J. ROY.

GAS RANGE.

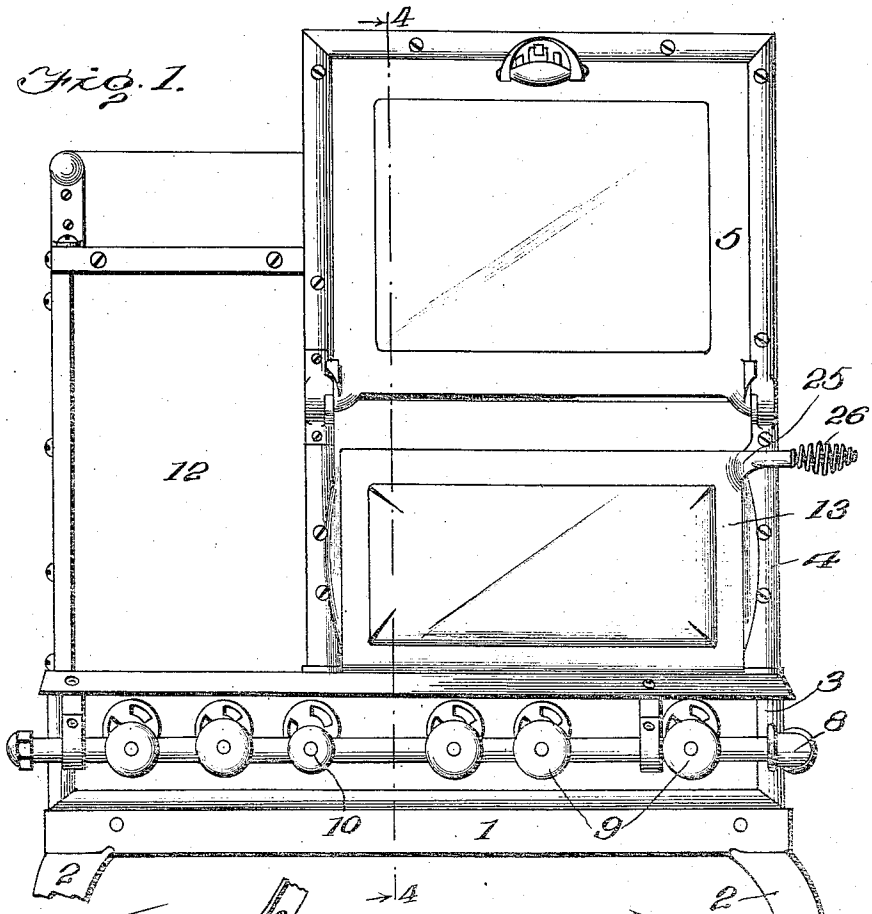
APPLICATION FILED JAN. 23, 1913.

1,104,224.

Patented July 21, 1914.

2 SHEETS—SHEET 1.

Fig. 1.



