

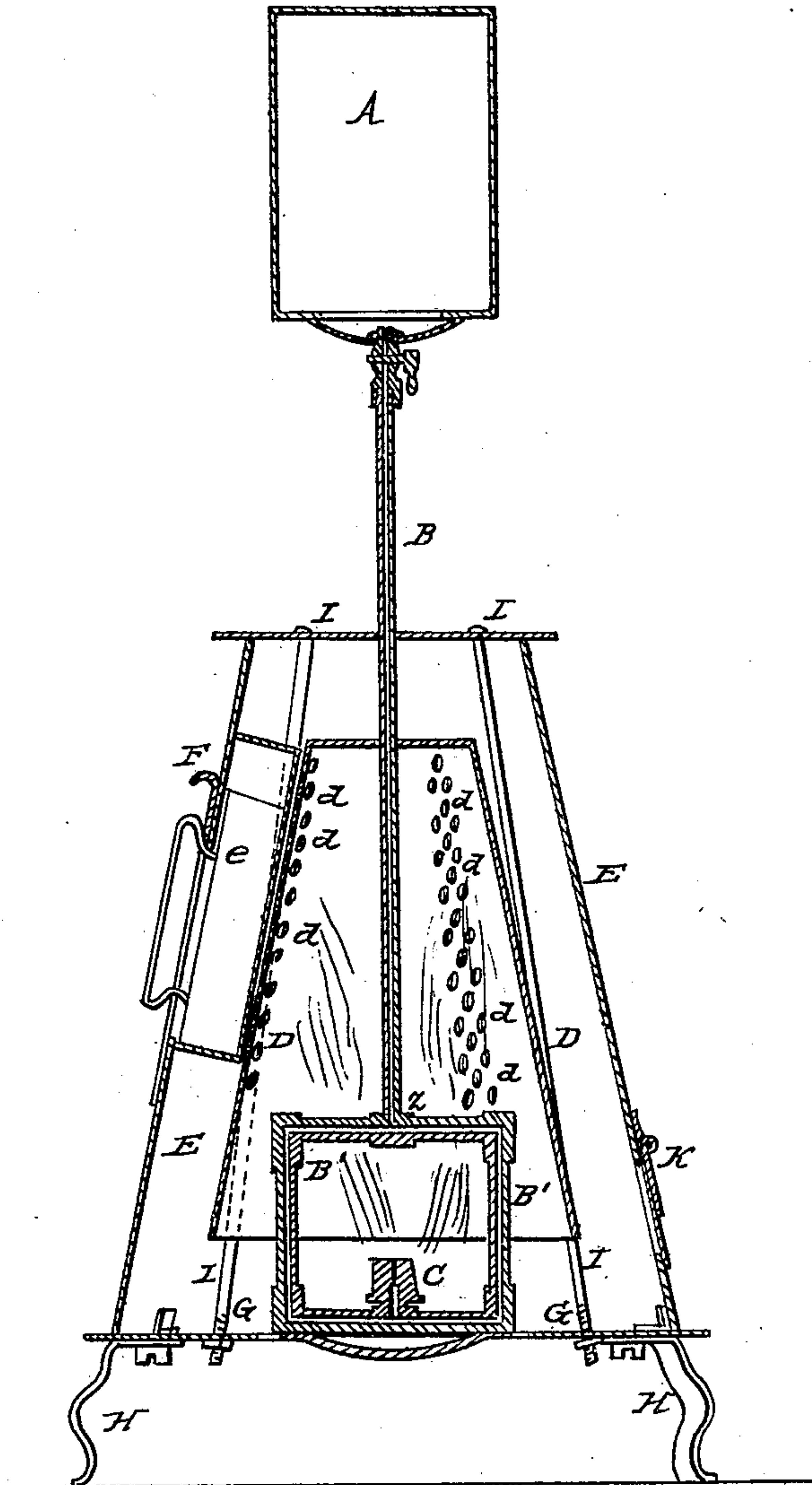
J. D. SPANG.

