Dec. 23, 1924. 1,520,464

W. A. BUSIEK

RANGE

Filed Jan. 31, 1924

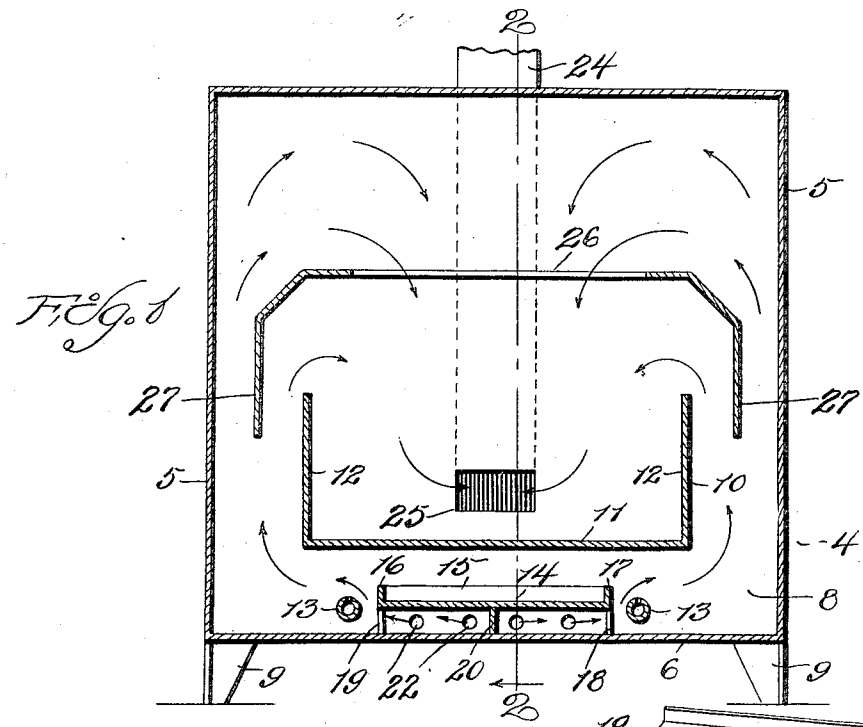


Fig. 1

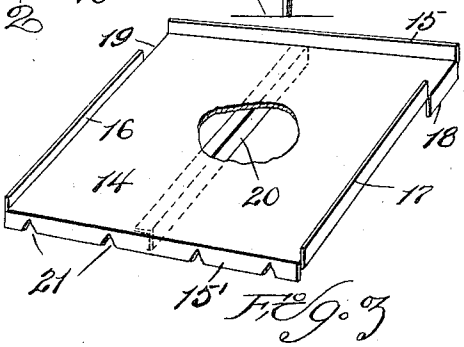


Fig. 3

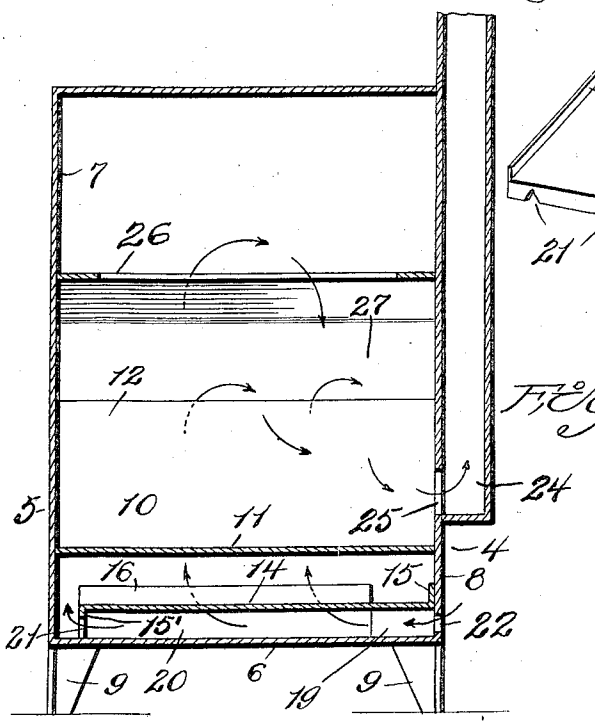


Fig. 2

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UNITED STATES PATENT OFFICE.

