

J. JOHNSTON.

Sad Iron.

No. 10,409.

Patented Jan. 10, 1854.

Fig. 1

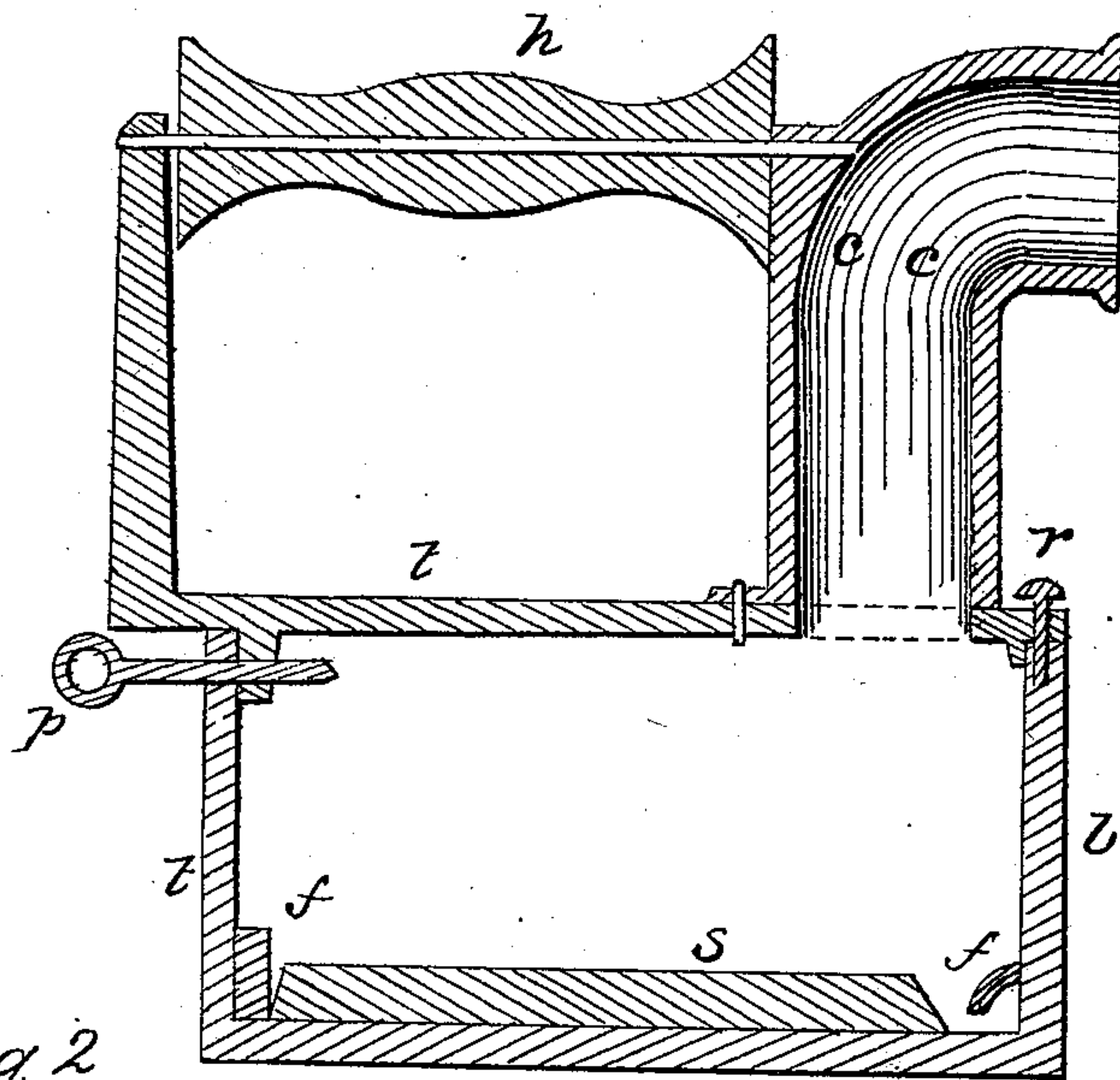


