

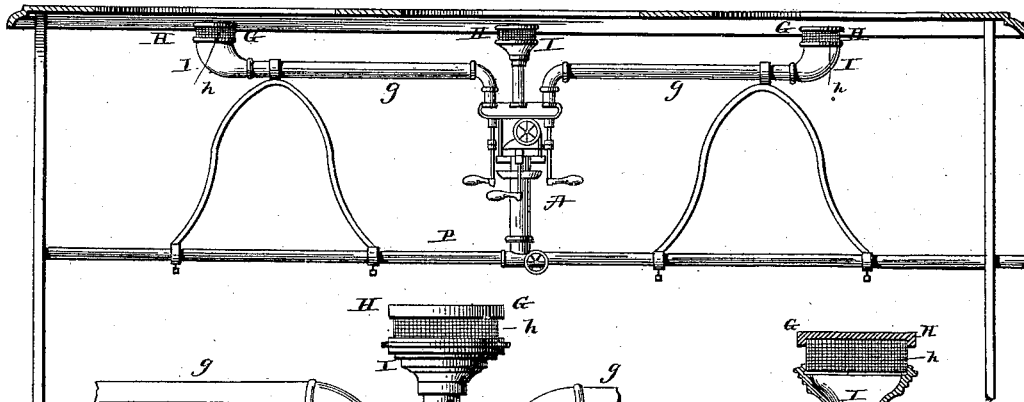
(No Model.)

P. SCHNEIDER & H. TRENKAMP.  
VAPOR STOVE.

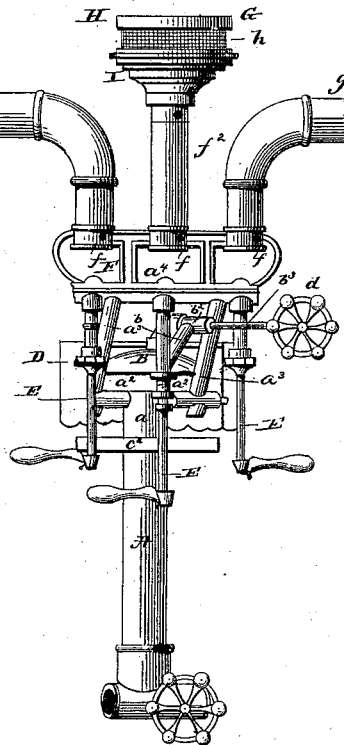
No. 343,733.

Patented June 15, 1886.

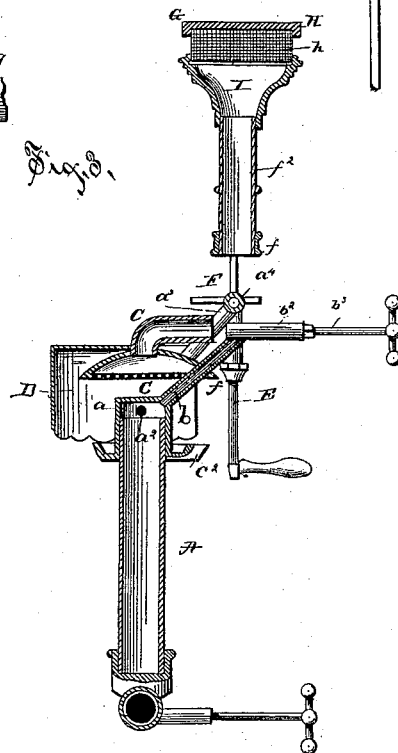
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



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# UNITED STATES PATENT OFFICE.

PAUL SCHNEIDER AND HENRY TRENKAMP, OF CLEVELAND, OHIO.

## VAPOR-STOVE.

SPECIFICATION forming part of Letters Patent No. 343,733, dated June 15, 1886.

Application filed August 10, 1885. Serial No. 174,033. (No model.)

*To all whom it may concern:*

Be it known that we, PAUL SCHNEIDER and HENRY TRENKAMP, both of Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Vapor-Stoves, of which the following is a specification.

This invention relates to vapor-stoves; and it consists in the peculiar construction and adaptation of a burner, whereby vapor is generated for supplying several burners grouped or arranged about said burner.

Our invention consists of a generating pipe or chamber having tubes leading therefrom supplying a burner directly over the generating-chamber, whose flames strike downward on the top of the generating-chamber, also supplying other burners for cooking or heating purposes, the several parts comprising said invention being constructed, combined, and operating substantially as hereinafter fully described, and pointed out in the claim.

In the accompanying drawings, Figure 1 is a front sectional elevation of a stove-frame having our improved burner attached, showing location and arrangement of the generating-burner relative to the side burners. Fig. 2 is a front elevation enlarged of our generator and supply-burner. Fig. 3 is a vertical section of the same.

A is a generating-tube attached by a T-joint to the main supply-pipe P.

To the top of tube A is attached a cap, *a*, having arms *a*<sup>2</sup>, from which arise branch pipes *a*<sup>3</sup> in a diagonal line, supporting a cross-tube, *a*<sup>4</sup>, in which the orifices and needle-valves are located. From the said cap *a* is also made a tube, *b*, standing at an angle of about forty-five degrees, and having on its upper end a branch, *b*<sup>2</sup>, in which is provided a needle-valve, *b*<sup>3</sup>.

B is a burner consisting of a concave disk having a foraminous bottom, C, forming a

plano concave chamber located directly over the generator A. To the top of said chamber B is attached a bent-tube, *c*, having its open end toward the orifice in the tube *b*<sup>2</sup>, through which vapor is injected for supplying said burner with vapor, which burns at the perforations in the bottom, the flames from which strike directly on top of cap *a* for heating the generator. A heater-cup, *c*<sup>2</sup>, is attached to the generator-tube below the cap for the initial starting of the burner.

D is a shield or apron, partly surrounding the burner for the purpose of protecting this burner from outside air-currents.

Depending from cross-tube *a*<sup>4</sup> are sockets for needle-valves E. To said cross-tubes is attached a frame, F, for supporting the tubes leading to the several burners. Said frame has rings *f*, located directly over the orifices and needle-valves E. In said rings are secured the pipes leading to the burners. The middle or central burner stands on a short vertical tube, *f*<sup>2</sup>, and under the central opening in the stove-top. Branch pipes *g*, connected by elbows, lead to side burners, G, located beneath openings in the stove-top.

The burners G consist of commingling-chambers composed of perforated rings *h*, covered by a flat disk, H, and standing on cups I, attached to the ends of tubes *f*<sup>2</sup> and *g*, the vapors issuing from perforations in the rings *h* and producing bright circular flames.

Having described our invention, we claim as follows:

The combination of generating-chamber A, outlet *b*, pipe *c*, burner B, cap *a*, pipes *a*<sup>2</sup> and *a*<sup>3</sup>, cross-tube *a*<sup>4</sup>, pipes *f*<sup>2</sup>, and burners G, substantially as set forth.

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Witnesses:

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