

No. 641,541.

Patented Jan. 16, 1900.

C. E. PIERCE.  
HEATER FOR SOLDERING IRONS.

(Application filed Oct. 15, 1898.)

(No Model.)

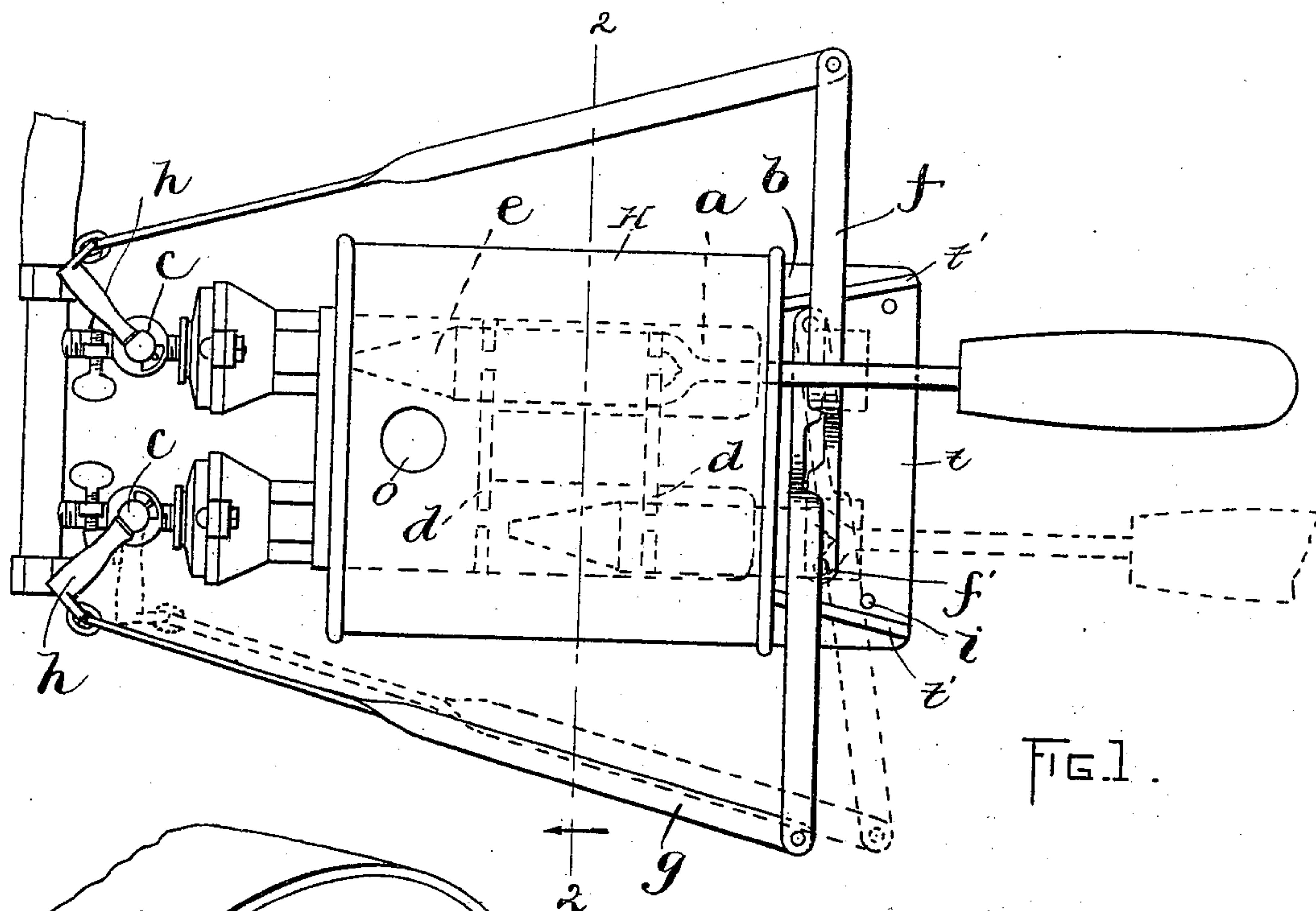


FIG. 1.

