R. W. KREMER.

SAD IRON.

APPLICATION FILED OCT. 22, 1910.

999,319. Patented Aug. 1, 1911.

Fig. 1.

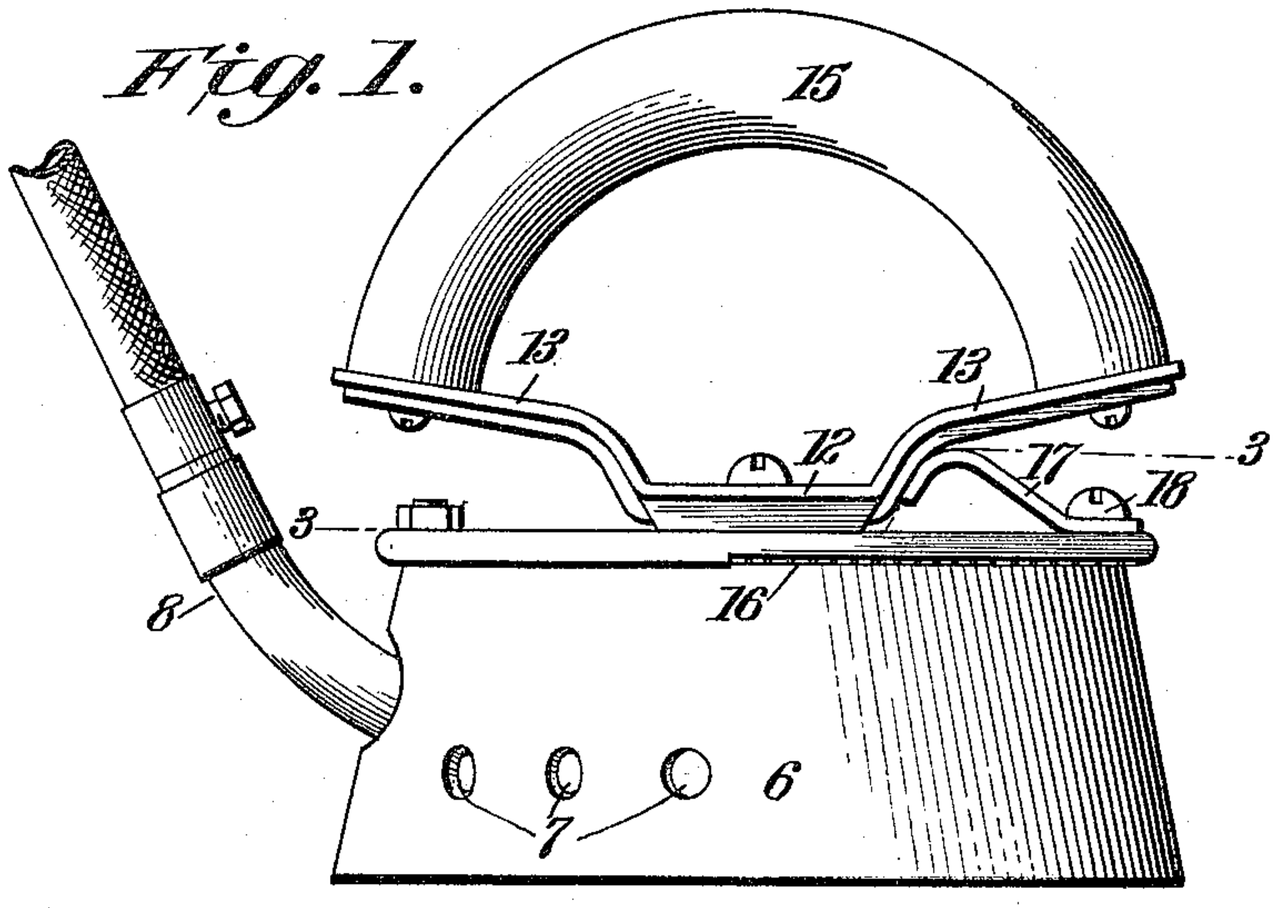


Fig. 2.

