W. A. BUSIEK.

RANGE.

APPLICATION FILED MAR. 11, 1921.

1,409,923. Patented Mar. 21, 1922.

FIG. 1

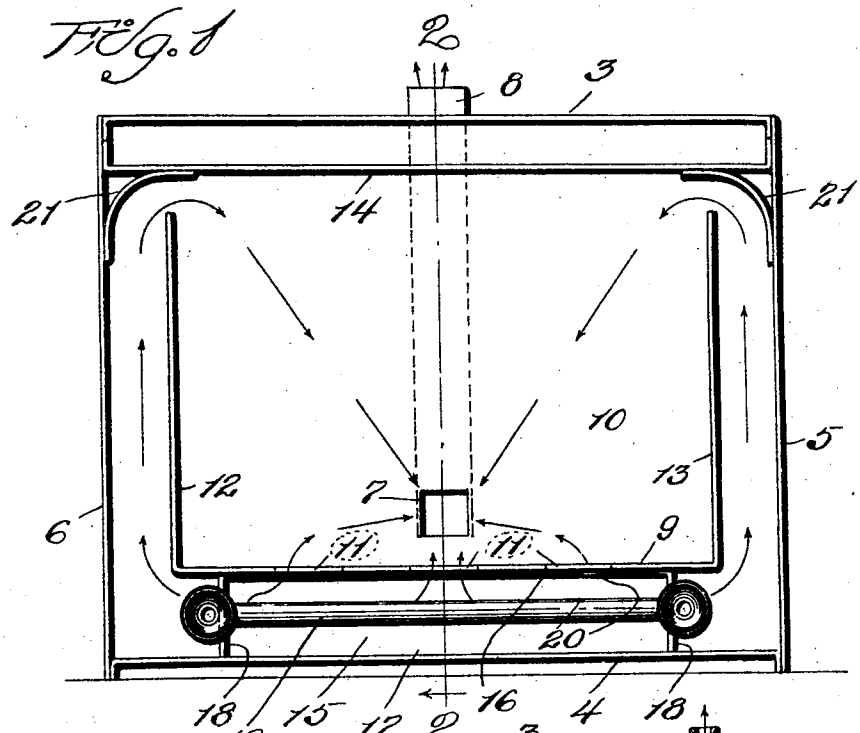
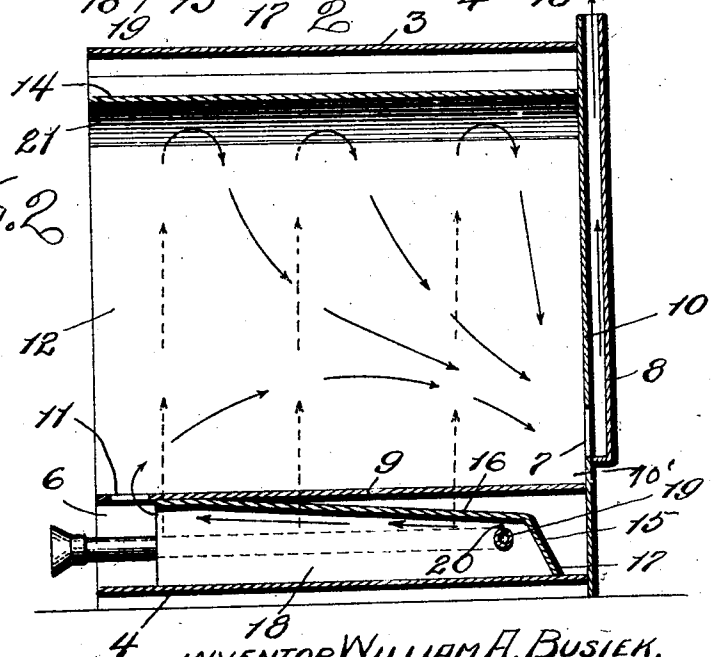


FIG. 2



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UNITED STATES PATENT OFFICE.

