June 24, 1930. C. RADITSCH 1,768,145

GAS IRON

Filed March 23, 1928

Fig. 1.

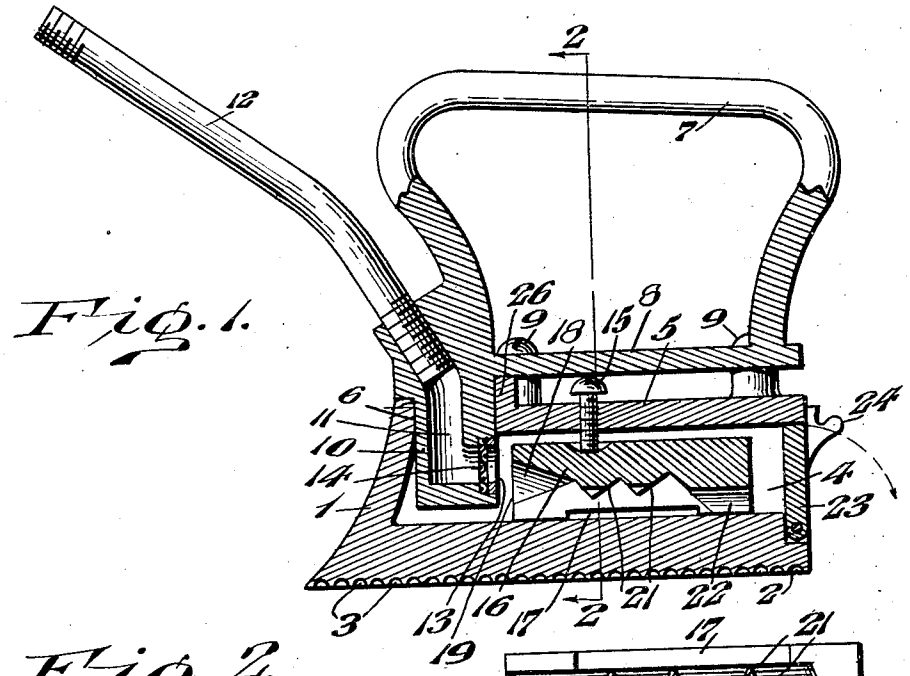


Fig. 2.

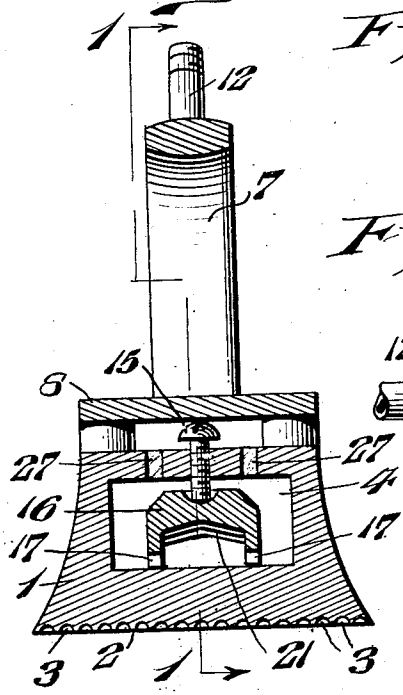


Fig. 3.

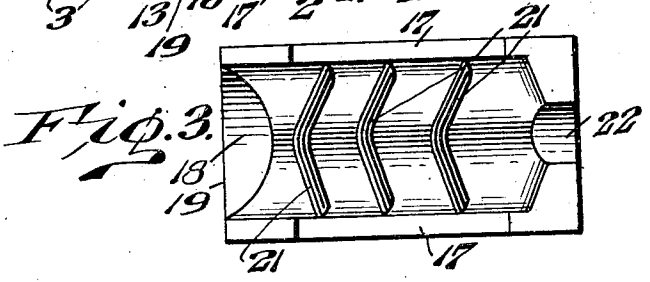
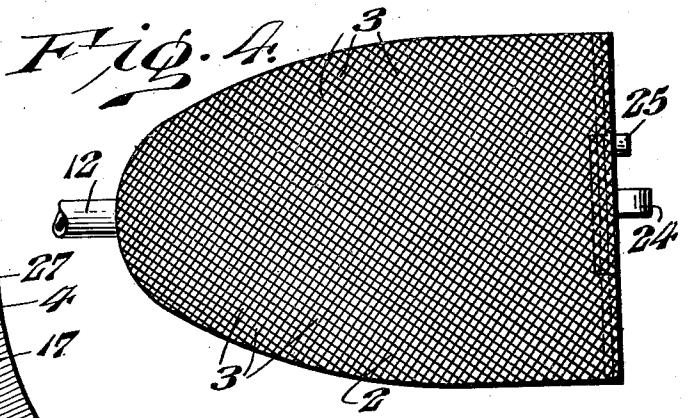


Fig. 4.



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GAS IRON

Application filed March 23, 1928. Serial No. 264,099.

My invention comprehends a novel construction of a gas heated iron.

It further comprehends a novel gas iron having a novel construction of an ironing surface.

