Nov. 11, 1941. R. T. FRAZIER 2,262,319

GAS RANGE WITH ELECTRIC BUDGET COOKER

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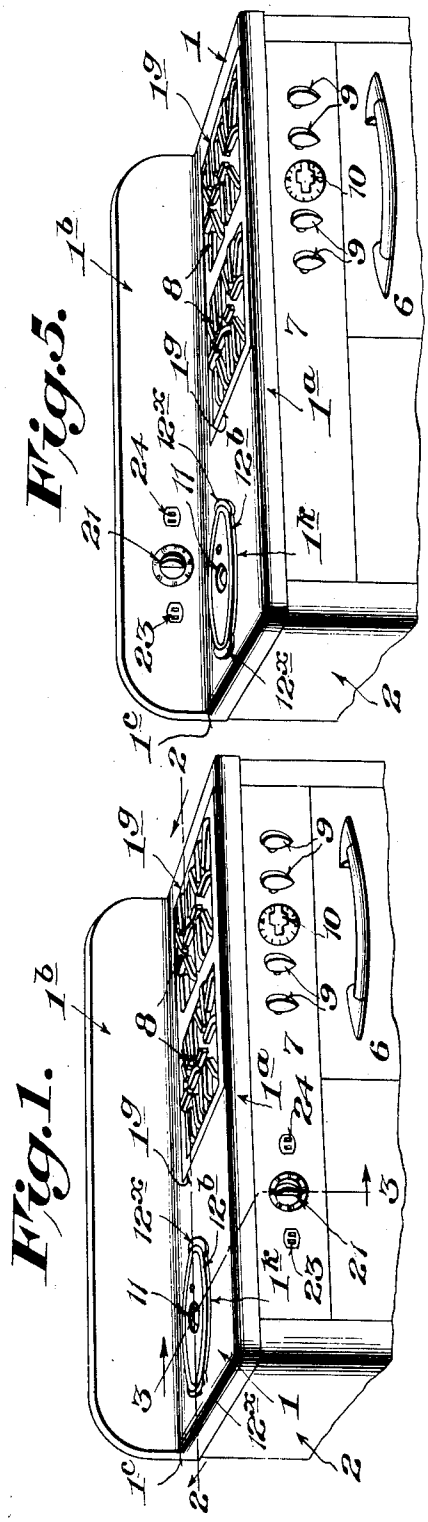


Fig. 1.

Fig. 5.

