(No Model.) 2 Sheets—Sheet 1.

H. CLAYTON.

SAD IRON.

No. 500,854. Patented July 4, 1893.

Fig. 2.

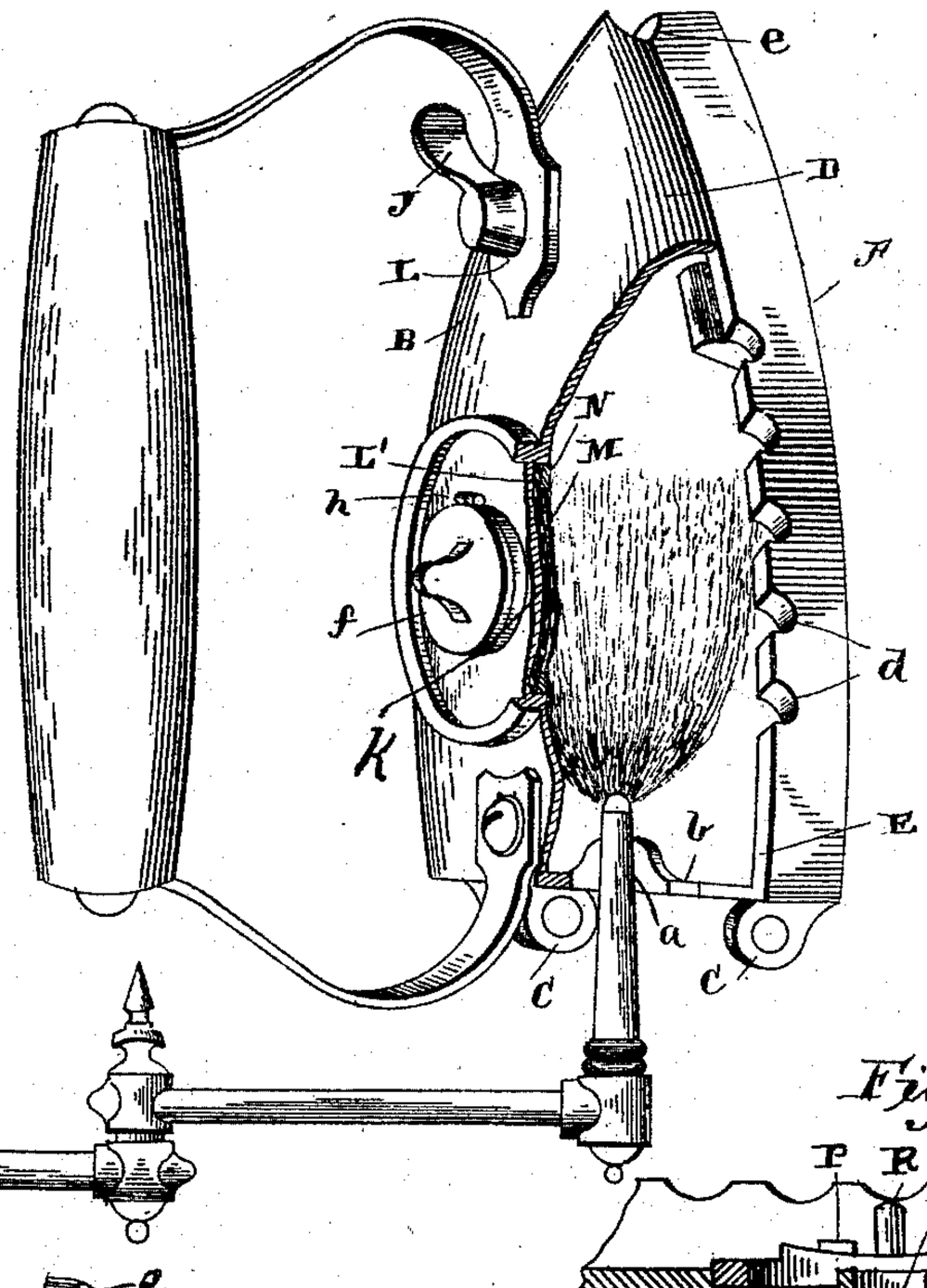


Fig. 4.

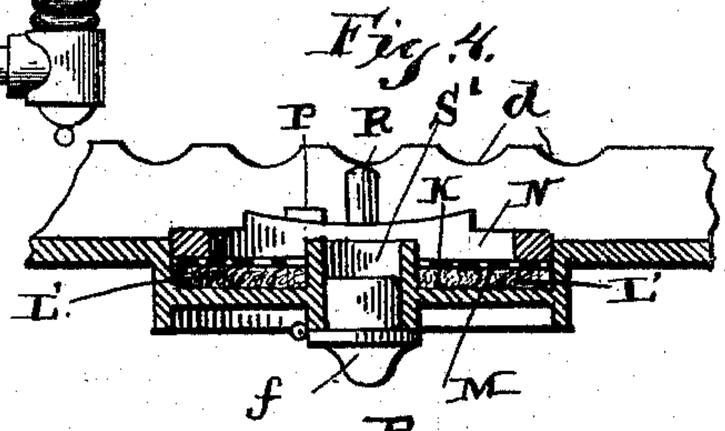


Fig. 3.

