C. McKEE.

BURNER FOR GAS STOVE OVENS.

APPLICATION FILED NOV. 15, 1920.

1,404,783. Patented Jan. 31, 1922.

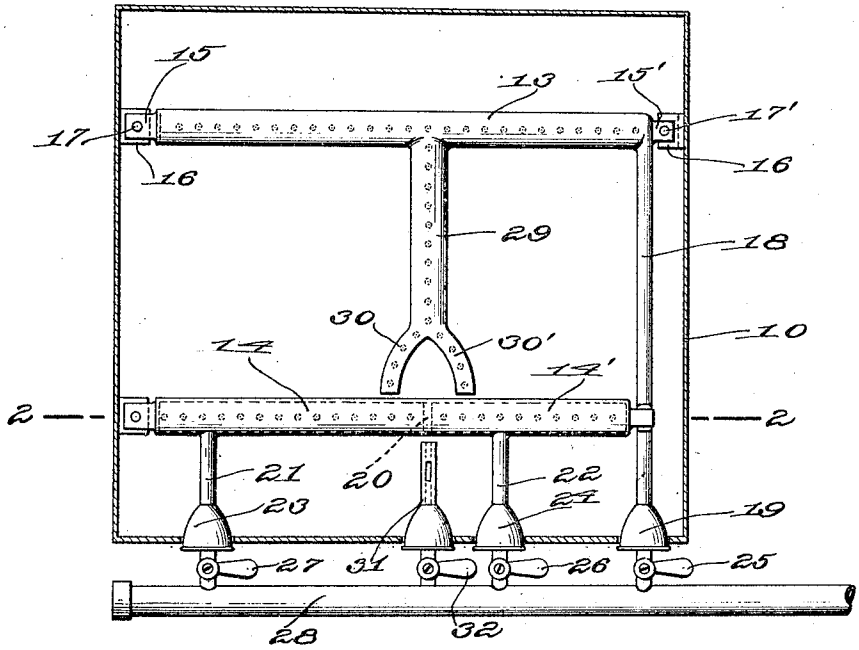


Fig. 1.

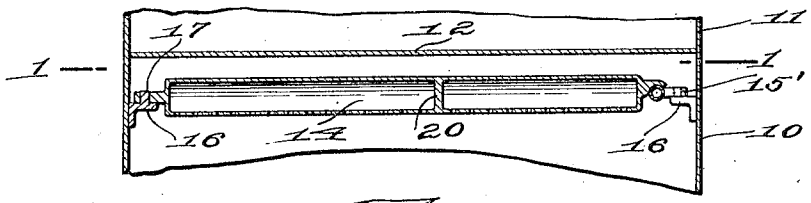


Fig. 2.

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UNITED STATES PATENT OFFICE.

CAROLYN McKEE, OF WALTHAM, MASSACHUSETTS.

BURNER FOR GAS-STOVE OVENS.

1,404,783. Specification of Letters Patent. Patented Jan. 31, 1922.

Application filed November 15, 1920. Serial No. 424,042.

To all whom it may concern:

Be it known that I, CAROLYN McKEE, a subject of the King of Great Britain, and a resident of Waltham, in the county of Middlesex and State of Massachusetts, have invented a new and useful Improvement in Burners for Gas-Stove Ovens, of which the following is a specification.

My invention relates to burners for gas stove ovens and its object is to provide means whereby an economy in gas consumption may be effected.

With this object in view, my invention comprises, generally speaking, a main burner preferably located at the rear of the oven and two smaller supplemental burners preferably located near the front of the oven, together with separate delivery pipes and valves controlling the supply of gas thereto for said burners respectively. The supplemental burners may consist of a pipe having a transverse partition intermediate the ends thereof and preferably means are provided whereby the gas in the main burner may be ignited from either one of the supplemental burners, a convenient means for this purpose being a perforated pipe or burner integral with the main burner and having a bifurcated forward end terminating close to the supplemental burners.

