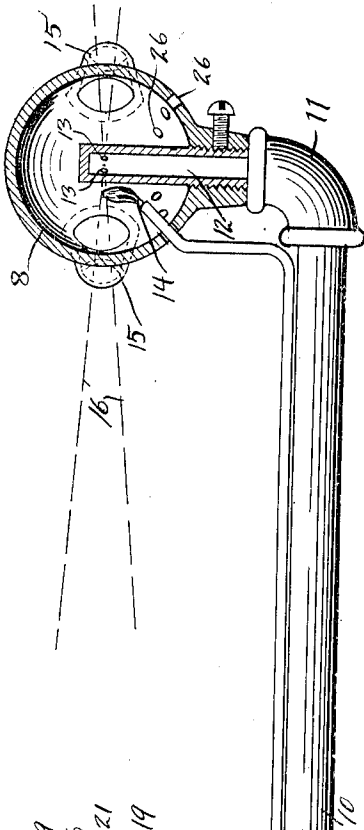
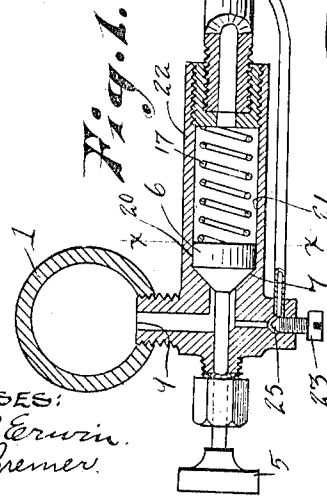


1,066,622.

Patented July 8, 1913.



WITNESSES:
A. R. Erwin.
J. S. Bremer.

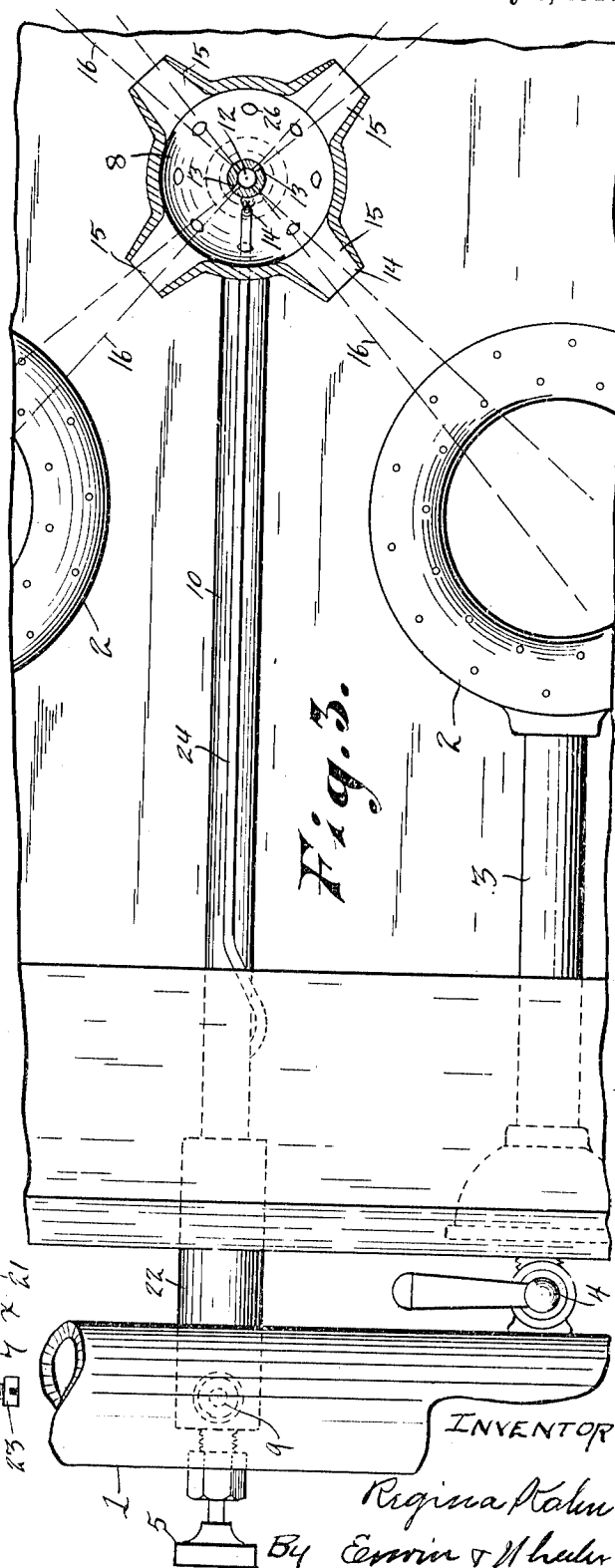


Fig. 3.

INVENTOR

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ATTYS

UNITED STATES PATENT OFFICE.

REGINA KAHN, OF MILWAUKEE, WISCONSIN.

