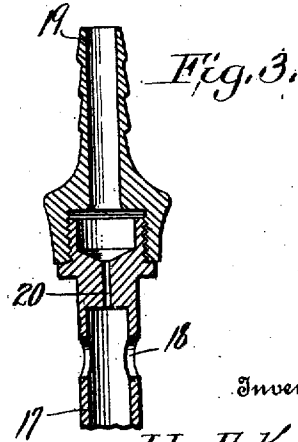
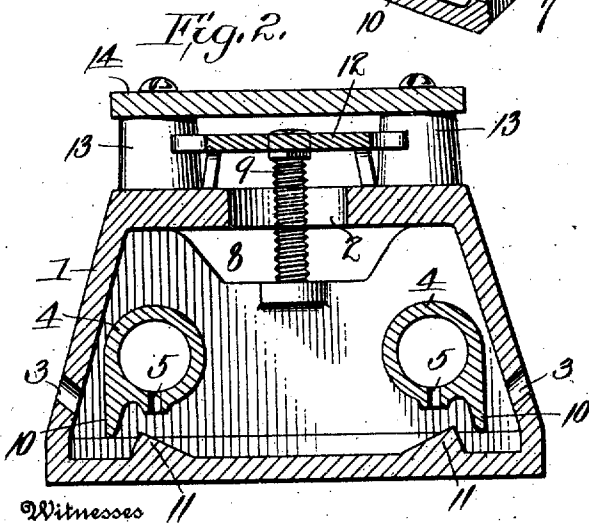
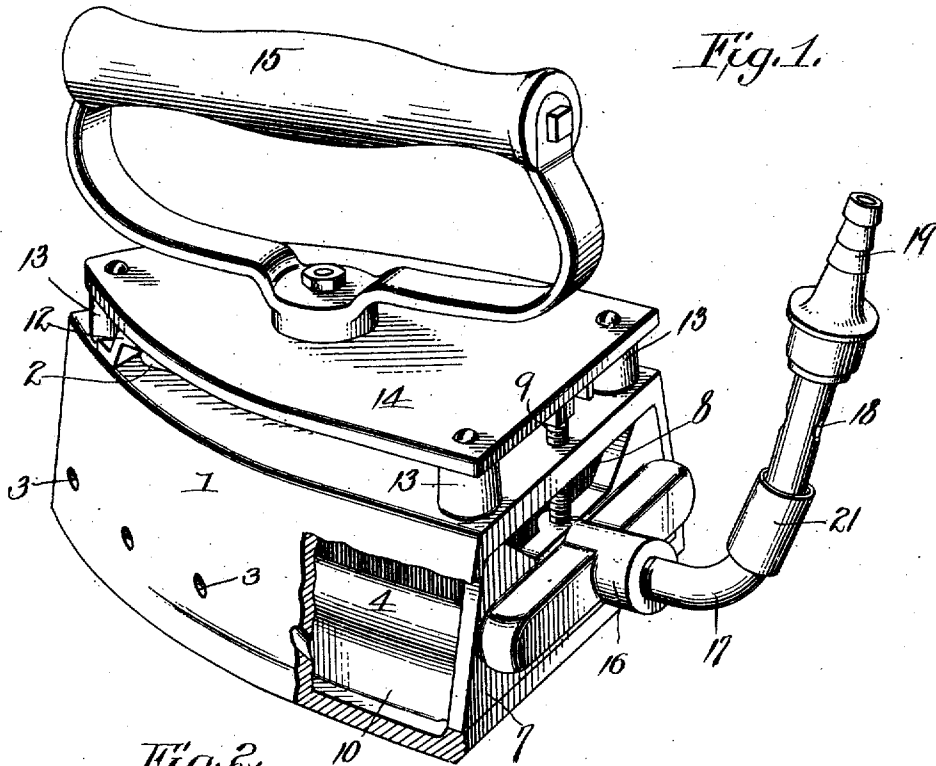


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APPLICATION FILED MAY 31, 1910.

986,397.

Patented Mar. 7, 1911.  
2 SHEETS-SHEET 1.