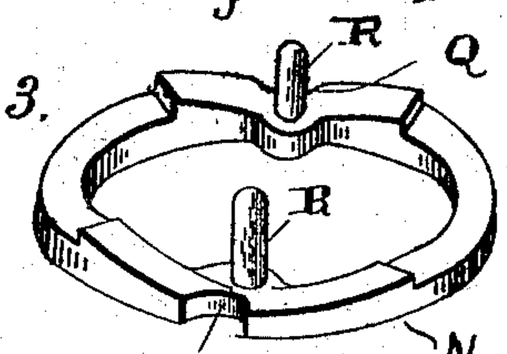
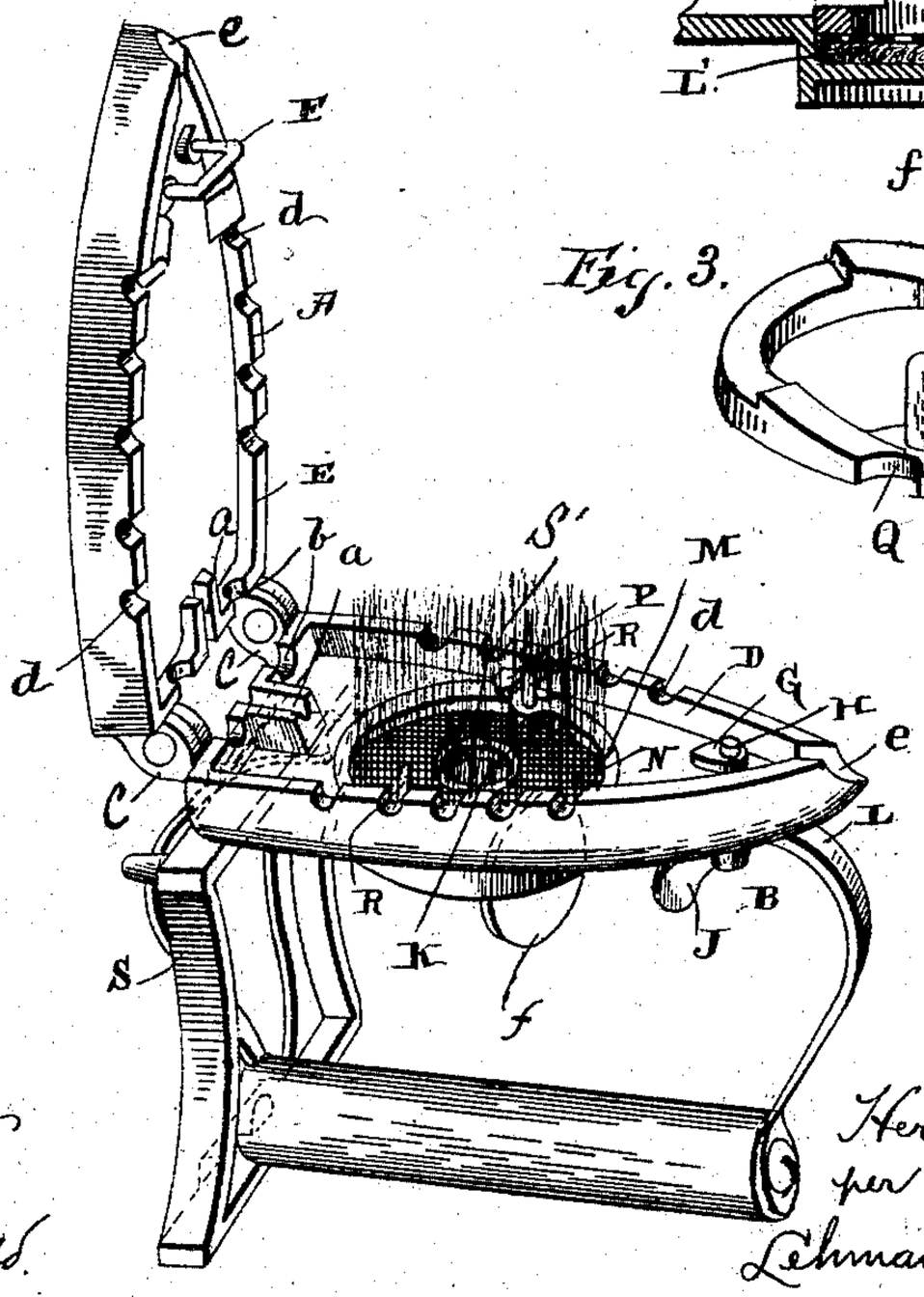


Fig. 1.



