

(No Model.)

M. TVERDAL.
SAD IRON.

No. 513,743.

Patented Jan. 30, 1894.

Fig. 1.

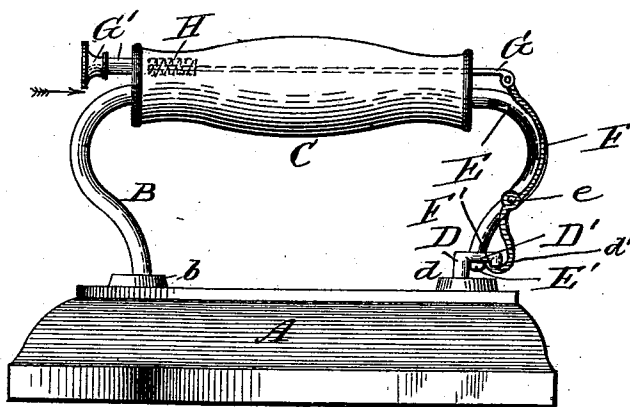


Fig. 2.

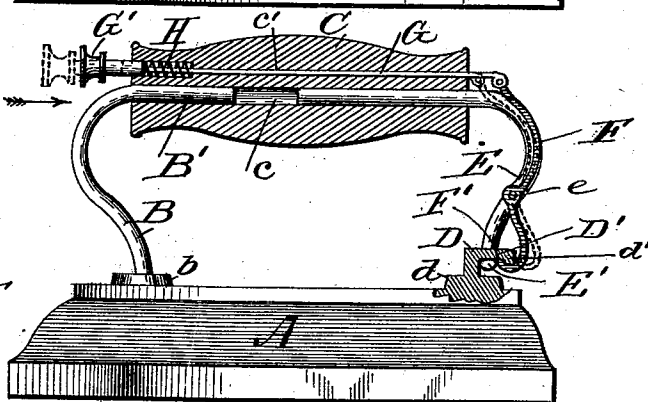


Fig. 5.

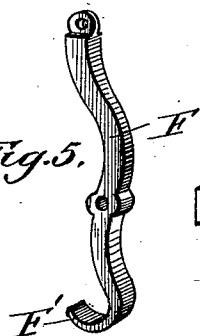


Fig. 4.

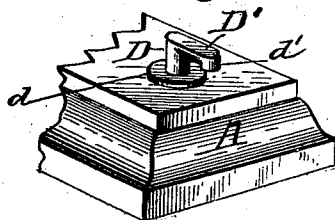


Fig. 3.

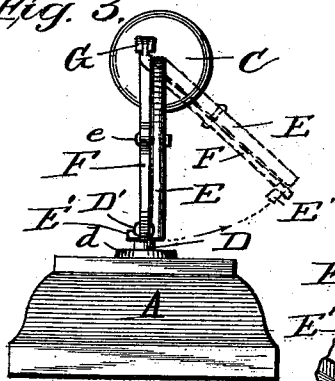
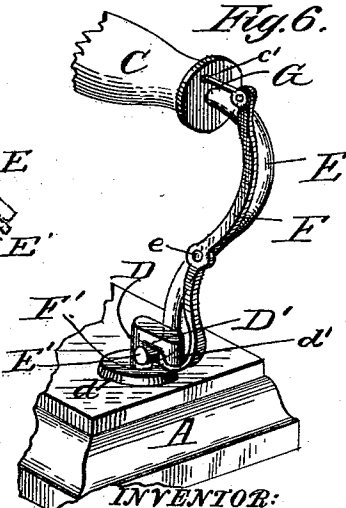


Fig. 6.



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UNITED STATES PATENT OFFICE.

MATHILDE TVERDAL, OF STOUGHTON, WISCONSIN, ASSIGNOR OF ONE-HALF
TO CHARLES T. JOHNSON, OF SAME PLACE.

SAD-IRON.

SPECIFICATION forming part of Letters Patent No. 513,743, dated January 30, 1894.

Application filed May 20, 1893. Serial No. 474,980. (No model.)

