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COMBINATION ELECTRIC AND GAS STOVE

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FIG. 1

FIG. 2

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This invention relates to improvements in combination electric and gas stoves, and the object thereof is to provide an appliance for a cook-stove by which heat is derived by the consumption of either gas fuel or electric current, in such manner that the operation of the appliance, when using gas fuel will be without interference or effect upon the electrical parts thereof, and so that the electrical current may be utilized without interference with or obstruction by the gas burning equipment.

These objects are accomplished by the construction illustrated in the accompanying drawings, in which:

Fig. 1 is a plan view of a structure embodying the invention, a portion thereof being broken away; and

Fig. 2 is an elevation projected from Fig. 1, a portion being in section.

The characters appearing in the description refer to parts shown in the drawings and designated thereon by corresponding characters.

The invention consists of a plate of refractory material formed of vitreous earthen matter, cement or other material suitable for installation of electric heating elements, such as is commonly used in electric stove structures. The plate 1 is formed a chamber 12, from which extend through the top of the plate a series of discharge openings 13 for the emission of the gaseous fuel mixture from said chamber which is supplied thereto through a duct 14 that has connection with a mixer 15 and a gas supply pipe 16 arranged in the manner common in the practice relating to gas consuming stoves.

Upon the top of the plate 1 is removably positioned a grate 17 that is held in spaced relation with the plate by means of legs 18, which grate is for the purpose of supporting a cooking vessel (not shown) in a position above and out of contact with the plate 1 when gas fuel is being used for the heating agent. This grate is essential only when gas fuel is being utilized, as its elevation above the discharge openings 13 admits of space beneath the vessel in which combustion of the fuel takes place. However, when the electric heating elements are utilized, said grate is removed so that the cooking vessel may be placed directly upon the top of the plate in close relation with the electrical heating elements.

The invention is utilized by the generation of heat, selectively, by the burning of gas admitted through the mixer into the chamber and expelled through the burner openings 13, at which point the gas is ignited and consumed, and the heat thus obtained is applied to the cooking vessel positioned upon the grate, or, by dispensing with the grate and placing the vessel directly upon the plate 1, the electrical heating elements being utilized by closing the switches 10 and 11, or either of them.

The invention affords facility in operations for cooking as either of the advantages peculiar to the use of electrical current as the heating agent, or those derived from the combustion of gas fuel, may be readily applied.

What I claim is:

1. An appliance of the class described, comprising a plate having a chamber therein and discharge openings leading therefrom through the top of said plate; means for supplying a gaseous fuel to said chamber to be expelled therefrom through said openings, the top of said plate having channels therein, the tops of which channels are open; electrical heating elements disposed in said channels; circuits including a source of energy for activating said elements; and a removable grate including supporting means whereby said grate is sustained spaced above said plate.

2. An appliance of the class described,
3. A combined electrical and gas heating member consisting of a plate having formed in its upper surface an open topped channel and having an internal chamber and discharge openings extending therefrom through the top of the plate spaced from said channel; means for activating said element; and means for supplying gaseous fuel to said chamber to be expelled therefrom through said openings.

4. A combined electrical and gas heating member comprising a plate having disposed in its top an electrical heating element; means for activating said element, said plate having an internal chamber and openings extending therefrom through the top of the plate at points spaced from said element; and means for supplying gaseous fuel to said chamber. In testimony whereof I affix my signature.

WILLIAM SIMPSON.