

Jan. 10, 1939.

A. R. JOHNSON

2,143,602

BROILING OVEN

Filed Dec. 5, 1936

Fig. 1

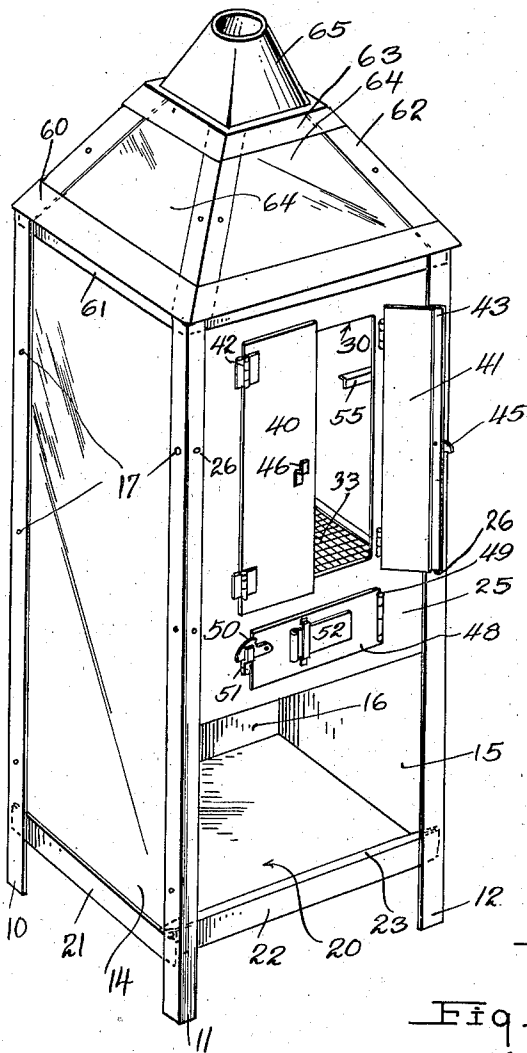


Fig. 2

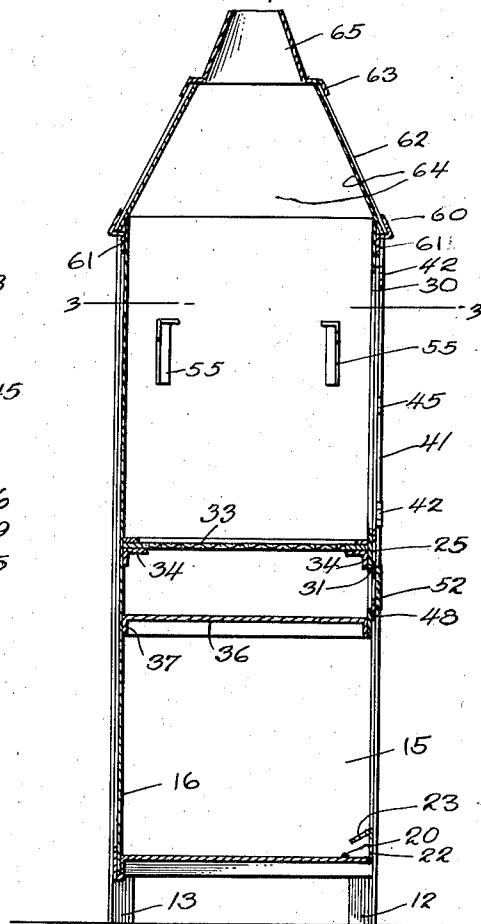
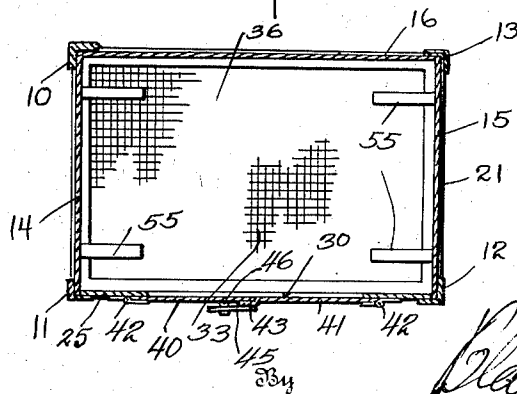


Fig. 3



Inventor

A. R. JOHNSON

Blair Kilgore
Attorneys

UNITED STATES PATENT OFFICE

2,143,602

BROILING OVEN

Annie Ruth Johnson, New York, N. Y.

