

J. VAN GUMSTER.
 Thermometer Attachment for Sad Irons.
 No. 204,637. Patented June 4, 1878.

Fig. 1.

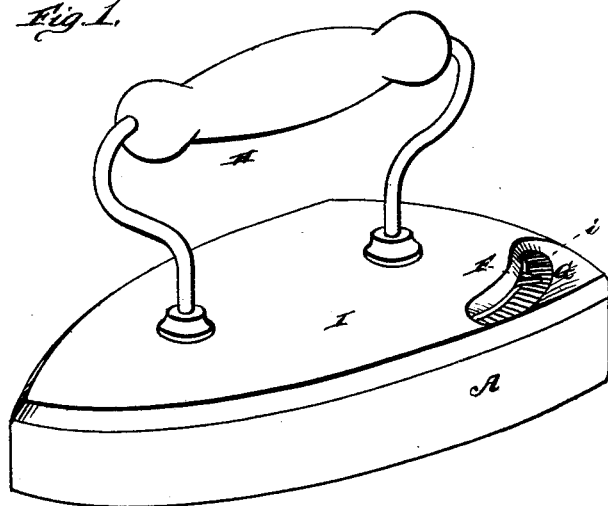
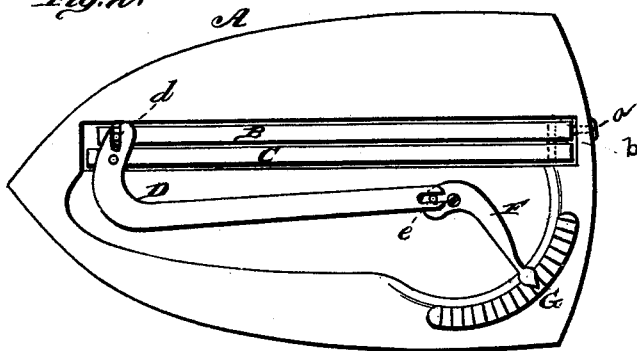


Fig. 2.



WITNESSES
Robert Crockett
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INVENTOR.
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ATTORNEYS.

UNITED STATES PATENT OFFICE.

JOHN VAN GUMSTER, OF ILION, NEW YORK, ASSIGNOR OF ONE-HALF HIS
RIGHT TO CHARLES W. NORTON, OF SAME PLACE.

IMPROVEMENT IN THERMOMETER ATTACHMENTS FOR SAD-IRONS.

Specification forming part of Letters Patent No. **204,637**, dated June 4, 1878; application filed
May 11, 1878.

To all whom it may concern:

Be it known that I, JOHN VAN GUMSTER, of Ilion, in the county of Herkimer and State of New York, have invented a new and valuable Improvement in Sad-Irons; and I 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 representation of a perspective view of my sad-iron, and Fig. 2 is a plan view with the cover removed.

My invention relates to sad-irons; and it consists in providing the same with an inclosed thermometer, for indicating certain heat requisite for different kinds of goods, and in the construction and combination of parts, as will be hereinafter more fully set forth.

The annexed drawings, to which reference is made, fully illustrate my invention.

A represents an ordinary sad-iron, in the upper surface of which are formed suitable recesses to receive the working parts of my device. B and C represent two straight bars of metal or other suitable material, the bar B being of such metal as will freely expand by heat, while the bar C is made of less expansible or non-expansible material. The bar B is attached to the heel of the flat-iron by a screw, *a*, and the two bars are, at or near this end, connected by a transverse pin, *b*, both being sunk into the space provided for them. Attaching these bars to the heel end of the iron only is to overcome the action of the expansion of the iron in itself.

On the forward end of the less expansible bar C is pivoted a lever, D, the smaller end of which is slotted, and fits over a pin, *d*, in the expansible bar B. The long end of the lever D is also slotted, and fits over a pin, *e*, on an index-hand, F, pivoted to the iron. As the bar B expands it turns the lever D, and this turns the index-hand F to show the degree of heat upon an index, G.

The entire device is then covered by a plate, I, to which the handle H is attached, said plate being fastened to the iron by bolts or otherwise, retaining the heat and protecting the working parts of the device. In the cover I is a quadrant-slot, *i*, through which the index can be plainly seen, and this may have glass or isinglass inserted to protect the index and the whole interior from dust, &c.

The less or non-expansible bar C may be made of pottery, slate, marble, porcelain, or other like non-expansive material. This bar may, however, be entirely dispensed with, in which case the pivotal pin of the lever D is fixed in the sad-iron itself, and sufficient indication is obtained in the difference of expansion between the bar B and the sad-iron itself.

I may also add a spring to act upon the lever D for taking up any lost motion which may occur in the contraction, thus rendering the action of the index-finger more sensitive and accurate, especially on its retarding action during the cooling of the sad-iron.

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

1. A sad-iron provided with a thermometer inclosed within the iron, and operating on an index to show the degree of heat, as herein set forth.

2. The combination, with a sad-iron, of an expansible bar, an intermediate lever, and an index-hand, substantially as and for the purposes herein set forth.

3. The combination, with the iron A, of the bar B, lever D, index-hand F, index G, and the covering-plate I, with handle H, all constructed substantially as and for the purposes herein set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

JOHN VAN GUMSTER.

Witnesses:

L. L. MERRS,
WM. H. ELLIOT.