Gas Heating Apparatus for Sad Irons.

No. 68,318.

Patented Aug. 27, 1867.

FIG. 1



INVENTOR

WITNESSES

Chas A. Pettit
Solomon Keim

FIG. 2



J. D. Spang
By *Munn & Co*
Attorneys

United States Patent Office

JACOB D. SPANG, OF DAYTON, OHIO.

Letters Patent No. 68,318, dated August 27, 1867.

GAS-HEATING APPARATUS FOR SAD-IRONS.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, JACOB D. SPANG, of Dayton, in the county of Montgomery, and State of Ohio, have invented a new and improved Gasoline Heating Apparatus; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, and in which—

Figure 1 is a vertical section of my invention.

Figure 2 is a top view of the burner C.

Similar letters of reference indicate corresponding parts in the two figures.

In this invention a new form of gasoline burner is used, and a new device is employed for utilizing the heat of such burners, and concentrating it upon particular points where the apparatus to be heated is situated.

In order that others skilled in the art to which my invention appertains may be enabled to make and use the same, I will proceed to describe it in detail.

In the drawings, A represents a reservoir, filled with gasoline, and communicating by the pipe B B' with the burner C. The lower extremity of the pipe B', it will be observed, is bent in the form of a square, having the burner in the centre of its lower side. Its upper extremity is provided with a stop-cock, *b*, to regulate the flow of oil from the reservoir. Around the burner and lower part of the tube B is a screen, D, of sheet metal, in shape the frustum of a cone, and having clusters of perforations *d d d* at different points in its walls. The top of this screen is fitted closely around the tube B, and the whole screen forms a chamber, in which all the heat of the burner is collected, and from which the heat and heated air, gases, &c., are delivered only through the perforations *d d d*. Outside of this again is another chamber, E, of sheet metal, of the same form as the screen D, but larger in all its dimensions. In the walls of this chamber, at *e e e*, extending inward opposite to the perforations *d d d*, are small compartments or heaters, into which access can be had only from the outside. They are of different shapes, to receive smoothing irons, or whatever else it may be desired to heat in them, and are so arranged, with reference to the heat-discharging perforations *d d d*, that all the heat possible shall be utilized upon them. Covers F are provided, which can be adjusted in position, as shown in the drawings, and when the smoothing-irons, &c., are being heated, will confine the heat in the compartments *e e e*.

This whole apparatus is placed upon a stand, consisting of a perforated plate, G, supported upon legs H H H, and is firmly attached to it by metallic rods I I I, extending from the top of the chamber E to the plate G, and confined by nuts and screws, or in other suitable manner. A valve is provided in the walls of the chamber E at K.

The burner C, it will be observed, is of peculiar construction, being a hexahedron, with top slightly smaller than bottom, and having two slits *c c* in its top, crossing each other at right angles in the centre of the burner, where there is stationed a small button, *x*, for the purpose of throwing the flame from the centre. The square portion of the pipe B' is attached to the upper part of the pipe by a screw-joint, *z*. Asbestos may be placed inside of the pipe B B', if desired, through which the oil will filter, and which will thus regulate the supply of oil to the burner.

A great advantage is derived from the form and position of the square portion B' of the pipe, as it enables the heat of the lamp to be communicated to the gasoline just at the point where it is necessary to heat it in order to volatilize it and bring it to the burner in the condition of gas. The form and construction of burner shown and described will also be found to possess advantages over those hitherto in use, being at the same time durable, and yet radiating a great amount of heat.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The burner C, having the slits *c c*, and the central button *x*, combined and arranged together substantially as and for the purpose described.
2. The screen D, having clusters of apertures *d d d*, as and for the purpose described.
3. The arrangement and combination of the burner C, screen D, and chamber E, having the heating compartments *e e e*, substantially as and for the purpose specified.

JACOB D. SPANG.

Witnesses:

THOS. D. MITCHELL,
GEO. SAY.