D. A. BARNES.
Sad-Iron.

No. 197,958. Patented Dec. 11, 1877.

Fig. 1

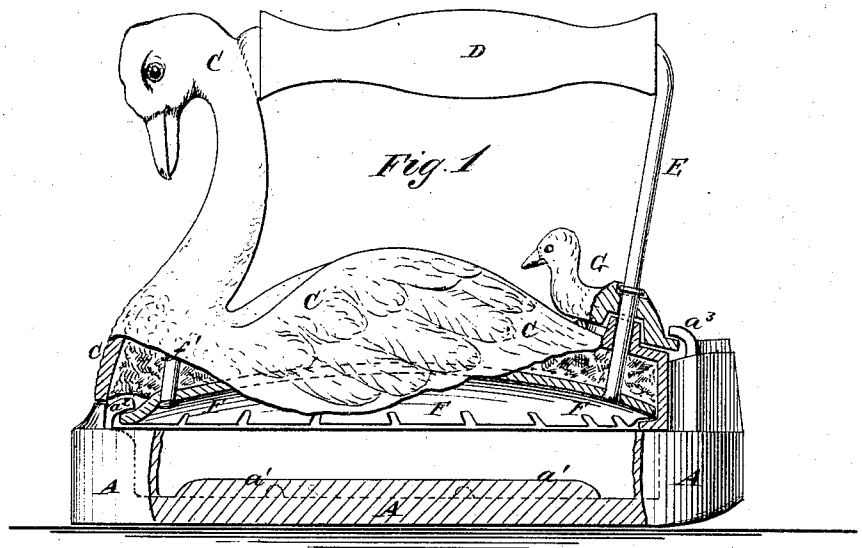


Fig. 2

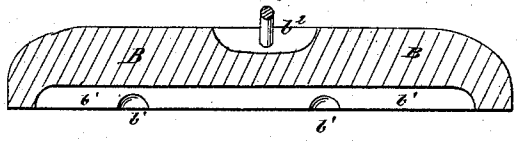


Fig. 3

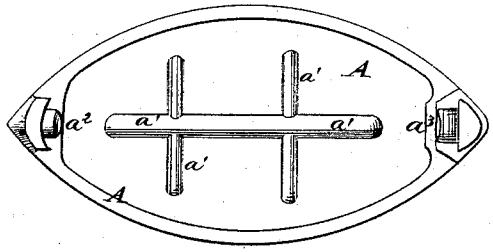
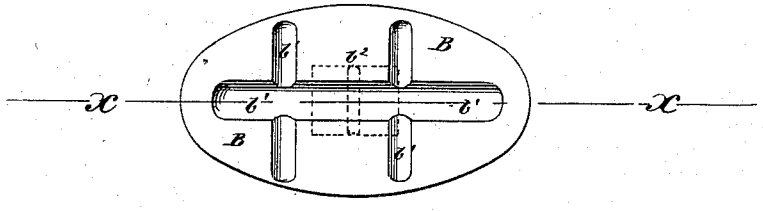


Fig. 4



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UNITED STATES PATENT OFFICE.

DANIEL A. BARNES, OF NEW YORK, N. Y.

IMPROVEMENT IN SAD-IRONS.

Specification forming part of Letters Patent No. **197,958**, dated December 11, 1877; application filed April 13, 1877.

To all whom it may concern:

Be it known that I, DANIEL A. BARNES, of the city, county, and State of New York, have invented a new and useful Improvement in Smoothing-Irons, of which the following is a specification:

Figure 1 is a side view of my improved smoothing-iron, parts being broken away to show the construction. Fig. 2 is a longitudinal section of the heating-iron, taken through the line *x x*, Fig. 4. Fig. 3 is a top view of the lower part. Fig. 4 is a bottom view of the heating-iron.

Similar letters of reference indicate corresponding parts.

The object of this invention is to furnish an improved iron for smoothing and polishing clothes, which shall be so constructed as to protect the hand of the operator from the heat, and render the employment of a "holder" unnecessary, which will not soil or stain the clothes, may be kept hot with a small fire, or with a fire that is being used for other purposes, and which shall be convenient in use, and neat and beautiful in appearance.

The invention will first be described in connection with the drawing, and then pointed out in the claims.

A is the lower part of the iron, which is made hollow to receive the heating-iron B, and is beveled or rounded off at one end, to adapt it for both smoothing and polishing. The outer surface of the lower part A is nickel-plated, so that it will not rust, and so that, as it is never exposed to the fire, it may always keep smooth and clean. Upon the bottom of the cavity of the lower part A are formed ribs or points a^1, and in the bottom of the heating-iron B are formed corresponding depressions or cavities b^1. The projections a^1 and the cavities b^1 are so arranged as to correspond with each other when the heating-iron B is inserted one end forward; but when the said heating-iron B is inserted with the other end forward they will not correspond, and the heating-iron will rest upon the projections a^1, so as to leave a space between the heating-iron B and the bottom of the lower part A. This enables the heat of the part A to be tempered as required. Upon the upper side of the heating-iron B is formed a staple or loop, b^2, to enable the said heating-iron to be readily put into and taken out of the fire with a hook. Upon the upper side of the ends of the lower part A are formed hooks or catches a^2 a^3, for the attachment of the upper part C. The hooks or catches a^2 a^3 are formed of malleable or wrought iron, so that they may be bent to take up the wear. The upper part C is made in the form of a swan, and is provided with a wooden handle, D, which is placed upon a rod, E. The forward end of the rod E is attached to the upper part of the swan's neck. The rod E, at the rear end of the handle D, is bent downward, and its lower end is attached to the rear part of the said upper part C. The upper part C is made hollow, and has a plate, F, attached to it, so as to form a chamber, which may be left as an air-chamber, or may be filled with plaster-of-paris, asbestus, or other non-conducting material, to prevent the heat from passing up to the handle. The rear end of the plate F rests upon a lip formed upon the rear end of the upper part C, and its forward part is secured by a screw, *f'*, passing through it, and screwing into the neck of the swan. The forward part of the plate F is bent downward, to engage with the hook or catch a^2 of the lower part A.

To the rear end of the upper part C, or to the rod E, is pivoted a button, G, which engages with the hook a^3 of the lower part A, to lock the said upper and lower parts together. The button G is made in the form of a young swan, and has the appearance of a young swan riding upon its mother's back.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. The combination, with the parts A C, of the plate F, resting with its rear upon a lip of part C, secured by a screw in front, and locking at the end with a catch, a^2, as and for the purpose substantially as set forth.

2. The button G, pivoted to rod E, and engaging with the hook a^3, as and for the purpose specified.

DANIEL A. BARNES.

Witnesses:

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