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MANUALLY OPERATED TWO-POINT FLAT IRON

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2 Sheets-Sheet 1

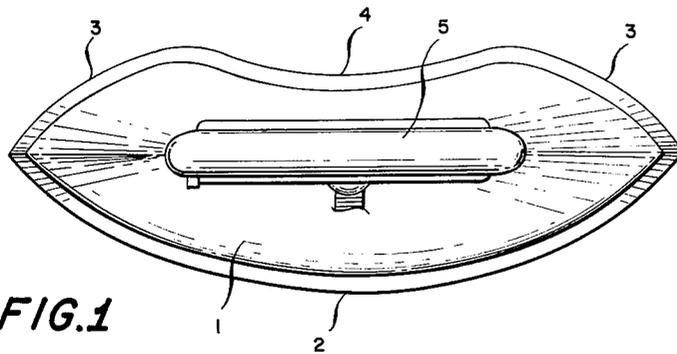


FIG. 1

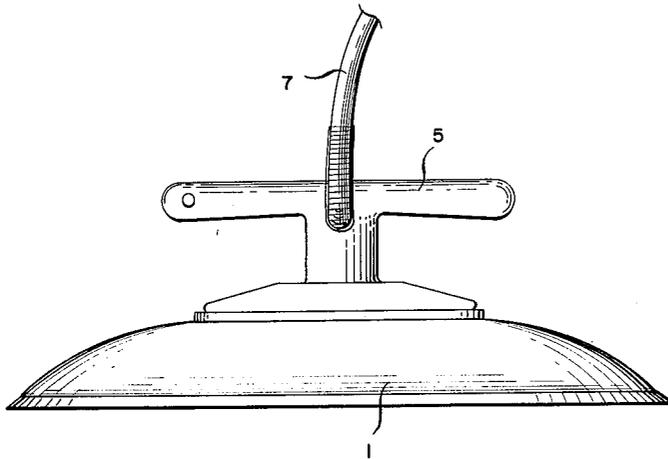


FIG. 2

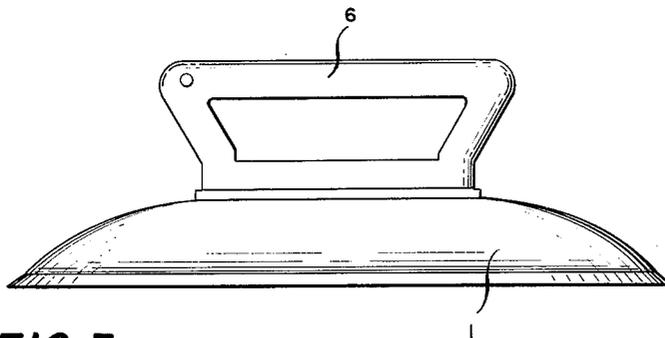


FIG. 3

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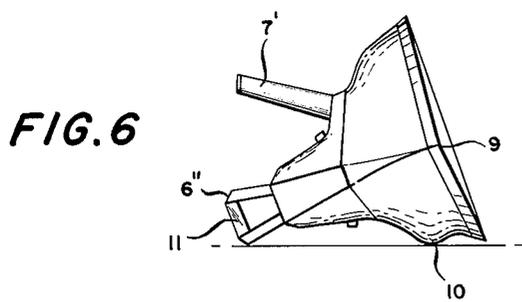
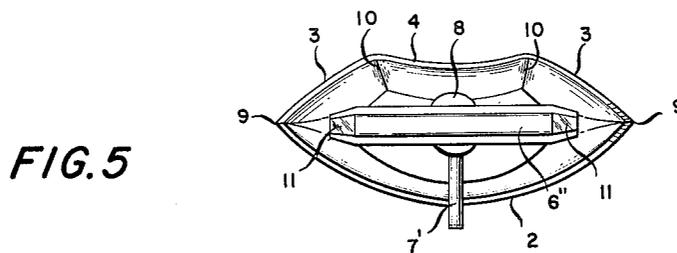
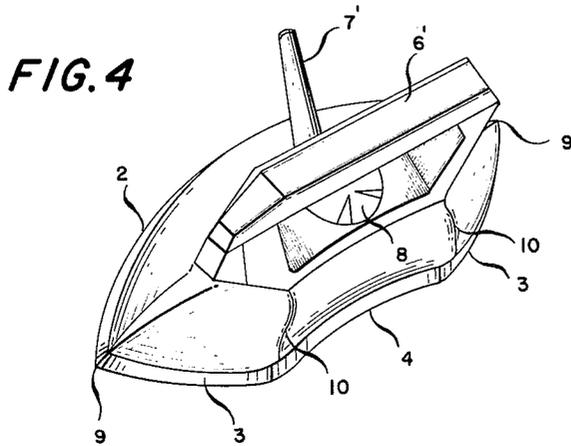
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MANUALLY OPERATED TWO-POINT FLAT IRON

