(No Model.) 2 Sheets—Sheet 1.

H. FLYNT.

VAPOR OR GAS STOVE.

No. 377,850. Patented Feb. 14, 1888.

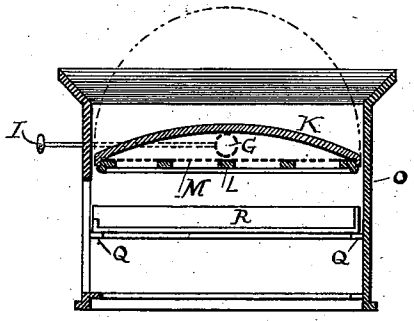

Fig 1

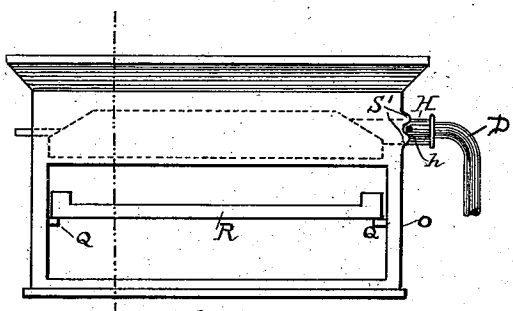

Fig 2

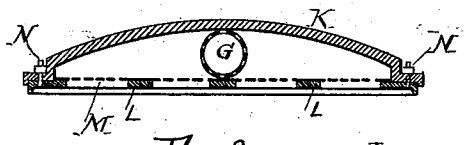

Fig 3

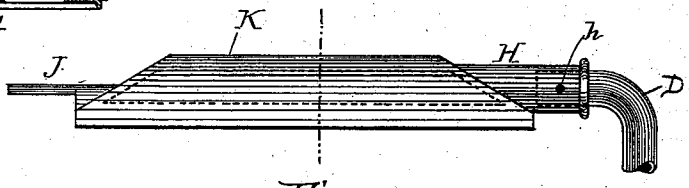

Fig 4

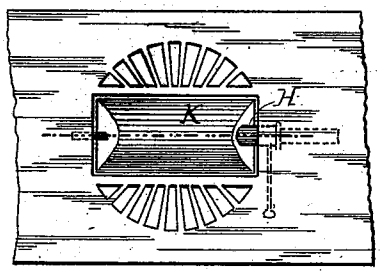

Fig 6

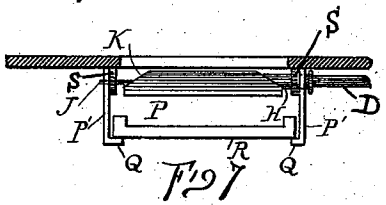

Fig 7

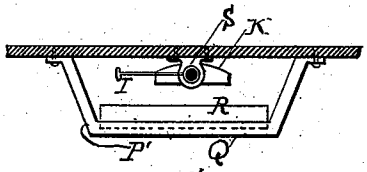

Fig 8

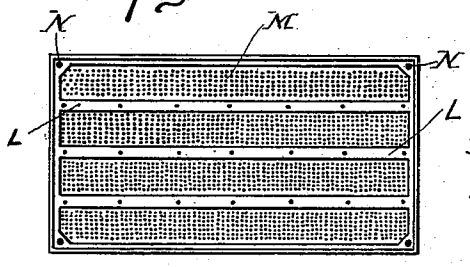

Fig 5

WITNESSES:

Jas. Olive Hogg.

Geo. R. Hogg.

INVENTOR,

Henry Flynt

BY J. H. Higdon

ATTORNEY.

N. PETERS. Photo-Lithographer, Washington, D. C.

(No Model.) 2 Sheets—Sheet 2.

H. FLYNT.

VAPOR OR GAS STOVE.

No. 377,850. Patented Feb. 14, 1888.