My invention may best be understood by having reference to the drawings which accompany and form a part of this specification, in which:—

Figure 1 is a horizontal section taken on the line 1—1 of Fig. 2 of a gas stove oven embodying my invention, certain parts being shown in plan view, and Fig. 2 is a vertical section taken on the line 2—2 of Fig. 1.

In the particular drawings selected for more fully disclosing my invention, 10 represents the walls of the broiler portion of a gas stove and 11 the walls of the oven thereof. Located within the broiler part of the stove and immediately below the floor 12 of the oven is the heating apparatus consisting of a rear burner 13 and two supplemental burners 14, 14′. The rear burner is held in position by lugs 15, 15′, which rest on the brackets 16, 16′, pins 17, 17′ integral with said brackets fitting into holes in the said lugs. A pipe 18 for delivering the gas to the main burner is preferably cast integral with the latter and is provided at its forward end with the usual Bunsen mixing chamber 19.

While the supplemental burners may be of any suitable design, I prefer to employ a single pipe having a transverse partition 20 intermediate the ends thereof, and said partition may be arranged at the middle of the pipe so as to form two burners of equal length, or, as shown, at one side of the middle thereby forming two burners of unequal length. The supplemental burners are provided with delivery pipes 21, 22, respectively, which terminate in a mixing chamber 23, 24, respectively, and the valves 25, 26, and 27 are arranged to control the supply of gas from the gas main 28 to the mixing chambers 19, 24, and 23 respectively.

Integral with the main burner is a perforated pipe or burner 29 preferably arranged at right angles thereto and having a forwardly - extending bifurcated end, the branches 30, 31′ of which are arranged in juxtaposition with the ends of the supplemental burners 14, 14′, so that the gas in the main burner may be ignited from either one of the supplemental burners.

Arranged with its end in proximity to the partition 20 is an ignitor 31 controlled by the valve 32, said ignitor being of any suitable construction whereby the gas supplied thereto upon the opening of said valve 32 may be ignited from a point exterior to the stove and communicate flame to the gas escaping from the perforations in either one of the supplemental burners.

From the foregoing description it will be obvious that my invention provides a simple and convenient means for supplying an oven or broiler with graduated amounts of heat, so that if it is desired to cook small articles, such as a chop or a single piece of toast, one of the supplemental burners only could be used and the heat therefrom concentrated on the article to be cooked, instead of employing for this purpose the usual burner which extends all the way across the oven and wasting much of the heat produced thereby. It will be apparent also that by means of my invention a considerable saving in gas may be effected by supplying to the oven only enough heat for the purpose desired.

Having thus described an illustrative em-

bodiment of my invention, without however, limiting the same thereto, what I claim and desire to secure by Letters Patent is:

1. The combination with a gas stove oven of a rear burner extending transversely across the oven near the rear thereof, a delivery pipe therefor, and valve controlling the supply of gas to said rear burner, two front burners extending transversely across the oven near the front thereof, separate delivery pipes for each of said front burners, valves controlling the supply of gas to said front burners, respectively, and means co-operating with both of said front burners for igniting the gas in said rear burner.

2. The combination with a gas stove oven of a rear burner, a delivery pipe therefor, and valve controlling the supply of gas to said rear burner, two front burners, separate delivery pipes for said front burners, valves controlling the supply of gas to said front burners, respectively, and a burner integral with said rear burner and having a bifurcated forward end arranged in juxtaposition to said front burners.

3. The combination with a gas stove oven of a rear burner extending transversely across the oven near the rear thereof, and a front burner extending transversely across the oven near the front thereof and consisting of a pipe having a transverse partition intermediate the ends thereof, said partition dividing said pipe into two separate portions, separate controlling valves for said rear burner and for the two portions of said pipes, respectively, and means co-operating with both of said portions of said pipe for igniting the gas in said rear burner.

In testimony whereof, I have hereunto subscribed my name this 9th day of November, 1920.

CAROLYN McKEE.