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**MANUALLY OPERATED TWO-POINT FLAT IRON**  
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 Italy, and Michelino Ravasi, Monza, Italy  
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 Claims priority, application Italy, Feb. 10, 1962,  
 2,640/62  
 5 Claims. (Cl. 38—88)

The present invention relates to a flat iron and more particularly to a two-point flat iron having at least one lateral concave portion.

From the beginning the manually operated flat iron has retained through the centuries its original form which was necessary as long as these irons were heated in various ways or by various means which were supplemental or auxiliary.

When the use of electric energy made the heating of the flat iron independent, no one thought of changing the escutcheon shape to make it more practical or functional. In fact the original escutcheon shape was based on the heating devices to which it was adapted.

Particularly in order to obtain the greatest possible saving in space requirement it was necessary to place the flat iron into a vertical position against a heated surface which was also more or less vertical or inclined, which made it necessary to construct the flat iron to have a flat rear side so as to be able to rest it conveniently in its vertical position on the table, corresponding also to the rest position during the ironing operation. Also the coal heated flat iron had to have a flat rear side to provide an opening for discharging the ashes.

When changing over to the use of electric energy for heating the flat irons, the heating system was incorporated in the iron itself, an arrangement which would have allowed to discard the original form which was no longer necessary as before; however, one continues to follow the same basic construction, thinking that the flat rear side was still useful for resting the flat iron to give it a fairly convenient rest position without requiring an auxiliary device having for example the form of a flat iron support which would still take up space on the ironing table or ironing board.

The present form of a flat iron, although it is able to satisfy many work requirements, can nevertheless not be considered practical as it presents actually several disadvantages, particularly in view of the fact that the flat iron is employed for ironing either in domestic or industrial use and is employed primarily to iron personal clothing.

The personal clothing such as jackets, trousers, shirts, underwear and the like, although they are manufactured by assembling flat fabric portions, are sewed together in all types of shapes particularly forming curves which are more or less pronounced, even sometimes completely circular as in the case of collars, sleeves, cuffs, trouser seams and the like.

In order to be able to iron this clothing in a perfect manner and without being excessively tiring, the shape of the flat iron must correspond as much as possible to these curves with its own profile, i.e. the flat iron must be designed in a corresponding manner.

Thus, if one continues to use the present flat iron, one will continue to tire oneself unnecessarily and to undertake work which is not always as perfect as one would like, specifically due to the disadvantages which are inherent in the traditional flat iron.

As a matter of fact, the present form of the flat irons in the shape of an escutcheon comprises a forward point, two lateral curves and a flat rear side, the latter being almost never employed to carry out an ironing operation,

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but only to support the flat iron in the vertical rest position.

In regard to the traditional flat iron, the flat iron of the present invention makes it possible to obviate the disadvantages of the traditional iron while allowing an ironing process which is truly perfect and easy in all instances whatever the article to be ironed.

This new iron is characterized in that it is made of a shape which has two opposed points as if two presently known flat irons were combined, one being placed against the other, so that the flat rear sides touch each other reciprocally or symmetrically. As such the soleplate of the iron is substantially laterally symmetrical about an axis perpendicular to its longitudinal axis to permit the iron to be completely reversible with the shape of the leading edge being the same when the iron is moved longitudinally in either direction. According to another feature one of the two lateral sides of the flat iron of this invention has at a certain distance from the two end points a linear connection which is straight or curved and at any rate is concave, i.e. in the direction of the longitudinal axis of the flat iron more or less parallel to the other lateral side which is also curved in an arc or convex. The ends of the concave portion provide arcs having a radius of curvature different from that found elsewhere on the soleplate of the iron.

