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SADIRON ASSEMBLY

Filed April 27, 1937

Fig. 3.

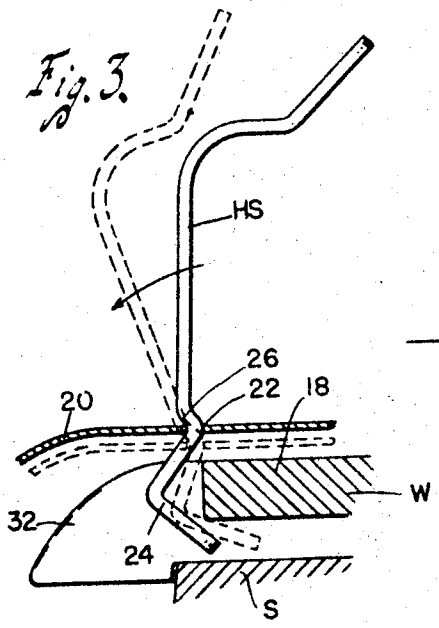


Fig. 2.

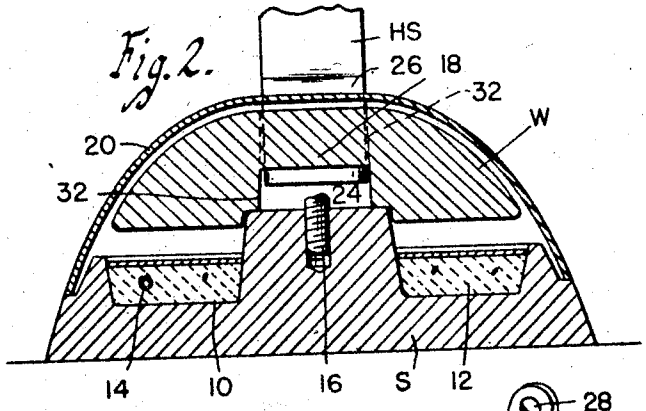


Fig. 4.

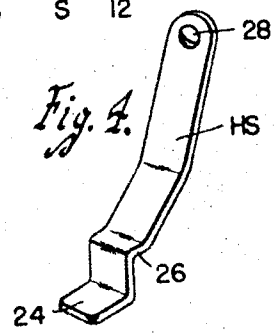
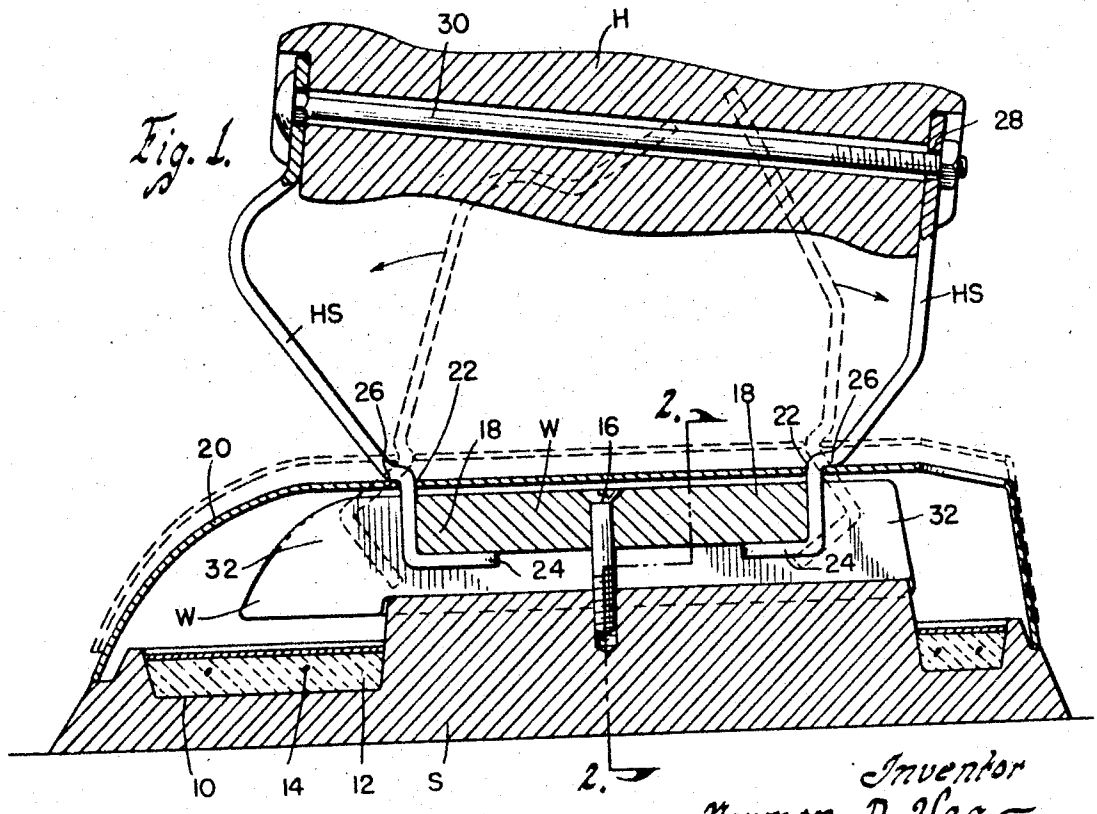


