

March 7, 1944.

D. K. FERRIS

2,343,544

DOMESTIC APPLIANCE

Filed Dec. 23, 1940

Fig. 1

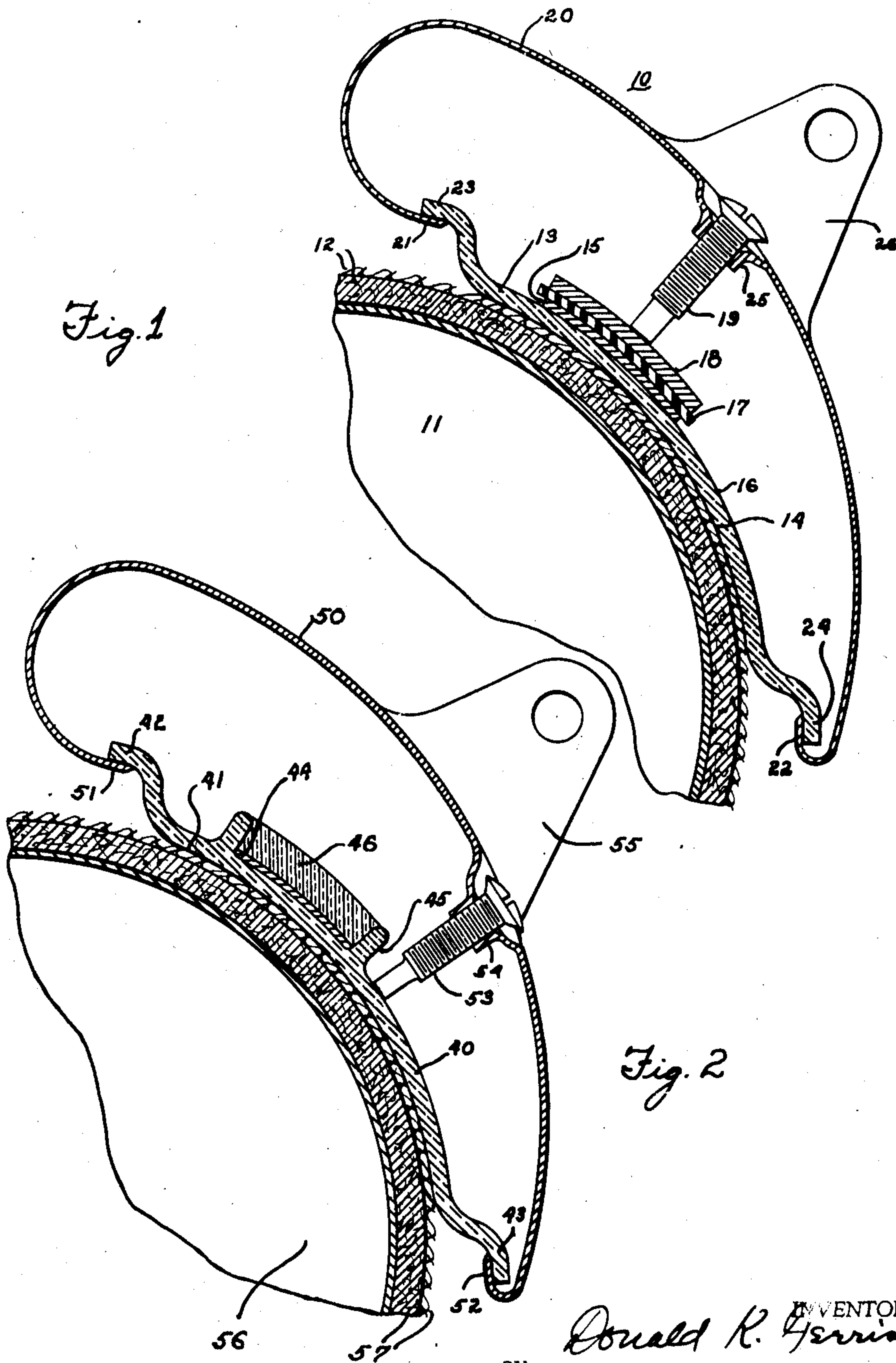


Fig. 2

INVENTOR.
Donald K. Ferris,
BY
Spencer Hardman & Pehr,
Attorneys

UNITED STATES PATENT OFFICE

2,343,544

DOMESTIC APPLIANCE

Donald K. Ferris, Dayton, Ohio, assignor to General Motors Corporation, Dayton, Ohio, a corporation of Delaware

Application December 23, 1940, Serial No. 371,227

4 Claims. (Cl. 38—66)

This invention relates to domestic appliances and more particularly to ironers.

An object of this invention is to provide an ironing shoe having a glass ironing face.

Another object of this invention is to provide an ironing shoe which indicates when its heating element has been energized.

Another object of this invention is to provide an ironing shoe having a reduced condensive effect tending to prevent charging of the ironer frame when using A. C. power.

