

(No Model.)

A. E. DETWILER.
GAS STOVE BURNER.

No. 575,052.

Patented Jan. 12. 1897.

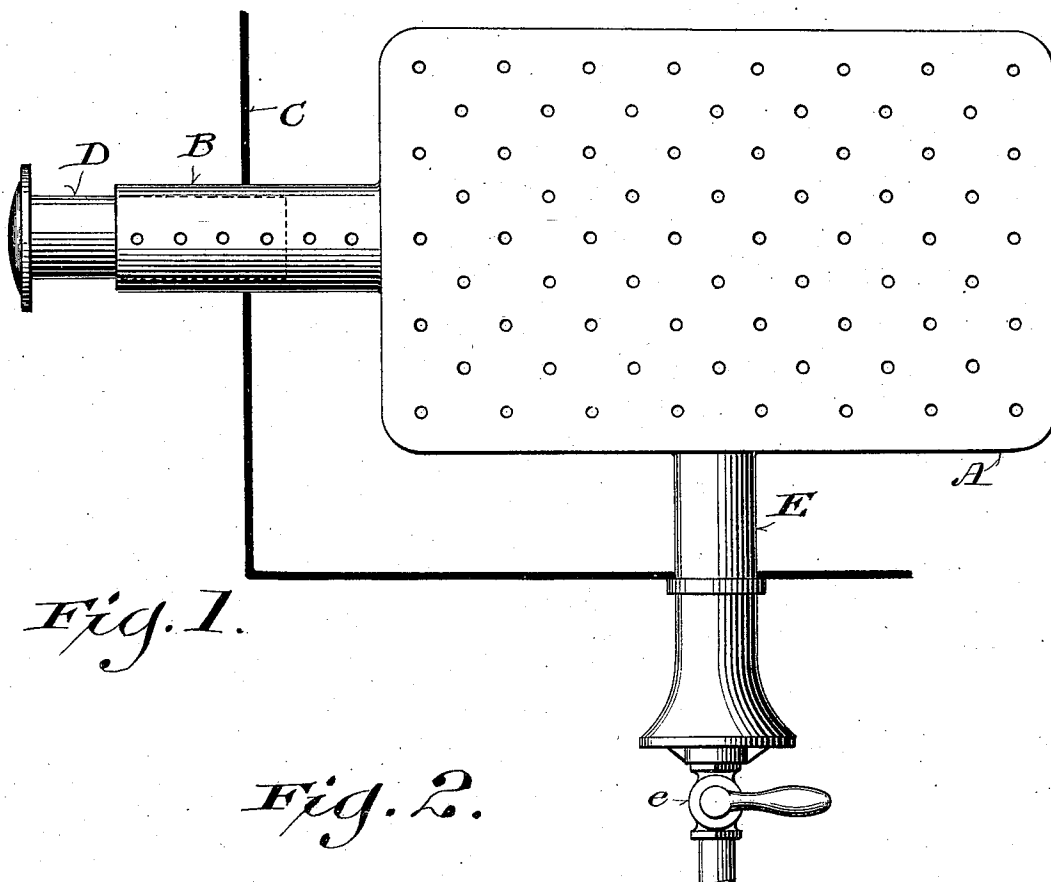
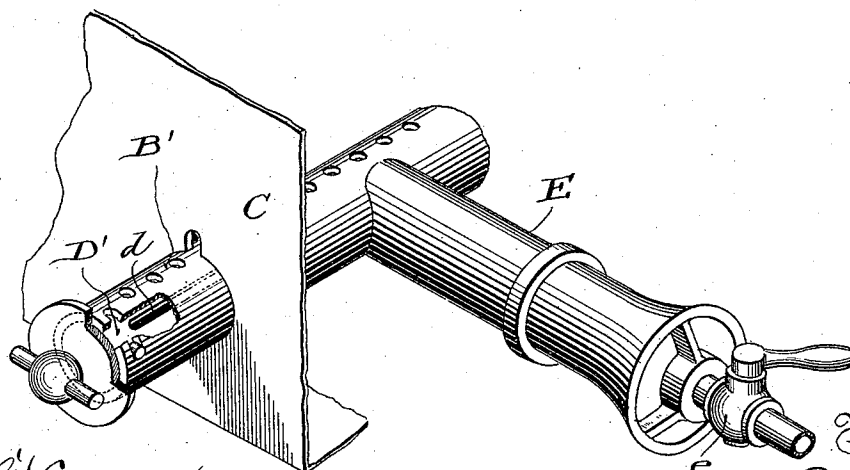


Fig. 1.

Fig. 2.



Witnesses:
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UNITED STATES PATENT OFFICE.

