G. H. SCHAETZEL.

LIGHTING DEVICE FOR GAS BURNERS.

APPLICATION FILED MAR. 22, 1911.

1,036,727.

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Fig. 1.

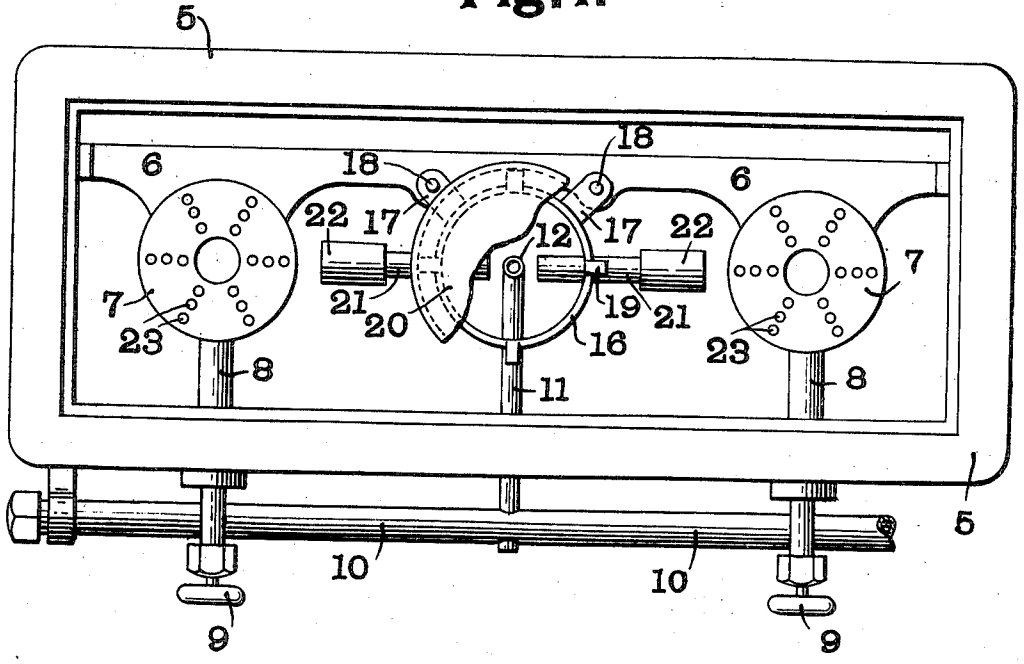
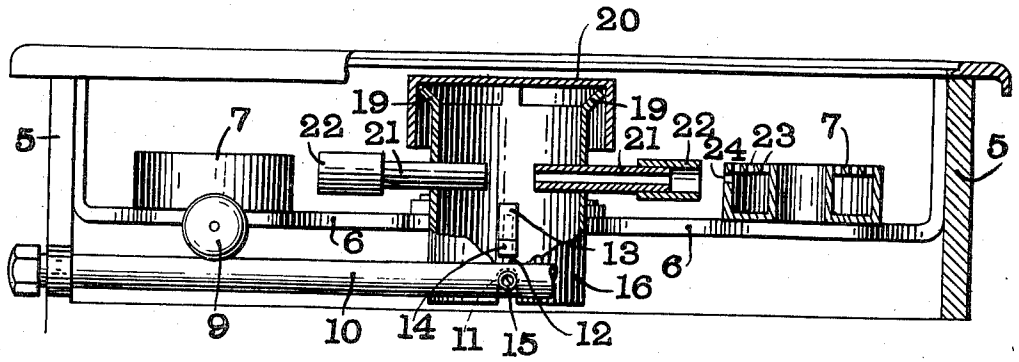


Fig. 2.



WITNESSES:

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GEORGE H. SCHAETZEL, OF ST. LOUIS, MISSOURI.

LIGHTING DEVICE FOR GAS-BURNERS.

1,036,727. Specification of Letters Patent. Patented Aug. 27, 1912.

Application filed March 22, 1911. Serial No. 616,097.

To all whom it may concern:

Be it known that I, GEORGE H. SCHAETZEL, a citizen of the United States, residing at the city of St. Louis, Missouri, have invented a certain new and useful Lighting Device for Gas-Burners, of which the following is such a full, clear, and exact description as will enable any one skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

My invention relates to a lighting device for gas burners and particularly to a device for use in connection with the burners of gas stoves.

The object of my invention is to provide a lighting device for gas burners which will be simple in construction and in which no moving parts are necessary to convey the flame to the various burners, the lighting operation consisting merely in opening the valve to supply gas to the burner.

A further object of my invention is to provide means for effectively protecting the pilot light or other source of ignition from the action of the air or from liquids which might be dropped thereon.

In the accompanying drawings which illustrate a two-burner gas stove made in accordance with my invention, Figure 1 is a top plan view and Fig. 2 is a front elevation partly in section.

