March 22, 1932. C. F. CONOVER 1,850,866

REIGNITING DEVICE FOR GAS STOVES

Filed Feb. 5, 1930

Fig. 1.

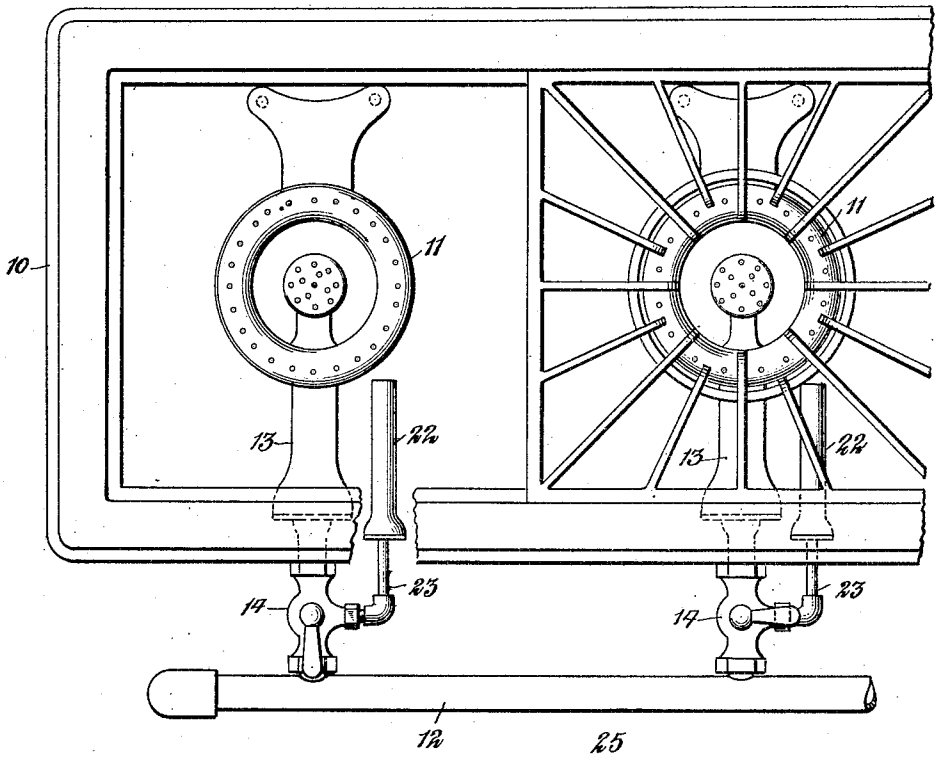
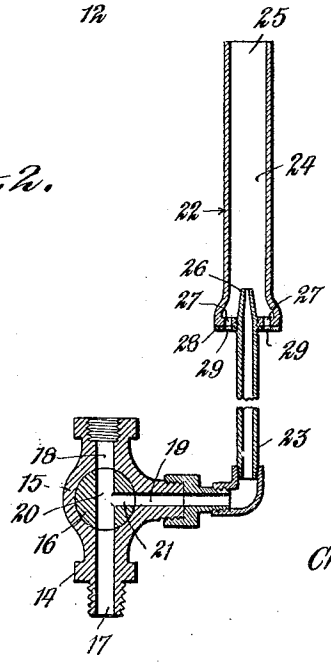


Fig. 2.



WITNESSES

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UNITED STATES PATENT OFFICE

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REIGNITING DEVICE FOR GAS STOVES

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This invention relates to a reigniting device for gas stoves.

The principal object of the invention is the provision of a simple, practical and reliable device of the indicated character, which is designed and adapted to reignite the burner or burners of a gas stove, if for any reason the flames thereof are extinguished in any accidental or unintentional manner such as by a sudden gust of wind, or by the overflow liquids of cooking vessels arranged on the stove over the burners.

The nature of the invention and its distinguishing features and advantages will appear when the following specification is read in connection with the accompanying drawings, in which

Figure 1 is a fragmentary plan view of a gas stove having the device of the present invention shown in conjunction with two burners, one of the burner grids being removed;

Figure 2 is an enlarged section of the auxiliary burner and gas control valve.

Referring now more particularly to the drawings, it will be apparent that the present invention essentially involves a gas stove 10 having one or more burners, there being two burners 11 shown in the present instance. Gas is fed to the burners 11 by a supply pipe 12 having branch connections 13 in communication therewith which communicate respectively with the burners 11. The branch connections each include a control valve 14 of the three-way type. On reference to Figure 2 it will be apparent that each valve includes a casing 15 having a turnable valve plug 16. The casing 15 has an inlet 17 which communicates with the pipe 12, an outlet 18 leading to the related burner connections, and an outlet 19 for a purpose to appear. The plug 16 has a transverse passage 20 and a communicating branch passage 21. It will be apparent that in one position of the plug 16 the passage 20 will be in registry with the inlet 17 and the outlet 18, and the branch passage 21 will be in registry with the outlet 19, as shown in Figure 2. This is the opened position of the plug 16, and gas will be flowing through the inlet 17 and out of the outlets 18 and 19. It will be apparent that when the plug 16 is moved to the closed position gas will be prevented from flowing out of the outlets 18 and 19.

In accordance with another feature of the invention there is provided an auxiliary burner 22 in communication with the outlet 19 of the valve 14 by suitable connection 23. The burner 22 consists of a shield or protecting tube 24 open at one end as at 25, and a jet 26 is in communication with the connection 23 and projects into the opposite end of the tube 24. The end of the tube 24 into which the jet projects has a plurality of air holes 27 which are controlled by a plate 28 having holes 29 arranged to be brought into registration with the holes 27 to varying degrees for the purpose of regulating the admission of air into the tube 24. The burner 22 is arranged in relation to the related burner 11 so that the flame of the jet 26 protected by the tube 24 may reignite gas flowing from the burner 11, in the event of the unintentional extinguishment of the flames of the burner for any reason such as those mentioned hereinbefore. It being understood that when the plug 16 of the valve 14 is in the opened position gas will be flowing to both burners 11 and 22. When the plug 16 of the valve 14 is in the closed position gas will be shut off from the burners 11 and 22. It will be apparent that although the flames issuing from the burner 11 may be extinguished by a gust of wind or by the overflow liquids of a cooking vessel arranged on the stove over the burner 11, the flame issuing from the jet 26 of the burner 22 will not be extinguished due to the fact that it is protected by the tube 24, consequently the burner 22 will constantly serve as a means for reigniting the related burner 11. It follows, therefore, that the auxiliary burner 22 serves as an expedient to avert explosions, and also to avert persons being asphyxiated by gas flowing from the burner 11.

I claim:

1. The combination with a gas stove including a burner; of a gas jet positioned on the stove adjacent said burner, a tubular shield having air holes therein surrounding

said jet in fixed relation thereto, gas supply piping common to said burner and jet, and a valve connected with said piping to control the flow of gas, so that gas may flow simultaneously to the burner and jet, or be simultaneously shut off from the burner and jet.

2. The combination with a gas stove including a burner; of a gas jet positioned on the stove adjacent said burner, a tubular shield surrounding said jet in fixed relation thereto, a regulator for controlling the admission of air into said shield, and gas supply means common to said burner and jet.

Signed at Borough of Brooklyn, in the county of Kings and State of New York this 1st day of February, 1930.

CHARLES F. CONOVER.