Application December 5, 1936, Serial No. 114,520

4 Claims. (Cl. 126—29)

This invention relates to broiling ovens and in its more specific aspects pertains to broiling ovens of improved design.

Among the objects of the present invention may be noted the provision of a broiling oven of improved design; the provision of a broiling oven designed for either indoor or outdoor use; the provision of a broiling oven which is simple in construction, rugged and durable in use, and which may be operated in simple manner with the minimum of fire hazard; the provision of an oven as aforesaid which embodies a storage compartment or compartments, which are or may be used in carrying or storing fuel, such as charcoal in loose form or in the convention bag.

Other objects will be in part obvious and in part hereinafter pointed out in connection with the following analysis of this invention wherein is illustrated an embodiment of the invention in detail.

In the drawing—

Fig. 1 is a perspective view of a portable broiling oven in accordance with the invention;

Fig. 2 is a vertical section through the oven illustrated in Fig. 1;

Fig. 3 is a section along lines 3—3 of Fig. 2.

Referring now to the drawing wherein like reference characters denote like parts throughout the several views, one form of oven in accordance with the invention is illustrated and may be constituted by four upright corner members 10, 11, 12 and 13, preferably L-shaped angle irons, and arranged in suitably spaced relation to each other to provide a rectangular or square oven structure of desired dimension.

A continuous piece of sheet metal stock is advantageously bent to U-shape and is associated with the corner members in such manner as to form the sides 14, 15, and rear 16, of the oven body, such being suitably secured to the inside of the corner members as by screws 17, although other forms of connection such as spot-welding may be utilized. The sides and rear terminate short of the bottom of the corner members, and a bottom for the structure is provided, such being constituted by a horizontal metal panel 20 which extends between the sides 14 and 15, with its side and rear edges bent over to provide securing flanges. Exterior side edge strips indicated at 21 may be provided, as indicated. The bottom also extends from front to rear of the structure. A front bottom edge strip 22 is disposed between the front corner members 11, 12, and is suitably secured thereto, being further provided with an inwardly inclined lip 23 which extends slightly

over the bottom 20 thus to provide easy ingress and egress of material, such as charcoal, desired to be laid on the bottom panel 20.

A front panel 25 extends between the front corner members 11 and 12 and is suitably secured thereto as by screws 26, although other fastening means may be substituted. The front panel extends downwardly from the top of the corner members and terminates well above the bottom 20 whereby a large-area opening to the storage compartment whose bottom is constituted by the panel 20 is provided.

The front panel 25 is provided with two preferably rectangular openings, of which the upper opening 30 is of substantially large area, and the bottom opening 31 (Fig. 2) is of relatively small area. The opening 30 provides access to a broiling chamber within the oven structure as aforesaid, whose bottom is constituted by a grille 33 which is adapted to rest on suitable brackets 34 which extend inwardly from the wall of the structure, the arrangement being such that the grille is readily raisable from the brackets 34 and is thereby removable for cleaning or replacement purposes.

Below the grille 33 and spaced therefrom is a horizontal partition 36 which extends from side to side and from front to rear of the structure and is suitably secured to the interior wall thereof as by securing flanges 37, the panel 36 forming the bottom of a fire chamber or pit, to which opening 31 provides access.

Large opening 30 is adapted to be closed by the door sections 40, 41, each mounted to swing on a vertical axis through its hinge mounting indicated at 42, the relatively right-hand door 41 being preferably provided with an edge portion 43 adapted to overlap the door section 40.

One of the door sections, such as the section 41, may carry a swinging latch element 45 adapted to engage with a keeper 46 carried by the other door section 40 whereby the doors 40, 41 may be latched in closed position while at the same time they may be readily opened when desired to provide access to the broiling chamber.

The opening 31 for the fire pit is adapted to be closed by a door 48 which may swing on a vertical axis through a hinge mounting 49, the door at its other edge carrying a swinging latch member 50 adapted to cooperate with a keeper 51 carried by the front panel 25.

The door 48 is provided further with a draft opening which may be closed by a sliding damper 52, whereby air admitted to the fire pit may be controlled within certain limits.

Disposed well above the grille 33 and extending inwardly within the broiling chamber are a plurality of brackets 55 on which may rest a pan or other container in which broiled articles may be kept hot.