Like marks of reference refer to similar parts in both views of the drawings.

5 represents the frame-work of a gas stove. Carried by this frame-work 5 is a bracket 6 on which are supported burners 7. These burners 7 are supplied with gas through pipes 8 controlled by valves 9. 10 is the supply pipe which in addition to supplying gas to the burners 7 also supplies gas to a pipe 11 provided with an up-turned end 12 forming a pilot light. The up-turned end 12 of the pipe 11 is provided with a top 13 of lava or other suitable material and this top is adapted to be adjusted vertically by means of a friction collar 14, upon the up-turned end of the tube. The supply of gas is regulated by means of a screw valve 15 shown in Fig. 2.

In order to protect the pilot light the same is surrounded by means of a sleeve 16 supported at one side by the pipe 11 and at the other by a pair of lugs 17 taking over pins 18 in the bracket 6. The sleeve 16 is open both at its lower and upper end and is provided with outwardly and upwardly projecting lugs 19 which support a removable cap 20 in such manner as to allow the necessary circulation of air to supply oxygen to the pilot light while at the same time protecting the said light against the influence of drafts. Projecting through the walls of the sleeve 16 are pipes 21 leading to the burners 7. Each of these pipes 21 is provided at its outer end with a sliding tube 22 so as to adjust the end of the said pipe toward and away from the burner 7. Each of the burners 7 in addition to the gas orifices 23 in its upper face is provided with a lateral gas orifice 24 adapted to discharge into the tube 21.

In the operation of my device the pilot light which is protected by the sleeve 16 remains constantly burning, the size of the said pilot light being regulated by means of the screw 15 and its vertical position being regulated by means of the friction collar 14 below the top 13. Whenever one of the burners 7 is supplied with gas by the operation of the valve 9 a portion of the gas escapes laterally through the opening 24 into the tube 21 and is communicated to the pilot light where it becomes ignited and conveys the flame back to the orifice 24. This orifice 24 is sufficiently close to the burner orifices 23 in the upper face of the burner to communicate the light thereto and thus ignite the burner. The protecting sleeve 16 while effectively protecting the pilot light from the influence of drafts and from the effect of water or other liquid which might otherwise be dropped thereon, at the same time allows the necessary circulation of air to supply oxygen to the pilot light.

Having fully described my invention, what I claim as new and desire to secure by Letters Patent of the United States, is:

1. The combination with an ignition source provided with a conduit, of a gas burner having an opening adapted to discharge gas into said conduit, and means for varying the length of said conduit to adjust the end thereof toward and away from said gas burner.

2. The combination with a pilot light, of a tube leading from said pilot light, a gas burner having an opening adapted to discharge gas into said tube, and means for varying the length of said tube to adjust

the end thereof toward and away from said burner.

3. The combination with an ignition source, provided with a conduit, of a gas burner having a lateral opening adapted to discharge gas into said conduit, and means for varying the length of said conduit to adjust the end thereof toward and away from said burner.

4. The combination with an ignition source, of a protecting sleeve surrounding said source, pipes extending through the wall of said sleeve, and gas burners provided with openings adapted to discharge gas into said pipes.

5. The combination with an ignition source provided with a protecting sleeve, of pipes extending through the walls of said sleeve, a removable cover for said sleeve adapted to allow the passage of air, and gas burners having openings adapted to discharge gas into said pipes.

6. The combination with an ignition source, provided with a protecting sleeve, of a removable cover for said sleeve adapted to allow the passage of air, pipes extending through the walls of said sleeve, burners provided with openings adapted to discharge gas into said pipes, and means for adjusting the ends of said pipes toward and away from said burners.

7. The combination with an ignition source provided with a protecting sleeve, of a cover for said sleeve adapted to allow the passage of air, pipes extending through the walls of said sleeve, burners provided with openings adapted to discharge gas into said pipes, means for adjusting the ends of said pipes toward and away from said burners, and means for vertically adjusting said source of ignition.

8. The combination with a pilot light, of a protecting sleeve surrounding said light, pipes extending through the walls of said sleeve, burners provided with openings adapted to discharge gas into said pipes, means for adjusting the ends of said pipes toward and away from said burners, and means for vertically adjusting said pilot light.

9. The combination with a pilot light provided with a protecting sleeve, of a cap for said sleeve adapted to allow the passage of air, pipes extending through the walls of said sleeve, burners having openings adapted to discharge gas into said pipes, means for adjusting the ends of said pipes toward and away from said burners, and means for vertically adjusting said pilot light.

In testimony whereof, I have hereunto set my hand and affixed my seal in the presence of the two subscribing witnesses.

GEO. H. SCHAETZEL. [L. S.]

Witnesses:

EMIL MAYER,

W. A. ALEXANDER.