One obtains thus in this manner a flat iron which is able to follow exactly all the curves generally encountered while ironing personal clothing, linens, as well as a large number of other articles which have to be ironed under heat. The flat iron according to the invention may be operated forwardly or rearwardly without any difficulty or any functional difference, and with the greatest ease and without special movement of the hand which cause an unnecessary tiring. It may be turned 180° without changing its functional effect, thus providing a flat iron which may be used in reverse movement and which may thus be used in any direction.

The two lateral curves of the first portion in the vicinity of the two points are symmetrical and convex. Thus the flat iron has on one side a complete curve of an arc of a circle of large size and on the opposite side two outward curves of reduced extent which are interconnected by one curve of a reversed direction, i.e. concave or re-entrant, which is almost parallel to the general curve of the other side of the flat iron.

Due to this construction, by turning the flat iron 180°, actually only the position of the two curves is reversed. Thus one will be able to use selectively and according to the type of ironing to be carried out, either one side or the other side of the flat iron by merely turning it by 180°.

Another feature of the flat iron according to the invention resides in the bilateral gripping handle which is designed to adapt itself to the reversible character of the flat iron and which may be gripped on both sides with either one or the other hand allowing thus to be gripped in four different positions and leaving the observation of two ends completely unobstructed.

The cap of the flat iron has curvilinear side corresponding to curvilinear sides of the soleplate of the iron, and has two shaped projections which may be incorporated or may be left off, and which correspond to the two extremities of the reentrant concave line, and which permit to support the flat iron in a side position of rest supported on these projections and maintaining the sole plate of the flat iron away from the ironing surface, avoiding thus the transmission of too much heat to this support or ironing surface.

Another feature of the reversible flat iron of the present invention resides in the good balance or equilibrium of its weight. While with the former flat irons the user

found it easier to move the iron in one direction rather than in the other direction, with the flat iron according to the present invention the weight of the flat iron is uniformly distributed in the longitudinal direction with respect to the handle so as to make it perfectly balanced and imparting to it a substantially improved mobility and ease of handling.

The particular shape of the flat iron of the present invention having two points and being reversible, provides also another advantage as follows: with the common flat irons one was able to iron well only while moving the iron in a generally rectilinear direction back and forth while the particular form of the flat iron according to this invention allows also a very easy rotating movement of the arm and thus the ironing along any desired lines, thus being able to make rotating movements, as well as other desired movements.

The reversible flat iron provided with two points according to this invention may obviously be heated in any desired manner, directly or indirectly, but preferably, in view of the present advanced state of electrical appliances, could be heated electrically.

In the case of the flat iron of the present invention the connection of the cord for supplying the electric current to heat the iron is located at the center of the iron in the upper part to provide a much improved ease of handling and leaving the two points of the iron completely free.

The arrangement of connecting the cord which supplies the electric current to the center of the flat iron provides another substantial advantage of the flat iron according to this invention in that two resistances may be incorporated in the iron and connected in parallel, one for each half of the iron, so that the current may be divided over these two resistances each amounting to half the resistance value of the circuit, providing a greater electrical strength or longer life of the resistance or the use of a wire of smaller diameter in view of the fact that according to Kirchhoff's law the current will distribute itself uniformly into the two branches while in the flat irons known hitherto all the current passes through one resistance.

The reversible handle of the flat iron may be provided with two signal lamps at the ends so that the user may always see the degree of temperature the iron has reached regardless of how the handle is gripped.

The flat iron according to this invention represents thus truly a revolutionary change in the field of flat irons and it will be understood that it may be provided with all the novel devices which are found in the flat irons that are now in use, for example thermostats, application to steam and the like.

A few preferred embodiments of the present invention are illustrated in the attached drawing in which:

FIG. 1 illustrates in plan view a flat iron according to the present invention.

FIG. 2 illustrates a side view of the flat iron according to FIG. 1.

FIG. 3 illustrates still another side view of the flat iron according to FIG. 1 with a modification of the handle illustrated in FIGS. 1 and 2.

FIG. 4 is a perspective view of a flat iron according to the invention illustrating some of its features.

FIG. 5 is a plan view of the flat iron having a reversible handle and signal lights, and

FIG. 6 is a front view of the iron in the rest position when supported on its side.

