June 15, 1948. F. E. FINLAYSON 2,443,448

FLATIRON HANDLE STRUCTURE

Filed June 15, 1946

Fig. 1.

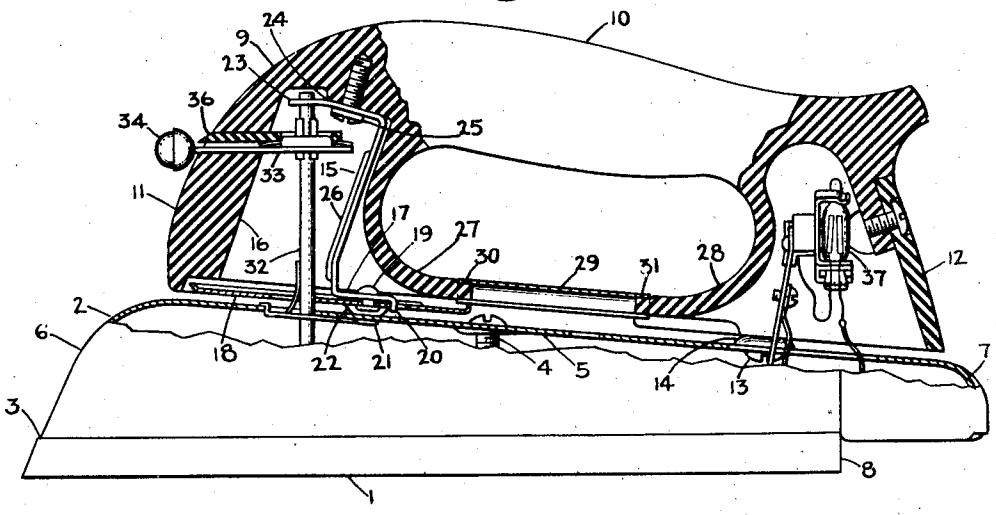


Fig. 2.

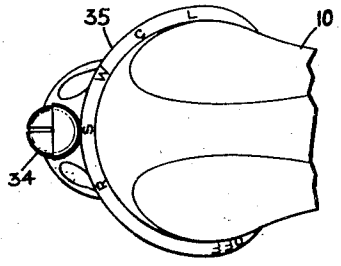


Fig. 3.

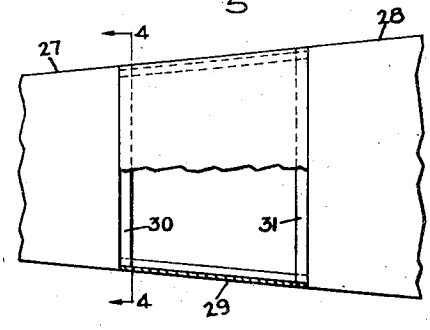
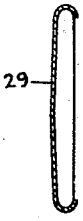


Fig. 4



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Patented June 15, 1948 2,443,448

UNITED STATES PATENT OFFICE

2,443,448

FLATIRON HANDLE STRUCTURE

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Application June 15, 1946, Serial No. 676,910

2 Claims. (Cl. 38—90)

1

This invention relates to flatirons, and it has for its object the provision of an improved organization of elements in a flatiron, particularly those relating to the handle structure. For a more complete understanding of this invention, reference should be had to the accompanying drawing in which Fig. 1 is a vertical side elevation of an electrically-heated flatiron embodying this invention, parts being shown in section so as to illustrate certain structural details; Fig. 2 is a fragmentary plan view illustrating a part of the handle structure of the iron shown in Fig. 1; Fig. 3 is a fragmentary plan view of a portion of the iron handle structure; and Fig. 4 is a sectional view taken through the line 4—4 of Fig. 3 and looking in the direction of the arrows.

Referring to the drawing, this invention has been shown in one form as applied to the electrically-heated, automatically controlled flatiron described and claimed in my application Serial No. 676,909, filed concurrently herewith, and assigned to the assignee of the instant application, and certain features here disclosed are described and claimed in that application. As shown, this iron comprises a soleplate 1 which is covered by a shell 2. The soleplate is heated by a cast-in heating element (not shown) which is controlled by a temperature responsive device (also not shown), but which element and device are fully described in the aforementioned copending application.

The shell 2 has its lower edge resting upon a ledge 3 formed on the opposite sides of the soleplate 1, and is secured to the soleplate by means of a pair of transversely spaced screws 4 (only one shown) which screws are passed through openings provided for them in the top wall 5 of the shell 1 and which are threaded into the soleplate 1.

The top wall 5 of the shell, as shown, slopes from its forward pointed end 6 downwardly toward the rear where it is provided with a down-turned wall 7, which is spaced from the rear of the soleplate heel edge 8, and which constitutes a heel rest for the iron.

The handle structure arranged in accordance with this invention comprises a handle 9 mounted on the top wall 5 of the shell. This handle may be formed of any suitable material, but preferably it will be molded of an electrically insulating material, such as a phenol condensation production. The handle is provided with a hand-grasping portion 10 running from the front to the rear of the iron, and with a forward skirt section 11 and a rear upright section 12 formed integrally

2

with the hand-grasping portion; in other words, the hand-grasping portion 10 the skirt section 11 and the rear upright section 12 all are formed integrally of the phenol condensation product.