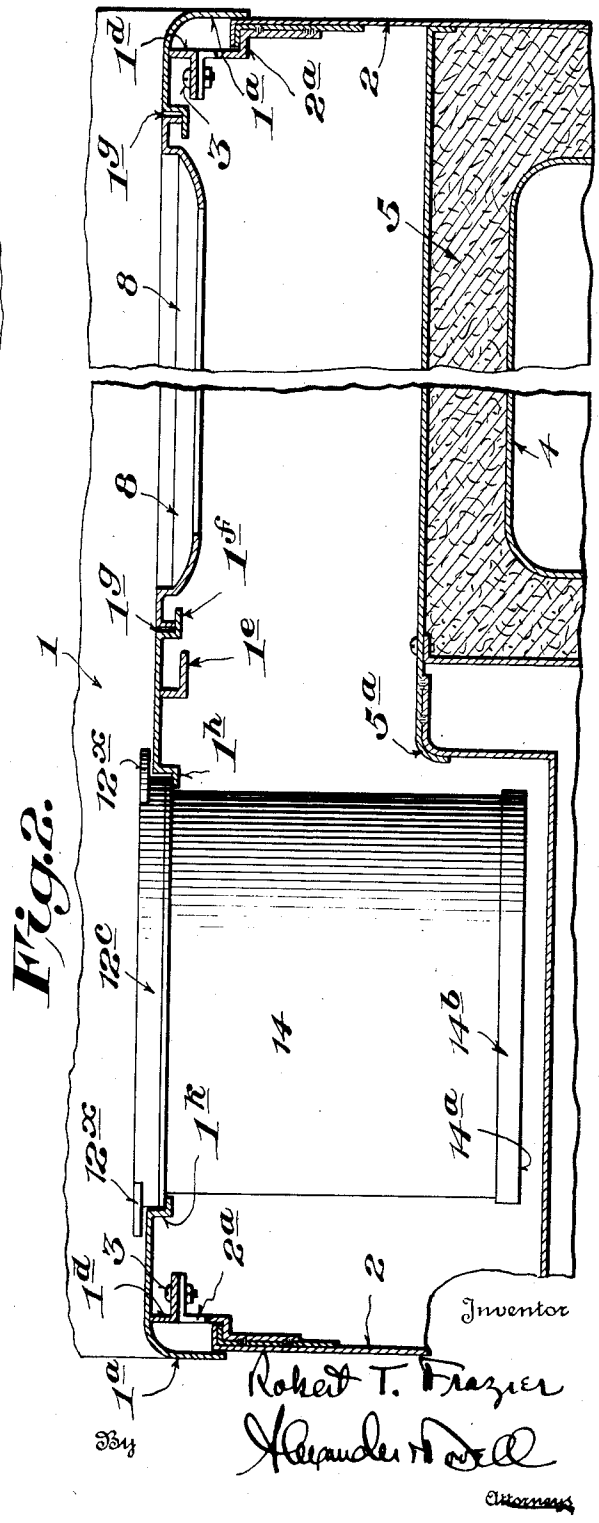


Fig. 2.

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Fig. 3.

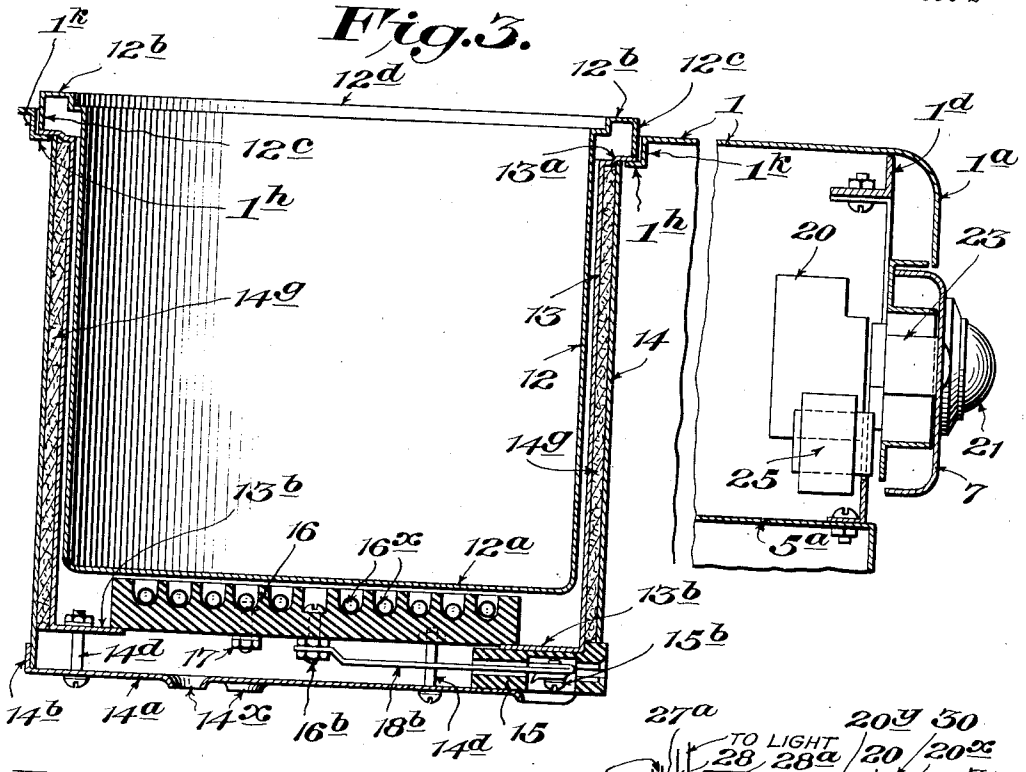
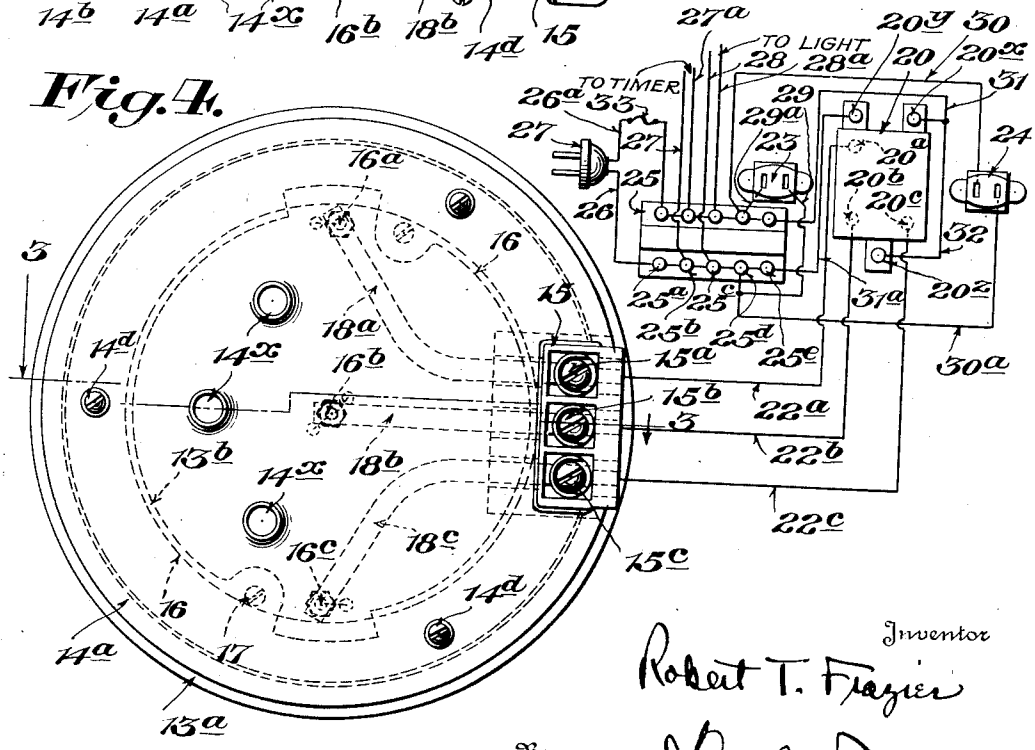


