To whom it may concern:

Be it known that I, Sierra Leone Richards, a citizen of the United States, residing at Baltimore, in the State of Maryland, have invented certain new and useful Improvements in Combined Broilers and Ovens; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use the same.

This invention relates to improvements in gas ovens, and more particularly to an oven in which is mounted a dupplex facing system of jet burners between which burners is suspended a broiler rack adapted to inclose the article to be broiled.

The object of the invention is to provide an oven of this character which may be readily converted from a baking to a broiling oven and vice versa.

With these and other objects in view, the invention consists of certain novel features of construction, combination and arrangement of parts as will be more fully described and claimed.

In the accompanying drawings:—Figure 1 represents a front elevation of a gas range equipped with this improved oven. Fig. 2 represents a longitudinal vertical section thereof with the oven arranged for baking. Fig. 3 is a similar view with the oven arranged for boiling. Fig. 4 is a transverse vertical section taken on the line 4—4 of Fig. 2. Fig. 5 is a horizontal section taken on the line 5—5 of Fig. 3.

This improvement is shown applied to a gas stove or range having what is known as an elevated oven 1, the walls of which are of the usual double construction having asbestos or other insulating material between them. The usual horizontally arranged burners 2 are employed such as are ordinarily used in gas baking ovens and the supply of gas to which is controlled by the usual cocks. Within this oven 1 upright jet burner boxes 3 and 4 are located, one at each end of the oven. One of these boxes is fixed and the other movable to vary the space between them and position the burner or flame plates 7 and 6 thereof a suitable distance from the article to be broiled.

The inner face of one end wall of the oven 1 constitutes the back plate of the fixed burner box 3, and the front plate thereof which latter has an angle flange bracket 8 which offsets said front burner plate 7 from the back plate or oven wall 9 sufficiently to constitute a gas supply chamber 9, between said plates which supplies the 60 series of burner jets 5 formed in the front plate 7. This front plate 7 is provided on its outer face with a plurality of vertically spaced shelf racks or brackets 10 which are designed to cooperate with similar brackets 11 on the movable burner box 4 for supporting shelves or other articles as may be desired. A gas pipe 11 supplies gas to the fixed burner box 3 and the passage of gas therethrough is controlled by a suitable cock.

The movable burner box 4 is preferably constructed as shown clearly in Figs. 2 and 3, being composed of spaced walls 13 and 14 connected at their opposite ends to form a partition which extends approximately the full height of the oven and on which the rollers 12 are mounted. This partition forms the back plate or wall of the burner boxes, the front plate 6 of which is offset from said back wall by an angle flange 16 a distance sufficient to provide a gas chamber 17 from which gas is supplied to the jet openings 18 in the front plate thereof. On the outer face of this front plate shelf brackets 19 are secured and disposed in alignment with the brackets 10 on the fixed burner box. These brackets support the shelves, not shown, when the oven is used for baking and when used as a broiler they support an upright broiler to be described.

The gas chamber 17 has a coupling 19 at its lower end into which a gas pipe 20 is designed to project when said movable box 4 is moved toward the fixed box a certain distance as shown in Fig. 3, and this pipe 20 supplies gas to the chamber 17 and is controlled by a suitable cock 21.

The movable partition to which the burner box 4 is attached has recesses 22 in its lower end for the passage therethrough of the burner pipes or tubes 9, as shown clearly in Fig. 4, said burners extending approximately the full length of the oven to

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supply suitable heat thereto when the oven is used for baking, sufficient space being left at the end of said burners for the movable partition and burner box 4 when in its operative position as is shown clearly in Fig. 2. A jointed handle 24 is secured to the rear face of the movable partition by a suitable coupling. The sections of this handle are provided with lugs 25 and 26 for a purpose to be described. This handle passes loosely through an opening in one end of the oven, said opening being sufficiently large to permit the lugs 25 and 26 to pass therethrough when the handle is moved upwardly, said handle resting on the lower wall of said opening when in normal position.

A suitable pilot 27 is disposed in position to light the burners of the oven when used for either baking or broiling purposes and it may be of any ordinary or desired construction. See Figs. 3 and 5.

An upright broiler 28 is designed to be supported between the burner boxes 3 and 4 on the shelf brackets of said burners as shown clearly in Fig. 3. This broiler is composed of hingedly connected sections 29 and 30 composed of suitable foraminous material, preferably woven wire such as is ordinarily employed in constructing broilers.

