March 17, 1936. O. C. LANG 2,034,042

IRONING ELEMENT

Filed March 26, 1934 2 Sheets-Sheet 1

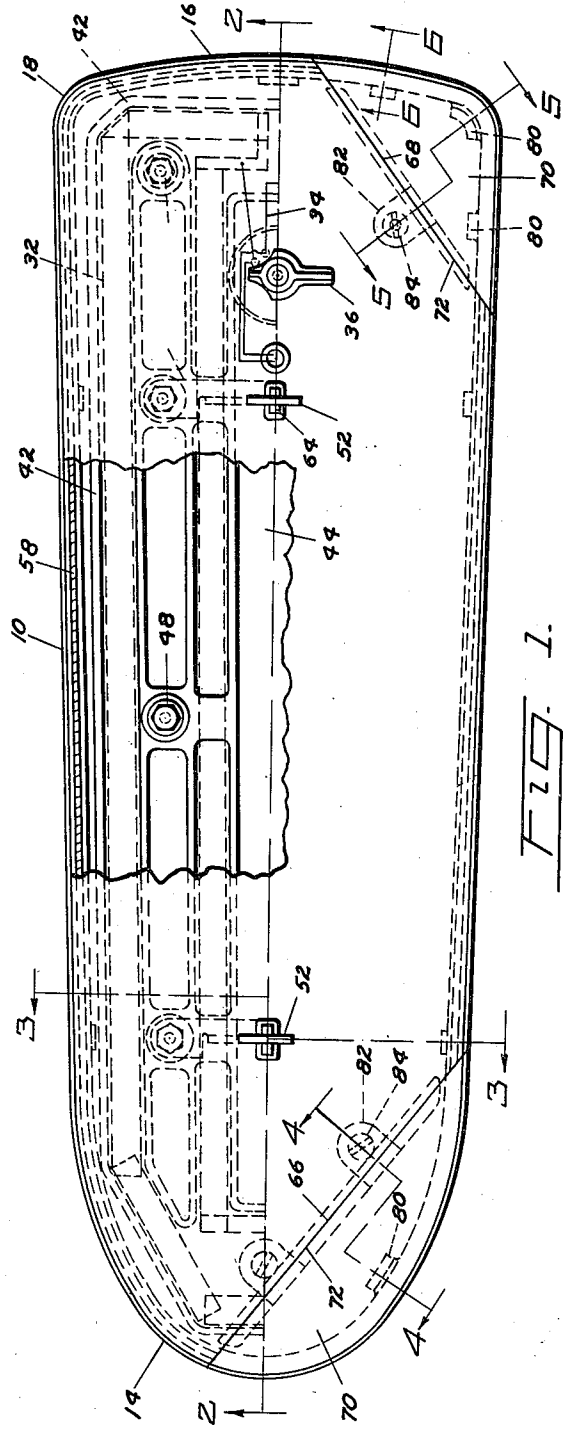


FIG. 1.

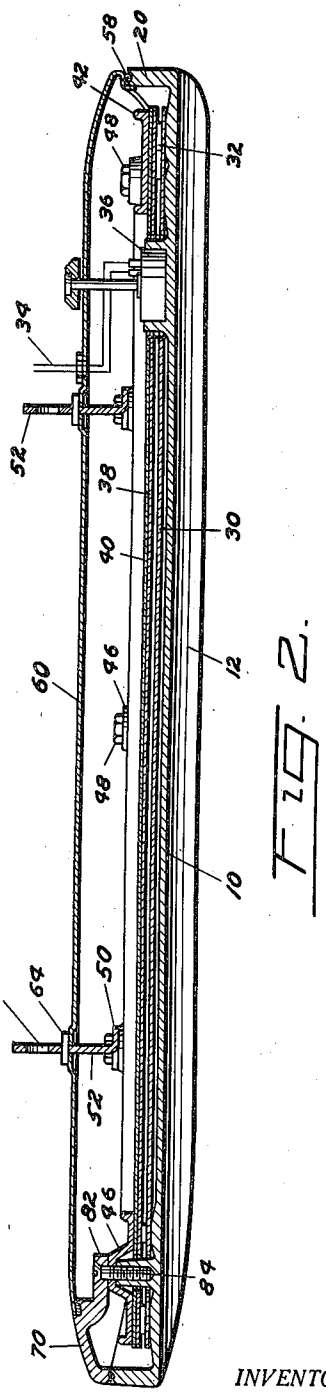


FIG. 2.

INVENTOR.
OTTO C. LANG
BY O. H. Fowler
ATTORNEY.