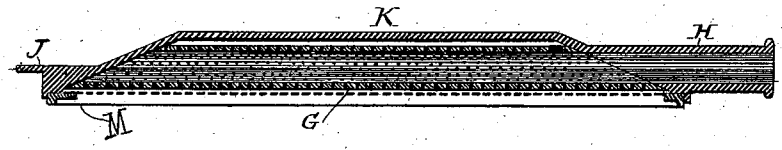

Fig 9

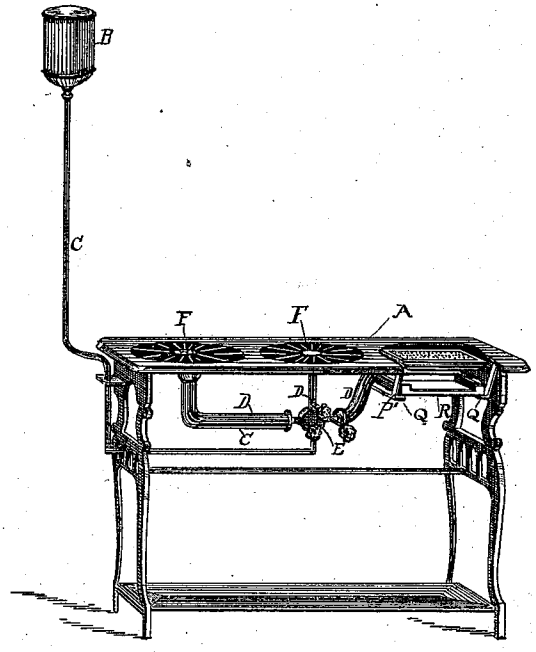

Fig 10

WITNESSES:
Jas. Oliver Hogg.
Geo. R. Hogg.

INVENTOR,
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BY J. R. Higdon.
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N. PETERS. Photo-Lithographer. Washington, D. C.

UNITED STATES PATENT OFFICE.

HENRY FLYNT, OF KANSAS CITY, MISSOURI, ASSIGNOR OF ONE-HALF TO CHARLES E. COOKE, OF SAME PLACE.

VAPOR OR GAS STOVE.

SPECIFICATION forming part of Letters Patent No. 377,850, dated February 14, 1888.

Application filed March 9, 1887. Serial No. 230,255. (No model.)

To all whom it may concern:

Be it known that I, HENRY FLYNT, of Kansas City, Jackson county, Missouri, have invented certain new and useful Improvements in Vapor or Gas Stoves, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

This invention relates more particularly to a reversible burner for use in a vapor or gas stove; and its object is to provide a burner swiveled upon the end of the commingling tube and adapted to throw the heat either upward against the under side of the article desired to be heated or cooked or downward upon the top of such article. In connection with such burner are arranged a frame-work for supporting the cooking utensils and other details, all of which will be set forth herein, and more particularly pointed out in the claims. I accomplish this object by means of the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a cross-section of the elevating frame-work for supporting the cooking utensils above the table of the ordinary vapor or gas stove, the reversible burner being shown in cross-section therein. Fig. 2 is a side elevation of Fig. 1. Fig. 3 is an enlarged cross-section of the reversible burner detached. Fig. 4 is a side elevation of Fig. 3, showing the swivel connection. Fig. 5 is a plan view of the perforated face of the burner. Fig. 6 is a plan view of a portion of the stove-table, showing my improved reversible burner pivoted therein and with its perforated face turned downward. Fig. 7 is a longitudinal section of a portion of the stove-table, showing the hanger frame-work for supporting the cooking utensils below the surface of the table, the reversible burner being also shown therein, its face turned downward. Fig. 8 is an end view of Fig. 7. Fig. 9 is a central longitudinal sectional view of my improved reversible burner. Fig. 10 is a general perspective view of a gas or vapor stove, showing my reversible burner and the hanger frame-work attached thereto.

The same letters of reference have been applied to corresponding parts throughout the several figures and in the specification.

The letter A designates the stove-table supported by suitable legs.

B is the reservoir for the gasoline; C, the supply-tube leading to the commingling tubes D through the generator E, which may be of any desired or preferred construction. When artificial or natural gas is used, it will be led direct into the tubes D through a suitable branch and valves located at E. The tubes D may be of any desired number and lead to burners F in the top of the stove-table, all as now ordinarily constructed and in general use in stoves of this character.

Upon one or more of the tubes D, at its outer end, I swivel my improved reversible burners, as shown in Figs. 2, 4, and 7, the swivel connection being of any preferred construction, but permitting no escape of the gas or vapor. This burner consists of a perforated interior tube, G, closed at one end by a shield, K, as described below, and opening at the other into a short tube, H, which constitutes one member of the swivel-joint. The tube H is provided with a hole, *h*, into which a pin, I, may be inserted for turning this tube on the tube D, and thus reversing the burner; or any other suitable means may be employed for this purpose—such, for instance, as a handle rigidly connected to the tube H. Attached to the shield K, opposite the end of the perforated tube G, and projecting axially from opposite the closed end of said tube, is a bar, J, and this bar with the tube D form the journals upon which the reversible burner is pivoted.

The perforated interior tube, G, is surrounded by a shield or backing, K, on three sides, which shield is of sheet metal and preferably concavo-convex, as shown. The face of the burner is composed of a metallic frame-work, L, stretched from edge to edge of the shield, and a wire-netting, M, clamped against the inner surface of the frame-work L by means of bolts N, passing through the frame-work, netting, and shield at the edges. The vapor or gas enters the perforated tube G from tubes H and D, passes through the perforations therein into the chamber formed by the shield and face, and is forced through the perforated face against the utensil or article to be heated or cooked.

