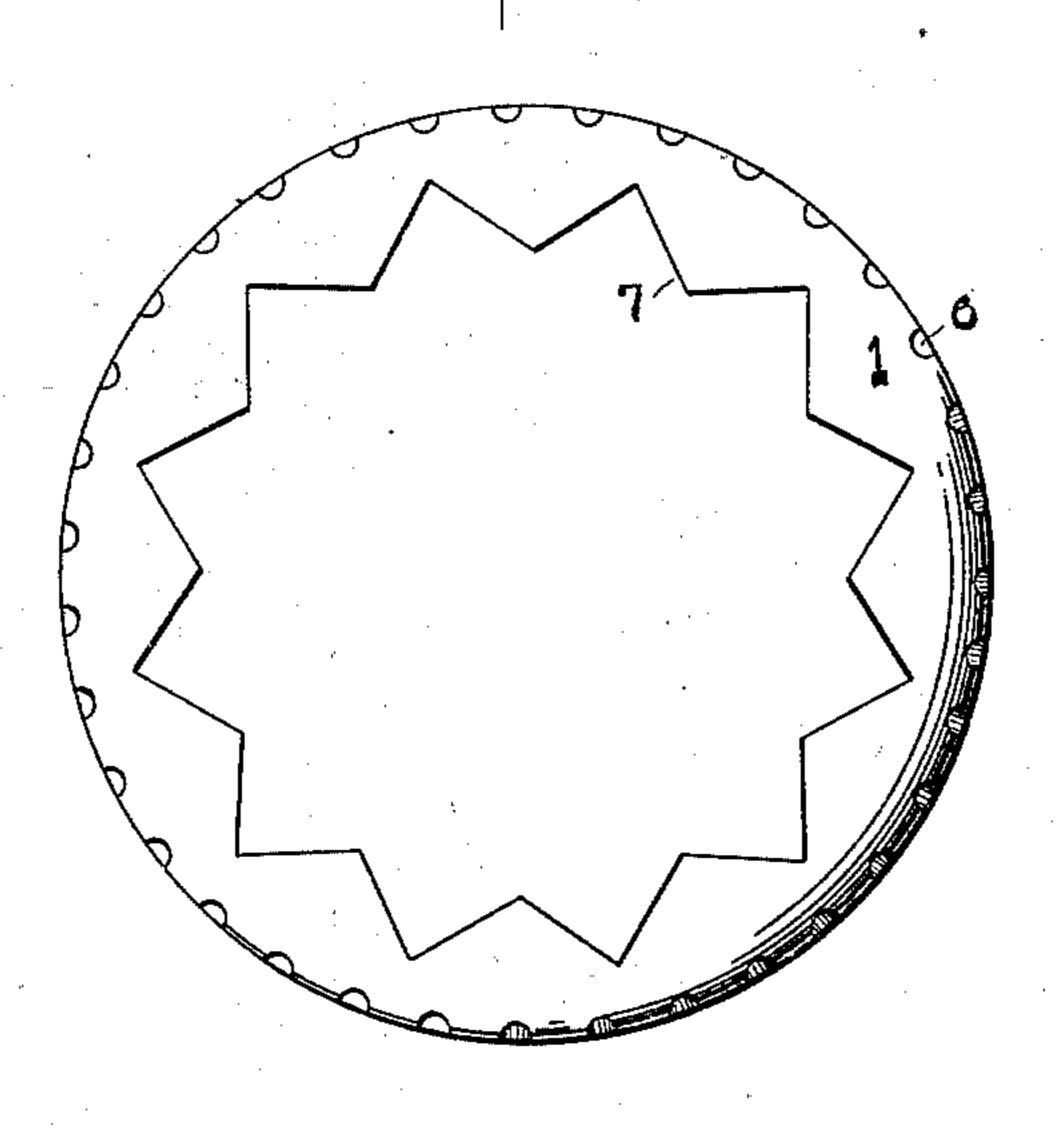
No. 698,507.