Witnesses  
*Chas. H. Holmes*  
*E. B. M. Bath*

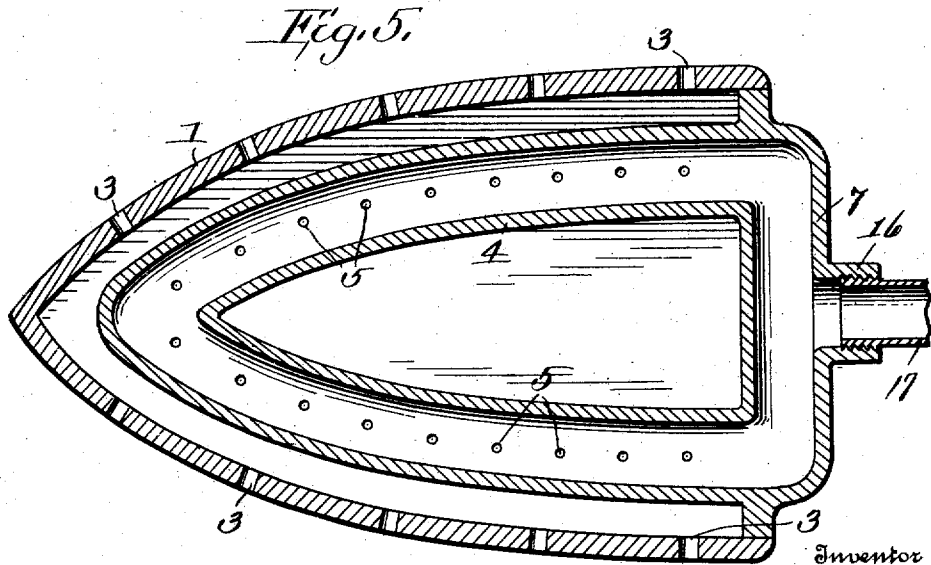
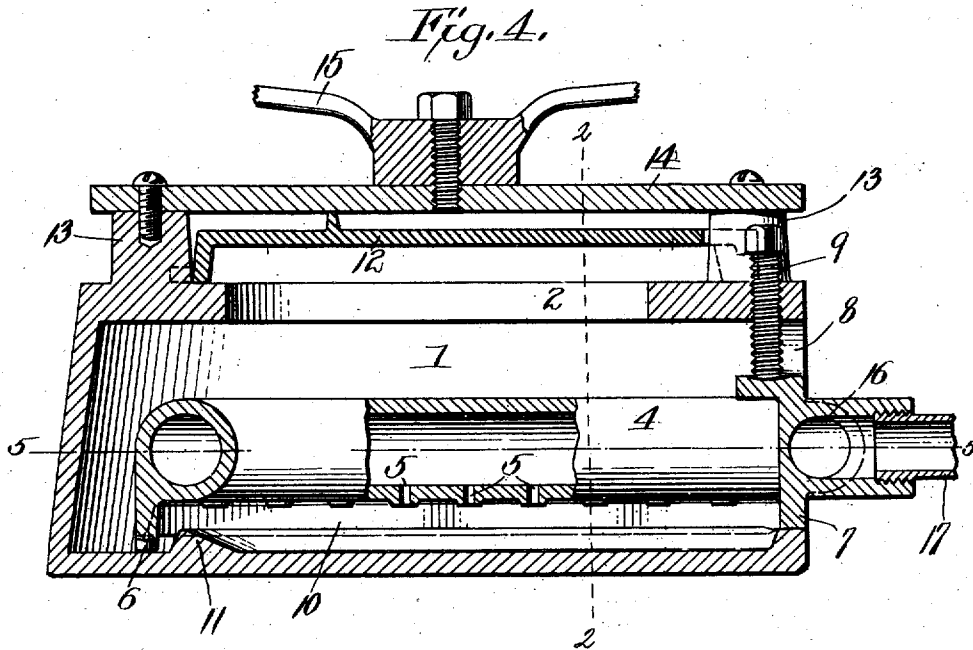
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# UNITED STATES PATENT OFFICE.

HARRY A. KOENIG, OF PHILADELPHIA, PENNSYLVANIA.

ATMOSPHERIC-GAS IRON.

986,397.

Specification of Letters Patent.

Patented Mar. 7, 1911.

Application filed May 31, 1910. Serial No. 564,261.

*To all whom it may concern:*

Be it known that I, HARRY A. KOENIG, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented a new and useful Improvement in Atmospheric-Gas Irons, of which the following is a specification.

This invention relates to a gas iron and is an improvement upon the gas iron for which application for patent was made by me August 5, 1908, Serial Number 447,118.

By means of my improved construction a steady flame is maintained, the burner being shielded from any in-draft from openings in the body of the iron, and by avoiding flickering of the flame I also avoid the disagreeable odor thrown off by a gas burner during imperfect combustion.

A further object of the invention is to throw heat down upon the bottom of the iron and to ventilate the upper portion in order to keep the same as cool as possible and to prevent heating of the handle.

With these objects in view the invention consists of the novel features of construction hereinafter described, pointed out in the claims, and shown in the accompanying drawings in which:

Figure 1 is a perspective view of the iron complete, one side being partly broken away. Fig. 2 is a vertical transverse section on the line 2—2 of Fig. 4. Fig. 3 is a longitudinal sectional detail view of a portion of the gas supply pipe. Fig. 4 is a vertical longitudinal section, partly broken away. Fig. 5 is a section on the line 5—5 of Fig. 4.