Fig. 4.



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Patented Nov. 11, 1941

2,262,319

UNITED STATES PATENT OFFICE

2,262,319

GAS RANGE WITH ELECTRIC BUDGET COOKER

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Application September 10, 1941, Serial No. 410,325

4 Claims. (Cl. 219—35)

This invention relates to ranges, stoves or the like, and the principal object of the invention is to provide a combination gas range and electric budget cooker, said combination also being provided with convenience electric outlets and said combination affording a customer a gas range equipped with the most economical form of cooking with electricity, i. e., an electric deep-well cooker, arranged as a unit wherein the top of the range and the back-splash plate of the range are made in one piece, the top being punched with a large rectangular hole at one side to accommodate the usual gas range burners, and being punched with a large round hole at the other side to accommodate the electric deep-well cooker unit, which latter is detachably inserted down through the round hole provided therefor. The electric switch controlling the deep-well cooker is mounted on the front panel of the range, on which the gas cocks and oven control are likewise mounted.

The present application is a continuation-in-part of my copending application Serial No. 310,967, filed December 26, 1939.

I will explain the invention with reference to the accompanying drawings which illustrate one practical embodiment thereof to enable others familiar with the art to adopt and use the same; and will summarize in the claims, the novel features of construction, and novel combinations of parts, for which protection is desired.

In said drawings:

Fig. 1 is a perspective view of the upper portion of a range according to my invention, showing all the control devices and convenience outlets projecting through the front panel of the range.

Fig. 2 is an enlarged section on the line 2—2, Fig. 1.

Fig. 3 is an enlarged section on the line 3—3, Fig. 1.

Fig. 4 is a bottom plan view of the electric deep-well cooker unit and showing diagrammatically the electric circuit including the switch and convenience outlets.

Fig. 5 is a perspective view similar to Fig. 1, but showing some of the control devices and the convenience outlets projecting through the backsplasher panel, and the remaining control devices projecting through the front panel.

As shown, the range is provided with a unitary top plate 1 coextensive with the entire area of the range, said plate having downwardly bent flanges 1*a* at the front and side edges thereof overlapping the front panel 7 and side walls 2 of the range, said top plate having at its rear edge an upwardly flanged backsplash portion 1*b* connected with the main portion of the top by a fillet 1*c* formed on a substantially large radius. Preferably the underside of top plate 1 adjacent the side flanges 1*a* is provided with angle bars 1*d* (Fig. 2) adapted to seat upon flanged strips 2*a* secured to the side walls 2, said members 1*d* and 2*a* being connected together by bolts 3. The top plate 1 may be further reinforced by one or more angle bars 1*e* disposed intermediate the bars 1*d*.