Fig. 2

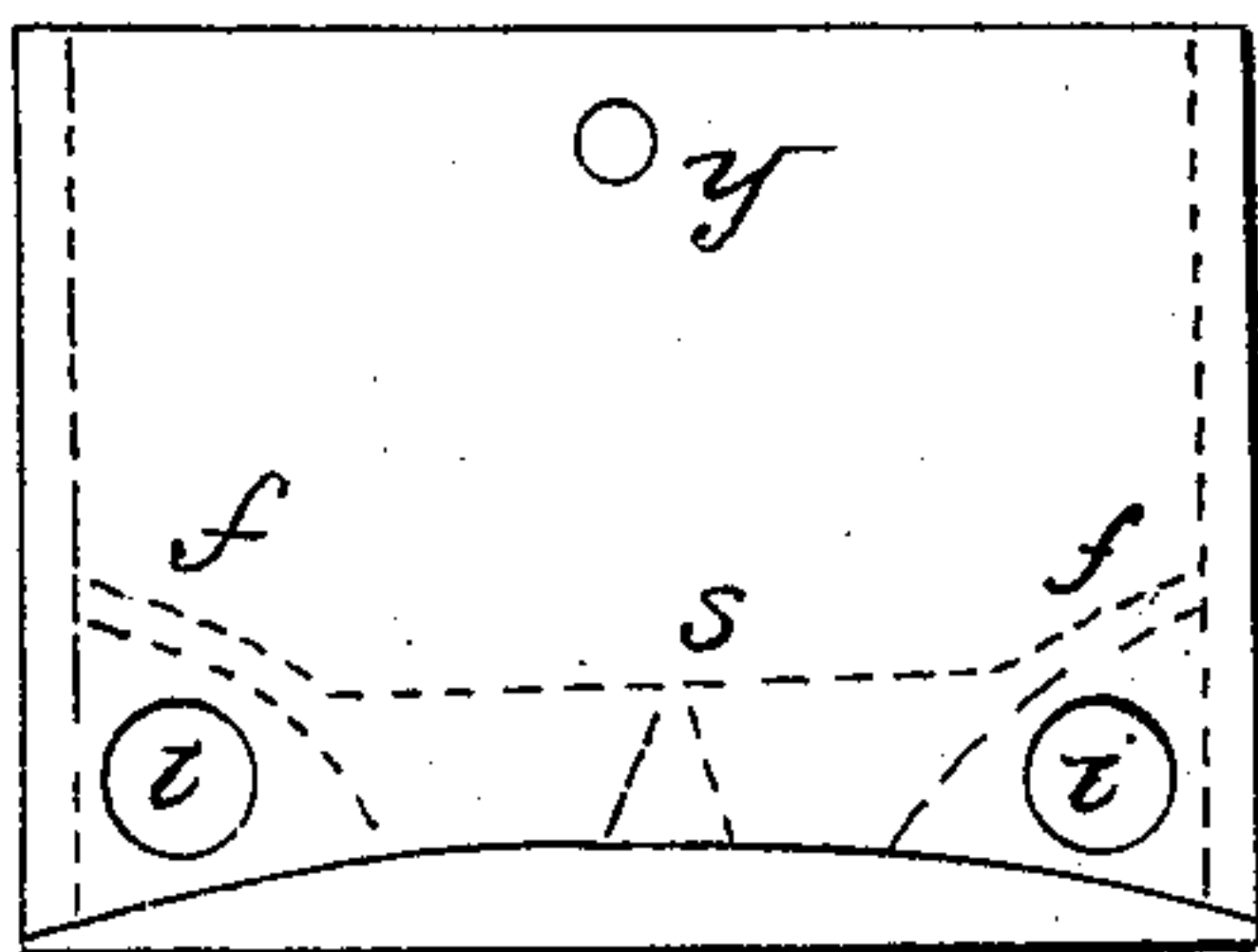


Fig. 3

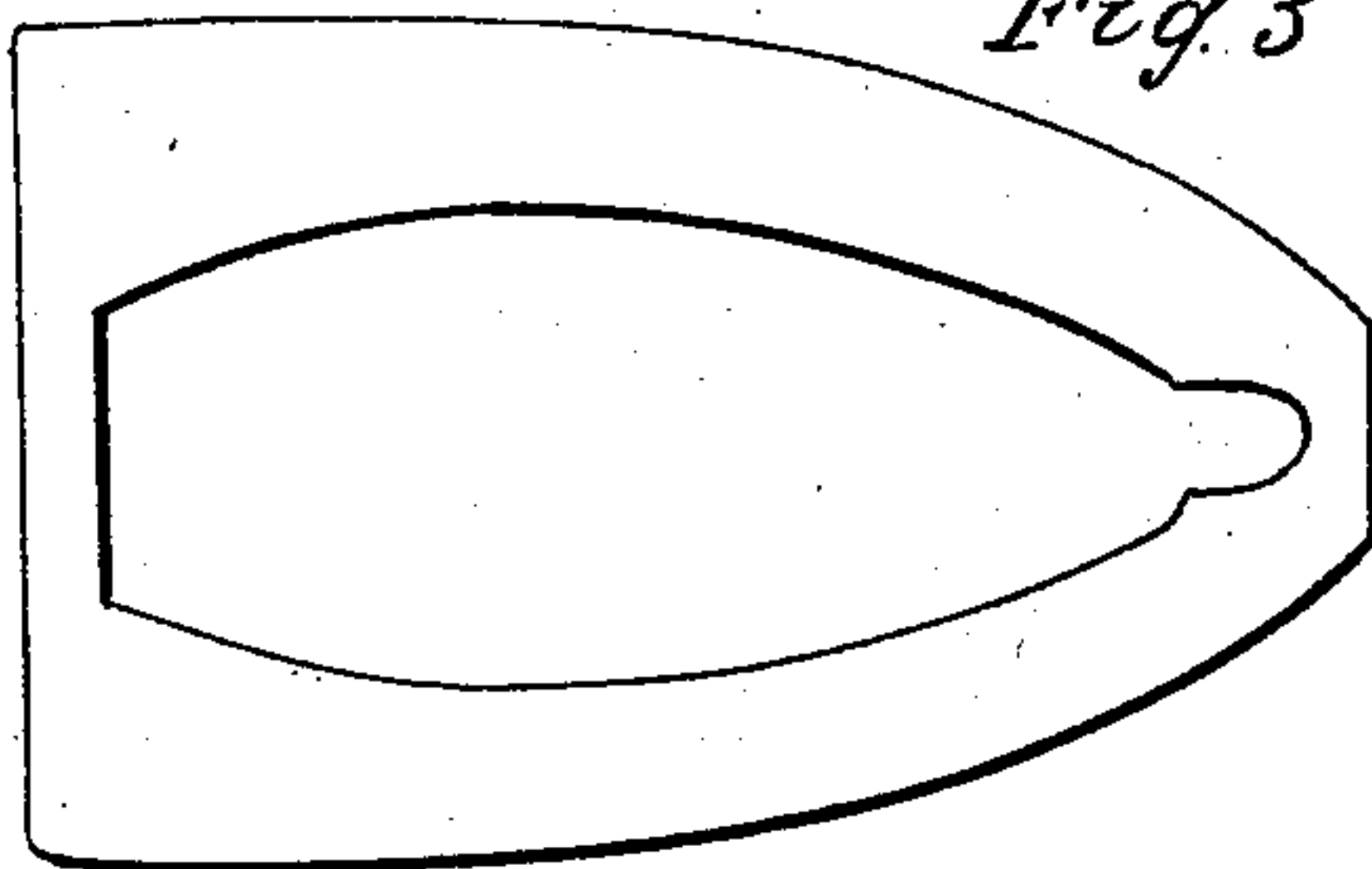
