

No. 721,376.

PATENTED FEB. 24, 1903.

J. J. KONIGS.
STOVE.

APPLICATION FILED NOV. 5, 1902.

NO MODEL.

Fig. 1

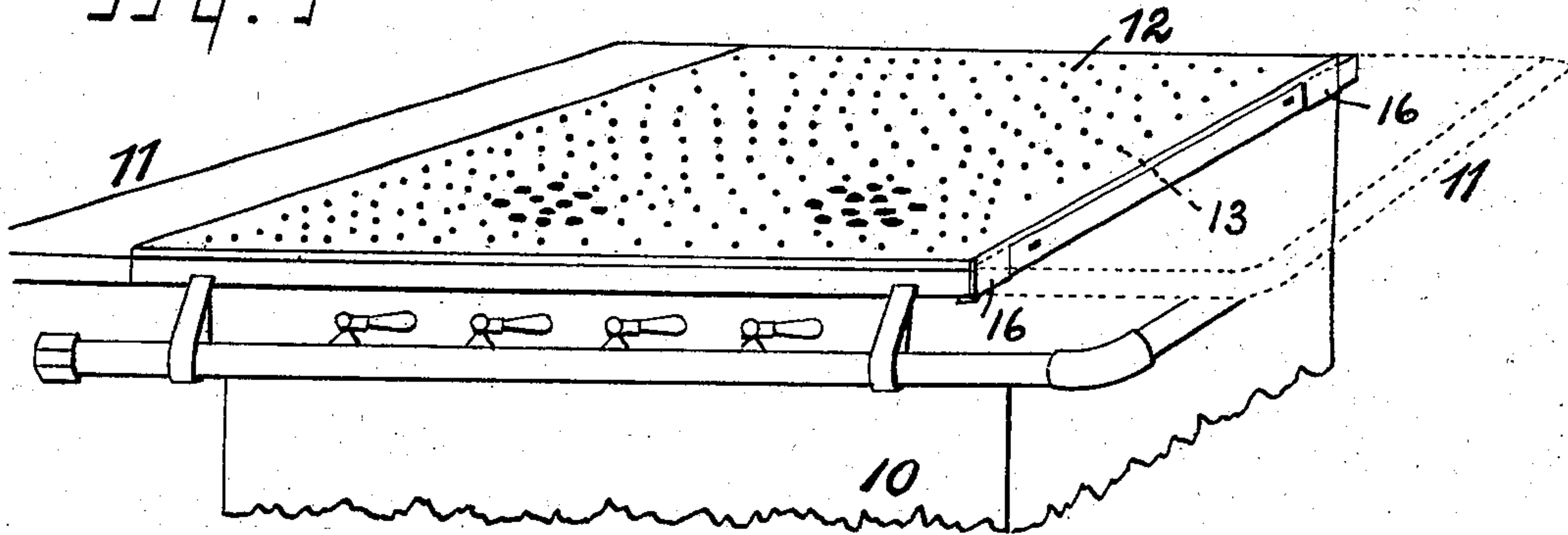


Fig. 2

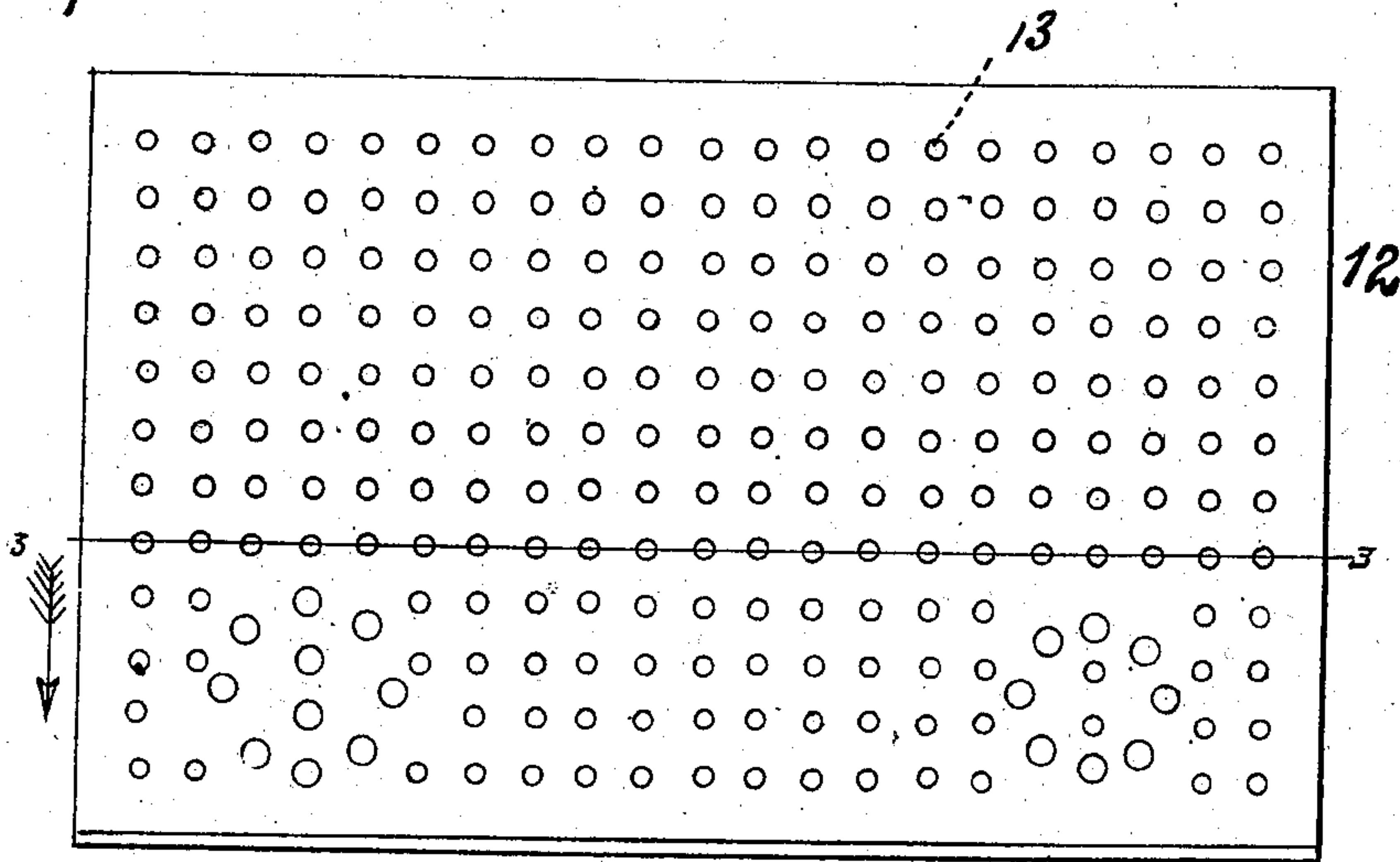
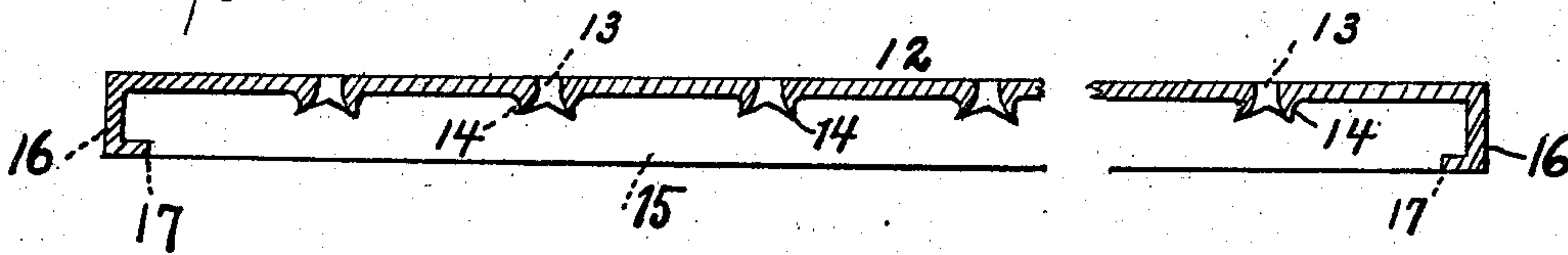


Fig. 3



WITNESSES:

Anna P. Broderick.
Arthur Marion.

INVENTOR
Julius J. Konigs,
BY
Chas. C. Gill
ATTORNEY

UNITED STATES PATENT OFFICE.

JULIUS J. KONIGS, OF NEW YORK, N. Y.

STOVE.

SPECIFICATION forming part of Letters Patent No. 721,376, dated February 24, 1903.

Application filed November 5, 1902. Serial No. 130,125. (No model.)

To all whom it may concern:

Be it known that I, JULIUS J. KONIGS, a citizen of the United States, and a resident of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Stoves, of which the following is a specification.

The invention relates to improvements in gas, vapor, and oil stoves, and pertains more particularly to a novel top plate to be placed upon said stoves and to receive upon their surface the cooking receptacles or articles to be subjected to the action of the heat.

The purpose of my invention is to secure greater efficiency and economy in the use of the stoves, or, in other words, secure and utilize in an efficient manner the greatest amount of heat with the minimum consumption of the gas or other fuel.

