

No. 834,733.

PATENTED OCT. 30, 1906.

S. J. JEHA.
GAS SAVING APPLIANCE.
APPLICATION FILED NOV. 25, 1905.

FIG. 1.

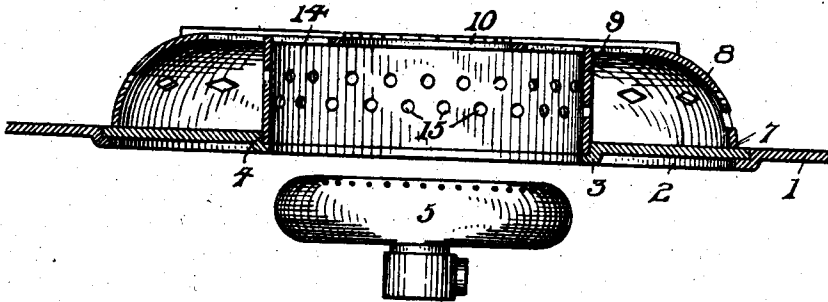


FIG. 2.

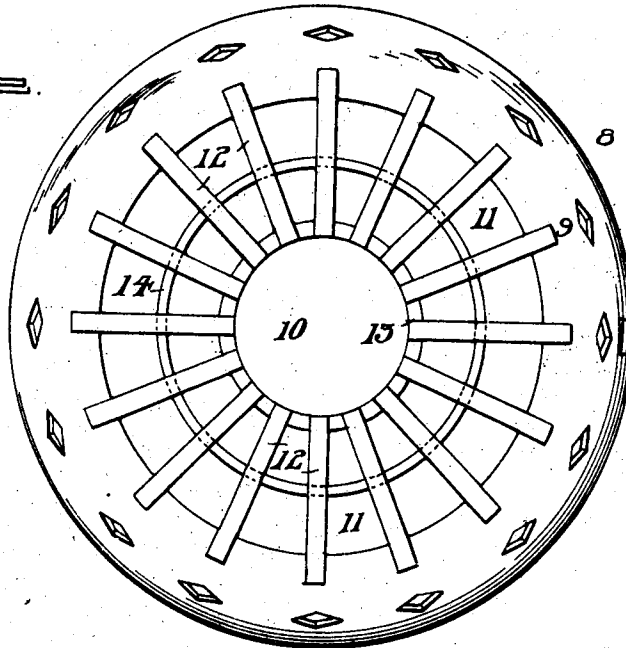


FIG. 3.

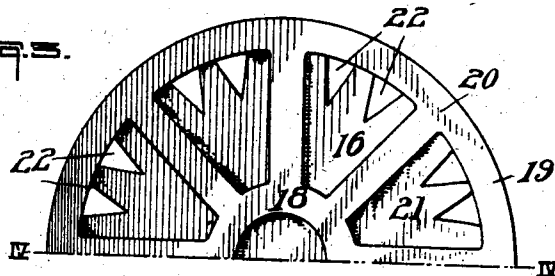
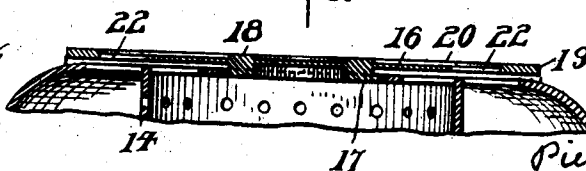


FIG. 4.



WITNESSES:

J. P. Hoffman,
Charles H. Starnick.

INVENTOR

S. J. Jeha,
by

Pierce & Barker,
ATTORNEYS

UNITED STATES PATENT OFFICE.

SPIRIDON J. JEHA, OF SWISSVALE, PENNSYLVANIA.

GAS-SAVING APPLIANCE.

No. 834,733.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, SPIRIDON J. JEHA, a citizen of the United States, residing at Swissvale, in the county of Allegheny and State of Pennsylvania, have invented or discovered new and useful Improvements in Gas-Saving Appliances, of which the following is a specification.

My invention relates to devices for use with gas-burners; and its object is to provide an auxiliary device to be used in place of the ordinary cover or lid of a gas or similar stove whereby the combustion will be made more nearly perfect and the heat generated be saved and economically distributed.

Referring to the drawings, Figure 1 is a vertical section of my invention shown in place on the top of a stove; Fig. 2, a plan thereof; Fig. 3, a half-plan of an auxiliary device for use in connection with the devices shown in Figs. 1 and 2; and Fig. 4, a cross-section on the line IV IV of Fig. 3, a portion of the device of Figs. 1 and 2 being shown in connection therewith.

