

L. MARGOLIS.
SAD IRON.

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1,057,863.

Patented Apr. 1, 1913.

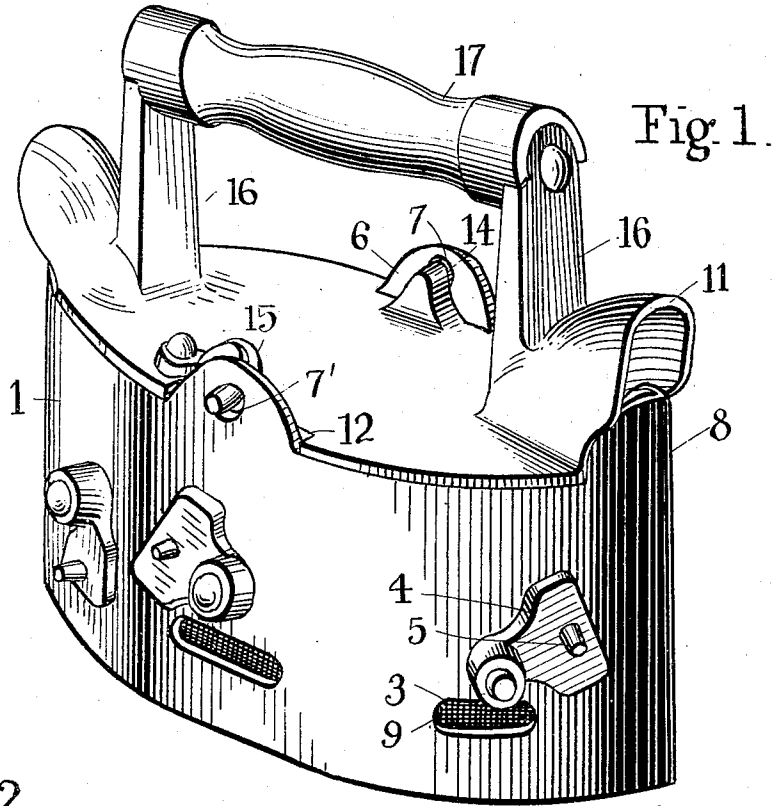
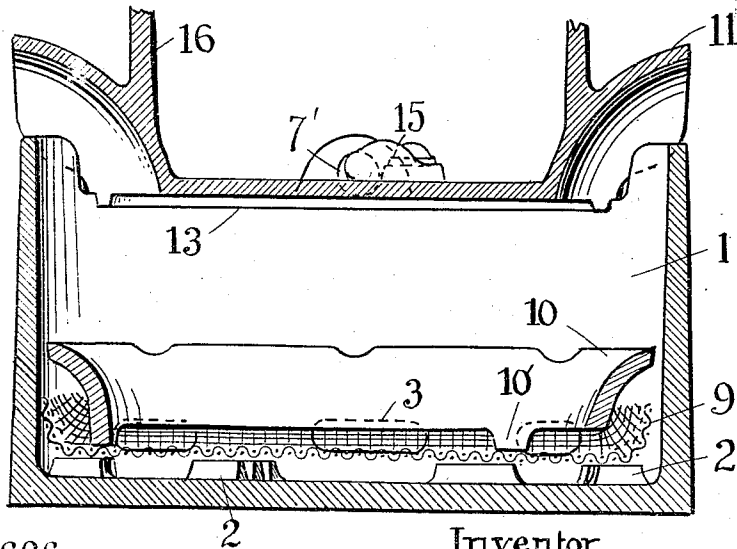


Fig. 2.



Witnesses

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UNITED STATES PATENT OFFICE.

LOUIS MARGOLIS, OF NEW YORK, N. Y.

SAD-IRON.

1,057,863.

Specification of Letters Patent.

Patented Apr. 1, 1913.

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To all whom it may concern:

Be it known that I, LOUIS MARGOLIS, a resident of the borough of the Bronx, city, county, and State of New York, have invented certain new and useful Improvements in Sad-Irons, of which the following is a specification.

My invention relates to sad-irons which are heated by means of combustion within the iron itself, and which are commonly known as carbon or charcoal irons.