It will be evident that when the face of the

burner is turned uppermost the heat will be thrown upward, and that when the burner is turned on its journals, so that the face will be down, the heat and the flames will be thrown in that direction.

The elevating frame-work O (illustrated in Figs. 1 and 2) is preferably composed of sheet-iron, and adapted to be placed upon the table-top for elevating the cooking utensils above the same. This frame-work is preferably rectangular in shape, open at top and bottom, and closed on all sides, except opposite one end of the slides Q, whereon a dish, pan, or broiler, R, is adapted to be supported below the burner, and when the face of the latter is turned down the flames will be thrown into this dish or upon the top of the article being cooked. By withdrawing the dish R and resting it upon the top of the sides of the frame-work O and by turning the burner face upward the bottom of the dish will be heated.

The hanger frame-work P (illustrated in Figs. 6, 7, 8, and 10) is constructed, preferably, of sheet-metal angle-strips P′, depending from the table-top and connected at their lower extremities by horizontal slides Q. This frame-work is intended for a similar use, except that herein the dish is supported below the table-top by means of the strips Q, and when it is desired to heat the bottom of such dish, or, in fact, the bottom of any dish, it is simply placed on the stove-top above the burner and the latter turned face upward.

It will be understood that in using either frame-work the pipe D must be led to the swivel-joint, and, further, that the hanger frame-work may be rigidly attached to the stove-table by bolts, screws, or any other suitable means, if desired, as shown in Fig. 10. The bar J is suitably journaled in either frame-work used, and the tube H is passed loosely through such frame-work in order that the burner may be reversed at pleasure.

In Fig. 4 I have illustrated two supplemental lugs, S, depending from the table-top, through which the bar J and tube H may also be passed, if desired, for further strengthening the device, although this feature is not essential.

In Fig. 2 I have shown a device for fastening the burner with its face either up or down. This device consists of two lugs, S′, having rounded faces, and when the rod I is sprung and rests between these lugs the burner-face will be locked in downward position. Upon the opposite side of the frame-work are two similar lugs, (not here shown,) and when the rod rests between these latter the burner-face will be locked in upward position. Although I have not illustrated this device in connection with the hanger frame-work, I contemplate its use when the rod I is employed.

When a handle or other similar device is used for reversing the burner, any suitable means may be employed for locking it.

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

1. The herein-described reversible burner for vapor or gas stoves, comprising the short tube H, swiveled upon the conducting-tube D, the perforated tube G, extending the tube H, the shield K, surrounding the perforated tube on three sides, and the perforated face M, secured to the edges of said shield, in combination with a frame-work within which said burner is supported, substantially as described.

2. The herein-described reversible burner for vapor or gas stoves, comprising the short tube H, provided with the hole *h*, adapted to receive a reversing-pin, I, said tube being swiveled upon the conducting-tube D, the perforated tube G, extending the tube H, the shield K, surrounding the perforated tube on three sides, the netting M, connecting the edges of the shield, the frame L, covering said netting, and the bolts N, passing through the edges of the shield, netting, and frame for securing them together, in combination with a frame-work within which said burner is supported, substantially as described.

3. In a reversible burner for vapor or gas stoves, the combination, with the burner proper having the short tube H at one end and the rod J at the other, of a frame-work within which said rod is journaled, and a conducting-tube swiveled to said tube H, as and for the purpose set forth.

4. The combination, with the reversible burner, the tube H, provided with the hole *h*, and the pin I, of the frame-work for supporting the burner, provided with the lugs S′ and the supply-tube D, for the purpose stated.

5. In a vapor or gas stove, the combination, with a reversible burner and a conducting-tube connected thereto, of a frame-work within which said burner is journaled midway between its bottom and top, said frame-work having an open top and being provided with slides Q near its bottom, as and for the purpose set forth.

6. In a vapor or gas stove, the combination, with the stove-table A and the hanger frame-work, the latter comprising depending arms P′, having the slides Q, of the reversible burner journaled midway between said stove-table and slides, for the purpose set forth.

7. In a vapor or gas stove, the combination, with the stove-table A, the lugs S, secured thereto, and the hanger frame-work comprising the depending arms P′, having the slides Q at their lower ends, said frame-work being open at its top, of the reversible burner journaled in said lugs below said stove-table, substantially as described.

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

HENRY FLYNT.

Witnesses:
J. W. NORTON,
G. E. NORTON.