On the drawings, 1 represents a portion of the top plate of a gas or similar stove, and 2 the annular portion of a common two-part stove-lid, the circular or central portion being omitted, but fitting on flange 3 in the opening 4 in the top 2.

5 represents a burner located beneath the opening 4 and may be a gas, gasolene, or similar burner.

6 is the outer drum or casting resting on the top of the stove. It has preferably a circular bottom 7, from which the casting rises and curves inwardly, as shown at 8, until it attains the desired height, and then it extends horizontally, as shown at 9, toward the center thereof and terminates at the circular opening 10. Between the opening 10 and preferably the curved portion 8 I provide a number of wedge-shaped openings 11, which may be considered as formed by a number of arms 12, extending inwardly radially to the rim 13 of the opening 10.

Extending downwardly from the top 9 between the rim 13 and the outer ends of the openings 12 is the cylindrical inner drum 14, which fits into the opening 4 and rests upon the flange 3 when the appliance is properly placed on the stove 1, the bottom 7 then resting on the top of the stove, as shown on Fig. 1. The drum 14 is provided with the holes 15, which connect together the space

within the drum 14 and the annular space between the drums 6 and 14.

When it is desired to heat or cook material which is liable to burn when the containing vessel is subjected to the direct heat of the burner, the device shown in Figs. 3 and 4 may be used. It consists, preferably, of a disk 16, having some means, as the circular rib 17, which enters the opening 10, as shown on Fig. 4, to keep it from being accidentally shoved off from the top 9. The upper side of the disk is provided with the inner annular rib 18 and the outer annular rib 19, the latter being preferably at the edge of the disk. These ribs are connected together by several radial ribs 20, which form, with the annular ribs 18 and 19, the wedge-shaped passages 21. The disk is preferably provided with numerous openings 22, which lead to the annular space between the two drums 6 and 14.

A cooking vessel being placed on the top 9 and the burner 5 being ignited, the burning gases extend up in the drum 14, where they are somewhat confined and thoroughly mixed with air, a portion of the gases passing through the openings 15 and in the annular space between the drums, where they are still confined and caused to escape through the openings 11 into contact with the said vessel. The cylinder 14 is substantially evenly heated on both sides, and will therefore retain its shape. The outer drum 6, having the curved portion 8, allows no angle at the top to form a dead space, as the gases touching it will readily slide along it and out at the top.

When the disk 16 is placed on the top 9 and the cooking vessel placed on the former, the flames do not directly strike the vessel, but are caused to pass through the holes 15 and out beneath the disk. The bottom of the vessel will be heated by conduction through the upper ribs and by the contact of the hot gases or air in the spaces between the ribs. Thus there will be but little liability of burning anything in the vessel. A large saving of gas will be effected, as but little will be required, for only moderate heat will be necessary when the disk is used.

Having described my invention, I claim—

1. In a gas-saving appliance, a stove-top with an opening therein, a burner beneath the opening, a perforated drum seated in the same, a second drum surrounding the first drum and resting on the stove-top, a disk re-

movably adapted to be laid on said drums, and ribs in the upper face of the disk.

2. In a gas-saving appliance, a stove-top with an opening therein, a burner beneath
5 the opening, a perforated drum seated in the same, a second drum surrounding the first drum and resting on the stove-top, a disk removably adapted to be laid on said drums, and ribs in the upper face of the disk, there
10 being openings near the margin of said disk communicating with the annular space between the drums.

3. In a gas-saving appliance, a stove-top with an opening therein, a burner beneath
15 the opening, a perforated drum seated in the same, a second drum surrounding the first drum and resting on the stove-top, a disk removably adapted to be laid on said drums, ribs in the upper face of the disk, and means
20 on the disk to hold it in place on the drums.

4. In a gas-saving appliance, two drums, one within the other, a top plate connecting them together and having therein a central opening, a disk removably adapted to rest on said top plate, and having a rib in said open- 25 ing.

5. In a gas-saving appliance, a drum adapted to be seated on a stove and provided with openings therein, and a series of ribs on said drum extending toward the center 30 thereof but having their inner ends arranged around a central opening in the top of the appliance.

Signed at Pittsburg, Pennsylvania, this 8th day of November, 1905.

SPIRIDON J. JEHA.

Witnesses:

ALICE E. DUFF,
F. N. BARBER.