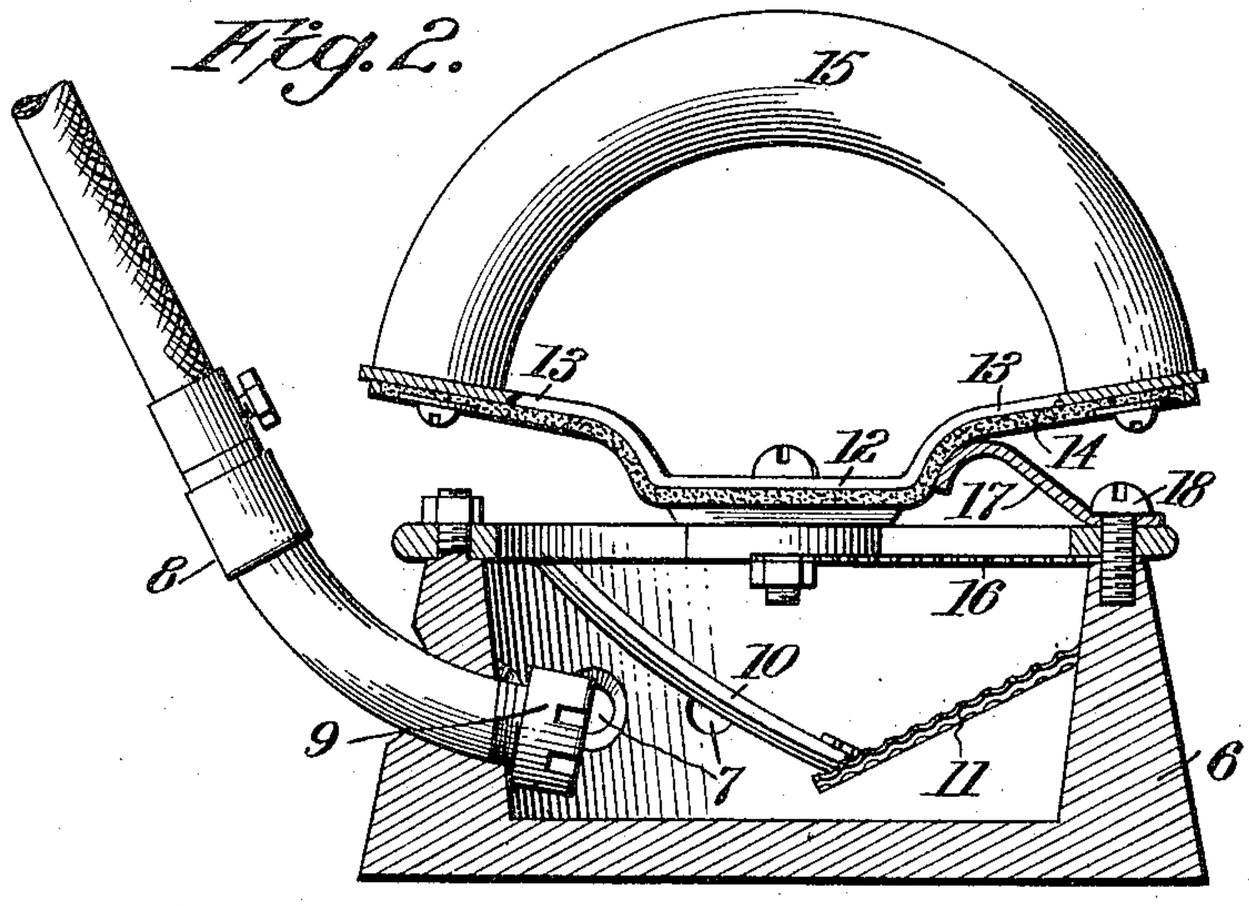
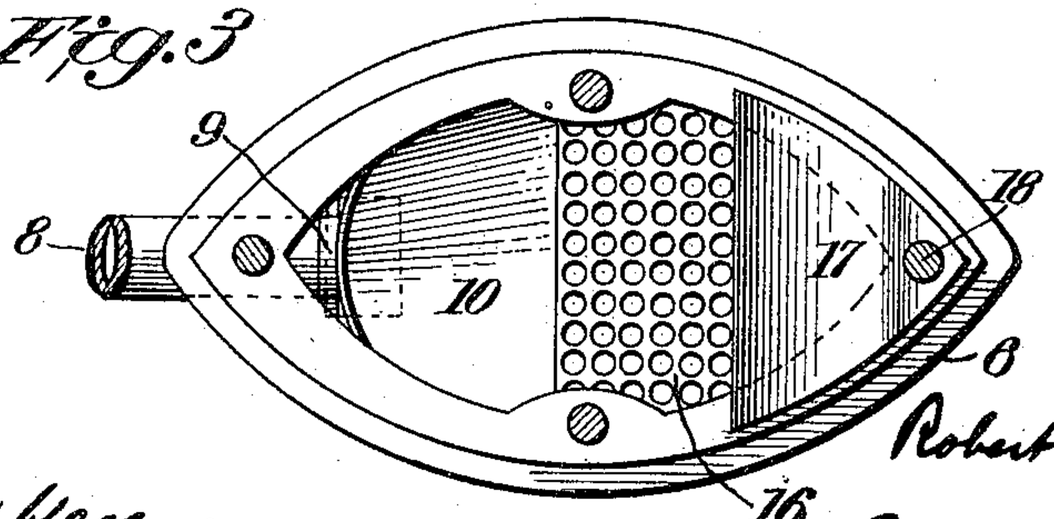


Fig. 3



Witnesses

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UNITED STATES PATENT OFFICE.

ROBERT W. KREMER, OF CLEVELAND, OHIO.

SAD-IRON.

