March 12, 1929. M. KRAVITZ 1,705,368

GAS BURNER

Original Filed Oct. 10, 1924

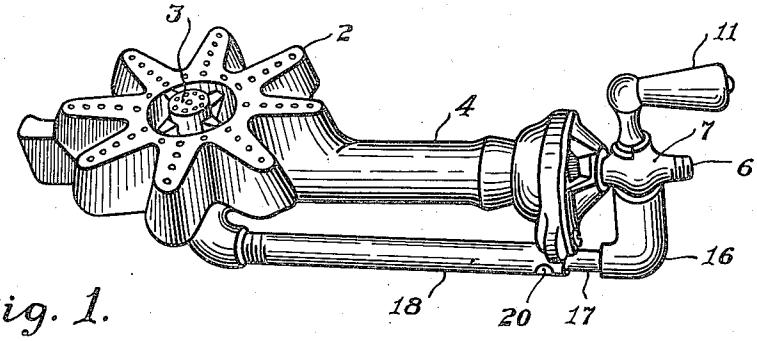


Fig. 1.

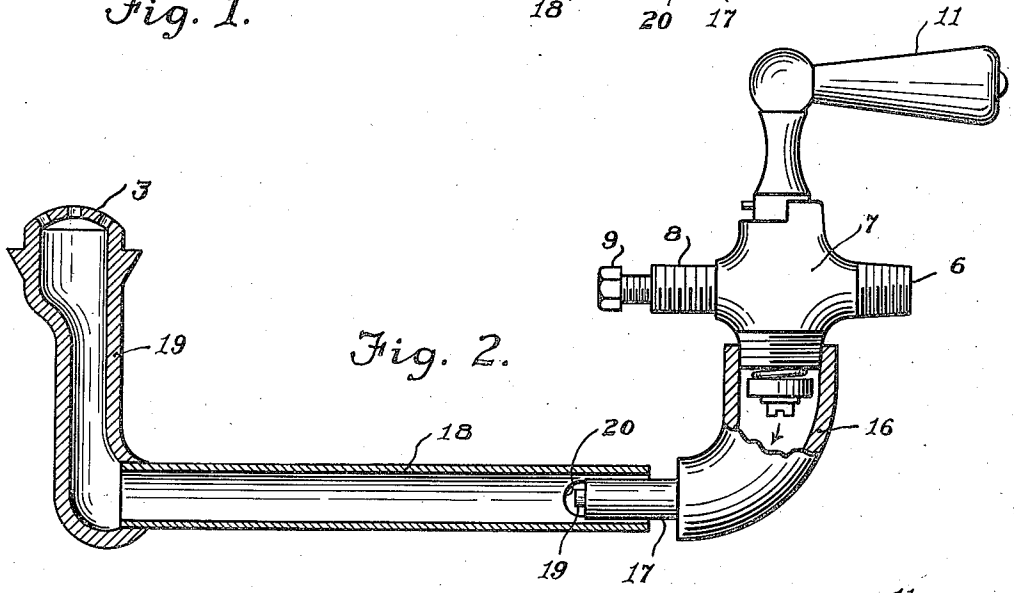
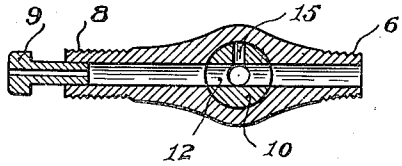


Fig. 2.

Fig. 3.



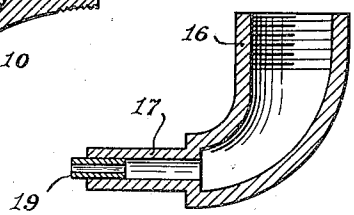
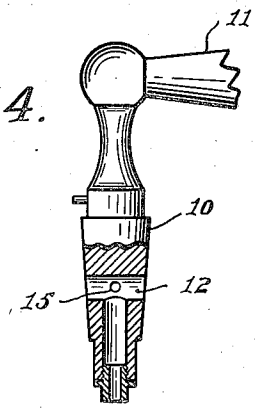


Fig. 5.

Fig. 4.



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WITNESS:

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1,705,368

UNITED STATES PATENT OFFICE.