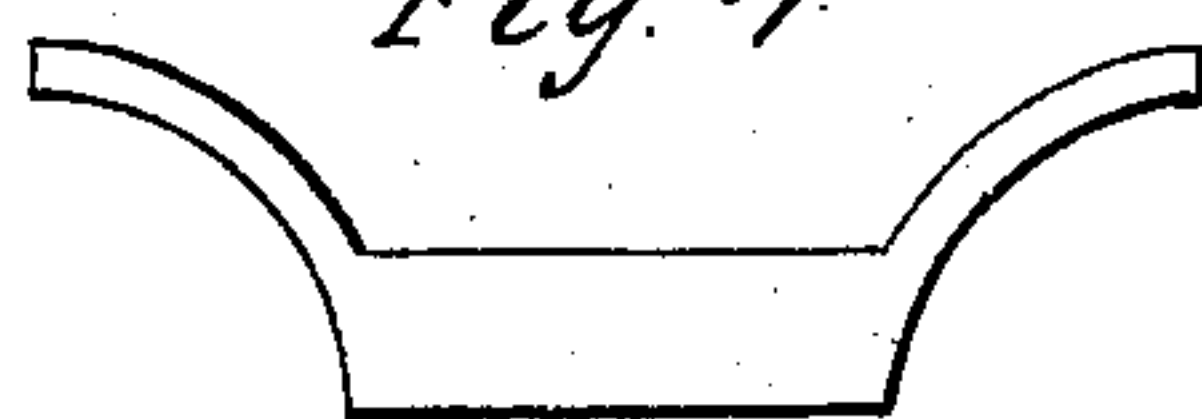


Fig. 4



UNITED STATES PATENT OFFICE.