999,319. Specification of Letters Patent. **Patented Aug. 1, 1911.**

Application filed October 22, 1910. Serial No. 588,495.

To all whom it may concern:

Be it known that I, ROBERT W. KREMER, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Sad-Irons, of which the following is a specification.

This invention relates to sad irons, and especially to self-heated said irons employing gas fuel.

The object of the invention is to provide a construction improved particularly with respect to the means for supporting the handle of the iron, and with respect to the means for protecting the hand of the user from the flame, and from excessive heat. The construction includes a sad iron which is open at the top, above the burner, the opening being provided with a perforated shield which prevents the passage of flame through the upper opening. A novel support for the handle is also provided, which is so constructed as to permit the escape of heated products of combustion from the interior of the iron, without the danger of burning the hand of the operator.

In the accompanying drawings, Figure 1 is a side elevation of the iron. Fig. 2 is a central longitudinal vertical section, parts being shown in elevation. Fig. 3 is a horizontal section on the line 3—3 of Fig. 1.

Referring specifically to the drawings, 6 indicates the body of the iron which may be of any suitable or desired shape, and is provided with air inlet openings 7 near the rear end thereof. A gas pipe 8 is fitted in the rear end of the iron and leads to a burner 9 within the body of the iron. Within the iron, above this burner, is a curved metal plate 10 which is located over the burner and serves to deflect the flame thereof, the general flow of flame being forwardly or toward the front end of the iron, and said plate serves to confine the heat to the lower part of the iron. In front of the plate 10 is a perforated metal plate 11 which extends from the central part of the iron, where it joins the edge of the plate 10, toward the top or upper front corner of the iron. This plate serves the purpose of confining or deflecting the heat to the lower part of the iron and confining the flame thereto, the perforations permitting a retarded escape of the products of combustion.

The top of the body of the iron is open, and attached thereto is a handle support and shield, consisting of a metal plate or cover, the middle part 12 of which is fastened to the sides of the iron at about the middle thereof. The ends of this plate are bent up from the body of the iron as indicated at 13, and extend over the openings at the ends of the top of the iron. This plate is solid or unperforated, and has an asbestos lining 14 on the under side to prevent excessive heating thereof. The handle 15 is fastened at its ends to the curved parts 13 which thus form a support, and means of attachment for said handle. At the front of the iron, toward which the main part of the flow from the burner is directed, the top opening is provided with a perforated metal plate 16, as indicated.

The plates 11 and 16 act to prevent the passage of flame from the burner through the top of the body of the iron while permitting the escape of heated gases. They thus serve as shields and deflectors, and the end 13 of the top also covers said opening and shields the hand of the operator holding the handle. The handle is preferably made of wood or non-conducting material. By the means described the danger of over heating the iron or burning the hand of the operator is reduced to a minimum, and the construction is such that the parts may be readily assembled and new parts easily substituted when necessary. The body of the iron may be cast in one piece, and the inner shields and burner are readily accessible through the open top thereof on removal of the cover plate.

At the front end of the iron is an additional shield or plate 17 fastened to the front upper corner of the iron by a screw 18 and extending from said corner upwardly and backwardly to contact with the under side of the plate 12, or rather to contact with the lining 14 thereof. This additional shield 17 serves to prevent draft blowing out the flame. The forward movement of the iron, when at work, creates more or less draft and the shield is provided for the purpose of preventing this draft from affecting the flame.

What I claim as new and desire to secure by Letters Patent is—

1. A self heated sad iron provided with a burner in the lower part thereof and a cover plate fixed to the top thereof, the ends of the plate being bent up to form openings for the escape of heated products of

combustion, a handle fastened to said plate, the latter forming a shield under the handle, and inclined deflector plates located within the body of the iron and spaced from the cover plate and serving to deflect the products of combustion toward said openings.

2. A self heated sad iron the body of which is open at the top and provided with a cover plate extending across the middle part thereof, the end portions of the plate being raised and spaced from said body to form outlets for products of combustion, a handle fastened to said plate, and a deflector plate located in the body of the iron, between the burner and the cover plate and spaced from the latter, said deflector plate being inclined toward one of said outlets, the body of the iron having air inlet openings in its side walls, beside the burner.

3. A self heated sad iron the body of which is open at the top and provided with a burner in the lower part thereof, an inclined plate 10 in the rear part of the iron, above the burner, a perforated plate 11 in the front part of the iron, and a handle attached to the top of the iron, substantially as described.

4. A self heated sad iron the body of which is open at the top and provided with a burner in the lower part thereof, plates located within said body above the burner and inclined upwardly from the middle toward opposite ends of the top of the iron, one of said plates being perforated, a cover plate attached at its middle to the top of the iron and flared upwardly at its opposite ends, and a handle attached to said cover plate.

In testimony whereof, I do affix my signature in presence of two witnesses.

ROBERT W. KREMER.

Witnesses:

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STEDMAN J. ROCKWELL.