The rear section 12 constitutes a support for the rear end of the hand-grasping portion 10 and is secured to the rear end of the top walls of the shell by a pair of screws 13 spaced apart transversely of the shell (only one being shown in Fig. 1); preferably, and as shown, the screws will pass through upright bosses 14 formed upwardly from the material of the shell and which function to space the rear handle support 12 from the shell, and thereby thermally insulate it from the shell.

The forward end of the hand-grasping portion 10 is supported by means of a metallic upright bracket 15 having roughly the shape of a Z. This bracket, as shown, extends upwardly into a cavity 16 provided by the skirt 11. The lower arm 17 of this bracket rests upon a metallic baffle plate 18 which is mounted on the top wall 5 of the shell. The lower arm 17 is secured to the baffle plate by means of a rivet 19 and is prevented from moving about the axis of the rivet by means of a down-turned section 20 at its extremity which is received in an aperture provided for it in the baffle plate, as clearly shown.

The baffle plate 18 in turn is secured to the top wall 5 of the shell by means of a pair of transversely spaced rivets 21 (only one shown) positioned on opposite sides of the rivet 19, and extending through downwardly projecting bosses 22 formed in the baffle plate and spacing it upwardly from the shell; that is, the baffle is held in spaced relation with the shell to thermally insulate it from the shell by means of the down-turned bosses 22 around the rivets.

The upper arm 23 of the Z-shaped bracket 15 bears against a seat 24 provided on the forward end of the hand-grasping portion 10, and at the top of the recess 16, and it is secured to the handle by means of a self-tapping screw 25.

The bracket is provided with a vertical strengthening rib 26 extending along the length of its vertical leg, as shown.

It will be observed, in view of the foregoing description, that the handle 9 has but very little contact with the shell 2. At the rear the handle engages the shell only through the bosses 14, whereas at the front it contacts the shell only through the relatively long and poor heat-conducting path consisting of the bracket 16, the baffle 18 and the bosses 22.

The function of the skirt section 11 of the han-

dle is to conceal the front handle support 26; it is, as shown, in the form of an apron extending downwardly from the forward end of the hand-grasping portion 10. This apron at its lower end 27 curves back over the top of the shell, as shown. The rear handle section 12 is provided with a similar apron 28 extending forwardly over the shell toward the apron 27, and the space between the two ends of the two aprons 27 and 28 is filled by means of a metallic baffle plate 29. The plate 29 is formed of a metal which is inherently resilient and it is caused to resiliently engage the two aprons 27 and 28, whereby it is secured to the handle. Each apron preferably, and as shown, is provided with reduced end extensions 30 and 31 respectively, while the baffle plate 29 is given a complementary shape in cross section (Fig. 4) whereby it may be snapped over the two reduced sections 30 and 31. As shown in Figs. 3 and 4, the lower end portions of the curved aprons are shaped in cross section like elongated ellipses, and the plate 29 has in cross section the shape of a wide U, the legs of which are curved under, these curved-under legs resiliently engaging the edges of the reduced sections to clamp the plate to the handle. To remove the plate, it is merely necessary to insert a screw driver—or some other similar instrument—under one side of the plate and pry it up to spring it away. When the plate is assembled, as shown in Figs. 1 and 3, its top surface merges in a smooth line with the curved aprons.

As pointed out previously, this iron is of the automatic type. As pointed out in my aforementioned copending application, the temperature adjustment is effected by a rod 32 extending upwardly into the chamber 16 where it is provided with an operating lever 33 that projects forwardly from the chamber to the exterior of the iron where an operating knob 34 is provided. This knob operates against a temperature scale 35 formed on a plate 36.

Also, as described in the aforementioned copending application, the iron is provided with an indicating lamp 37 mounted in the rear standard 12.

It will be understood that the baffle plate 29 functions not only to fill the space between the two handle apron sections 27 and 28, but also functions as a heat baffle to protect the hand of the operator, and also as a cover plate to conceal the screw fastening means 4.

While I have shown and described a particular embodiment of my invention, it will be obvious to

those skilled in the art that various changes and modifications may be made without departing from my invention in its broader aspects and I therefore aim in the appended claims to cover all such changes and modifications as fall within the true spirit and scope of my invention.

What I claim as new and desire to secure by Letters Patent of the United States, is:

1. A flatiron comprising a soleplate, a shell covering said soleplate, a handle having a hand-grasping portion extending longitudinally of said shell and also having generally vertical forward and rear sections, said sections respectively having inner surfaces under said hand-grasping portion curving downwardly and inwardly toward each other and terminating in edges that are spaced apart, and a separate metallic plate closing the space between said edges and having a wall merging into the contours of said surfaces, said edges and adjacent sections of said metallic plate being interlocked so as to secure said plate to said handle, and said plate sections being resilient to flex sufficiently to permit separation of said handle and plate and the reassembly thereof.

2. A flatiron comprising a soleplate, a metallic shell covering said soleplate and a handle having a hand-grasping portion extending longitudinally of said shell and also having generally vertical forward and rear sections, said sections respectively having inner surfaces under said hand-grasping portion curving downwardly and inwardly toward each other and terminating in edges that are spaced apart, a metallic spring plate closing said space, the edges of said curved surfaces having an elongated elliptical cross-sectional shape, and said plate having a transverse section, shaped like an elongated U complementary to the shape of the tops and ends of said edges, and the arms of said plate being curled under said ends, and being snapped around them so as to hold said plate onto said handle.

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