The range is also provided with the usual gas oven 4 covered by heat insulation 5, and heated by the usual gas burners or jets (not shown), said oven being accessible through a door 6 at the front of the range. Insulation 5 extends from one side wall 2 to a point adjacent the longitudinal center of the range, the top of the insulation 5 being disposed below the top plate 1. Extending from the top of the insulation 5 is a plate 5*a* connected to the other side wall 2 of the range as shown in Fig. 2.

Extending across the front of the range below the flange 1*a* is a fixed panel 7 of depth sufficient to close the gap between the top plate 1 and the top of the oven door 6, panel 7 supporting the various gas cocks for the range burners, the oven control; and if desired also supporting the electric cooker switch, also the electric convenience outlets (Fig. 1), although the electric cooker switch and electric convenience outlets may be mounted in or supported in the backsplasher panel 1*b* (Fig. 5).

In top plate 1, above oven 4, is a relatively large rectangular opening 1*g* extending substantially half the area of the top, said opening having a downwardly offset peripheral flange 1*f* extending around same adapted to support the grates 8 of the range which are disposed in the usual manner directly above the gas range burners (not shown), which burners are controlled by cocks 9 mounted on the front panel 7 opposite the burners in the usual manner; also the control valve 10 for the gas oven 4 is mounted on the panel 7, said valve 10 being disposed at the center of the series of gas cocks 9 so as to present a near symmetrical appearance.

In top plate 1 at the end opposite the opening 1*g* is a relatively large round or circular opening 1*k* having a downwardly offset peripheral flange 1*h*, said opening receiving the electric deep-well cooker unit of the range, which unit is detachably inserted down through the opening 1*k* in the top provided for the same.

The electric cooker unit is preferably cylindric

in shape, and consists of a removable pot 12 of cylindrical shape and preferably formed of aluminum, said pot having a bottom 12a and having at its upper end an exterior annular flange 12b provided with a downwardly extending flange 12c at its outer end, the diameter of annular flange 12c being such that it will make a neat fit upon the offset flange 1h of the opening 1k. Pivoted handles 12x such as shown in Fig. 1 may be provided on flange 12b. Preferably a recessed annular shoulder 12d is provided between the flange 12b and the wall 12, shoulder 12d forming a seat for the cover 11 of the electric cooker which is also preferably formed of aluminum and so designed that when same is seated in the recess it will be substantially flush with the annular flange 12b. The wall 12 and bottom 12a are imperforate and adapted to hold and retain liquids or the like.

The well for the pot 12 consists of an inner cylindrical wall 13 of porcelain enameled steel or other metal having an outwardly extending peripheral flange 13a at its upper end adapted to seat upon the flange 1h of opening 1k to support the well. Wall 13 extends down below the bottom 12a of pot 12 and is provided with an internal annular flange 13b spaced from and parallel therewith.

Surrounding the wall 13 is an outer cylindrical wall 14, of porcelain enameled steel or other metal, the upper end of which wall directly contacts the upper flange 13a of wall 13. Cylindrical wall 14 extends below the bottom flange 13b of wall 13, and is closed by a removable circular plate 14a having an upstanding annular flange 14b receiving the lower end of wall 14a. Bottom plate 14a is removably secured to the bottom flange 13b by bolts 14d, which bolts likewise hold the upper end of wall 14 against flange 13a so that the members 13, 14 and 14a form a rigid structure insertable and removable as a unit in the hole 1k of the top plate 1. The space between walls 13 and 14 is preferably filled with aluminum foil 14g or other heat insulating material. By the above construction the aluminum pot 12 may readily be lifted out of the well 13—14 for washing or other purposes.

Extending through the lower end of wall 14 and into the space between the bottom portions 13b and 14a is a porcelain terminal block 15 having three electric contacts 15a, 15b and 15c, said block having openings opposite the contacts whereby conductor wires may be readily connected with the respective contacts. In the space between the bottom plates 12a and 13b is a standard electric heater brick 16 preferably secured to the flange 13b by means of bolts 17, the coil 16x of said heater brick having three terminals 16a, 16b and 16c connected by conductors 18a, 18b and 18c respectively to the terminals 15a, 15b and 15c respectively of terminal block 15, the conductors extending through the space between the bottom plate 14a and flange 13b of the cooker unit. In the bottom plate 14a are a series of holes 14c for the purpose of permitting air to circulate between the parts 14a and 13b for the purpose of ventilation.