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(No Model.)

2 Sheets—Sheet 2.

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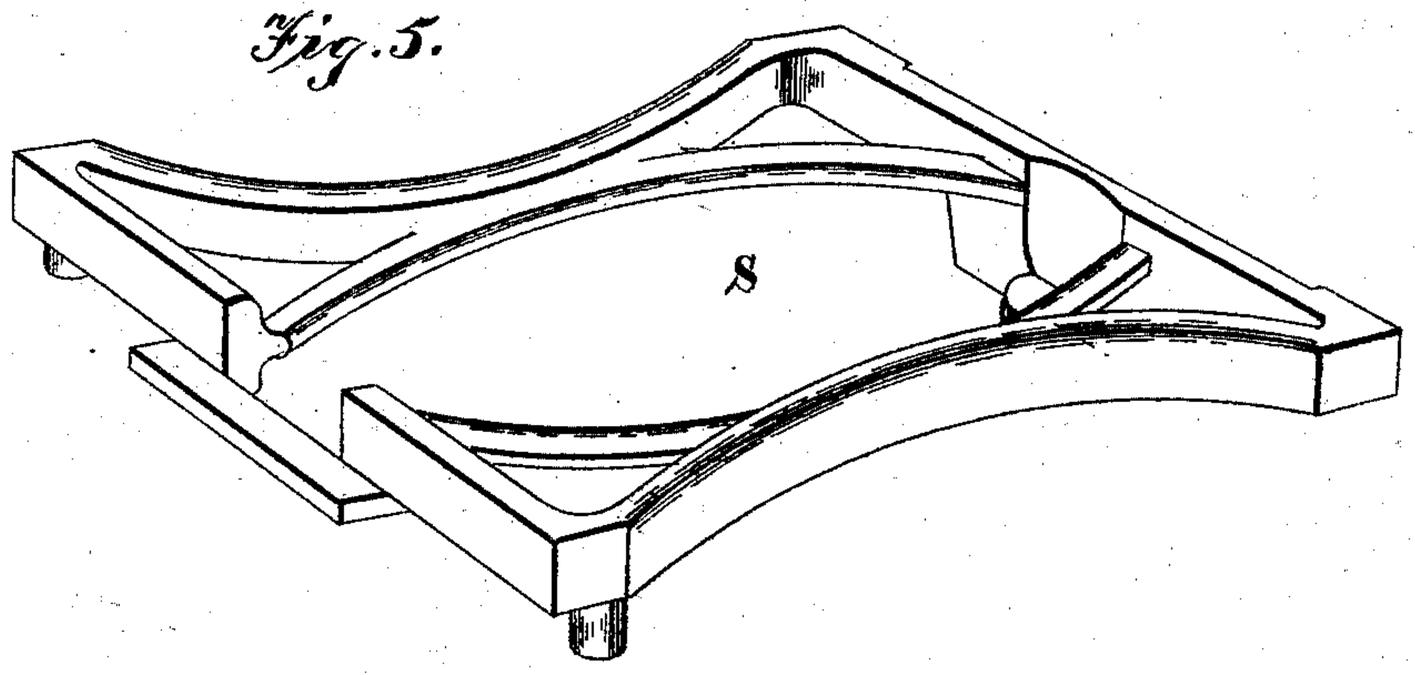
Fig. 5.



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UNITED STATES PATENT OFFICE.

HERBERT CLAYTON, OF NEW YORK, N. Y.

SAD-IRON.

SPECIFICATION forming part of Letters Patent No. 500,854, dated July 4, 1893.

Application filed September 9, 1892. Serial No. 445,431. (No model.)

To all whom it may concern:

Be it known that I, HERBERT CLAYTON, of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Sad-Irons; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to improvements in sad irons, and it consists in the construction and arrangement of parts, which will be fully described hereinafter, and particularly pointed out in the claims.

The object of my invention is to provide a sad iron as hereinafter fully shown and described, whereby it is adapted to be heated by alcohol or by a gas jet.

In the accompanying drawings,—Figure 1, is an inverted perspective view of my iron, the parts thereof being separated, showing the alcohol stove, and also the support for holding the iron in this inverted position. Fig. 2, is a perspective view of the iron showing it applied to the gas burner to be heated, and partly in section. Fig. 3, is a perspective view of the clamping ring N. Fig. 4, is a detail view of the alcohol stove showing the air inlet in the top of the iron, and the position of the stopper. Fig. 5, is a detached view of the iron support, the same being in a position to be used as an ordinary iron holder.