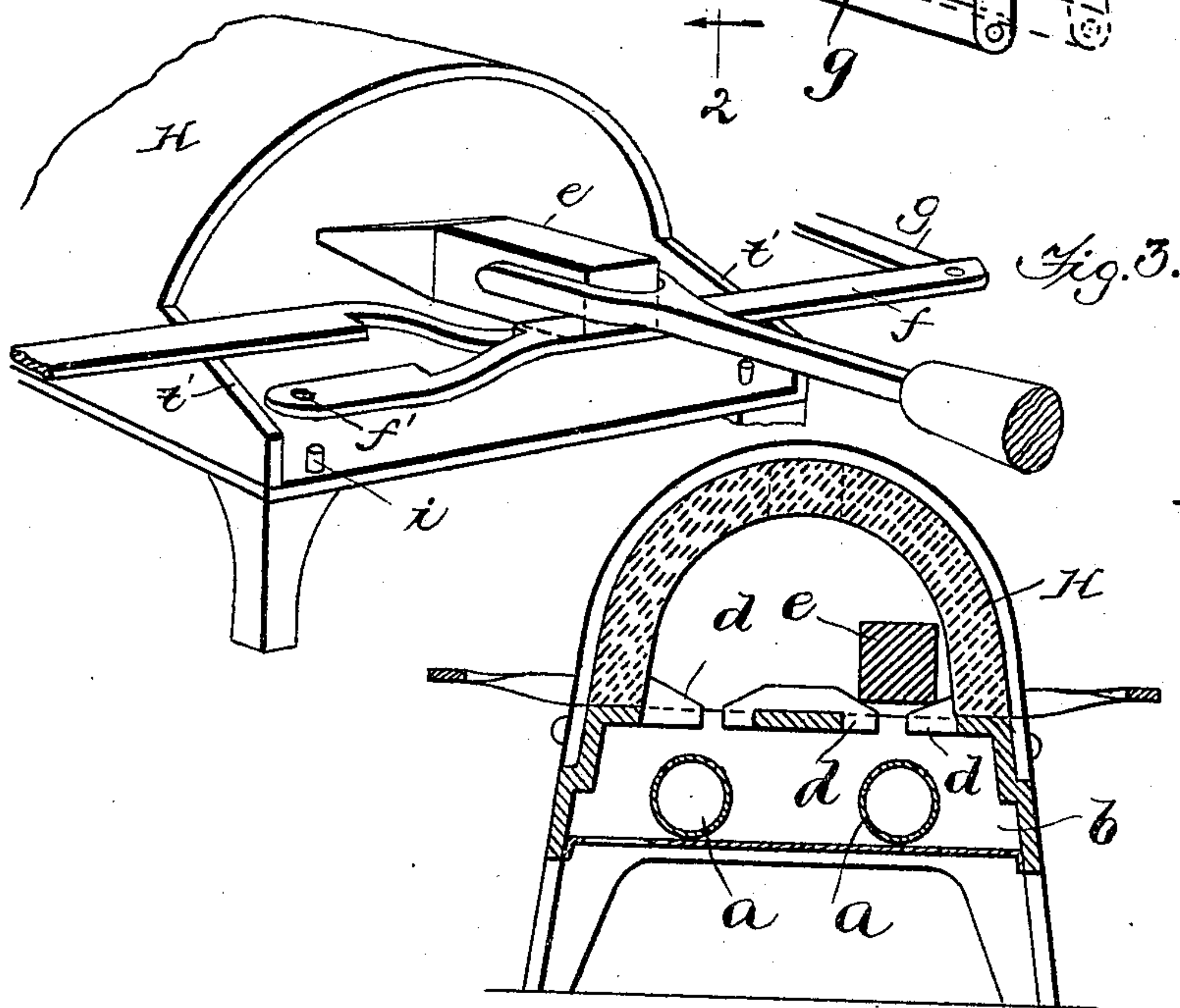


FIG. 2.

WITNESSES:

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# UNITED STATES PATENT OFFICE.

CHARLES E. PIERCE, OF CAMBRIDGE, MASSACHUSETTS.

## HEATER FOR SOLDERING-IRONS.

SPECIFICATION forming part of Letters Patent No. 641,541, dated January 16, 1900.

Application filed October 15, 1898. Serial No. 693,580. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES E. PIERCE, of Cambridge, in the county of Middlesex and State of Massachusetts, have invented certain  
5 new and useful Improvements in Heaters for Soldering-Irons, &c., of which the following is a specification.