The oven structure as described may be substantially covered by a top structure which is preferably constituted by a lower horizontal corner frame generally designated at 60 extending along the sides, the front, and the rear of the stove body, the corner frame being secured to the top of the corner members 10, 11, 12 and 13, and being further provided with downwardly extending flange portions 61 to provide edge strips parallel to bottom edge strips 20, 21. Cooperated with the frame 60 are the inclined corner elements designated 62 and the top horizontal frame member 63, which parts are adapted to properly secure the inclined top panel elements designated 64. The arrangement is such that a flue opening is provided into which is inserted and suitably secured the flue 65 through which the products of combustion as well as the smoke resulting from the broiling operation may be discharged to atmosphere.

In use of the above structure as aforesaid, suitable fuel such as charcoal may be laid on the bottom 36 of the fire pit and ignited, and door 48 may be kept wholly opened or, if closed, the damper slide 52 may be adjusted to secure proper draft. Upon the oven being brought up to proper heat, the doors 40 and 41 if closed are opened to full open position and the article or articles to be broiled are inserted through large opening 30 and laid on the grill 33. The size of the door 30 is such that the articles may be readily turned as may be necessary, it being understood that the products of combustion and gases are discharged through the top flue 65.

When it is desired to remove the ashes from the fire pit, such may be accomplished with facility through the door opening 31, it being further understood that the imperforate bottom 36 of the fire pit prevents ashes dropping to the lower storage compartment, which provides a storage chamber for a supply of charcoal, either in loose or in bag form, so that fuel may be readily available.

The broiling oven as above described may be constructed in various sizes, depending on the intended use. Thus, for inside use where the oven would probably be permanently located, as in a commercial barbecue stand, the oven as aforesaid may be substantial in size and weight. For outside use, and particularly where it is desired that the oven be capable of ready transport, as for use at picnics and the like, the oven may be of smaller size and constructed of light weight material, whereby it is of a portable nature. In any event the lower compartment is always available as a storage chamber for fuel or the like, so that fuel is at hand and readily available.

As many changes could be made in carrying out the above constructions without departing from the scope of the invention it is intended that all matter contained in the above description and shown in the accompanying drawing shall be interpreted as illustrative and not in a limiting sense.

I claim:

1. A broiling oven structure having sides, a front and a rear, a bottom for the structure, a horizontal partition disposed above the bottom, the front terminating below the horizontal partition but well above the bottom, the horizontal partition extending from side to side and from front to rear of said structure and providing with the bottom and the sides and rear of the structure a storage compartment, a grille disposed above and spaced from the partition whereby the partition forms with the sides, front and rear of the structure a fire pit having a closed bottom disposed below the grille, the front being provided with openings, one of which provides access to the space in the structure above the grille, and the other providing access to the fire pit.

2. A broiling oven structure having sides, a front and a rear, a bottom for the structure, a horizontal partition disposed above the bottom, the front terminating below the horizontal partition but well above the bottom, the horizontal partition extending from side to side and from front to rear of said structure and providing with the bottom and the sides and rear of the structure a storage compartment, a grille disposed above and spaced from the partition whereby the partition forms with the sides, front and rear of the structure a fire pit having a closed bottom disposed below the grille, the front being provided with openings, one of which provides access to the space in the structure above the grille, and the other providing access to the fire pit, and manually operable doors arranged on said front for closing said openings.

3. A broiling oven structure having sides, a front and a rear, a bottom for the structure, a horizontal partition disposed above the bottom, the front terminating below the horizontal partition but well above the bottom, the horizontal partition extending from side to side and from front to rear of said structure and providing with the bottom and the sides and rear of the structure a storage compartment, grille supporting means arranged in the structure above the partition, a grille removably supported on said means, the partition forming with the sides, front and rear of the structure a fire pit having a closed bottom disposed below the grille, a top for the structure having a flue opening, and a flue arranged in said opening.

4. A broiling oven structure having sides, a front and a rear, a bottom for the structure, a horizontal partition disposed above the bottom, the front terminating below the horizontal partition but well above the bottom, the horizontal partition extending from side to side and from front to rear of said structure and providing with the bottom and the sides and rear of the structure a storage compartment, grille supporting means arranged in the structure above the partition, a grille removably supported on said means, the partition forming with the sides, front and rear of the structure a fire pit having a closed bottom disposed below the grille, a top for the structure having a flue opening, a flue arranged in said opening, the front being provided with openings, one of which provides access to the space in the structure above the grille, and the other providing access to the fire pit.

ANNIE RUTH JOHNSON.