A further object of my invention is to provide a top plate having an adequate surface area to receive the cooking utensils and to avoid the necessity of superposing such receptacles upon definitely-placed studs or pins extending upwardly from the upper surface of a stove-top plate.

A further object of the invention is to provide a top plate for gas, vapor, and oil stoves upon which the cooking utensils may be placed without danger of the solder at the joints around the bottom thereof being melted.

In carrying out my invention I provide a top plate, preferably of sheet metal, to cover the top of the stove and punctured throughout its entire area, the metal displaced from the apertures caused by the puncturing extending downwardly and forming flanges or burs encircling the lower edges of said apertures. It is to be observed that in carrying out my invention I do not form mere perforations through the top plate, but that instead of forming clean-cut perforations in the plate I puncture the plate without removing any part of the metal therefrom, but displace the metal in the act of puncturing, so that it may form downwardly-extending flanges or burs encircling the apertures, the result being that the top plate becomes perforated throughout and that at its lower surface is formed an extended heat-chamber encircling all of the burs or flanges projecting downwardly from around the aforesaid apertures. The burs

or flanges encircling the apertures or holes in the top plate are of the utmost importance, because, among other reasons, they serve to house the heat below the top plate and direct the circulation of the heat all over the lower surface of said plate, with the result that with a minimum consumption of the gas at one or more burners of the stove the entire top plate, extending over, say, four burners, becomes intensely heated and capable of use in connection with the operations of cooking and heating.

The invention will be fully understood from the detailed description hereinafter presented, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view, partly broken away, of a four-burner gas-stove equipped with a top plate constructed in accordance with and embodying my invention. Fig. 2 is a detached top view of the top plate, and Fig. 3 is a longitudinal section of same on the dotted line 3 3 of Fig. 2.

In the drawings, 10 designates a customary form of four-burner gas-stove, 11 the usual extension-leaves at the opposite ends of said stove, and 12 the top plate of my invention, which plate is punctured over substantially its entire area, as denoted at 13, the metal from the apertures formed by the puncturing being displaced downwardly to form the encircling flanges 14, extending around the lower edge or periphery of said apertures, as indicated in Fig. 3.

The plate 12 will preferably be formed of sheet metal and the holes punctured therein will, except over the two front gas-burners, be about one-eighth of an inch in diameter, while the holes directly over the front gas-burners will be somewhat larger, as shown, or about one-quarter of an inch in diameter. By preference the plate 12 will be formed at its front edge with a downwardly-extending flange 15 and at its ends with end flanges 16, which at their lower ends will extend inwardly, as at 17, for the purpose of passing below the edges of the usual top of the stove, whereby to hold the plate 12 in position. The upper surface of the plate 12 is substantially flat and is adapted at any part to receive the cooking utensils or other articles to be heated, while the lower surface of said plate is

not flat, but contains the downwardly-extending annular flanges or burs 14, which in use prevent the rapid upward escape of the heat through the holes in the plate and house said
5 heat below said plate and enable said plate throughout its entire area to become heated to the maximum extent and with great economy in the consumption of the fuel. The heat being housed below the plate 12 will pass
10 around the burs or flanges 14 and travel all over the under surface of the plate 14, heating the latter and enabling the utilization of the entire upper surface of the plate, although only for illustration the front two
15 burners of the stove are in operation. The presence of the flanges or burs 14 is of the utmost importance in securing a maximum efficiency with the minimum consumption of the gas, and said flanges or burs 14 deflect a
20 part of the gas-flames laterally and assure the diffusion of the heat all over the lower surface of the plate 12 instead of allowing a concentration of the heat within some small area about the stove-burner.
25 I desire it to be fully understood that to secure the results attained by me the plate 12 must not only have the holes through it, but that the said holes must not be clean-cut perforations, but have around their lower peripheral outline the downwardly-extending

burs or flanges to be acted upon by the heat-flames and to house the generated heat below the plate.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. For use on and over and in combination with a stove, the top plate 12 having the punctures 13 with the flanges 14 encircling the same and extending downwardly below the lower surface of said plate whereby there is
40 formed below said lower surface an extended heat-chamber encircling all of said flanges; substantially as set forth.

2. For use on and over and in combination with a stove, the top plate 12 having the punctures 13 with the flanges 14 encircling the same and extending downwardly below the lower surface of said plate whereby there is
45 formed below said lower surface an extended heat-chamber encircling all of said flanges, and said plate also having edge flanges to engage the edges of the stove-top; substantially as
50 set forth.

Signed at New York, in the county of New York and State of New York, this 3d day of
November, A. D. 1902.

JULIUS J. KONIGS.

Witnesses:

CHAS. C. GILL,
ARTHUR MARION.