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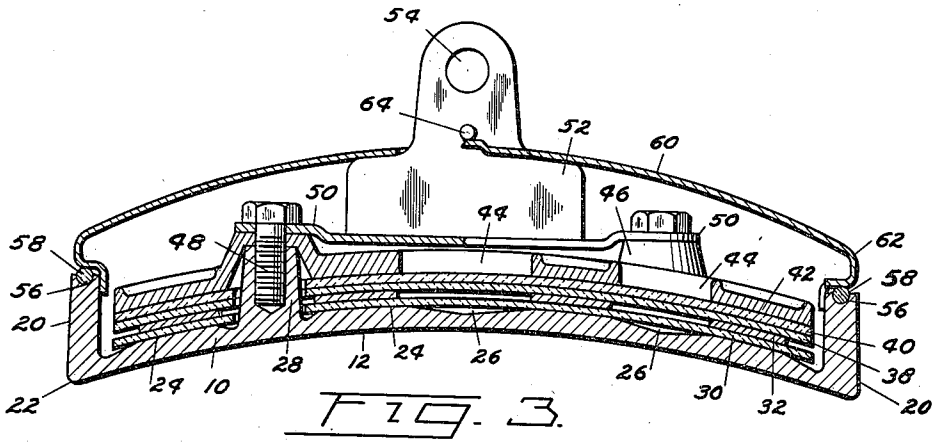


FIG. 3.

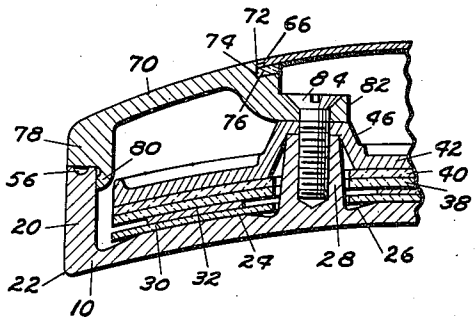


FIG. 4.

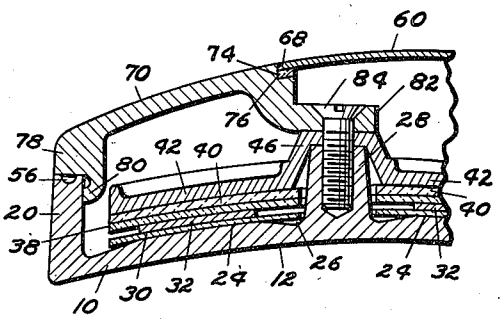


FIG. 5.

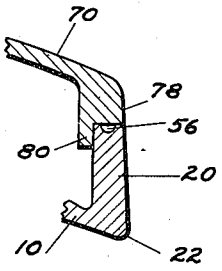


FIG. 6.

INVENTOR.
OTTO C. LANG
BY O. H. Fowler
ATTORNEY.

Patented Mar. 17, 1936 2,034,042

UNITED STATES PATENT OFFICE

2,034,042

IRONING ELEMENT

Otto C. Lang, Detroit, Mich., assignor to Hydraulic Brake Company, Detroit, Mich., a corporation of California

Application March 26, 1934, Serial No. 717,499

8 Claims. (Cl. 68—9)

This invention relates to ironing machines for domestic use, and more particularly to ironing elements.

Broadly the invention comprehends an ironing element or head including a plate having an ironing surface associated with a heating element, and ironing members attached to the plate and receiving heat therefrom for ironing ruffles on sundry articles and garments.

Preferably the ironing surface of the head is concave and the head is provided with an upstanding marginal flange, this flange forming an acute angle with the ironing surface at the juncture of the flange and the ironing surface, the angle being uniform for a substantial length intermediate the respective ends of the head and gradually increasing toward the respective ends of the head to provide a more obtuse angle. Members supported on the marginal flange provide, in conjunction with the flange, ironing surfaces having different contours so that ruffles of various widths and fullness may be pressed thereon by drawing the ruffles over the ironing surface approximately conforming to the ruffles.

An object of the invention is to provide a head for an ironing machine having associated parts of different contours for ironing ruffles on various articles.

Another object of the invention is to provide an ironing machine including a plate having an ironing surface and an upstanding marginal flange, and parts having ironing surfaces of different contours supported on the flange and adapted to receive heat therefrom.

Other objects of the invention will appear from the following description taken in connection with the drawings which form a part of this specification, and in which,—

Figure 1 is a top plan view of an ironing element embodying the invention;

Figure 2 is a longitudinal sectional view substantially on line 2—2, Figure 1;

Figure 3 is a cross-sectional view substantially on line 3—3, Figure 1;

Figure 4 is a sectional view substantially on line 4—4, Figure 1;

Figure 5 is a sectional view substantially on line 5—5, Figure 1; and

Figure 6 is a sectional view substantially on line 6—6, Figure 1.

Referring to the drawings for more specific details of the invention, 10 represents an ironing element including a plate having an ironing face which may be of practically any desirable contour. Preferably the ironing face is slightly concave, as indicated at 12, and is finished with a high polish. As shown, the plate gradually increases in width from one end to the other. The smaller end of the plate is preferably semi-elliptical as at 14, and the larger end has a substantial arcuate portion 16, the respective ends of which terminate in arcuate portions or corners 18 of small radius.

