By Wright, Bro
attys

UNITED STATES PATENT OFFICE.

BENJAMIN S. KOLL, OF ST. LOUIS, MISSOURI.

VAPOR-BURNER.

SPECIFICATION forming part of Letters Patent No. 578,246, dated March 2, 1897.

Application filed March 31, 1892. Serial No. 427,207. (No model.)

To all whom it may concern:

Be it known that I, BENJAMIN S. KOLL, a citizen of the United States, residing at the city of St. Louis, in the State of Missouri,

5 have invented a certain new and useful Improvement in Vapor-Burners, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

10 My invention relates to an improvement in burners for vapor heating-stoves; and my invention consists in features of novelty hereinafter fully described, and pointed out in the claim.

15 Referring to the drawings, Figure I illustrates a horizontal section taken on line I I, Fig. II, through the burner, a portion of the burner-cap being also shown in horizontal section. Fig. II illustrates a vertical section

20 taken on line II II, Fig. I. In the drawings, 1 represents the mixing-chamber or base of a burner having a central opening 2 and provided with a trough 3.

4 designates the inlet-pipe leading to the burner and opening into the trough 3. The mixing-chamber is provided with outer flanges 5 and inner flanges 6 on each side of the trough 3, and on these flanges the burner-cap 7 rests. The burner-cap is provided with flanges 8 and

30 has outer jet-holes 9 and inner jet-holes 10.

11 designates an inner grate that rests upon the flange 6, the central opening of which is directly above the opening 2. This grate is surmounted by a vertical cylinder 12.

13 designates an outer grate, which rests 35 upon the flange 5 and surrounds the burner-cap 7. This outer grate is surmounted by an outer cylinder 14.

The vapor enters the burner through the pipe 4, passing into the trough 3, and from 40 the trough passes through the jet-holes 9 and 10 of the burner-cap, where it is burned. The passage of the air into and through the burner is indicated by the arrows in the drawings. One current of air enters the burner through 45 the opening 2, a portion of it ascending directly through the inner cylinder 12, while the remainder diverges from an upward direction, passing through the openings of the inner grate 11. The other current of air enters 50 the burner through the outer grate 13, where it comes in contact with the flame of the burner and descends through the outer cylinder 14.

I claim as my invention—

55 A vapor heating-stove comprising a main burner having a central opening, the inner and outer grates, the inner and outer cylinders mounted on their respective grates, and the cap having inner and outer flanges provided with jet-holes; substantially as described. 60

BENJAMIN S. KOLL.

In presence of—

BENJN. A. KNIGHT,
SAML. KNIGHT.