GAS-IGNITER.

1,066,622.

Specification of Letters Patent.

Patented July 8, 1913.

Application filed July 27, 1912. Serial No. 711,770.

To all whom it may concern:

Be it known that I, REGINA KAHN, a citizen of the United States, residing at Milwaukee, county of Milwaukee, and State of Wisconsin, have invented new and useful Improvements in Gas-Igniters, of which the following is a specification.

My invention relates to improvements in gas igniters, and it pertains to that class in which gas is led to and ignited by a pilot light within its spherical chamber, which chamber is centrally located between a plurality of gas burners, whereby gas may be simultaneously ignited in all of said burners, or in any one or more of said burners by applying manual pressure to a push button located at a convenient place in front of said burner.

My invention is explained by reference to the accompanying drawings, in which—

Figure 1 represents a side view thereof, part in section. Fig. 2 is a transverse section, drawn on line *x—x* of Fig. 1, and Fig. 3 is a plan view of my device in connection with several burners of an ordinary cook stove.

Like parts are identified by the same reference numerals throughout the several views.

1 represents the main gas duct through which gas is led from the source of supply to the burners 2 of the stove. The burners 2 are connected with the supply 1 through the branch ducts 3 and the gas controlling valves 4, which are of ordinary construction. In using my device, the valve 4 communicating with the burner where gas is to be ignited, is first turned on. When this is done, manual pressure is applied by the user to the push button 5, whereby the valve 6 is moved from its seat 7, and whereby gas is admitted to the spherical chamber 8 passing through the valve port 9, duct 10, elbow 11, vertical chamber 12, and thence in separate jets through the several radial ports 13, when the several jets of gas are ignited by the pilot flame 14. It will be understood that the pilot flame 14 ignites the gas in the two next adjacent ports 13, when the flame thus produced is instantaneously communicated to and ignites the jets of gas in the other two ports. The flame thus produced passes out through the radial ports 15, as indicated by the dotted lines 16, whereby the gas which has been previously

admitted to one or more of the burners 2 is instantaneously lighted.

It will be understood that as soon as the pressure on the push button 5 is released, the valve 6 will be thrown to its seat by the recoil of the spiral spring 17, whereby the further admission of gas past the valve 20 to the chamber 8 is prevented. The valve 6 is provided with a plurality of longitudinal grooves 19, whereby gas from the duct 1 is free to pass the valve into the duct 10, and thence to the spherical chamber 8 as described, while segments of the periphery 20 of said valve bear against the opposing walls 21 of the valve chamber 22 and serve as guides to said valve as the same is opened and closed.

23 is a valve for controlling the admission of gas to the pilot duct 24. The valve 23 is normally open, whereby a supply of gas is normally maintained for the pilot jet 14. When, however, it becomes necessary to close the admission of gas to the pilot duct, the valve 23 is turned forwardly in its bearings until the seat 25 of said valve is closed.

It will be understood that by the arrangement described, when the gas is first turned on, it may be simultaneously ignited in all of the several burners or in one or more of said burners, as circumstances may require.

26 are air ducts leading to the spherical chamber through which the necessary air is admitted to such chamber to maintain combustion. By thus admitting the gas for igniting purposes and igniting the same within a spherical chamber closed at its upper side, the gas is prevented from escaping except as it is ignited and discharged through the radial openings 15 toward the several burners of the stove, while I am enabled to locate the duct 10 and the gas controlling valve connected at its inlet end below the plane of the several burners 2, whereby it is entirely out of the way of cooking utensils ordinarily located above such burners.

Attention is called to the fact that a single chamber 22 is interposed between the main gas supply pipe and the central chamber 8, and that the passage of gas to both the radial ports 13 and to the pilot flame 14 is controlled by the respective valves 6 and 23, located in said valve chamber.

What I claim as my invention and desire to secure by Letters Patent, is—

1. The combination of a main gas supply

pipe, a gas burner, a gas branch duct leading from said main gas supply pipe to said burner, a valve for closing said duct, a hollow spherical gas chamber provided with a plurality of radial ports, a pilot duct having its discharge end in said chamber, a valve chamber and duct leading from the gas supply to said chamber, a valve located at the front end of said valve chamber, and means for manually opening said valve.

2. The combination of a plurality of gas burners, a main gas supply pipe, a branch duct leading from said gas supply pipe to each of said burners, a valve for manually controlling the admission of gas to said branch duct, a gas chamber centrally located between said burners, a pilot duct

having its open end in said central chamber, a second branch duct leading from said main supply pipe through a valve chamber to said central chamber, a valve in said valve chamber for manually controlling the admission of gas to said branch duct, and a by-pass and an additional valve, also located in said valve chamber, for controlling the admission of gas to said pilot duct, all substantially as and for the purpose specified.

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

REGINA KAHN.

Witnesses:

JAS. B. ERWIN,

I. D. BREMER.