The plate has a concave ironing surface and an upstanding marginal flange. This flange forms with the ironing surface an acute angle at the junction of the flange and the ironing surface. Preferably the plate has a substantial length intermediate its respective ends where the apex of the angle formed at the juncture of the ironing surface with the marginal flange may be defined by a radius which does not exceed one-eighth of an inch, and this radius gradually decreases toward the respective ends of the plate where the radius does not exceed one-sixteenth of an inch, and at the respective ends of the plate the angle is materially increased. Preferably the back of the plate has longitudinally disposed flat surfaces 24 spaced by channels 26 of varying depth, so that the heat generated by a heating element, to be hereinafter described may be more equally distributed over the ironing face of the plate, and arranged in the channels are spaced bosses 28 tapped for the reception of screws or bolts.

A sheet of mica 30 having openings for the reception of the bosses 28 is positioned on the back of the plate, and positioned on the sheet of mica 30 immediately above the flat surfaces 24 is the heating element 32 connected in a circuit 34 having connected therein a manually operated rheostat 36 controlled by a thermostat, not shown. A second sheet of mica 38 is laid over the heating element, and a sheet of asbestos 40 is laid over the second sheet of mica. This assembly is surmounted by a compression plate 42 having longitudinal slots 44 spaced to register with the channels 26 in the back of the ironing plate, and having spaced thimbles 46 for the reception of the bosses 28. Studs 48 threaded in the bosses serve to retain the compression plate in position, and straps 50 secured beneath the heads of the studs have integral lugs 52 apertured as indicated at 54 for attachment to a suitable support.

The marginal flange 20 has a continuous groove 56 in its edge in which is fitted a suitable heat resisting material or packing 58, portions of which are cut away. A cover 60 is fitted on the marginal flange 20. The cover has openings for the recep-

tion of the lugs **52** and a perimetral flange **62** bent inwardly and downwardly to provide a shoulder seated on the packing **58** in the groove **56** and to overlap the marginal flange upon the inner side thereof. The cover is suitably secured in position by pins **64** extending through the lugs **52**. The respective ends of the cover **60** and its perimetral flange **62** have portions cut away as at **66** and **68**.

It has been found that in pressing articles and wearing apparel having ruffles considerable difficulty has been experienced in satisfactorily performing the work. The present invention aims to overcome this difficulty, and to that end auxiliary ironing elements **70** are provided at the respective ends of the plate or head.

Each of the auxiliary ironing elements includes a plate having a straight edge **72** provided with a shoulder **74** receiving the edge **66** or the edge **68** of the cover plate. Preferably a strip of asbestos or other heat resisting material **76** is interposed between the shoulder and the cover plate. The plate **70** has a marginal flange **78** registering with the marginal flange **20** on the ironing plate **10**, and formed on the marginal flange are lugs **80** engaging the marginal flange **20** on the inner side thereof. The plates have formed thereon lugs **82** apertured to receive screws **84** threaded in the bosses **28**. The exposed surfaces of the auxiliary ironing members have a high polish so that ruffles on articles and garments may be freely drawn by hand over the ironing surfaces to effectively iron the ruffles.

Although this invention has been described in connection with a certain specific embodiment, I am fully aware that many modifications thereof are possible. The invention is, therefore, to be limited only as indicated by the scope of the appended claims.

Having thus described the various features of the invention, what I claim as new and desire to secure by Letters Patent is:

1. An ironing element comprising a plate having an ironing face and a marginal ironing flange, and a member secured thereto having an ironing surface and an ironing flange contiguous with the marginal flange.

2. An ironing element comprising a plate having an ironing face and a marginal ironing flange, and a member secured thereto having a convex ironing surface and an ironing flange contiguous with the marginal flange.

3. An ironing element comprising a plate having an ironing surface and a marginal flange, and members attached to the ends of the plate having ironing surfaces and flanges contiguous with the marginal flange.

4. An ironing element comprising a plate having an ironing surface and a marginal flange bearing an angular relation to the plate, and members attached to the ends of the plate having ironing surfaces and flanges contiguous with the marginal flange.

5. An ironing element comprising a plate having an ironing surface and a marginal flange providing an acute angular relation to the plate, and members secured to the plate having ironing surfaces of different contour contiguous with portions of the marginal flange.

6. An ironing element comprising a longitudinal plate having an ironing surface and a marginal flange bearing an acute angular relation to the plate, means for heating the plate, a cover for the plate, and members secured to the respective ends of the plate having ironing surfaces of differing contour contiguous respectively with portions of the cover and portions of the marginal flange.

7. An ironing element having a main ironing face, heat insulating material on the back thereof, and an auxiliary ironing surface on the back of said element in heat conducting relation with the main face, said auxiliary surface extending over but a small portion of said back.

8. An ironing element having a main ironing face and a heat insulated cover over the back thereof, and an auxiliary segmental ironing face secured in heat conducting relation with the main face and extending over a relatively small area of the back along an edge thereof, the cover being cut away to receive the auxiliary face.

OTTO C. LANG.