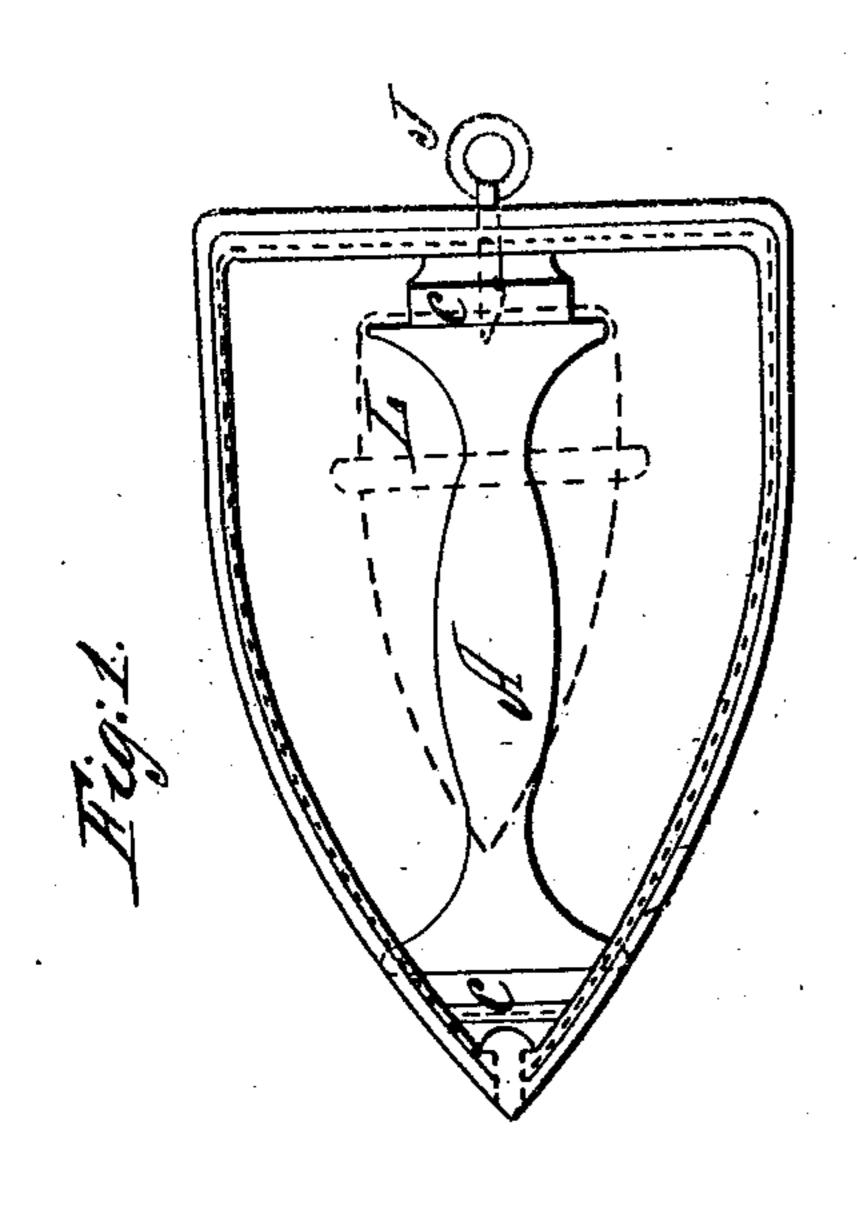
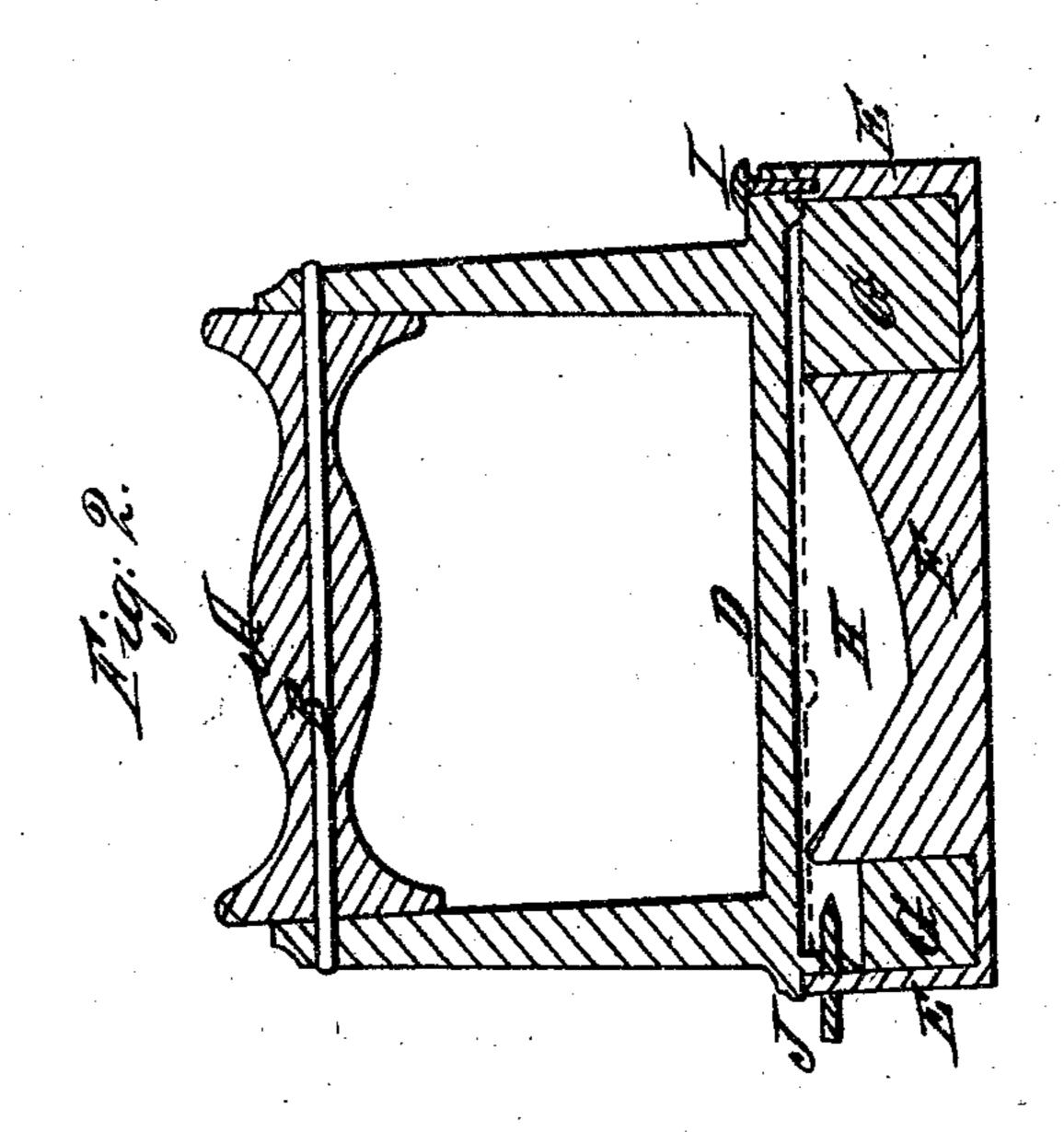
is not the primi

