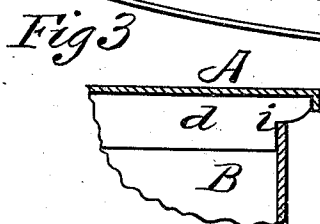
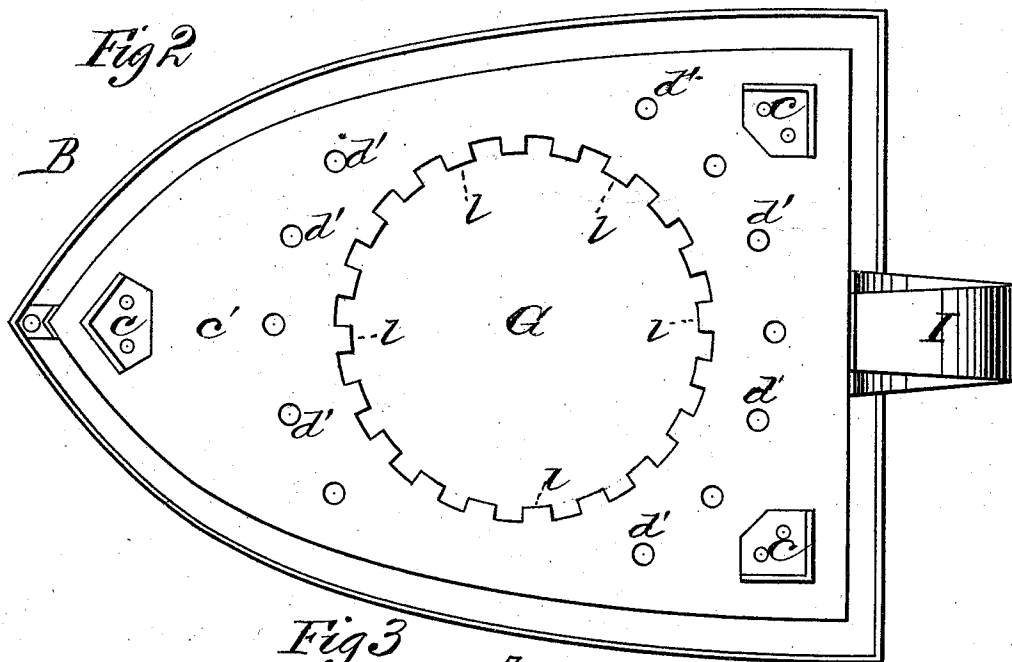
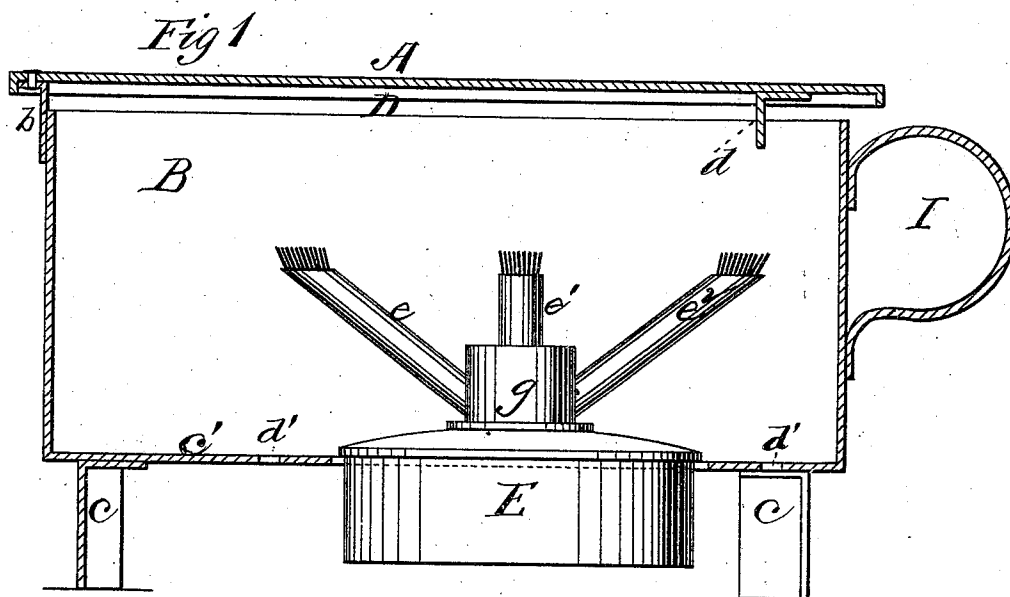


A. HITT, R. R. LOGAN & J. EGGINTON.

SAD-IRON HEATER.

