

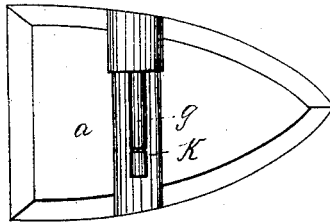
*E.L. Pratt,*

*Sad Iron,*

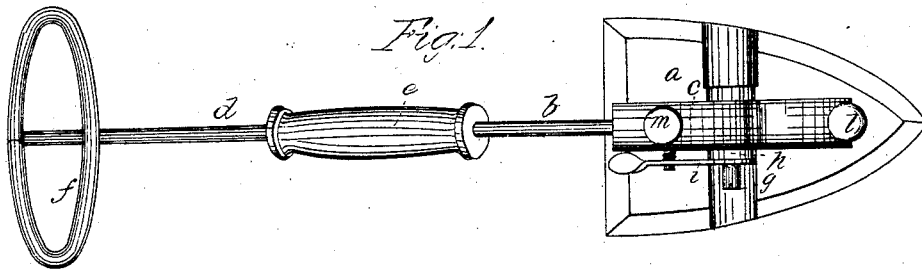
*No. 45,434,*

*Patented Dec. 13, 1864.*

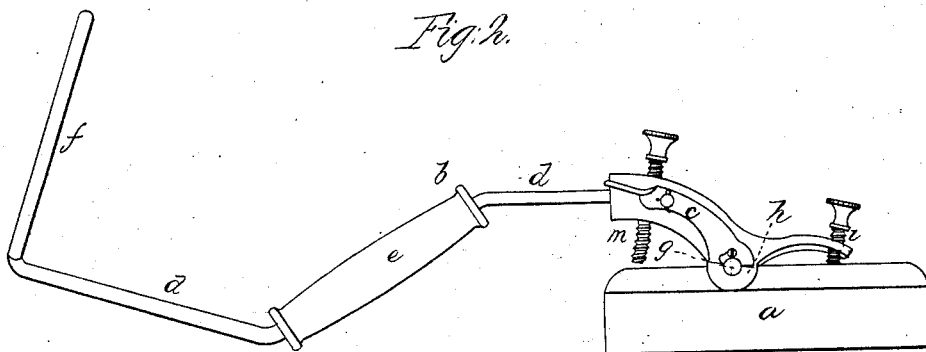
*Fig. 3*



*Fig. 1*



*Fig. 2*



*Witnesses:*

*H. Gould*  
*J. B. Kiddle*

*Inventor:*

*E. L. Pratt*  
*By his atty*  
*W. B. Crutcher*

# UNITED STATES PATENT OFFICE.

E. L. PRATT, OF BOSTON, MASSACHUSETTS.

## IMPROVED SAD-IRON.

Specification forming part of Letters Patent No. **45,434**, dated December 13, 1864.

*To all whom it may concern:*

Be it known that I, E. L. PRATT, of Boston, in the county of Suffolk and State of Massachusetts, have invented an Improved Sad-Iron; and I do hereby declare that the following, taken in connection with the drawings which accompany and form part of this specification, is a description of my invention sufficient to enable those skilled in the art to practice it.

This invention relates to the construction of laundry or sad irons, and has for its object such a construction of an iron as shall enable it to be used with greater ease and freedom and with better result than is obtained with the ordinary construction. The common iron, with its handle integral with or fixed upon and directly over its top, is too well known to need description.

My improvement consists primarily in the attachment thereto of an arm-piece extending to the rear of the iron in such manner as to afford a support for the arm and to bring the muscles of the arm and wrist more equitably into play in actuating the iron.

Figure 1 of the drawings represents a top view of my improved sad-iron; Fig. 2, a side elevation thereof; Fig. 3, a top view of the iron with the handle removed.

*a* denotes the body of the iron; *b*, the handle. This handle is made up of several parts—namely, a top piece, *c*, by which the handle is jointed to the iron, a rod, *d*, extending back from said piece *c* and carrying a wooden hand-hold, *e*, and an arm-ring, *f*. The iron *a* has a horizontal pin, *g*, extending across, or partially across, its top, upon which a sleeve, *h*, in the top piece, *c*, is slid. When applied to the iron, the top piece is kept from lateral movement by a spring-catch, *i*, which enters a groove, *k*, in the pin *g*. The piece *c* rocks freely upon the pin, the extent of this rocking movement being controlled and adjusted by means of adjusting-screws *l m*, one of which is placed in the end of the piece projecting over the front part or toe of the iron, and the other passing through the other end of the piece and down toward or against the heel of the iron. At a short distance in rear of the heel of the iron is the hand hold *e*, the rod *d*

having a downward inclination where the handle is placed upon it, as seen in Fig. 2. This hand-hold is applied loosely upon the rod, so as to turn freely with the hand. In rear of it the rod *d* is inclined upward correspondingly with the natural inclination which the arm would have with the iron upon a table of proper height and the hand grasping the hand-hold *e*. At the end of the rod is the arm-ring *f*, the distance of this ring from the hold *e* being such as to bring the ring about midway between the wrist and elbow joints.

To use the iron, the hand of the operator is passed through the arm-ring *f* and grasps the hand-hold *e*, by means of which the iron is easily propelled over the cloth or fabric to be ironed, the bearing of the arm within the ring bringing a part of the strain otherwise exerted in the wrist-joint upon the muscles of the arm.

It will be readily understood that the strength necessary to be exerted to push the iron is much better exerted in rear of the iron and with the lower part of the hand in, or nearly in, the same horizontal plane of the handle than it can be on top of or directly over the iron, as in the common construction. The difficulty of propulsion is such that the ordinary iron has to be made comparatively light, in consequence of which a very tiresome downward pressure has to be exerted in addition to the exertion necessary to push the iron forward. But by applying the force in rear of the iron as shown a much greater weight may be given to the iron, thereby saving the exertion of the downward pressure.

The arrangement of the handle in such manner as to rock freely upon the iron and the application of the adjusting-screws enables the iron to be adapted to the height of table upon which the ironing process is being effected and to the natural and easiest play of the arm.

The reach of the iron can be extended much farther and to greater advantage by this construction, as will be readily understood, and the iron can be guided with great facility. The handle does not need to be removed from the arm for change of irons, as the top piece *c* needs only to be slid from the pin in one iron

and slid upon the pin of another, and no cloth or holder is necessary to protect the hand from heat.

I claim—

1. The application of an arm-ring or rest-piece to the handle of a sad-iron, to operate substantially as described.

2. So applying the handle that the extent of its rocking movement can be regulated and adjusted substantially as set forth.

E. L. PRATT.

Witnesses:

J. B. CROSBY,  
FRANCIS GOULD.