Plates 31 and 32 are fixed to the upper free edges of these sections 29 and 30 and extend outwardly in opposite directions in planes at right angles to the sections and are of a width sufficient to space the sides of the broiler a suitable distance from the flame or front plates of the burner boxes 3 and 4, said plates being adapted to rest on the shelf brackets of said burner boxes. Handles 33 extend laterally from one end of said sections and are adapted to be connected by a sliding ring 34 which may be adjusted to bring said sections toward each other or to space them further apart as may be desired, according to the thickness of the meat or other article to be cooked between them.

A drip pan 35 is supported below said broiler on the shelf brackets as is shown in Fig. 3 and is adapted to catch the drippings from the article being broiled. When it is desired to use this oven for baking the movable partition with the fire box 4 attached thereto is drawn toward the end of the oven having the aperture therein, through which the handle 21 slides, the movement of the partition being accomplished by grasping the handle and drawing it outwardly into the position shown in Fig. 2, and when it is released the outer hinged section thereof will fold downwardly and the lug 26 on the inner section will engage the outer face of the end wall of the oven and lock the partition in withdrawn position until it is again desired for use. When this movable partition and fire box 4 are in the position above described and shown in Fig. 2, the oven is ready for use as a baker and the shelves (not shown) may be supported on the brackets 10 and 11 secured to the burner boxes, the burners 2 being supplied with gas and lighted for furnishing the heat necessary for the baking operation, the gas which supplies the burner boxes having been first cut off. When in this position the partition carrying the movable burner box 4 is locked against inward movement by the engagement of the lug 25 with the outer face of the end wall of the oven.

When it is desired to use the oven for broiling, the handle 24 is straightened out into the position shown in Fig. 3, and pushed inward to its extreme inward limit which is controlled by the length of the pipe 20 which projects into the coupling at the lower end of the burner box 4 as shown in Fig. 3 and prevents further movement of said partition in this direction. The cock controlling the supply of gas to said pipe may then be turned to permit the gas to enter the chamber of the burner box 4 and permit it to pass out through the jet openings 18, where it is ignited. The gas is also turned into the chamber of the fixed burner box 3 and ignited when it issues through the jets formed in the front wall thereof, thereby supplying flame on opposite sides of the broiler 28 which has been suspended from shelf brackets on said inner boxes. When in this position the partition carrying the movable burner box 4 is locked against rearward movement by the engagement of the lug 26 with the inner face of the end wall of the oven. See Fig. 3.

From the above description it will be obvious that the oven 1 may be quickly converted either into an oven for baking or into a broiling oven, as may be desired.

While I have described my invention with more or less minuteness as regards details and as being embodied in certain precise forms, I do not desire to be limited thereto unduly any more than is pointed out in the claims. On the contrary, I contemplate all proper changes in form, construction, and arrangement, the omission of immaterial elements and substitution of equivalents as circumstances may suggest or render expedient.

I claim as my invention:

1. A gas oven having an upright fixed burner therein, an upright burner freely movable toward and away from said fixed burner, a handle secured to the rear wall of said movable burner and provided with a pivoted outer section having longitudinally spaced lugs, said oven having an opening in one end wall through which said handle is adapted to slide freely, said opening being of greater diameter than the handle to permit the lugs thereon to pass therethrough.

2. A gas oven having an upright burner freely movable toward and away from said fixed burner, a handle secured to the rear wall of said movable burner and provided with a pivoted outer section having longitudinally spaced lugs, said oven having an opening in one end wall through which said handle is adapted to slide freely, said opening being of greater diameter than the handle to permit the lugs thereon to pass therethrough.
A gas oven having an upright burner box fixed to one end wall thereof and provided with a plurality of jet openings, means for supplying gas to said box, a partition movable toward and away from said fixed burner box and extending the full height of said oven and having casters for engaging the top and bottom walls thereof, said partition having an upright burner box on one face thereof, said box having a coupling at its lower end, a gas pipe extending horizontally in said oven and terminating at its inner end about midway the length of the oven in position to engage the coupling of said box when in its extreme inward position, and means for locking said adjustable burner in adjusted position.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

SIERRA LEONE RICHARDS.
Witnesses:
EDWARD B. EISENBRANDT,
THOMAS R. BOND.