JOHN JOHNSTON, OF ALLEGHENY CITY, PENNSYLVANIA.

SELF-HEATING SMOOTHING-IRON.

Specification of Letters Patent No. 10,409, dated January 10, 1854.

To all whom it may concern:

Be it known that I, JOHN JOHNSTON, of Allegheny City, in the county of Allegheny, the State of Pennsylvania, have invented a new and Improved Mode of Admitting Air to Charcoal or other Fires in Self-Heating Smoothing-Irons; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon.

The nature of my improvement consists in making a hollow iron with the upper part of the bottom convex, and with two flues commencing at the back end of the iron which run along the bottom and sides and unite at the point of the iron.

To enable others skilled in the art to make and use my improvement, I will proceed to describe its construction and operation.

I construct my iron in any of the known forms of selfheating smoothing irons, with chimney, handle, and the other appendages of such irons, but in order to increase the draft of air to the charcoal or other fire I construct my iron as represented in the drawings, which make part of this specification.

Figure 1, in the accompanying drawings represents a central section of the various parts of the iron. *h*, is a wooden handle. *w*, is a wire rod which passes through the wooden handle *h*, and is riveted to the support on the back end of the lid, and to the chimney on the front end, *c c*, is the chimney which is cast in a separate piece from the lid, and is riveted to the lid. *z*, is the top or lid, and is held to its place on the body of the iron by a notch in the point of it, which fits around the shoulder and under the head of rivet *r*, and at the back end by the pin *p*, which passes through the body of the iron near the top edge, and through the lug on the under part of the lid. *b b*, is the body of the iron. *s*, is a strip which is used to hold the charcoal or other fire up off the bottom of the iron. *f f* is the flue and flue plate. The flue plate is cut away at the point and along the sides, at its lower edge, to make an inlet for the air to the fire.

Fig. 2, is an end view of the body of the iron. *w*, is the convex bottom. *i i* are the openings into the flues. *s* is the strip in the

center of the bottom. *f f* are the flues. *y* is the hole for the pin *p*.

Fig. 3, is a top view of the flue plate.

Fig. 4, is an end view of the flue plate.

In using my iron, I remove the top and fill the body with burning charcoal or other fire, replace the top and secure it to the body of the iron, by means of the rivet *r*, and the pin *p*, let the iron thus prepared stand a few minutes. It is then ready for use.

The advantages of my improvements are that by means of the two flues and the convex bottom I obtain a stronger draft of air to the fire and greater amount of heat than is obtained by any of the selfheating irons now in use, and I also gain another advantage over other irons, viz. the advantages of clearing the fire from ashes and the ease with which the flues can be cleaned out, and also the admission of the air below the level of the bottom of the fire, all of which I gain, by means of the convex bottom and the arrangement of the flues.

In using the iron the motion of it will naturally cause the ashes and other refuse of combustion to settle down to the lowest point in the iron, which is the flues, thus keeping the heavy part of the bottom always clear to the action of the fire, thereby keeping up a strong and sharp heat, which is a very desirable thing in ironing damp clothes. To clean the flues (which should be done every fifteen or twenty minutes) turn the point of the iron up, and shake it, and the ashes will fall out at the openings *i i* in the back end of the iron.

I do not claim the chimney, wooden handle, and the fastenings for the top, &c., neither do I claim in general the use of a distributing flue over the bottom of the iron, as that device has been used before in the self-heating flat-iron of Toliaferro and Cummings, patented March 30th, 1852; but

What I do claim is—

The flues around the edges of the bottom as herein described in connection with the convexity of the upper part of the bottom of the iron, for the purpose herein mentioned.

JOHN JOHNSTON.

Attest:

HENRY SANDERS,
P. KINGSLAND.