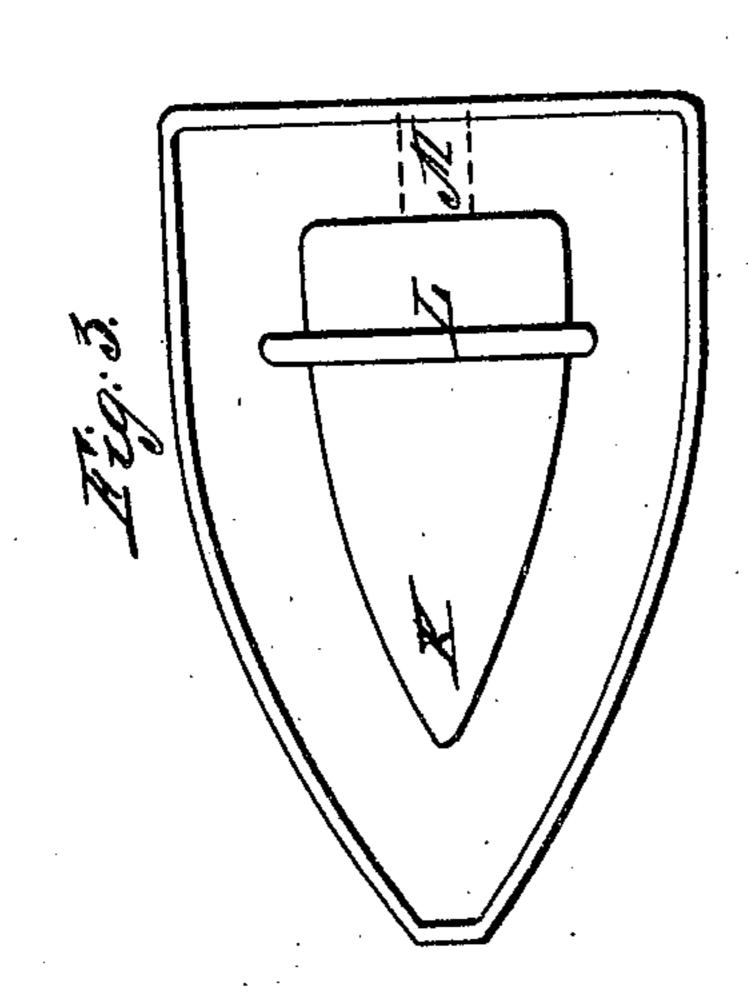
No. 10,408.