In these drawings 1 represents the body portion of the iron, said body portion being open at the rear end and having in its top a central, longitudinal opening 2 for the purpose of ventilation and keeping cool the upper interior portion of the iron. The iron body is also perforated as shown at 3, said perforations being formed adjacent the bottom of the iron, and being arranged in a horizontal row along each side of the iron. Resting within said iron body and being readily movable therefrom is a burner consisting of a tubular frame 4 having an outline similar to that of the base of the iron, but of considerably less size in order to space the same from the sides of the iron. This tubular frame is provided with perforations 5 upon its under side, and the said

frame is supported above the base or bottom of the iron by a foot 6 at its inner apex portion, and it is also supported at its rear end by an end plate 7 carried by the burner and forming a closure for the rear end of the iron, the upper portion of said plate being cut out midway its ends as shown at 8 in order to admit air to the burners. A suitable screw 9 works through the top of the iron body and bears upon the end plate as shown in Figs. 1, 2 and 4 for the purpose of locking the burner in position in the iron.

To prevent a direct draft of air against the perforated portion of the burner, I form upon the converging side members of the tubular frame 4 a depending flange 10, which flange is arranged between the perforations 5 and the sides of the iron. In order to prevent draft under this flange blowing the flame from off the bottom of the iron I form upon said bottom and immediately within the flange ribs 11, which ribs run from the rear to the front portion of the iron and parallel to the sides. The inner face of these ribs is given a longer and more gradual slope than the outer face, and by this means the flame is not spread or dampened as would be caused if it struck upon a flat bottom, thus producing a hotter surface than could otherwise be secured with the same flame.

A deflector plate 12 is mounted upon and above the top of the iron and extends over the central longitudinal opening 2 previously referred to. Suitable bosses 13 are formed upon the top of the iron and support a suitable plate 14 upon which is secured a handle 15 of any preferred design. The plate 14 is one upon which the trade mark name of the iron and the name of the manufacturer is placed and is designated in the trade as the name plate, and in order to distinguish it from other parts of the device it will be referred to by this term. The plate 12 deflects the heat escaping through the opening 2 from the name plate 14 which therefore remains comparatively cool.

At the rear of the burner a tubular projection 16 has threaded into it one section of a supply pipe 17. This section is provided with air inlets 18, and has threaded upon it a suitable nipple 19 adapted to receive an end of a flexible tube, not shown. Immediately above the inlets 18 the bore of the pipe section 17 is constricted as shown at 20 in order that there will not be too great a

flow of gas into the burner. The pipe section 17 forms a mixing chamber and I place loosely upon said section a sleeve 21 which can be sloped upwardly to cover the air in-  
 5 lets 18 when igniting the burner, thereby preventing back firing, and avoiding the necessity of using the fingers to close the air openings as is found necessary in some con-  
 structions.

- 10 From the above description it will be ob-  
 vious that I have provided a burner which  
 will have an ample supply of air for the  
 purpose of combustion but which is at the  
 same time shielded from drafts which would  
 15 interfere with proper combustion and which  
 would produce a flickering flame and give  
 rise to odors common to gas burners in  
 which there is imperfect combustion.

What I claim is:

- 20 1. The combination with a hollow iron  
 body having side openings, of a tubular  
 frame forming a burner fitting loosely with-  
 in said body and supported above the iron  
 bottom, a plate carried by said frame, said  
 25 plate forming a part of the supporting  
 means and also forming a partial closure for  
 the iron body, a screw working through said  
 body and bearing upon said plate, a depend-  
 ing flange carried by the burner, and a gas  
 30 supply pipe carried by the burner said pipe  
 having air inlet openings therein.

2. An iron having a hollow body portion  
 open at the rear end, longitudinally slotted  
 at the top and having draft openings in the  
 sides, a tubular burner fitting therein and  
 35 perforated upon its under side, a depend-  
 ing flange carried by said burner, said flange  
 being arranged to prevent direct draft be-  
 tween the perforations of the burner and the  
 draft openings in the iron body, and an end  
 40 plate carried by said burner.

3. A device of the kind described compris-  
 ing a hollow iron body having side open-  
 ings, a tubular burner frame having per-  
 forations on its under side, and a flange car-  
 45 ried by said frame, said flange forming a  
 shield between the perforations of the  
 burner and the side openings of the iron  
 body.

4. A device of the kind described compris-  
 50 ing a hollow iron body having side draft  
 openings, a rib formed upon the interior  
 face of the bottom of the iron body, and a  
 burner arranged within said body, said  
 burner having perforations in vertical aline-  
 55 ment with said rib, and having a depending  
 flange offset with respect to said rib, as and  
 for the purpose set forth.

HARRY A. KOENIG.

Witnesses:

MALCOMB G. CAMPBELL,  
 ROBT. M. THOMPSON.