This invention relates to heaters for portable articles, such as soldering-irons, employing a burner for gas or other fuel, and a  
10 cock which controls the supply of fuel to the burner.

It is the object of my invention to provide means which will insure the closing of the  
15 cock, either wholly or in part, when the heated iron or other article is being withdrawn from the burner, so that when the burner is not in use there will be no wasteful consumption of fuel.

The invention consists in the improvements which I will now proceed to describe and claim.

Of the accompanying drawings, forming a part of this specification, Figure 1 represents  
25 a top plan view of a heater embodying my invention. Fig. 2 represents a section on line 2 2 of Fig. 1. Fig. 3 is a view in perspective illustrating my invention.

In the drawings, (referring for the present  
30 to Figs. 1 and 2,) *a* represents a burner, which may be of the well-known Bunsen type and is supported by a suitable frame or holder *b*. *c* represents a cock which controls the supply of fuel to the burner.

*d d* are rests located transversely within a hood or heating-chamber *H*, said rests being provided with upwardly-extended beveled  
35 portions designed to support the soldering-iron *e* in position to be heated by the burner. The hood or chamber *H* is provided with an air vent or outlet *O* in its top.

*f* is an arm or lever, which is pivoted at *f'* to a platform or extension *t* of the holder *b*, said arm or lever being curved upwardly at  
45 *f''* and resting upon the inclined edges of the upturned sides *t'* of said platform and in the path of the soldering-iron as the same is inserted into or withdrawn from the position it occupies over the burner while being heated.  
50 By this arrangement the inner end of said iron will strike the arm or lever *f* and move the same outwardly, as indicated by dotted

lines in Fig. 1, said arm or lever also serving as a rest or support for the handle of the iron while the latter is being heated. The arm or  
55 lever *f* is connected by means of a rod or link *g* with an arm *h*, affixed to the cock *c*. The arrangement of the arm or lever *f*, cock *c*, and arm *h* is such that when the said parts are in the position shown in full lines in Fig. 60  
1 the cock is opened to its fullest extent, so that a full supply of fuel passes to the burner. When the arm or lever *f* is moved to the position shown in dotted lines, the cock is closed,  
65 either wholly or in part, thus preventing waste of fuel when the iron is not in place over it.

It will be seen that the arm or lever *f* is moved to shut off the supply of gas without any care on the part of the operator, and that  
70 when the iron is again inserted the arm or lever *f* may be pushed inwardly either by contact with the soldering-iron when the latter is being inserted or by the operator's hand.

*i* represents a stop which limits the cock-closing movement of the arm or lever *f*, said  
75 stop being arranged so that the cock cannot be entirely closed, but will permit a small supply of fuel to pass to the burner when the soldering-iron is removed, so that the burner  
80 is continuously lighted.

In the drawings I have shown a heater provided with two burners and the accompanying devices above described, it being obvious  
85 that any desired number of burners may be employed without departing from the spirit of my invention.

From what has been said it will be observed that there is an operating-arm connected with a gas-cock and arranged in the path in which  
90 the article to be heated is moved to and from the rest that is supported over the burner, so that in each case the cock is operated, in a certain sense, automatically—that is to say, the usual movement of the article to be heated, to and from its position on the rests operates the cock.

I claim—

1. A heater of the character herein described, comprising a supporting-frame, a dome or heating-chamber supported thereby,  
100 rests or supports located within said dome or chamber, burners supported by said frame below said rests or supports, cocks adapted to control the supply of fuel to said burners,

arms or levers pivoted to said frame and having upwardly-curved portions lying in the path of the article to be heated and also serving as rests or supports, connections between  
5 said levers and said cocks; and stops designed to limit the movement of said arms or levers, substantially as set forth.

2. A heater of the character herein described, comprising a supporting-frame having  
10 a platform or extension, a dome or heating-chamber supported by said frame, rests or supports located within said dome or chamber, burners supported by said frame below said rests or supports, cocks adapted to con-

trol the supply of fuel to said burners, arms  
15 or levers pivoted to said platform or extension and curved to extend into the path of the article to be heated, said curved portions also serving as rests or supports, connections  
20 between said levers and said cocks, and stops on said platform designed to limit the movement of said levers, substantially as set forth.

In testimony whereof I have affixed my signature in presence of two witnesses.

CHARLES E. PIERCE.

Witnesses:

C. F. BROWN,

A. D. HARRISON.