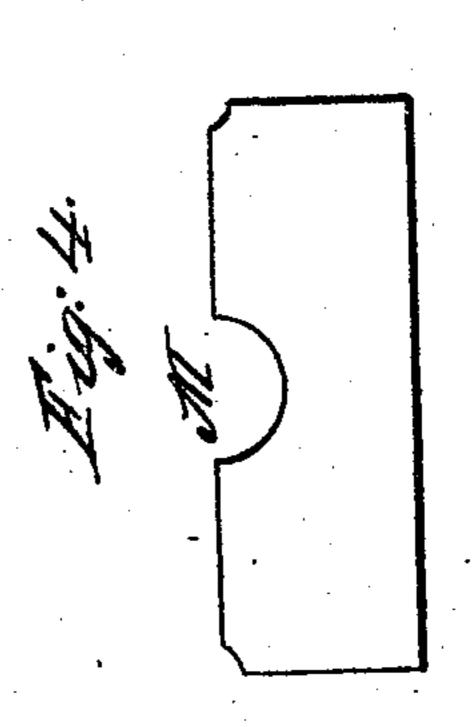
PATENTED JAN. 10, 1854.

## J. J. JOHNSTON. HEATER FOR SMOOTHING IRONS.









## UNITED STATES PATENT OFFICE.

JAMES J. JOHNSTON, OF ALLEGHENY CITY, PENNSYLVANIA.

## HEATER FOR SMOOTHING-IRONS.

Specification of Letters Patent No. 10,408, dated January 10, 1854.

To all whom it may concern:

Be it known that I, James J. Johnston, of Allegheny City, Allegheny county, Pennsylvania, have invented a new and useful Improvement in Box-Irons for Ironing or Smoothing Clothes; and I do hereby declare the following to be a full, clear, and exact description and representation of the same, reference being had to specification and drawings herewith filed.

Figure 1 is a top view of the box-iron. Fig. 2 is a central section lengthwise the handle of the box-iron and the heater all in place for use. Fig. 3 is a top view of the heater, and Fig. 4 is an end view of the

heater at its larger end.

The nature of my invention consists in giving to a box-iron for smoothing clothes a central conducting mass for carrying, by 20 means of a largely increased surface and body, the caloric of the heater directly to the smoothing surface of the box-iron, this central mass being cast in one body with the box-iron and it and the heater and the 25 box-iron corresponding in shape the one to the other, the heater being thus made in a way to prevent its usual working and also to give out a greater amount of heat than can otherwise be attained.

can otherwise be attained. 30 It is obvious that the heater cools from the surface toward its center, therefore the movement the outside of the heater gets cools, no matter what heat may still reside in the center of the mass of the heater, this 35 heat is not available. It is necessary to reheat the heater's outside surfaces. My plan first increases to a great extent these available outside surfaces and secondly applies a large mass directly to the heater for con-40 ducting the greatest possible amount of the caloric in the heater to the smoothing surfaces of the box-iron. Others have used box-irons and heaters and heaters, too, with small central opening for a fastening standard to 45 pass through, but I think it will be readily observed how my object is to apply a large mass in contact with the heater so as to draw off the heat by its contact and also its large conducting power, and as this conducting mass is thus placed directly in the center of 50 the smoothing surface, made part of the same, made central to the heater and thus protected in every way from cooling, it is obvious that my box-iron will be in condition for smoothing clothes much better 55 and for a longer period than any other. I can also heat the heater more readily on account of the large central opening.

(A) is a wooden handle with a wire (B) which fastens it to the standards (C), 60 which are cast to the lid (D). This lid is fastened to the body of the box-iron at its point by a broad-headed rivet (I), which holds the lid by means of a notch.

(J) is a pin which fastens the back end 65 of the lid to the body of the box-iron.

(E) is the box iron, made of the usual shape, pointed in front and broad at the back end, having the mass of iron (F) for absorbing the heat and conducting it to 70 the smoothing face, cast in its central portion and of similar form to itself. This mass is made with a cavity at (H), so that a hook can pass under the wire (L) of the heater, so as to lift the heater out thereby. 75

(M) is a notch sunk in the heater so as to permit the pin (J) to pass through the lug on the under part of the lid.

(K) is the opening in the heater, and (G) shows the heater as seen in section in Fig. 2. 80 What I claim as new and desire to secure by Letters Patent is—

The raised body (F) as described and represented and for the purposes described in its combinations with the heater with the 85 large central opening to fit the raised body, the raised body, the outer shell of the boxiron and the heater being adapted in shape and depth the one to the other for the purposes described.

JAMES J. JOHNSTON.

Attest:

ALEX. HAYS, JOSEPH JOHNSTON.