Fig. 1.



Inventor
~Norman D. Vea~
By Bair, Freeman & Sinclair
Attorneys

Witness
H. S. Munzenmaier

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SADIRON ASSEMBLY

Norman D. Vea, Dover, Ohio, assignor to Knapp-Monarch Company, St. Louis, Mo., a corporation of Missouri

Application April 27, 1937, Serial No. 139,245

5 Claims. (Cl. 38—90)

An object of my invention is to provide a sadiron assembly in which the handle supporting elements are quickly and easily assembled relative to the sole plate, shell and handle of the iron without the necessity of providing connecting bolts or the like, the construction, however, being comparatively simple and inexpensive from a manufacturing standpoint.

A further object is to provide handle supporting elements which are so shaped and which so cooperate with a casing and sole plate of a sadiron that they retain the casing and sole plate rigidly assembled relative to each other upon connection of the handle of the iron with the handle supports.

Still a further object is to provide handle supports which are pivoted relative to a saidiron shell and have hooks to engage projections of the sole plate upon pivotal movement of the handle supporting elements to a predetermined position, whereafter connection of the handle of the sadiron to the handle supports retains them in such position.

With these and other objects in view, my invention consists in the construction, arrangement and combination of the various parts of my sadiron assembly, whereby the objects contemplated are attained, as hereinafter more fully set forth, pointed out in my claims, and illustrated in the accompanying drawing, in which:

Figure 1 is a vertical longitudinal sectional view through a sadiron assembly embodying my invention.

Figure 2 is a lateral vertical sectional view on the line 2—2 of Figure 1.

Figure 3 is a sectional view similar to a portion of Figure 1 showing the parts in different positions; and

Figure 4 is a perspective view of one of the handle supporting elements of my sadiron assembly,

On the accompanying drawing I have used the reference characters S to indicate a sole plate, HS handle supporting elements and H a handle. The sole plate S may be of the usual construction having a heating element groove 10 with a heating element compacted therein and consisting of suitable insulating material 12 in which is embedded a coiled resistance wire 14.

In connection with the sole plate S I illustrate a weight member W secured in position by a screw 16. The weight member W may be an integral part of the sole plate, the only requisite for my construction being that a pair of projections 18 adjacent the front and rear of the sole plate are provided, under which the handle supporting elements HS may hook, which will hereinafter be described.

A shell is indicated at 20 for covering the sole plate S. This shell is provided with a pair of perforations 22 through which the handle supporting elements HS project.

Each handle supporting element is formed of strap iron or the like having on its lower end a hook 24 and spaced above the hook is a shoulder 26 formed by a bend in the handle supporting element. The upper end of the element is perforated as indicated at 28 for reception of a through bolt 30 for the handle H.

Assembly operation

During assembly of the parts of the sadiron, the handle supporting elements HS are first projected through the shell 20 as shown by dotted lines in Figure 1, with their upper ends close together. This spaces the terminal ends of the hooks 24 far enough apart that the shell and the handle supporting elements may be moved downwardly onto the sole plate S with said terminal ends clearing the ends of the projections 18.

The assembler may then start spreading the handle supporting elements so that they first assume the position in full lines in Figure 3, and then begin to hook under the projections 18, as shown by dotted lines therein, whereupon the shell 20 must move downwardly toward the sole plate S. Finally when the hooks 24 engage the under surfaces of the projections 18, as shown by full lines in Figure 1, the peripheral edge of the shell 20 has contacted with the sole plate S and the shoulders 26 have created a downward pressure on the shell, thus placing the parts under tension against any wabbling relative to each other thereafter.

