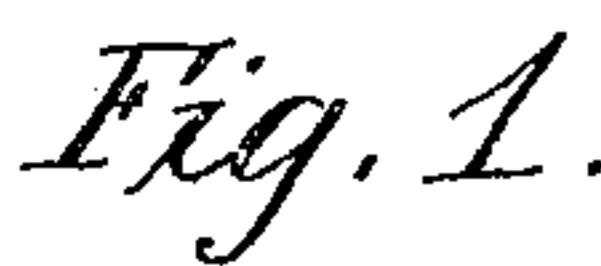


GAS HEATER.

930,914.

2 SHEETS—SHEET 1.



Inventor  
August Abramson  
by his Attorneys  
Rowson & Rowson





# UNITED STATES PATENT OFFICE.

AUGUST ABRAMSON, OF PHILADELPHIA, PENNSYLVANIA.

## GAS-HEATER.

No. 930,914.

Specification of Letters Patent.

Patented Aug. 10, 1909.

Application filed November 7, 1907. Serial No. 401,139.

*To all whom it may concern:*

Be it known that I, AUGUST ABRAMSON, a citizen of the United States, residing at Philadelphia, Pennsylvania, have invented certain Improvements in Gas-Heaters, of which the following is a specification.

My invention relates to certain improvements in apparatus for heating sad irons and such articles by the use of gas and compressed air.

The main object of my invention is to so design such a heating apparatus that it will automatically light and extinguish the heating flame; and a further object is to provide a suitable mixing chamber and means for regulating the flame. These objects I attain in the following manner, reference being had to the accompanying drawings, in which:—

Figure 1, is a vertical sectional view of my improved gas heater; Fig. 2, is a sectional plan view on the line 2—2, Fig. 1; Fig. 3, is a side view; and Figs. 4 and 5, are perspective views of details.

A is a standard having a base A' and mounted on this standard is a double support a, a', in the present instance for the reception of a sad iron. One support a is provided with a gas heater and the other support a' is to rest the iron upon without heating, but it will be understood that my invention can be applied to any form of support.

B is the burner having a slotted cover plate b forming a final mixing chamber for the air and gas. This burner is connected by a vertical pipe b' with a valve casing D, and also connected to this casing are the gas and air pipes C and E, respectively. The gas pipe C is connected to a T-joint c which in turn is connected to the casing D by a thimble c'. The T-joint c is connected to a pipe F extending to a point near the burner B and is provided with a small burner f, forming a pilot light for the main burner B. In the pipe F is a cock f' for regulating the supply of gas to the pilot burner. The air pipe E in the present instance is connected to the lower portion of the casing by an elbow joint e and thimble e'. I prefer to so connect the air and gas pipes that the air pipe will be in direct line with the burner pipe b' and that the gas pipe will project the gas into the path of the air under pressure, the mixing taking place first in the valve casing D and finally in the burner B. From the above description it will be seen that of the four pipes connected to said casing D two project from its top and bot-

tom, while the remaining two project from opposite sides respectively.

d is a valve having a stem d' which is forked and screw threaded. On the stem is a coiled spring g tending to force the valve against its seat to close the gas passage leading from the pipe C; a cap d<sup>2</sup> holds the spring in position.

Passing through the slot d<sup>3</sup> in the forked end of the stem d' is an arm i forming part of a rod I. This arm is made as shown in Fig. 4, having a T-head i' so that it cannot be accidentally detached from the stem d'; a nut d<sup>3</sup> on the threaded end of the stem d' regulates the opening of the valve so that more or less gas can be admitted to the burner, as desired. The rod I is connected to one arm of a bell crank lever N, pivoted at n to a bracket M adjustably secured to the stem A. The bracket is forked to form a clamp and is held by means of a screw m'. The other arm of the bell crank lever N is attached to a presser rod P extending through the support a and has a head p rounded on one side as at p'. The head of this rod extends above the projections a<sup>3</sup> forming the supports for the sad iron, as illustrated in Fig. 1, so that when the sad iron is placed on the support it forces the presser rod down causing the rod I to withdraw the valve and allow gas to enter the valve chamber D, which mixes with the air under pressure and is ignited at the burner B by the pilot light f. The head of the rod P is rounded on one side so that when the operator places the iron on the support it will not catch on the head but will slide over it and press it down.

I claim:—

1. The combination of a standard, an iron supporting structure mounted thereon, a burner for said structure, a valve casing having four branches extending from its top, bottom and opposite sides respectively, of which one branch is connected to the burner, a gas supply pipe connected to a second branch, a valve for said pipe having a rod projecting through the third branch and in line with said second branch of the casing, an air pipe connected to the fourth branch of the casing in line with the first branch thereof, a presser rod extending adjacent to the burner, a lever having one arm connected to said presser rod and having means for connecting its second arm with the valve rod.

2. The combination of a gas heater, a standard, a support carried by the standard,



a burner, a valve casing communicating with the burner and with gas and air pipes, a valve in the casing arranged to close the gas pipe and leave the air pipe free, a spring on  
5 the stem of the valve, said stem being forked at its outer end and threaded, a nut on the threaded end, a rod having a T-headed arm adapted to the forked stem, and a presser rod extending normally above the support

and connected to the valve rod, substantially 10 as described.

In testimony whereof, I have signed my name to this specification, in the presence of two subscribing witnesses.

AUGUST ABRAMSON.

Witnesses:

JOHN POSNER,  
BERTHA BODNICK.