Further objects and advantages of the present invention will be apparent from the following description, reference being had to the accompanying drawing, wherein a preferred form of the present invention is clearly shown.

In the drawing:

Fig. 1 is a transverse cross-section of one form of ironing shoe adjacent a movable cooperating ironing member; and

Fig. 2 is a view somewhat similar to Fig. 1, showing a modified form of shoe.

According to this invention, an ironing shoe 10 is provided to cooperate with another ironing member 11. The shoe 10 may be the stationary ironing member and 11 may be the usual rotatable roll covered with padding 12. However, it is to be understood that features of my invention may be applied to the movable ironing member.

The ironing shoe is provided with a glass plate 13 having an ironing face 14. The ironing face 14 preferably is cylindrical in shape to cooperate with the roll 11. The plate 13 preferably is relatively long in the dimension transverse to the plane of the drawing. Its opposite face 16 is provided with heating means, preferably in the form of an electrical heating resistance 15, held adjacent to the said opposite face 16 by means of an electrical insulating strip 17. This insulating strip 17 preferably is urged against the face 16 by means of a metal plate 18, which is urged towards the glass plate by one or more bolts 19.

The glass plate preferably is held by a supporting shield 20, which may be provided with inwardly directed flanges 21 and 22. The glass plate 13 is provided with reversely curved edges 23 and 24 held within the inner sides of the flanges 21 and 22. The bolt or bolts 19 are carried by the shield 20 at the threaded apertures 25, so that the entire assembly may be locked in place by the action of the bolts 19 on the plate 13. Ears 26 may be provided on the shield 20 to attach the ironing shoe to rocking means for rocking the shoe towards and away from the roll 13.

This ironing shoe may be used as the large or small shoe disclosed in my copending applications Serial Nos. 282,228 filed June 30, 1939, and 367,989 filed November 30, 1940, respectively.

In the modification shown in Fig. 2, the glass plate 40 is provided with a cylindrical ironing face 41 and with reversely bent edges 42 and 43. An electrical heating resistance 44 is placed within a longitudinal pocket formed by a ridge means 45 integral with the glass plate. The electrical resistance 44 may be held within this pocket by insulating packing material 46.

A supporting shoe 50 is provided with inwardly directed flanges 51 and 52 to cooperate with the edges 42 and 43 of the plate. The shield 50 is provided with one or more bolts 53 threadedly held at apertures 54 and urging the plate 40 forwardly to lock the edges 42 and 43 against the flanges 51 and 52. The shield 50 may be provided with ears 55 for supporting the shoe rockably. The shoe shown in Fig. 2 likewise may be used as the large or small shoe disclosed in my said copending applications. It cooperates with the rotatable roll 56 having padding 57.

An ironing shoe made in accordance with my invention is particularly advantageous because its ironing face is relatively smooth and hard and not easily scratched. Because of its transparency, the user is able to see the heating element, and its glow, when heated, is readily discernible through the glass plate. This plate cuts down the condensive effect of the element and thus tends to prevent electrical charge on the ironer frame when using alternating current.

It is to be understood that the glass used to make the glass plate should be of the character which resists breakage on sudden changes of temperature, and should be of the character now commonly used for cooking utensils and the like.

While the form of embodiment of the invention as herein disclosed, constitutes a preferred form it is to be understood that other forms might be adopted, all coming within the scope of the claims which follow.

What is claimed is as follows:

1. An ironing shoe comprising in combination, a glass member having an arcuate ironing face on its front side, an electric resistance element disposed in contact with the back side of said glass member and adapted to heat said ironing face, a support for said glass member extending along the back side of said glass member, insulating means on the back side of said resistance element, screw means acting against said insulating means and threaded in said support for hold-

ing said resistance element in direct contact with said back side of said glass member, and said glass member forming the sole means for electrically insulating the front side of said resistance element.

2. An ironing shoe comprising an arcuate ironing member having reversely bent edges, a curved shield member having curved edges extending over said reversely bent edges, an arcuate electric heating resistance in the space between said members directly against a face of said ironing member, and spreading means adjustable from outside tending to spread said members apart.

3. An ironing member comprising an elongated arcuate face member having edges back of the arc of the contact face of said member; a shield member behind said face member having edges hooked in front of said edges of said face mem-

ber, a heating resistance adjacent the interior surface of said face member, and a screw threaded in said shield member and bearing against said face member tending to spread said shield member and face member.

4. An ironing member comprising an elongated arcuate glass face member having edges back of the arc of the contact face of said member, a shield member behind said face member having edges hooked in front of said edges of said face member, a heating resistance in contact with the interior surface of said face member, electrical insulation covering said heating resistance, and a screw threaded in said shield member and bearing against said electrical insulation, heating resistance and face member tending to spread said shield member and face member apart.

DONALD K. FERRIS.