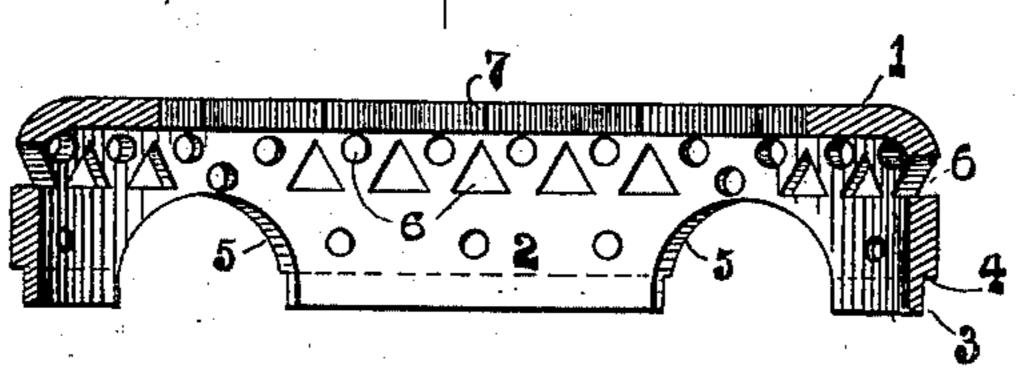
Patented Apr. 29, 1902.

S. J. JEHA. GAS SAVING APPLIANCE.

(Application filed Dec. 26, 1901.)

(No Model.)





Gwo. H. Harvey. F. N. Barber.

Spiridon J. Jeha.
W. L. Pierce
his Attorney.

United States Patent-Office.

SPIRIDON J. JEHA, OF PITTSBURG, PENNSYLVANIA.

GAS-SAVING APPLIANCE.

SPECIFICATION forming part of Letters Patent No. 698,507, dated April 29, 1902.

Application filed December 26, 1901. Serial No. 87,212. (No model.)

To all whom it may concern:

Be it known that I, Spiridon J. Jeha, a citizen of the United States, residing at Pittsburg, in the county of Allegheny and State of Penn-5 sylvania, have invented or discovered new and useful Improvements in Gas-Saving Appliances, of which the following is a specification.

In the accompanying drawings, which make 10 part of this specification, Figure I is a plan view of my gas-saving appliance. Fig. II is a cross-section of the same.

Heretofore in the construction of gas-saving appliances such open-top lids as have been 15 offered to the trade have always permitted an excess of air to come in contact with the gas at the point of combustion.

The object of my invention, generally stated, is to make an appliance adapted to be fixedly 20 supported in the stove-lid opening and to provide the same with air-inlet openings and gasoutlet openings. This construction permits of perfect combustion and the heating of the utensil more rapidly when placed on it than 25 has ever heretofore been accomplished in this general class, for the following reasons: First, the side drafts are reduced to a minimum by providing openings at intervals in the side walls of the appliance for the admission of 30 air instead of the usual spider-web formation heretofore used; second, the regulated quantity of gas, with admixture of air, provided through the inlets of the appliance secures a perfect combustion and permits the apex of 35 the flame to impinge against the bottom of the utensil and distribute its heat evenly over its exposed portion, while the waste products of combustion are permitted to pass through the small openings located around the top of 40 the appliance and above the air-inlets.

My invention consists of a top plate 1, of | the device. any approved outline, provided with a downwardly-turned flange 2, extending at right angles thereto. The lower edge of the flange 45 is thinned or reduced at 3, forming a shoulder 4, the reduced part 3 entering an opening in the stove-top and the shoulder 4 forming a stop or rest for the appliance, the shoulder

resting on the edge of the opening from which the lid has been removed. Arch-shaped air- 50 inlets 5 are made in the bottom of the flange. These openings will be of such a size as to supply sufficient air for perfect combustion of the gas. Through the upper part of the flanges and above the air-inlets are one or 55 more rows of holes 6 for the passage of the waste products of combustion and excess of flame. The top plate 1 is cut away, leaving an annular series of radially-projecting teeth 7.

The teeth present advantages over closed 60 tops or over tops having openings with a smooth margin, because in either of the last two constructions the top will sag where it becomes very hot and has lost its carbon and upon cooling will pull the sides or flanges out 65 of shape, so that they will not fit the stove-top openings. With the teeth extending, as they do, approximately to the flange they expand and contract without any injurious effect upon the shape of the appliance.

While I have shown one form of my invention, I do not desire to limit myself to the precise details shown, as many changes in shape, proportion, and arrangement will readily suggest themselves to those skilled in the 75 art to which it belongs.

Having described my invention, I desire to claim—

1. In a gas-burning device, a top plate having a serrated opening and a flange thereon 80 having air-inlets at the edge thereof opposite the top plate and waste-product outlets between the air-inlets and the top plate.

2. In a gas-burning device, a top plate having an opening with a broken margin, and a 85 flange on said plate said flange having a reduced portion adapted to enter a stove-top opening and a shoulder, forming a stop for

Signed at Pittsburg this 23d day of Decem- 90 ber, 1901.

SPIRIDON J. JEHA.

Witnesses:

F. N. BARBER, GEO. H. HARVEY.