On the front panel 7 of the range disposed opposite the electric cooker is a switch 20 (Fig. 1), having an operating dial 21 for controlling the circuit to the heater brick 16 of the cooker. Switch 20 has three contacts 20a, 20b and 20c (Fig. 4) connected by wires 22a, 22b and 22c respectively with the contacts 15a, 15b and 15c of the terminal block 15, whereby rotation of dial 21 will control the power circuit to the heater brick 16. On the panel 7 at opposite sides of the switch dial 21 are convenience outlets 23 and 24 (Figs. 1 and 4) adapted to receive contact plugs for various electric kitchen appliances. However, if desired, the electric cooker switch 20 and its associated parts, also the convenience outlets 23 and 24 may be mounted in or supported by the back-splasher panel 1b as shown in Fig. 5.

At the rear of panel 7 or panel 1b, is mounted a contact block 25 having pairs of spaced contacts 25a, 25b, 25c, 25d, and 25e, respectively. The contacts 25a—25e inclusive at each side of the contact block are connected in series by means of bus bars. The first pair of contacts 25a are connected by wires 26 and 26a with a master plug 27 which may be inserted in a customary base receptacle installed in the kitchen to furnish power to the heating brick 16 of the electric cooker. The contacts 25b of the block 25 are respectively connected by wires 27, 27a to the automatic timer (not shown) for the heating brick 16 of the electric cooker. The contacts 25c of the block are respectively connected by wires 28—28a to electric lights (not shown) with which parts of the range may be equipped. The contacts 25d of the block are respectively connected by wires 29 and 29a to the contacts of the convenience outlet 23; also connected by wires 30 and 30a to the contacts of the other convenience outlet 24. The contacts 25e are respectively connected by wires 31, 31a to input terminals 20x and 20y of the switch 20, and a conductor 32 connects the input terminal 20x of the switch with the third input terminal 20z of the switch. Preferably a fuse 33 is interposed in the conductor 26a leading from plug 27 to the contacts 25a.

The above arrangement provides a combination gas range and electric deep-well cooker arranged as a unit wherein the top 1 and backsplash 1b of the range are made in one piece, the top being punched with a large rectangular opening 1g at one side to accommodate the gas range burners, and punched with a round hole 1k at the other side to accommodate the deep-well cooker, which cooker is formed as a complete unit and detachably inserted through the hole in the top provided for the same. The electric switch controlling the deep-well cooker is mounted on the front panel, on which panel are also arranged the gas cocks 9 and gas oven control 10, or the electric switch controlling the deep-well cooker, and the convenience outlets, may be arranged on the backsplasher panel. By the above arrangement a combination standard gas range and electric budget cooker with convenience outlets is provided, and by this arrangement the manufacturer may afford his customers a gas range in combination with the most economical form of cooking with electricity all arranged as one unit.

I claim:

1. In combination, a range having a unitary top plate and a unitary front panel; said top plate having an opening adjacent one end; a grate covering said opening; gas burners disposed below said grate; said top plate having a second opening; an electric deep-well cooker unit comprising a well having spaced side and bottom walls, insulation between the side walls and a removable pot in said well having a cover, said unit being removably inserted down through said second opening and having an annular flange seated on said top plate; an electric cir-

cuit for said cooker; and control devices for said gas burners and cooker circuit projecting through said panel; convenience outlets on said panel connected in said cooker circuit; a gas oven in said range, and a control valve therefor projecting through said panel.

2. In a combination as set forth in claim 1, an electric heating element disposed in the bottom of said well; and a terminal block at the lower end of the well having contacts electrically connected with the said heating element and disposed in said electric circuit.

3. In combination, a range having a unitary top plate provided with a backsplasher panel, and a unitary front panel; said top plate having an opening adjacent one end; a grate covering said opening; gas burners disposed below said grate; said top plate having a second opening; an electric deep-well cooker unit comprising a well having spaced side and bottom walls, insulation between the side walls, and a removable pot in said well having a cover; said unit being removably inserted down through said second opening, and having an annular flange seated on said top plate; an electric circuit for said cooker; control devices for said gas burners and cooker circuit; said control devices projecting through one of said panels respectively; convenience outlets on one of said panels connected in said cooker circuit; a gas oven in said range; and a control valve for said oven projecting through one of said panels.

4. In a combination as set forth in claim 3, an electric heating element disposed in the bottom of said well; and a terminal block at the lower end of the well having contacts electrically connected with the said heating elements and disposed in said electric circuit.

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