It further comprehends a novel gas iron provided with a novel construction of a heat deflector and a novel combustion chamber.

It further comprehends novel means for conducting the commingled air and fuel to the combustion chamber.

Other novel features of construction and advantage will hereinafter more clearly appear in the detailed description and the appended claims.

For the purpose of illustrating the invention, I have shown in the accompanying drawings, a typical embodiment of it, which, in practice, will give satisfactory and reliable results. It is however, to be understood that the various instrumentalities of which my invention consists can be variously arranged and organized, and my invention is not limited to the exact arrangement and organization of these instrumentalities, as herein set forth.

Figure 1 is a sectional elevation of a gas iron embodying my invention, the section being taken on line 1—1 of Figure 2.

Figure 2 is a section on line 2—2 of Figure 1.

Figure 3 is a bottom plan view of the flame deflector.

Figure 4 is a bottom plan view of the gas iron.

Similar numerals of reference indicate corresponding parts.

Referring to the drawings:—

1 designates the body portion of a gas iron embodying my invention. The bottom or ironing surface is pitted or recessed as at 2 due to the diagonally extending ribs 3. The body portion 1 has an internal chamber 4, the upper end of which is closed by the top wall 5 which terminates a desired distance from the front wall of the body portion to form an opening 6.

7 designates the grasping handle connected to a top plate 8 fixed to the plate 5 by means of fastening devices 9. The plate 8 and handle 7 have depending from them a lug 10 which is internally chambered as at 11 and communicating with such chamber is an inlet pipe 12 for the commingled air and fuel. The chamber 11 has a laterally directed discharge opening 13 which is preferably provided with a strip of gauze 14. The combustion chamber 4 has fixed in it by means of a screw 15, a deflector 16. This deflector 16 preferably consists of a casting having an open bottom and having its sides cut away at their bottoms as at 17 to form passages for the products of combustion.

The top wall 18 of the inlet 19 curves downwardly towards the depending V shaped baffles 21. The rear wall of the deflector is closed except for a restricted opening 22 which is the place at which the gas iron is lighted. In order to provide access to the rear end of the chamber 4 to light the burner and to insert and remove the deflector 16, a hinged closure 23 is provided having a projection 24 to facilitate its manipulation. The closure 23 is secured in closed position by means of a latch 25 pivoted at one end to the body portion of the iron.

In the type of iron herein shown, the fuel is commingled with a sufficient amount of air to promote combustion before it passes to the inlet pipe 12.

Substantially the entire bottom wall of the combustion chamber 4 is subjected to the heat of the products of combustion.

The commingled air and fuel is also highly heated by the gases in the combustion chamber before its admission into the combustion chamber as the lug 10 extends into and is spaced from the walls of the combus-

tion chamber. In order to provide a vent for the combustion chamber, the top wall 5 in front of the raised rib 26 is provided with holes 27 opening through it and communicating with the combustion chamber, and the portion of the top plate 8 in front of the rib 26 is spaced from the top wall 5.

In a device of this character difficulty has arisen in maintaining the flow of the mixture of air and fuel and in maintaining the continuous burning of the mixture.

I have found from a large number of experiences that if the deflector has its passage provided on its top face with a plurality of diverging baffles that the products of combustion will be unobstructed and a very intense heat is maintained within the deflector and passes around it through the bottom openings or passages 17 so that the entire wall of the combustion chamber 4 is maintained at a desired degree of temperature to effect the proper heating of the ironing face of the gas iron.

It will now be apparent that I have devised a new and useful gas iron which embodies the features of advantage enumerated as desirable in the statement of the invention and the above description, and while I have, in the present instance, shown and described a preferred embodiment thereof which will give in practice satisfactory and reliable results, it is to be understood that this embodiment is susceptible of modification in various particulars without departing from the spirit or scope of the invention or sacrificing any of its advantages.

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

1. The combination with a gas iron having a combustion chamber with means to feed commingled air and fuel under pressure to it and provided with a vent, of a deflector into which said feeding means discharges, said deflector being rectangular in form and uniformly spaced from the juxtaposed side walls of said combustion chamber and being open at its ends and bottom and having its top face forming baffles diverging towards the heel of the iron.

2. The combination with a gas iron having a combustion chamber with means to feed commingled air and fuel under pressure to it and provided with a vent, of a deflector into which said feeding means discharges, said deflector being open at its ends and bottom and having its top face forming baffles diverging towards the heel of the iron, the side walls of said deflector being cut away at the bottom throughout the extent of said baffles and means to lock said deflector in position.

3. The combination with a gas iron having a combustion chamber with means to feed commingled air and fuel under pressure to it and provided with a vent, of a deflector into which said feeding means discharges, said deflector being open at its ends and bottom and having its top face forming baffles diverging towards the heel of the iron, the opening at the rear of said deflector being restricted and at the opposite end curving outwardly, the side walls of said deflector at its bottom being cut away to form passages for the products of combustion and a controllable opening at the rear of the iron through which said deflector is removable.

CARL RADITSCH.