N. Waterman,

Sad Iron,

No. 39,250. Patented July 14, 1863.

Fig. 4

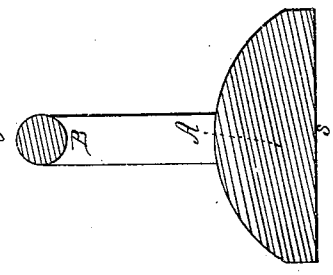


Fig. 4

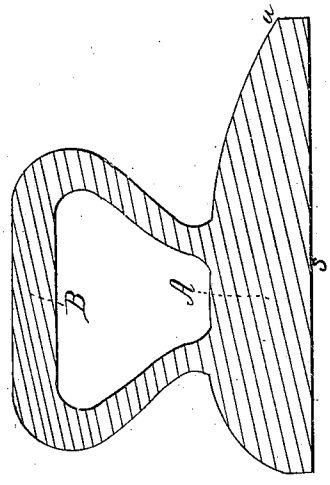


Fig. 1

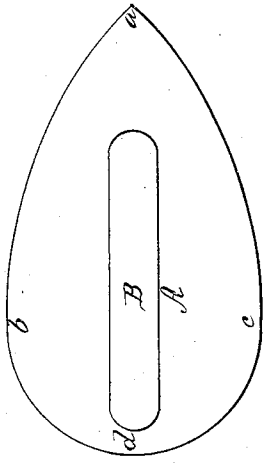
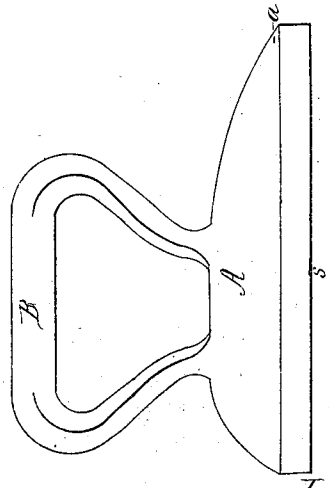


Fig. 2.



Witnesses:

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UNITED STATES PATENT OFFICE.

NATHANIEL WATERMAN, OF BOSTON, MASSACHUSETTS.

IMPROVED SAD-IRON.

Specification forming part of Letters Patent No. **39,250**, dated July 14, 1863.

To all whom it may concern:

Be it known that I, NATHANIEL WATERMAN, a resident of Boston, in the county of Suffolk and State of Massachusetts, have invented a new and useful Improvement in Smoothing or Sad Irons; and I do hereby declare the same to be fully described in the following specification and represented in the accompanying drawings, of which—

Figure 1 is a top view, and Fig. 2 a side elevation, of a sad-iron made in accordance with my invention.

My improvement consists in a smoothing or sad iron as made with a semicircular or round heel and a flat or plane surface bottom, an angular toe of the ordinary form, (as shown in the accompanying drawings,) its sides making an angle with its bottom, and finally with a top rounded both transversely and longitudinally—viz., at and above the toe and the heel, and from side to side and heel to toe—the whole being substantially as hereinafter described, and as represented in the accompanying drawings.

Common sad-irons or flat-irons are made with a flat bottom or plane surface bottom, and a straight heel, which, at its joining with the sides of the iron, forms two right or nearly right angles. The heel has been formed straight for the purpose of enabling the iron to stand up "on end" toward a fire, or to be supported on the heel. As sad-irons are now generally heated on stoves, instead of before a fire, it is not necessary to make them with straight heels. The angles of the straight heels and the sides are apt during a backward movement of the iron on a piece of cloth or an article of clothing to either crease it or catch into and tear it, or to form plaits in it. In my improved iron there are no angles at the junction of the heel and sides, as the heel and sides are somewhat ovoidal in shape in horizontal section and the bottom of the iron is a plane or flat surface. The top or upper surface of the body of the iron is also rounded both longitudinally and laterally, the same being as shown in Figs. 3 and 4, the first of the said figures being a vertical and longitudinal section, and the last a transverse and vertical section of the said iron.

In the drawings, A denotes the body, and B the handle, of my improved sad-iron. The toe of the iron is pointed or angular, or approximately so, as shown at *a* in Figs. 1 and 2, while the sides are curved as shown at *a b a c* in Fig. 1. The heel also is curved, as exhibited at *c d b* in the said figure and the bottom *s* is a flat or plane surface. Each side, or the periphery or edge of the iron, makes an angle with the bottom plane surface of it. This angle, as shown in the drawings, is a right angle, but it may be somewhat varied therefrom—that is, it may be slightly acute or obtuse—but should for practical purposes be a right angle or a close approximation thereto. This prevents the edge or sides from making small plaits or folds in cloth while the iron may be in use. The upper surface of the body of the iron, or that surface of it which is above the sides or edges, is curved both longitudinally and laterally, as shown in Figs. 1, 2, 3, and 4, the same being to cause the iron to pass freely either under or into the folds of clothing, or various other parts of clothing, without catching into and tearing such clothes or articles while being ironed or smoothed by it.

The flat-iron made with the body rounded on its top surface in manner as described is preferable to a sad-iron having a flat top. The top of the iron is not only rounded or made convex at the heel, but is so at the toe. The round or convexity of the top at the heel is important in guiding the iron under folds of cloth and turning them out of the way during a back-stroke of the iron.

I claim as my invention—

An improved smoothing or sad iron as made not only with a round heel and a plane surface bottom and a pointed or angular toe, but with the sides making an angle with the bottom, and with the top or upper surface rounded at and above the toe and heel, and both longitudinally and laterally, in manner as shown in the accompanying drawings and substantially as described.

NATHL. WATERMAN.

Witnesses:

R. H. EDDY,

F. P. HALE, Jr.