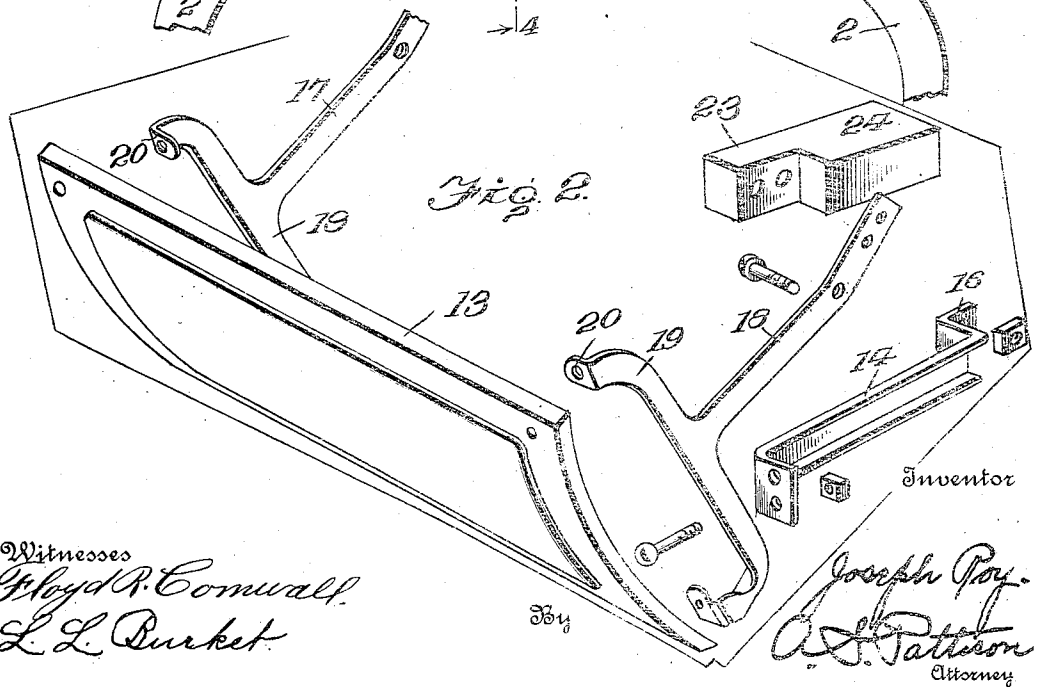


Fig. 2.

Witnesses

Floyd R. Comuvall.

L. L. Burket.

Inventor

Joseph Roy.

By

A. L. Patterson

Attorney

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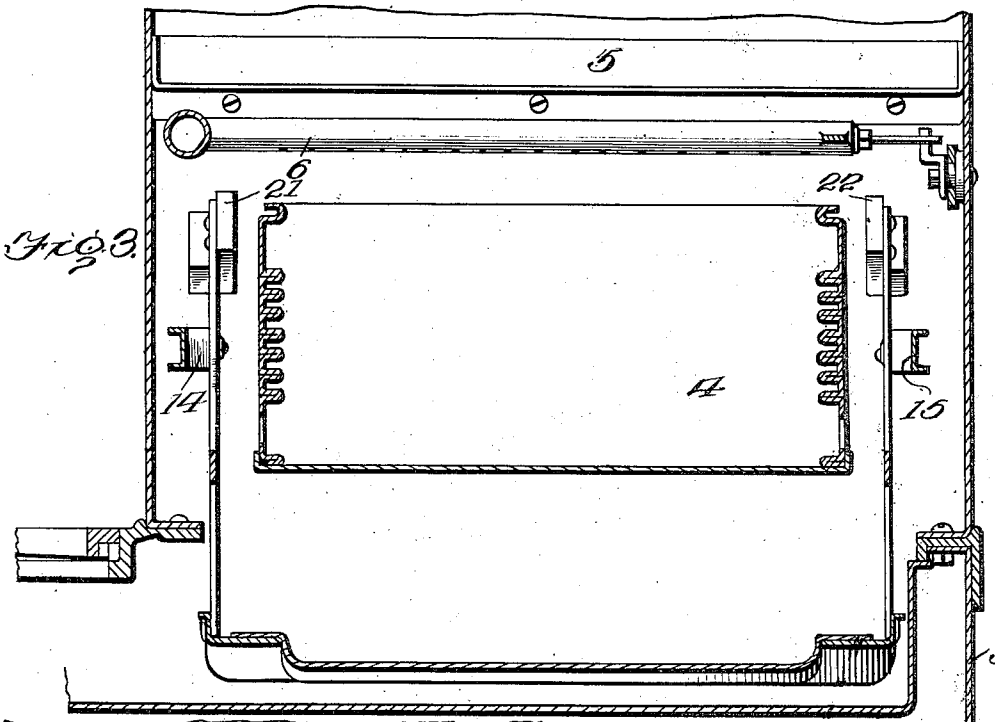
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2 SHEETS—SHEET 2.

Fig. 3.



