C. EZARD.

Sad-Iron and Heater.

No. 205,371. Patented June 25, 1878.

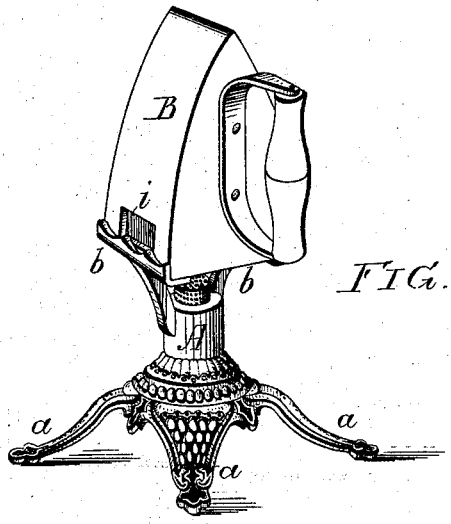

FIG. 1.

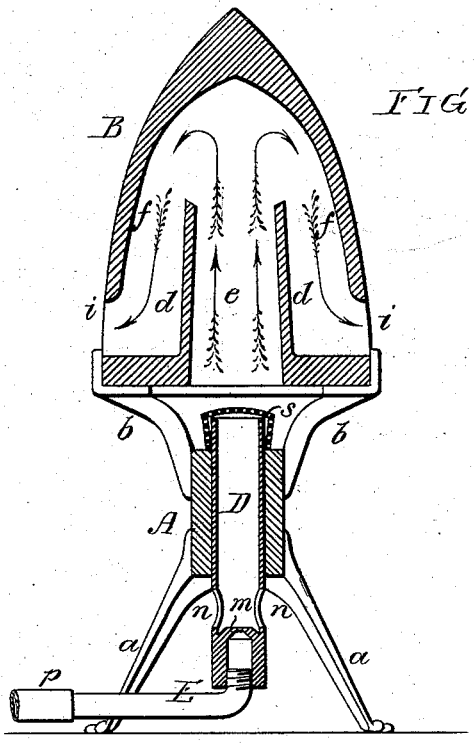

FIG. 2.

Witnesses,

Harry Smith

Jno. M. Dumer

Inventor,

Charles Ezard,

by his Attorneys

Howson and Sons

UNITED STATES PATENT OFFICE.

CHARLES EZARD, OF BRADFORD, ENGLAND.

IMPROVEMENT IN SAD-IRONS AND HEATERS.

Specification forming part of Letters Patent No. **205,371**, dated June 25, 1878; application filed March 4, 1878; patented in England December 29, 1876.

To all whom it may concern:

Be it known that I, CHARLES EZARD, of Bradford, Lancashire, England, have invented a new and useful Improvement in Sad-Irons, and in Heaters for the same, of which the following is a specification:

The object of my invention, for which an English patent, No. 5,043, dated December 29, 1876, was granted to myself and John Wallace, is to make a sad-iron which can be rapidly and thoroughly heated by a gas-flame, and to provide a convenient holder for retaining the iron while being heated. These objects I attain in the following manner, reference being had to the accompanying drawing, in which—

Figure 1 is a perspective view of my improved sad-iron and heater, and Fig. 2 a transverse section of the same.

A is a stand supported upon feet *a*, and provided at the top with brackets *b*, which serve to receive and support the sad-iron B in the manner shown in Fig. 1. The sad-iron is hollow, and has in the interior two partitions, *d*, of the character shown in Fig. 2, so as to form a central flue, *e*, communicating with the front ends of two side flues, *f f*, the latter terminating in openings *i*, formed in the edges of the iron near the rear end of the same.

The stand A has a central opening, to which is adapted a tube, D, having at the bottom a nozzle, *m*, and in its sides, adjacent to said nozzle, openings *n*. The nozzle *m* communicates with a pipe, E, which is connected, by means of flexible or other tubing, *p*, with any gas-burner or gas-pipe.

When the gas is turned on, a fine jet issues from the nozzle *m*, and induces air to enter through the openings *n*, the air and gas combining in the tube D and issuing from the perforations in the cap *s*, which covers the top of said tube D, the mixture of gas and air, when ignited, producing a flame of great heat.

When the sad-iron B is in position on the brackets *b* its central flue *e* is directly over the top of the burner, so that the flame will enter the said flue, the heated products taking the course pointed out by the arrows—that is, up through the central flue, down through the side flues *f*, and out at the openings *i*, thereby rapidly and thoroughly heating the iron with the expenditure of but a small quantity of gas.

I do not desire to claim, broadly, a sad-iron having flues through which volumes of heated air or heated products of combustion pass in order to heat the iron, as such irons have long been in use; but

I claim as my invention—

1. A sad-iron having the central flue *e*, side flues *f f*, and openings *i i*, as described.

2. The combination of a sad-iron having flues, as described, with a stand, A, having a central burner, and brackets *b b*, for supporting the iron, all substantially as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CHARLES EZARD.

Witnesses:

WM. H. S. WATTS,
Solicitor, Manchester.

J. HERBERT BROWNE.