M. A. B. Cook,

Sad Iron,

No. 5,950. Patented Dec. 5, 1848.

UNITED STATES PATENT OFFICE.

MARY ANN B. COOK, OF BOSTON, MASSACHUSETTS.

IMPROVEMENT IN SMOOTHING-IRONS.

Specification forming part of Letters Patent No. **5,950**, dated December 5, 1848.

To all whom it may concern:

Be it known that I, MARY ANN B. COOK, of Boston, in the county of Suffolk and State of Massachusetts, have invented a new and useful Improvement in Flat-Irons or Sad-Irons, whereby they may be used for smoothing and polishing shirt-bosoms or various other articles; and I do hereby declare that the same is fully described and represented in the following specification and accompanying drawings, letters, figures, and references thereof.

Of the said drawings, Figure 1 denotes a side elevation of one of my improved flat-irons. Fig. 2 is a top view, and Fig. 3 is a bottom view, of the same. Fig. 4 is a vertical central and longitudinal section, and Fig. 5 is a vertical and transverse section, of it. Fig. 6 is a horizontal section on the line *h i*, and Fig. 7 is a transverse and vertical section taken on the line *h k*, of Fig. 1.

Common flat-irons or sad-irons as usually made have only one flat ironing or plane surface. They are not well adapted to polishing or glazing starched shirt-bosoms or other articles. Experience has taught me that a very high gloss or polish can only be successfully or practically effected by a small curved convex surface, one capable of retaining a suitable polishing-heat while being used. In order to glaze shirt-bosoms, collars, or various other articles usually starched, it has been customary to mix with the starch some one or more foreign substances, such as wax or spermaceti. Such additions, besides being very expensive, often operate greatly to the injury of the linen or article covered by them, as it will readily be seen that they must offer more or less resistance to the water afterward used in washing the said linen or article, and require more friction and expenditure of soap and labor than would be necessary were starch alone employed. In order to effectually do away with all such combinations of starch and foreign matters, and to make use of starch only, and to easily and readily put a high gloss, glaze, or polish on the linen or article starched, I have contrived an iron which I shall now proceed to describe.

In its form the lower part of it or that part which is generally heated somewhat resembles a shoe. The lower surface *a b c d*, Fig. 3, and *a c*, Fig. 1, is made flat or as a plane and has an elliptical boundary or an approximation thereto. This surface is used for ordinary ironing or smoothing in the same manner as we use the bottom surface of a common iron. From the periphery or boundary of this bottom surface the iron is curved upward in front and rear and laterally, as seen in the drawings, the front end of it being made of a blunt or convex point, as seen at *e*. From said blunt point *e* the iron is curved upward and rearward to the part *g*, from whence with the point *f* it is curved down or made thinner, as seen in Figs. 1 and 4.

The portion of the iron at and immediately surrounding the point *h* is to be used for polishing. This portion is made convex in shape and is to be highly polished.

The front half of the iron, it will be seen, is made very much thicker in a vertical direction than the rear half, and the handle A, instead of being made parallel to the bottom *a c*, is inclined with respect to it, as seen in Fig. 1. The front half of the iron being made to weigh more than the rear half (the same being to enable it to retain more heat or a polishing-heat, while the latter part preserves only smoothing-heat) will, when the iron is lifted so as to place the convex part *h* in contact with any surface, cause an unnatural or tedious strain on the fingers or hand and wrist—that is, provided the handle be arranged parallel to the bottom *a c;* but if the said handle is inclined, as seen in the drawings, no such unpleasant strain takes place. When the inclination and the position of the polishing-convex *h* are so adjusted that when the said part *h* is resting on any article the said handle may be horizontal or thereabout, a twofold advantage is secured—that is to say, we not only remove the disagreeable strain upon the hand above alluded to, but we have a means of readily adapting the polishing-convex to any plane surface we desire to polish, for we have only to raise the rear part of the iron so as to bring the handle into a horizontal position and this is effected. By making the front end of the iron with the blunt nose or point *c* formed convex the iron is adapted to the smoothing of folds and gathers of a dress and does not leave thereon any of the iron-marks, such as is very apt to be produced by the common irons.

In my iron in all the parts or surfaces

which are used for smoothing or polishing all angular or sharp corners or edges are avoided. The rear half of the iron is gradually lessened in width toward the extreme back part *f*, it being made to curve upward in rear, as seen at *c i f* in Fig. 1. The whole iron thus has a somewhat elliptical shape in horizontal section.

The sides of the iron are made about perpendicular to the bottom smoothing-face of it, and where they are joined to said smoothing-face they do so by a quick or easy curve, so as to present no angle which would be liable to produce marks or creases in any article while being ironed.

I consider my iron to differ in the following particulars from those previously invented: first, in having the smoothing plane or bottom surface, the polishing-convex *h*, and the blunt convex or nose *e*, as combined together as above specified; second, in connection with the smoothing-surface and polishing-convex the front part or half of the iron is made much thicker and heavier than the rear part or half thereof, the same being for the objects hereinbefore specified; third, in connection with making the front half of the iron the heaviest the handle has a peculiar inclination or slope given to it, in the manner and for the purpose as above described; fourth, the rear half or part of the iron is gradually curved back and on each side toward a blunt or rounded point or convex *f*, and is rounded or curved upward from the smoothing-face toward said part *f*, so as to render it very difficult, if not impossible, to produce any creases or marks in the linen or article while it is being ironed. Therefore

That which I claim as my invention is—

An organization or combination of elementary improvements consisting of the rounded bevel of the lower and anterior part of the instrument, the increased weight of the anterior part over the posterior part, and, lastly, the rearward pitch of the handle, as described, the said peculiar inclination of the handle being to prevent unpleasant strain upon the hand and wrist, and for other purposes, as specified.

In testimony whereof I have hereto set my signature this 25th day of February, A. D. 1848.

MARY ANN B. COOK.

Witnesses:

R. H. EDDY,

CALEB EDDY.