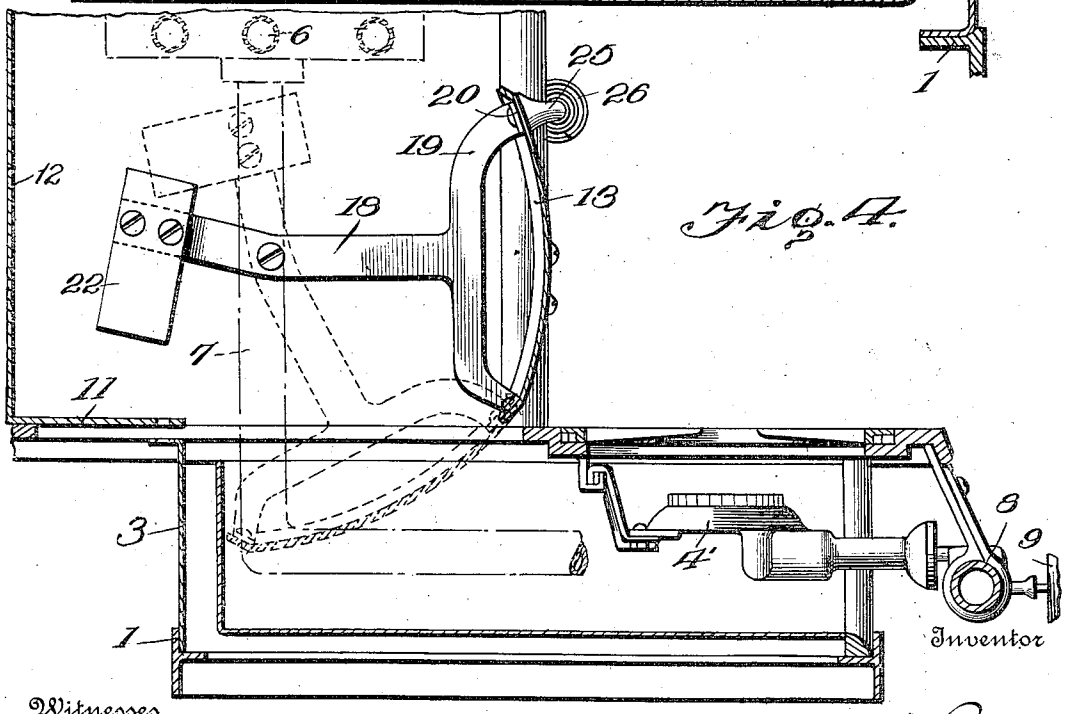


Fig. 4.

Witnesses

Lloyd R. Conwell.

L. L. Bucket.

Inventor

Joseph Roy.

By

A. S. Pattison

Attorney

UNITED STATES PATENT OFFICE.

JOSEPH ROY, OF CLEVELAND, OHIO, ASSIGNOR TO AMERICAN STOVE COMPANY, OF ST. LOUIS, MISSOURI, A CORPORATION OF NEW JERSEY.

GAS-RANGE.

1,104,224. Specification of Letters Patent. Patented July 21, 1914.

Application filed January 23, 1913. Serial No. 743,864.

To all whom it may concern:

Be it known that I, JOSEPH ROY, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Gas-Ranges, of which the following is a specification, reference being had therein to the accompanying drawing.

My invention relates to improvements in gas ranges, and pertains particularly to gas ranges in which a number of burners are arranged in a horizontal line and the oven positioned in the rear of some of the burners.

The object of my invention is to provide an oven door so arranged that it can be readily opened or closed from the side of the stove so that the door will not interfere with the burners or anything on the burners in front thereof.

Another object of my invention is to provide a range of this character in which the bottom of the broiler oven is located in a horizontal line slightly above the burners and positioned above the same is the baking oven, one set of burners being used for the two ovens. The door for the broiler oven is so arranged that it does not interfere with the burners in front of the oven, nor does it interfere with the burners between the two ovens.

A still further object of my invention is to provide a simple and more effective arrangement of the ovens and burners and the door for the lower oven, as will be hereinafter more fully described.

In the accompanying drawings: Figure 1 is a front view of an improved gas range embodying my invention. Fig. 2 is a perspective detached view of the door for the broiler oven showing the counterbalancing feature. Fig. 3 is a vertical longitudinal view of a part of Fig. 1. Fig. 4 is a transverse sectional view taken on the line 4—4 of Fig. 1.

Referring now to the drawings, 1 represents the base of my improved range, which is supported by legs 2, or in any other manner desired. Supported by the base 1 is a frame 3, in which are arranged across the front three burners 4′ and two side burners, all of which structure is well understood and needs no further description.

At one side of the side burners and in the rear of the two front burners at the right of the base and supported by the frame 3 is a broiler oven 4. Above the broiler oven is a baking oven 5. Between the broiler oven and the baking oven are arranged a number of horizontal elongated burners 6, supplied with gas by means of a pipe 7, leading downwardly and connected to the main gas supply pipe 8. The pipe 8, as shown in Fig. 1 of the drawings, supplies gas to the front and side burners of the stove and is provided with valves 9 for controlling the gas thereto. The pipe 8 is provided with a valve 10, which controls the gas to the pipe 7, whereby the burners 6 between the baking and broiling ovens are controlled.

The frame 3, supported by the base 1 at the rear, is provided with an extension 11, which extends out as far as the rear of the ovens and is provided with a vertical backing 12.