No. 173,292.

Patented Feb. 8, 1876.



WITNESSES

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UNITED STATES PATENT OFFICE.

ADRIAN HITT, ROBERT R. LOGAN, AND JOHN EGGINTON, OF FLORA, ILL.

IMPROVEMENT IN SAD-IRON HEATERS.

Specification forming part of Letters Patent No. 173,292, dated February 8, 1876; application filed October 9, 1875.

To all whom it may concern:

Be it known that we, ADRIAN HITT, ROBERT RILEY LOGAN, and JOHN EGGINTON, of Flora, in the county of Clay and State of Illinois, have invented a new and valuable Improvement in Sad-Iron Heaters; and we do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a longitudinal vertical section of our sad-iron heater. Fig. 2 is a bottom view of the same, and Fig. 3 is a detail view.

This invention has relation to improvements in sad-iron heaters; and it consists in the construction and novel arrangement of a sheet-metal heating-plate pivoted at one end to the lamp-case or heater proper, and provided at its other end with a transverse shouldered supporting-flange, whereby the said plate is held free from the heater, and a space is formed between them, through which heat will come in direct contact with the edges of the sad-iron. It also consists in an orifice formed in the bottom of the heater, provided upon its edges with projecting flexible teeth, which, bearing against the periphery of the lamp, will prevent its casual detachment therefrom when it is borne from place to place, as will be hereinafter more fully explained.

In the annexed drawings, the letter A designates the top of the heater, which is made of sheet metal, and is of the general shape of the smoothing-plate of an ordinary sad-iron. The pointed end of this plate is pivoted to an upright post, *b*, at the corresponding end of a similarly-shaped hollow metallic vessel or case, B, and its larger end is provided upon its under side with a transverse metallic flange, *d*, rigidly secured in position, and adapted to be received between the walls of heater B.

Post *b* extends up above the walls of the heater, and flange *d* is rabbeted, a shoulder, *i*, being thus formed at each of its ends, which

will rest upon the upper edge of vessel B, and will hold the said plate free from the same at its large end.

By this means a space, D, will be formed between the heater-vessel B and the plate A, which will allow ventilation and the direct contact with the edges of the smoothing-plate of heat arising from the lamp E in the heater.

The bottom *c'* of the heater is provided with perforations *d'*, of suitable size, which are designed to allow air to penetrate into the interior of heater B, for the purpose of preventing the inflammable substance used in the lamp from becoming unduly heated and exploding, and of creating an upward draft.

Lamp E, before alluded to, differs in no essential respects from an ordinary spirit-lamp, and may be provided with three or more burners, *e e' e''*, radiating from the screw-cap *g*, and it is inserted from below into the heater B through an orifice, G, formed in the bottom *c'* thereof. The edges of this orifice are provided with teeth *l*, projecting inward to a common center, which teeth will flex upward when the lamp is inserted, but will react the moment the lamp is released, seizing it in a strong grasp, and effectually preventing its casual detachment from the heater.

In practice, heater B will be provided with legs *c*, which will hold its bottom above a table or other stand on which our improved heater may be placed. It will also have a handle, I, by means of which it may be conveniently moved from place to place without danger of burning the hand.

What we claim as new, and desire to secure by Letters Patent, is—

1. In a sad-iron heater, the heating-plate A, pivoted to heater B, and raised above the same at one end by means of metal post *b*, and at the other end provided with a transverse flange, *d*, having shoulders *i*, adapted to be received between the walls of the heater, substantially as specified.

2. The combination, with the lamp E, of the heater B, having an orifice, G, in its bot-

tom, provided with teeth or indentations *l* on its edges, substantially as and for the purpose specified.

3. The combination, with the sad-iron-shaped heater B, of the horizontally-vibrating supporting-plate A, raised above the level of the heater, and forming a space around its edges, substantially as specified.

In testimony that we claim the above we have

hereunto subscribed our names in the presence of two witnesses.

ADRIAN HITT.
ROBERT RILEY LOGAN.
JOHN EGGINTON.

Witnesses:
JOHN C. ROSS,
D. M. SMITH.