The object of my invention is to produce an iron which shall be uniformly heated over its entire face and in which the source of heat shall be brought in as close proximity to the face as possible.

A further object of the invention is to provide against the dropping or throwing out of ashes or fuel upon the material being ironed through the ports by which the air is admitted to the fuel.

To this end my invention consists in the peculiar arrangement, construction and combination of parts hereinafter more fully described and claimed.

In the accompanying sheet of drawings, which forms a part of this application—Figure 1 is a perspective of the iron, and Fig. 2 is a vertical longitudinal section.

The body of the iron is hollow and provides a fuel chamber 1 at the bottom of which is located lugs 2 which may conveniently be cast integral with the iron. Slightly above these lugs are arranged on each side, one at each end and one in the middle, air inlet-ports 3, the current of air entering therein being governed by regulators 4 which are provided with knobs 5 for convenient manipulation and are pivoted to the body of the iron. On each side of the body of the iron at the top are ears 6 having apertures 7 and 7' for use in fastening the cover to the iron. The points 8 of the iron may also be raised to afford a shield against the throwing out of ashes or fuel, should the iron be tilted, and to elevate the chimney opening for increasing the draft.

Resting on the lugs 2 is a wire gauze 9 which has its sides turned up to completely cover the air inlet-ports 3 and upon which the fuel for heating the iron is placed.

A deflector 10, only sufficiently smaller than the chamber to permit its easy removal therefrom, may be provided with short legs 10' which rest upon the gauze 9 and are of such length that the bottom of the deflector

is not raised above the tops of the inlet-ports 3. The sides of the deflector are curved downwardly and inwardly, so that most of the air entering the ports is diffused and given a downward direction, and passes beneath and up through the gauze to the fuel from the bottom, thus affording the intensest heat there. In the construction described a slight space is left between the top of the gauze and the bottom of the deflector, so that a small portion of the air entering strikes the fuel all along the sides of the iron. This arrangement insures combustion over the entire bottom and lower edges of the iron where it is most needed.

The cover of the iron, at either end, is provided with elevated portions 11, which with the raised points of the iron, form chimneys through which the gases from the fuel pass. The sides of the cover are cut away at 12, so as to fit snugly around the ears 6 to keep it from shucking when the iron is in use. An additional means for this purpose is a depending flange 13, which fits closely around the inside of the body of the iron. On one side of the cover is a pin 14 which enters one of the apertures 7—7' and on the other side is a pivoted dog 15, which can be swung in and out of the other aperture. The dog may be made tapering, to take up wear and assure a tight joint. The pin 14 and the dog 15 fasten the cover to the body of the iron and permit its ready removal. Risers 16 are cast integral with the cover and afford convenient means for attaching the wooden handle 17.

In operation of the iron the cover is removed and the desired amount and character of fuel placed in the iron upon the gauze and lighted. The cover is replaced and the regulators 4 are adjusted in such manner that the proper degree of heat is maintained for the ironing in hand. When the ironing is completed the ports are closed and the combustion ceases. The ashes and unburned fuel can then be removed by simply taking off the cover. The gauze, in preventing any foreign matter from being thrown onto the fabric ironed, permits the operator to move the iron back and forth at any rate of speed desired; and, further, being very thin and of little substance, absorbs a minimum amount of heat and permits the combustion to be carried on in the closest proximity to the bottom of the iron possible. The arrangement of the inlet-ports and deflector

insures uniform combustion all over the bottom and lower edges of the iron, with uniform heating thereof as the result.

It is to be understood that I do not desire to be limited to the exact details shown and described, for obvious modifications will occur to those skilled in the art.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent of the United States, is—

In an internally heated sad-iron, the combination with a hollow body, of a gauze grating supported in close proximity to the bottom thereof, air inlet-ports, the gauze being

turned up to cover the ports, and a deflector adapted to fit closely around the interior of the hollow body above the air inlet-ports, the sides of the deflector extending downwardly and inwardly therefrom, substantially as described.

Signed at New York city, in the county of New York, State of New York, the 4th day of August, 1911.

LOUIS MARGOLIS.

Witnesses:

GEORGE H. GILMAN,
JAMES T. LAW.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."