WILLIAM A. BUSIEK, OF BELLEVILLE, ILLINOIS.

RANGE.

Application filed January 31, 1924. Serial No. 689,619.

To all whom it may concern:

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

The object of my invention is to make a gas range which will when in operation produce an equality in temperature in all portions of the oven. A further object is to provide a range with adequate circulation and one that utilizes a double burner. A further object is to make a range that is composed of standard parts, that can be easily assembled and lends itself readily to multiple production. A still further object is to product a range which is positive in circulation.

With these and other objects in view, my invention has relation to certain novel features of construction and arrangement of parts as will be hereinafter more fully described, pointed out in the claim and illustrated in the drawings in which—

Fig. 1 is a transverse sectional elevation,

Fig. 2 is a cross section on the line 2—2 of Fig. 1, and

Fig. 3 is a perspective view of my heat circulating plate.

Numeral 4 designates a conventional range having the side walls 5, the base 6, the front 7 and the rear 8. Numerals 9 designate conventional legs. Numeral 10 designates the oven having the floor 11 and the sides 12. The sides 12 and the floor 11 are secured together at right angles in the conventional manner and are secured to the front 7 and the back 8 of the range in conventional manner. The sides 12 terminate as best shown in Fig. 1. Numerals 13 designate the gas burners positioned as best shown in Fig. 1. Numeral 14 designates the heat circulating plate which has its rear end bent upward at an angle forming the flange 15 which is secured to the rear wall 8 of the range in conventional manner. The front of the heat circulating plate 14 is bent downwardly to form the flange 15′. Portions of the sides are bent upwardly to form the flanges 16 and 17. The remaining portions are bent downward to form the flanges 18 and 19. Numeral 20 designates an L shaped member secured to the heat circulating plate 14 as best shown in Fig. 3. The vertical portion of the L is the same height as the flanges 15′, 18 and 19. By means of the flanges 15′, 18 and 19 the heat circulating plate 14 is placed in the range being supported by the base 6. By means of the flange 15 it is secured to the rear or back 8 of the range. Numerals 21 designate vent holes in the flange 15′. The heat circulating plate 14 is of such size that when positioned as indicated the burners 13 will be positioned laterally relative it and so that perforations 22 in the rear wall 8 will be below the flange 15 and above the bottom 6 and so the L shaped member 20 will be approximately in the center of the heat circulating plate 14 as well as of the range bottom 6. Numeral 24 designates the smoke stack which is in fluid communication with the interior of the range and oven by means of the opening 25. Numeral 26 designates a shelf which is secured to the front 7 and the rear 8 in conventional manner in the position shown in Fig. 1 and having formed integral therewith the depending ends 27 which hang in the flue between the walls 5 and the sides 12 as best shown in Fig. 1. The circulation of the products of combustion is shown by the arrows. The air enters through the perforations 22 in the rear wall 8, passes under the heat circulating plate one-half on each side of the L shaped element 20 through the perforations 21, then laterally over the burners 13 and upwardly until the depending ends 27 are reached when a division occurs, some of the products of combustion proceeding between the depending ends 27 and the sides 12 into the oven and then out to the smoke stack 24 through the opening 25 and the remainder pass between the depending ends 27 and the walls 5 up over the shelf 26 and then downwardly through the front portion of the shelf 26 into the oven, then passing through the opening 25 into the smoke stack 24. It is found that by this circulation that every portion of the oven above and below the shelf 26 is heated to the same degree of temperature.

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

A range comprising an oven secured therein, a heat circulating plate having a longitudinally extending rib approximately

central of the lower side thereof, said plate positioned beneath said oven, a source of heat positioned adjacent said heat circulating plate, said heat circulating plate secured to the rear of said range, the rear of said range being perforated so that fluid communication is established between the exterior of said range and the spaces formed by the floor of said range and said bifurcated heat circulating plate.

In testimony whereof I affix my signature.

WILLIAM A. BUSIEK.