A indicates the lower part of my iron, which is made thick to retain heat, the outer face of which forms the ironing surface. Placed upon this lower part A is an upper part B, the two being hinged together, at their rear ends by means of the perforated ears C, and pivotal pins passing through them. This upper part B is made thin or shell like and is provided with depending edge walls D, that rest on the narrow upwardly extending edge walls E of the lower or ironing part A. In this manner a space is formed between the two parts, which space is a combustion chamber, as will appear farther on.

Extending upward from the front end of the lower part A, is a staple F which is engaged by a turning button G secured to the inner end of a rod H, the outer end of the rod passing through the front part I of the handle, and is provided with a handle J, by means of which the said rod and button are turned. By turning the said handle in one direction the button is turned within the said staple and the two parts of the iron locked together, but when turned in the opposite direction is disengaged, so that the parts can be separated, as shown in Fig. 1.

Made in the center of the upper part B, is an internal cavity K of any desired size, in which asbestus L′ is placed, and over this asbestus is a wire netting M. This netting is held in place by means of a ring N which fits in said cavity, and under the lugs P that extend inward over the cavity. To allow the ring to be placed in the cavity, two recesses Q are made in the periphery thereof, which are made to register with said lugs, and the ring turned under the lugs by the handles or projections R extending from the ring. The outer surface of the ring is preferably inclined at each side of the recesses, so that when it will be turned it will be tightened in place, as will be readily understood.

For the purpose of holding the iron in the inverted position, shown in Fig. 1, I provide a supporting frame S which is placed, as illustrated, with one end under the rear end of the iron, and inclosing the adjacent end of the handle, the opposite end of the handle resting upon the object holding the iron. This affords a firm rest and support for the iron when heating with alcohol and a rest or holder for the iron when in use, like the ordinary iron holder.

The above construction forms what I call an alcohol stove. By pouring a tea-spoonful of alcohol upon the asbestus, when the iron is supported in an inverted position, as shown in Fig. 1, and closing the two parts of the iron together, the flames impinge upon the lower part of the iron which soon becomes heated.

Air is fed into the iron for combustion through the air inlet S′, (when alcohol is being used) preferably made through the center of the alcohol stove, though several openings may be made through the stove, or several openings around the stove, either of which would serve the purpose intended.

Made in the center of the rear of the two

parts of the iron are the recesses *a*, which register and form together an opening through which the gas burner is inserted, as shown in Fig. 2, when the iron is being heated by gas. At each side of the central recesses *a*, are the recesses *b*, which form air inlets to feed combustion, and in the side walls are recesses *d*, which register when the parts of the iron are together and form air openings through which the products of combustion pass. In the point of the two parts of the iron are the recesses *e*, which form an opening for the same purpose, thus causing the flame to spread and heat the entire surface. When alcohol is being used, owing to the openings all around the iron, the flame is spread over the entire surface of the ironing part A.

In order to prevent the escape of heat through the opening S′, and striking the hand of the user, a stopper *f*, is provided which fits in said opening. This stopper or cover is secured to the iron by means of a hinge *h*. When the gas is being used, the cover or stopper is placed in the opening S′, but when the iron is inverted for the use of alcohol it will drop out of itself.

An iron of the above described construction is especially useful to persons boarding that desire to do a small amount of ironing in their rooms, and also to those in hotels, and to persons not having the facilities of a range or stove upon which to place their iron. It is also especially adapted for persons traveling, as it can be heated by alcohol when gas is not at hand, and vice versa, it being cheap and easily operated.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. A sad iron having a combustion chamber, the lower portion thereof forming an ironing surface, the upper wall having an interior cavity, a non combustible absorbent material within the cavity, and the upper and side walls having air openings, substantially as specified.

2. A sad iron having a combustion chamber the lower portion thereof forming an ironing surface, a non combustible absorbent material secured to the inner side of the upper wall, and the upper and side walls having air openings, substantially as described.

3. A sad iron having a combustion chamber the lower portion thereof forming an ironing surface, the upper wall having an interior cavity, a non combustible absorbent material placed in the cavity, a clamping ring for said material also within the cavity, the upper and side walls having air openings, substantially as described.

4. A sad iron composed of two separable parts, one part forming an ironing surface, and the other part carrying an absorbent material upon its inner side, whereby access to said material is afforded, and air openings in the part carrying the absorbent material and the sides of the two parts, substantially as described.

5. A sad iron having a combustion chamber, the lower portion forming an ironing surface, the upper wall having a non combustible absorbent material, and the air inlets, in the iron combined with a detachable stand or support for holding the iron in an inverted position, substantially as specified.

In testimony whereof I affix my signature in presence of two witnesses.

HERBERT CLAYTON.

Witnesses:
ALLEN S. PATTISON,
GEO. E. FRECH.