The handle supporting elements HS are now retained in their assembled position and in turn retain the parts S and 20 assembled relative to each other and relative to the handle supporting elements by placing the handle H in interposed position between the perforated outer ends of the handle supporting elements HS.

Finally when the through bolts 30 are placed in position, the parts are held in rigid assembled position against any disassembly until the through bolts and handle are again removed.

The weight member W has slots 32 at its ends, the width of which are illustrated by dotted lines in Figure 2. These slots are only slightly wider than the elements HS so that the weight member

W holds the handle supporting elements HS against any lateral swinging movement after the parts are assembled.

Obviously my sadiron is so constructed that the assemblying operations are reduced to a minimum. There is no necessity of inserting holding bolts for the handle supporting elements and for the shell as in the ordinary sadiron construction. A simple association of the parts S, 20, HS, H and 30 with each other in the proper manner holds all of these parts assembled relative to each other with an ease of operation which is at once obvious.

The peculiar shape of the handle supporting elements HS is such that the handle supporting elements cooperate with both the sole plate and the shell to tighten them relative to each other, and at the same ime rigidly connect the handle suporting elements to the sole plate and shell.

The parts being under tension when the shoulders 26 finally force the shell 20 downwardly, compensates for any subsequent expansion due to heating of the parts without experiencing any loosening of the parts.

With such an arrangement as disclosed, it is possible to effect a further economy in manufacture since lighter gauge steel can be used for the shell, because it does not have to be strong enough to withstand the pressure of screws or bolts.

My construction also reduces the time necessary for assembly, and accordingly a further economy in manufacture is thus effected.

Some changes may be made in the construction and arrangement of the parts of my device without departing from the real spirit and purpose of my invention, and it is my intention to cover by my claims any modified forms of structure or use of mechanical equivalents which may be reasonably included within their scope.

I claim as my invention:

1. In a sadiron assembly, a combined weight and sole plate member, a shell mounted thereon having a pair of perforations, handle supporting elements extending through said perforations and having hooks on the terminal ends thereof inside said shell, said sole plate member having hook means engaging the first mentioned hooks, said handle supporting elements each having shoulders exterior said shell engaging the shell to retain it on said sole plate when the handle suporting elements are spread apart and a handle interposed between the outer ends of said handle supporting elements to retain them spread apart.

2. In a sadiron assembly, a sole plate member having hook means fastened thereto, a shell for covering said sole plate, a pair of handle supporting elements having hook means engaging said first mentioned means inside said shell, said handle supporting elements being initially pivotally mounted on said shell and operable as the sole means for retaining said sole plate member when the handle supporting elements are pivotally moved to a predetermined position and means for retaining said handle supporting elements in said predetermined position.

3. In a sadiron assembly, a sole plate member having a hook means fastened thereto, a shell for covering said sole plate member, a pair of handle supporting elements having hook means engaged within said first mentioned means inside said shell, said handle supporting elements each being initially pivotally mounted on said shell and operable to retain said sole plate member when the handle supporting elements are pivotally moved to a spread-apart position and a handle having its ends connected with said handle supporting elements to retain them in their spread-apart position.

4. In a sadiron assembly, a sole plate structure, a shell thereon, a pair of initially pivoted handle supporting elements pivotally connected to said shell and having hook means to engage corresponding hook means in said sole plate upon pivotal movement of the handle supporting elements to a predetermined position and means for retaining said handle supporting elements in said predetermined position and thereby said shell in assembled position relative to said sole plate structure, said means comprising a handle interposed between and connected to said handle supporting elements.

5. In a sadiron assembly, a sole plate member, a shell having a pair of perforations, handle supporting elements extending through said perforations and having hooks on the terminal ends thereof inside said shell, hooked means on said sole plate, said hooks engaging the hooked means of said sole plate, said handle supporting elements each having shoulders exterior of said shell engaging the shell to retain it on said sole plate member when the handle supporting elements are spread apart, said sole plate member having walls engaging the sides of said handle supporting elements cooperable with the shoulders to retain them against lateral swinging movement and a handle interposed between the outer ends of said handle supporting elements to retain them spread apart.

NORMAN D. VEA.