To all whom it may concern:

Be it known that I, MATHILDE TVERDAL, a citizen of the United States, and a resident of Stoughton, in the county of Dane and State of Wisconsin, have invented certain new and useful Improvements in Sad-Irons; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a side elevation of my improved sad-iron, with the handle attached in its operative position. Fig. 2 is a similar view, but showing the handle in longitudinal section, and illustrating, in dotted lines, the position of the handle-lever and its operating rod when the handle is to be placed upon, or removed from, the body of the iron. Fig. 3 is an end view of the iron with the removable handle in place; showing, in dotted lines, the "twist" or turning of the handle to remove or replace it. Fig. 4 is a detail view of the rear end of the iron, showing the rigid elbow-lug for the attachment of the handle-arm and lever. Fig. 5 is a detail view of the handle-lever, detached from the handle; and Fig. 6 is a detail view illustrating the connection between the arm and the lever appertaining to the handle, and the rigid elbow-stud on the body of the iron.

Like letters of reference designate corresponding parts in all the figures.

My invention relates to that type or class of sad-irons which are provided with removable handles, and my improvement consists in the novel construction and combination of parts of the handle, the body of the iron, and the devices for connecting these separably, as will be hereinafter more fully and at length described and particularly pointed out in the claim.

Referring to the drawings, the letter A denotes the body of my improved sad-iron, which may be of any desired size and shape, according to the purpose for which it is intended to be used. At one end of this is a raised boss *b*, forming a rigid fastening for a curved arm B, the upper end of which is

bent to one side, parallel to the median line of the flat top of the iron, as shown at B'. At the other end is a similar boss *d*, forming the base for the fastening-lug D, which has a right-angled elbow D' for the attachment of the arm, E, appertaining to the removable handle, shown at C. Said handle, which is made, preferably, of wood or some other inexpensive material that can be easily shaped and is a poor conductor of heat, has a central longitudinal bore *c*, extending from end to end, and of such dimensions that the straight end B' of arm B can easily be inserted therein. At the other end of the handle, securely fastened in the bore *c*, is a curved arm E, corresponding in shape and conformation to arm B at the front end. This handle-arm E has a hook E' at its lower end, adapted to catch under the elbow D' on the iron, so as to hook arm E upon the fastening-lug D D' when the handle is to be applied to the iron.

Upon one side of arm E is a short laterally projecting stud *e*, forming a pivot or fulcrum for a lever F, the lower end of which has a hook F' adapted to interlock with an offset *d'* on elbow D' of the fastening lug. At its upper end, lever F is pivoted to a slender rod G, which is inserted loosely, so as to move easily forward and back, into and through a longitudinal bore *c'* in the handle, parallel to the larger central bore *c* and above the same. The forwardly projecting end of rod G has fastened upon it a finger-button G', and is also provided with a coiled spring H, the tension of which operates to pull the rod in the direction of the arrow, so as to push upon the upper end of lever F and, accordingly, force hook F' at the lower end of the lever into engagement with the elbow-stud or lug D D' *d'*.

From the foregoing description, taken in connection with the drawings, the manner of attaching and removing the detachable handle will readily be understood. To remove the handle, pull upon the button G', which—through the intervention of rod G and lever F—withdraws or releases the hook F' at the lower end of the lever from the shouldered elbow D' *d'*. By now giving the handle a slight turn or twist upon the part B' of arm B as a pivot, the lower hooked end E' of the

handle-arm E, will be released from the elbow-lug, so that the handle may be drawn off the part B' simply by pulling it in the direction of the arrow. To again replace the handle, the order of these operations is simply reversed; *i. e.*, the forward end of the handle is first inserted upon the straight arm B'; it is then turned a little to one side (upon arm B' as a pivot) and turned back again until hook E' catches under the elbow D'; and, finally, the fastening or locking-hook F' on lever F is sprung into place behind the detent or offset *d'* on the elbow-lug, thus locking the removable handle firmly in its operative position upon the iron.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

The combination with the iron A provided at one end with the rigid bent arm B and at the other end with the elbow-stud D D' *d'*, of the removable handle C having central bore *c* and a parallel bore *c'*, and provided with the bent arm E having hook E'; lever F having hook F'; rod G having finger-knob G'; and spring H; all constructed and combined to operate substantially in the manner and for the purpose shown and set forth.

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in presence of two witnesses.

MATHILDE TVERDAL.

Witnesses:

A. E. GILBERT,
CHAS. T. JOHNSON.