MAX KRAVITZ, OF PHILADELPHIA, PENNSYLVANIA.

GAS BURNER.

Application filed October 10, 1924, Serial No. 742,894. Renewed February 1, 1929.

This invention relates to gas burners, such as used on stoves, ranges, hot plates, or the like, and an object of the invention is to provide in a construction of this type, a novel form of burner including a full flame burner and a simmering burner, and to associate therewith a valve structure for controlling the passage of fuel to the said burners whereby the gas may be directed to the simmering burner or to the full flame burner as desired, by the operation of the single valve.

A further object of the invention is to provide a novel form of coupling which is utilized in connection with the simmering burner for facilitating and controlling the flow of gas or fuel thereto, and which cooperates with the novel form of valve, above specified.

Other objects of the invention will appear in the following detail description, and in the accompanying drawings wherein:

Figure 1 is an assembled perspective view of the complete burner arrangement.

Figure 2 is a longitudinal sectional view of the simmerig burner assembly.

Figure 3 is a longitudinal section of the valve structure.

Figure 4 is a vertical section of the valve cone.

Figure 5 is a vertical section of the elbow and sleeve.

Referring more particularly to the drawing, the full flame burner 2 has a fuel and air supply pipe 4 of approved construction which extends out to the front edge of the stove and to which the gas or similar fuel is fed from a supply pipe through the valve structure 6. The valve structure 6 includes the valve casing 7 having a pair of diametrically opposed laterally extending threaded nipples 8 formed thereon, one of which threads into the fuel supply pipe, while the other extends into the supply pipe 4. If it is so desired, a needle valve structure 9 may be carried by the nipple 8, which extends into the supply pipe to permit regulating of the quantity of gas delivered to the burner 2. The valve cone 10 which controls the direction of flow of the gas, that is, either to the burner 2 or to the simmering burner 3, is rotatably mounted in the valve casing 7, and has a handle 11 thereon to permit its rotation. The cone 10 is provided with a relatively large transversely extending opening 12, which is adapted to register with the bores of the transverse nipples 8, which are formed on the valve casing 7, to permit the fuel to flow from the fuel supply pipe to the burner 2 and also flow to the simmering burner 3 in that the cone is provided with an axially longitudinally extending opening 15 which communicates with the transverse opening 12 and opens out through the bottom of the valve structure into the elbow 16 which is threaded on the valve casing. The elbow 16 has a reduced sleeve 17 formed on its lower end which projects into the pipe 18 and a needle point plug 19 is inserted in the outer end of the sleeve 17 for constricting the gas outlet opening from the elbow into the pipe 18. The pipe 18 has the simmering burner 3 threadably connected to its end remote from the elbow 16. The pipe 18 has laterally opening air inlet openings 20 therein at the end of the sleeve 17, to permit aerating of the gas as it passes through the pipe 18 for delivery to the simmering burner 3.

To permit the flow of fuel to the simmering burner without permitting a flow of fuel to the burner 2, the valve cone 10 is provided with a small opening 15 which extends at right angles to the opening 12 and communicates with the opening 12, so as to permit a limited quantity of gas or fuel to pass to the simmering burner 3 without permitting gas to flow to the burner 2.

It is, of course, to be understood, that the invention may be constructed in various other manners, and the parts associated in different relations, and therefore, I do not desire to be limited in any manner, except as set forth in the claim hereunto appended.

What I claim is:—

In combination, a valve for a simmering burner and main burner including a valve casing with a transverse passage, a cone mounted in said casing and provided with a transverse relatively large opening to cooperate with closely adjoining parts of the passage, whereby a main supply of fluid may be conducted to the main burner, said cone having a vertical passage extending upwardly from the smaller end of the cone and merging into said opening and communicating with the simmering burner, whereby fluid may flow to the simmering burner simultaneously with

the flow of fluid to the main burner, said cone having a second relatively small horizontal opening formed in the side wall of the cone to one side of and at right angles to the first named opening, and adapted to register with the entrance portion of said transverse passage, when the first named opening is out of register with and at right angles to the transverse passage, whereby the fluid to the main burner is shut off and fluid admitted to the simmering burner independently.

In testimony whereof I affix my signature.

MAX KRAVITZ.