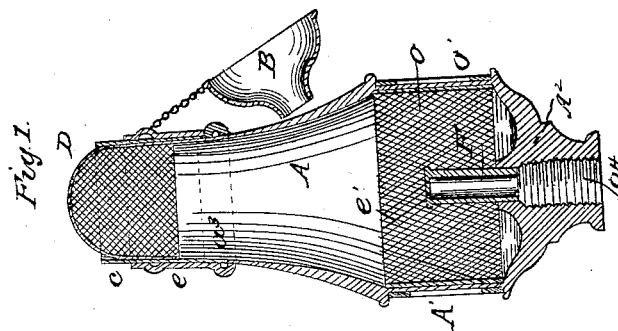
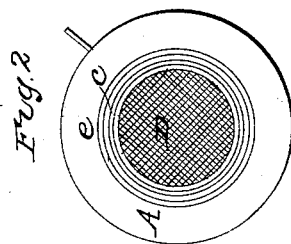
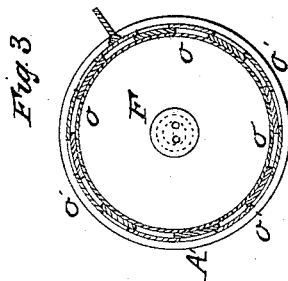


A GEISS.

Gas Burner for Cooking Purposes.

No. 51,170.

Patented Nov. 28, 1865.



Witnesses
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UNITED STATES PATENT OFFICE.

ADOLPH GEISS, OF BUFFALO, NEW YORK.

GAS-BURNER FOR COOKING PURPOSES.

Specification forming part of Letters Patent No. **51,170**, dated November 28, 1865.

To all whom it may concern:

Be it known that I, ADOLPH GEISS, of the city of Buffalo, county of Erie and State of New York, have invented new and useful Improvements in Gas-Burners; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

My invention relates to a gas-burner for cooking purposes by which far more heat may be obtained than by the common burner, the same being easily and quickly applied and connected to ordinary gas-fixtures, rendering it peculiarly adaptable to the sick-room or nursery when light cooking is required to be done.

Fig. I is a vertical section of my improved gas-burner. Fig. II is a top plan. Fig. III is a transverse section of the same.

Letters of like name and kind refer to like parts in each of the figures.

A represents a central metallic draft-chamber, conical in form, and serving the double purpose of draft and mixing the gas with air before it reaches the point of combustion. Below this chamber, and interposed between it and a metallic base, A², is placed a metal cylinder, A', which has several openings, o, which openings are provided with doors or slides o', for regulating the ingress of air, so that a greater or less amount of air may be admitted, as may be required to accommodate various particular purposes for which the burner may be used. Within this cylinder A' is placed a finely-perforated screen or wire-gauze shell, e', for the purpose of further straining and sifting the air in the passage into the draft and mixing chamber A, and so as to deliver the air and gas in steady and uniform quantities to the dome for combustion.

A gas-pipe, F, is inserted into the metallic base A², with a screw-thread cut thereon, as shown at a⁴, for easy connection with the ordinary gas-pipes used in dwelling-houses. This pipe projects into the perforated shell e', as shown, and allows the gas to escape therefrom through small apertures in the top thereof.

The chamber A, is surmounted by a perforated or wire-gauze dome, D. The lower part of the dome stands upon the upper end of the

chamber A, and is held in place by the outside thimble, e, which laps over the upper end of chamber A. In this overlapping part is formed an internal groove to receive projecting pins or nibs, as shown at a³. Notches are made in this groove to allow the thimble e to pass over the pins, and then by a slight turn the pins enter the groove and retain both thimble and dome in place.

A conical cap, B, is provided, which may be placed over the dome D, for the purpose of obtaining an illuminating-jet through the opening thereof whenever it may be required. When this cap is used the openings o may be diminished in size by means of the slides o', and thereby obtain the requisite supply of air to support a small illuminating-flame.

This device is designed to be used in connection with the gas pipe or fixtures ordinarily used in dwelling-houses, and may be connected and disconnected therewith at pleasure. When properly connected with a gas-pipe, the gas will issue through the pipe F, and coming in contact with the external air, which passes in through the openings in the cylinder A' and the perforated shell e', the gas and air become thoroughly mixed in the chamber A before reaching the point of combustion. Combustion takes place on the outer surface of the dome D.

For the purpose of heating water, or cooking therewith, any convenient cup, dish, or kettle may be used, and for this purpose may be set or held over the dome in contact with the flame in any convenient manner. It is a cheap and simple device, and will be found very useful and convenient in the sick-room or nursery, or where simple preparations and light cooking are only required.

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

The draft and mixing chamber A, in combination and arrangement with the perforated dome D, perforated shell e', and metallic base A², including gas-pipe F, for the purposes and substantially as described.

ADOLPH GEISS.

Witnesses:

W. H. FORBUSH,
C. S. PRINCE.