WILLIAM A. BUSIEK, OF BELLEVILLE, ILLINOIS.

RANGE.

1,409,923. Specification of Letters Patent. Patented Mar. 21, 1922.

Application filed March 11, 1921. Serial No. 451,642.

To all whom it may concern:

Be it known that I, WILLIAM A. BUSIEK, a citizen of the United States of America, residing at 625 East C Street, Belleville, in the county of St. Clair and State of Illinois, have invented certain new and useful Improvements in Ranges, of which the following is a specification.

This invention is an improved oven for a gas range. In the design of a range it is necessary to have the heat distributed equally throughout the oven. My device is particularly directed to a structure that will produce an equal distribution of the products of combustion throughout the oven in their path to the flue.

With the above and other objects in view my invention has relation to certain novel features of construction and arrangements of parts as will be hereinafter more fully described, pointed out in claims and illustrated in the drawing in which—

Fig. 1 is a front elevation of a range oven with the front door removed and

Fig. 2 is a transverse sectional elevation along the lines 2—2 of Fig. 1.

Numeral 3, designates the top, numeral 4 the bottom and numerals 5 and 6 the side walls of a conventional oven. Numeral 7 designates a flue vent in the rear wall of the oven, which is in fluid connection with the flue stack 8. Numeral 9 designates a horizontal plate secured to the rear wall of the oven 10 at 10′, and having the aperture 11 formed near the front end and having the side walls 12 and 13 formed integral therewith, said flanges being of such length as to leave a space between their external ends and the upper inner wall 14 of the oven. Numeral 15 designates a fuel distributing element formed of the upper inclined surface 16 and the end plate 17 and the side plates 18. The forward end of the fuel distributing element 15 extends to the inner edge of the aperture 11. It will be seen that the upper inclined surface 16 of the fuel distributing element 15 is positioned at an angle with the horizontal plate 9. Numeral 19 designates a gas pipe which extends from the front of the oven to a point substantially in the rear of the oven and then continues at right angle through the side plates 18 and then at right angles to the front of the oven. Numerals 20 designate the gas holes in the gas pipe. Numerals 21 designate circular baffle plates between the side walls 5 and 6 and the upper inner wall 14.

The gas pipe in passing through the side plates 18 passes through holes of such size as to permit a passage of a gas flame along the gas pipe through the holes. The portions of the gas pipe outside of the plate 18 form gas burners.

In operating my device the gas is ignited at 19 and the flame passes along the entire pipe. It will be seen that the rear portion of the gas pipe is positioned within and under the element 15, and that the other portions of the pipe are positioned on the outside of said element.

Arrows are positioned on both the figures to show the path of the products of combustion, which products from the rear portion of the gas pipe, pass under the fuel distributing element 15 through the aperture 11 and then through the operative portion of the oven to the rear to the flue vent 7. The products of combustion from the other portions of the gas pipe pass through the flues formed by the side wall 6 and sidewall 12, and sidewall 5 and side wall 13, over the side walls 12 and 13 into the top of the oven and thence downward to the flue vent 7. In this manner it will be seen that there is a substantial distribution of the heat in the operative portion of the oven.

What I claim and mean to secure by Letters Patent, is—

1. In an oven, an element therein forming flues with the bottom and sides of said oven so as to establish communication between said flues and the operative portion of said oven, a fuel distributing element above the bottom of said oven, a gas pipe having fuel holes formed therein for its entire length, extending through the flues between the sides of said oven and said fuel distributing element and through said fuel distributing element.

2. In an oven, an element therein forming flues with the bottom and sides of said oven so as to establish communication between said flues and the operative portion of said oven, a fuel distributing element positioned above the bottom of said oven, having an upper inclined surface, a gas pipe having fuel holes formed therein for its entire length, extending through the flues between the sides of the oven and said fuel distributing element and through said fuel distributing element.

In testimony whereof I affix my signature.

WILLIAM A. BUSIEK.