ALFRED E. DETWILER, OF CHICAGO, ILLINOIS, ASSIGNOR TO THE MILWAUKEE GAS STOVE COMPANY, OF MILWAUKEE, WISCONSIN.

GAS-STOVE BURNER.

SPECIFICATION forming part of Letters Patent No. 575,052, dated January 12, 1897.

Application filed May 22, 1896. Serial No. 592,525. (No model.)

To all whom it may concern:

Be it known that I, ALFRED E. DETWILER, of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful
5 Improvements in Gas-Stove Burners; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it pertains to make and use the
10 same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

The main object of my invention is to facilitate the lighting and regulation of burners which are inclosed or not exposed to view or are not easily accessible.

It consists, essentially, of a burner having one or more gas-discharge apertures, or series
20 of apertures, extending from the inside to the outside of the stove, that portion of the apertures outside serving to light the burner, a gas and air supply connection tapping the burner at a point removed from its lighting
25 extension, and a cut-off controlling the supply of gas to said extension.

In the accompanying drawings like letters designate the same parts in both figures.

Figure 1 is a plan view of a burner to which
30 my improvement is applied; and Fig. 2 is a perspective view of another form of burner, showing a modification of my improved lighting and regulating device.

Referring to Fig. 1, illustrating a form of
35 burner now in common use, consisting of a shallow-chambered casting A with gas-discharge apertures in the upper or under side, B designates a lighting and regulating extension formed with or applied thereto and projecting through the wall C of the stove-casing.
40 It is formed with an aperture, or series of apertures, extending from the outside to the inside of the casing in communication with or in proximity to the apertures in the body of
45 the burner, so that when the gas issuing from the apertures in the extension is lighted it will communicate its flame through an opening in the casing, as shown in Fig. 2, to the gas issuing from the apertures inside, and
50 thus light the concealed part of the burner within the stove. D designates a plug loosely

fitted inside of the extension B and adapted, when thrust into the same, to close the aperture or apertures therein outside of the casing.

Referring to Fig. 2, the lighting extension
55 B' of the burner outside of the casing C is provided with a rotary tubular plug or valve D', which has a longitudinal slot *d* in one side, which may be turned into and out of range with the gas-discharge aperture or ap-
60 ertures in said extension, so as to control the supply of gas thereto without affecting the supply to the apertures of the burner inside the casing.

The apertures in the lighting extension of
65 both forms of the burner corresponding in size or area with those inside, the size, condition, or quality of the flame within the stove may be determined from that outside of the casing, so that said extension not only affords
70 means for lighting the concealed and inaccessible portion of the burner, but also for determining the condition of the flame for the purpose of regulation, which is accomplished in the usual way by a cock or valve *e* in the
75 gas-supply pipe of the stove.

E designates the gas and air supply connection and mixing-chamber of the burner, which taps the same at a point removed from
80 its lighting extension, so that the position of the valve or cut-off in the lighting extension will not affect the supply of gas to the body or main portion of the burner within the casing.

I do not wish to be understood as limiting
85 myself to the exact details herein shown and described, as they may be variously modified within the spirit and intended scope of my invention; as, for instance, the form of the burner and the construction and arrangement
90 of its gas and air supply, mixing and regulating connection, as well as the construction and arrangement of the cut-off controlling the supply of gas to the lighting extension, may be modified in various ways without ma-
95 terially affecting the operation of the device.

I claim—

1. The combination with the casing of a stove, of a burner having a gas and air supply connection and one or more gas-discharge
100 apertures inside of said casing, and provided with a lighting extension projecting outside

of said casing, and having one or more gas-discharge apertures in communication with or proximity to the apertures of the burner inside of the casing which has an opening for the communication of flame from the apertures outside to those inside, and a valve or cut-off controlling the supply of gas to said lighting extension, substantially as and for the purposes set forth.

2. The combination with the fire-chamber of a stove, of a burner-pipe located within the fire-chamber, extending outside the stove, and provided with a series of apertures extending therealong from the inside to the outside of the fire-chamber, said fire-chamber having an opening adjacent to the series of apertures and the apertures outside of the fire-chamber serving as lighting apertures, and devices for

supplying and mixing air and gas, tapping the said burner-pipe at a point removed from the lighting apertures, substantially as and for the purposes set forth.

3. In a gas-stove, a burner provided with gas-supplying and air-mixing devices, and an extension projecting outside of the stove, and provided with a series of lighting-apertures, and a valve located in said extension, substantially as and for the purposes set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

ALFRED E. DETWILER.

Witnesses:

GEORGE B. ADAMS,
W. N. JOHN.