Referring to FIG. 1 of the drawing the novel shape of the flat iron designated by numeral 1 may be seen clearly. FIG. 1 shows the curved line 2 which is continuous on one side of the flat iron while at the opposite side the profile of the side is formed by two side portions 3 which are symmetrical to the curve 2 in respect to the longitudinal plane and of a portion 4 comprised between two

portions 3, the portion 4 being reentrant and parallel to side 2.

In FIG. 2 may be seen from the side the same flat iron 1 with a handle 5 having a central support provided with a double grip and the cord 7 for supplying the electric current to heat the iron. The usual cap or hood covers the sole plate and conceals the heating elements and the wiring leading to the sole plate.

FIG. 3 shows on the same flat iron 1 a handle 6 of the usual type with two supports at each end but which may be gripped on both sides as has been explained above.

The advantage of the form of handle 5 resides in the fact that one may introduce half of the flat iron into a cavity of the same height as that of the flat iron while in the case of the flat iron provided with handle 6 the point of the iron may be introduced only up to the handle, but a better handling and visibility of the ends is provided.

In FIG. 4 another embodiment of the iron of this invention is shown in perspective view and illustrates the various novel features, the central cord 7' for supplying the electrical current, the thermostat 8, the handle 6' with the end supports, the two end points 9, the curved line 2 and the reentrant concave line 4 located between convex portion 3, which defines the shape of the iron, and furthermore the two projections 10 for the lateral support of the iron in the rest position.

FIG. 5 shows besides the details mentioned above, the two signal lamps 11 disposed at the two ends of the reversible handle 6'' where the user may always control the temperature of the iron. These signal lamps are obtained by means of a frusto-conical top section at each end of the handle, which is made preferably of transparent plastic material for passing the light from the light source contained in the hollow handle.

FIG. 6 finally shows in detail on which points the flat iron rests when it is placed on its concave side in the rest position; the flat iron rests on projections 10 of the cap in such a way that the hot sole plate cannot damage the working surface.

In conclusion, the examination of the design and of the description provided herein will show the simplicity and the utility of the present invention which represents a revolutionary change in the construction and use of flat irons. It is understood that the shape of the reversible two point flat irons of the present invention is not strictly limited to the details disclosed herein but may be modified to a greater or lesser degree, depending on the exigencies, to retain the basic concept of the reversibility of the flat iron and thus the periphery of the sole plate may contain asymmetrical portions, could present one or more rectilinear or almost rectilinear portions, serrated portions in which the points are not perfectly opposite but slightly asymmetrical so that the lines which determine the points themselves could also be asymmetrical relative to each other and consequently the two points could also have a different form, and so forth, while still remaining within the spirit and scope of the invention which consists of providing a reversible flat iron having two points.

It is understood that various changes and modifications may be brought about in the manner of applying the present invention by persons skilled in the art while still remaining within its scope.

What is claimed is:

1. An elongated flat iron having a soleplate; said soleplate being substantially laterally symmetrical about an axis perpendicular to its longitudinal axis to permit the iron to be completely reversible with the shape of the leading edge being the same when the iron is moved longitudinally in either direction; said soleplate having curvilinear sides terminating in points at the ends of the longitudinal axis of the soleplate; one of said curvilinear sides being continuous between said pointed ends; the other of said curvilinear sides being discontinuous

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- and having a central reentrant concave portion extending substantially parallel with said continuous curvilinear side; and
- the ends of said concave portion providing arcs having a radius of curvature different from that found elsewhere on said soleplate to give a greater versatility to the iron.
2. The flat iron of claim 1 including a cap surmounting said soleplate and a handle disposed above said cap; said cap having a curvilinear sides corresponding substantially to the curvilinear sides of said soleplate; and said cap including projecting portions on the discontinuous side of said cap at the ends of the central concave portion for resting the flat iron securely on its side while maintaining the soleplate away from the support surface.
3. The flat iron of claim 2 wherein said handle is disposed centrally between said pointed ends and is laterally symmetrical about an axis perpendicular to its longitudinal axis.
4. The flat iron of claim 3 wherein said handle contains a signal lamp at each end.
5. The flat iron of claim 3 wherein a cord for supplying

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current to the flat iron is connected substantially centrally of said continuous curvilinear side.

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