In ranges of this character it has been found difficult to arrange the door 13 of the broiler oven so that it will neither interfere with the burners in front thereof, or with the burners between the two ovens when the same is open or closed, or during the opening and closing of the same. In my improved range, the door is so arranged that it slides within the frame 3, below the baking oven and in no way interferes with either of the burners in front of the same, or the burners between the two ovens.

The front wall of the broiler oven, at each side of the door opening, is provided with brackets 14 and 15, which are preferably bolted thereto. The rear ends of the brackets are provided with offset portions 16, to which are pivotally secured the arms 17 and 18, carried by the door 13 of the broiler oven. These brackets, as shown, have their forward ends approximately U-shaped, as indicated at 19, and have laterally turned ears 20 by means of which they are secured to the inner face of the door. The arms 17 and 18 extend approximately from the center of the U-shaped portion and are set straight at a point opposite to the pivotal connection with the offset portions 16 of the arms 14 and 15. The arms 18 are bent upwardly from said pivotal point and have rigidly carried by their outer ends the weights 21 and 22. These weights 21 and 22, as clearly shown in

Fig. 2 of the drawings, have the reduced forward portions 23 and the solid rear portion 24, making the weight much heavier at the rear of the arm than in front of the arm.

The door adjacent its upper end is provided with a forwardly and laterally turned arm 25, to which is secured a handle 26 at one side of the range so that the door 13 of the broiler oven may be readily operated without the operator being exposed at all to the flame from the burners in the front of the broiler oven.

From the description of the specific arrangement of the arms 17 and 18 and the weights carried thereby, it will be seen that when the door 13 is in its closed position, the weights 21 and 22 are in position, as shown in Fig. 4, to normally hold the door in said closed position. When the door is swung downwardly by means of the handle 26, in the position shown in dotted lines Fig. 4, the weight of the door is sufficient to counterbalance the rear enlarged portions 24 of the weights, as the forward reduced ends of the weights are beyond a vertical line of the pivot of the arms and do not have any effect upon the arms to cause the door to open. In other words this portion of the weight beyond the center or pivot of the arm counterbalances a portion of the weight and the weight of the door is greatly in excess of the unbalanced portion of the weight, and the door will remain in the open position shown in Fig. 4 of the drawing.

By the arrangement and construction of the door of the broiler oven, it will be seen that the same can be operated from the side of the range, and it will not interfere at all with the burners in front of the same, nor with any pot or kettle that may be upon the burners; nor does it interfere at all with the burners between the broiler oven and the baking oven.

Having thus described my invention, what I claim and desire to secure by Letters Patent is:

1. The combination with a range having a burner at the front thereof, of an oven in rear of and in a horizontal plane above the burner and having an opening in its front wall, a door for said opening and having a movement in an arc of a circle inside of a vertical plane with the burner and adapted to swing below the oven when in an open position.

2. The combination with a range having a burner at the front thereof, of an oven in rear of and in a horizontal plane above the burner and having an opening in its front wall, a door for said opening, arms having bifurcated forward ends secured to the inner face of the door and extending within the oven, said arms having the rear portions thereof turned at an angle and pivoted within the oven intermediate their ends, weights rigidly secured to the rear ends of the arms and having reduced forward ends, said door having a swinging movement in rear of a vertical plane with the burner whereby the door is overbalanced by the weights and held closed and the door when open overbalances the weights and is held open.

3. The combination with a range having a burner at the front thereof, of a grating above the burner, an oven in rear of the grating and having its lower end in a horizontal plane with the grating, said oven having an opening in its front wall, a door for said opening and having a movement in rear of a vertical plane with the burner and adapted to swing below the bottom of the oven.

4. The combination with a range having a burner at the front thereof, of an oven in rear of and in a horizontal plane above the burner and having an opening in its front wall, a door for said opening, arms having bifurcated forward ends secured to the inner face of the door and extending within the oven, the said arms pivoted intermediate their ends, and having their rear portions turned upwardly at an angle beyond the pivot, weights rigidly secured to the extreme rear ends of the upwardly turned portion of the arms, and having reduced forward ends secured to the rear ends of the arms, whereby the said door has a swinging movement in rear of a vertical plane with the burners, and is over-balanced by the weights and held closed, and the door when open, overbalances the weights and is held open.

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

JOSEPH ROY.

Witnesses:
L. M. KELLY,
J. M. SOURBECK.