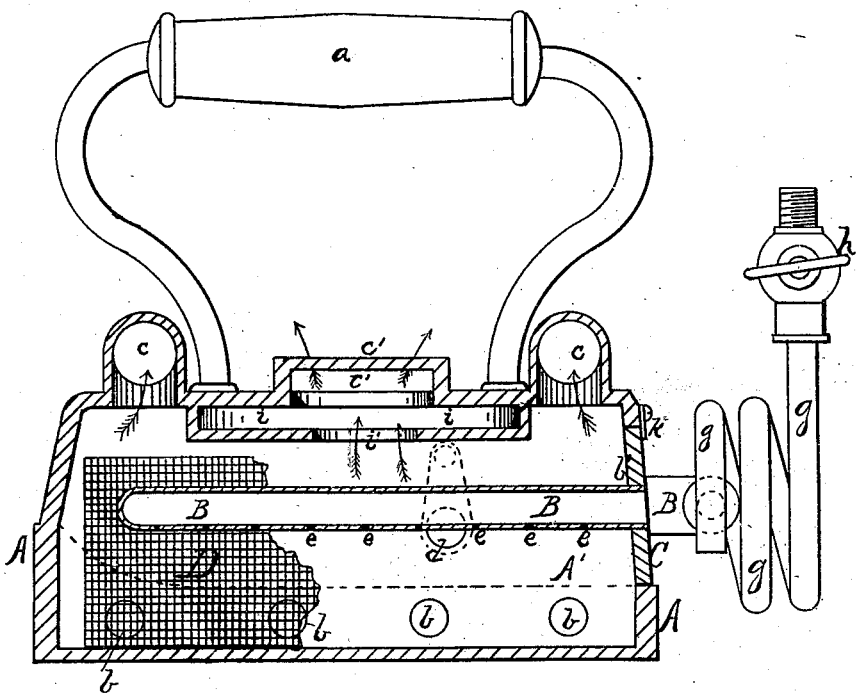
C. H. WESTPHAL.

SAD-IRON.

No. 186,697. Patented Jan. 30, 1877.



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UNITED STATES PATENT OFFICE

CHARLES H. WESTPHAL, OF BUFFALO, NEW YORK.

IMPROVEMENT IN SAD-IRONS.

Specification forming part of Letters Patent No. **186,697**, dated January 30, 1877; application filed December 29, 1876.

To all whom it may concern:

Be it known that I, CHARLES HENRY WESTPHAL, of Buffalo, in the county of Erie and State of New York, have made certain Improvements in Sad-Irons, of which the following is a specification:

This invention relates to hollow sad-irons, heated by gas; and it consists in providing inside of the iron a long pipe, having a series of gas-jet openings on its under side, the end outside being spirally bent and ending in an adjustable stop-cock, to which can be attached a flexible hose leading from any gas-pipe or burner near the ironing-table, and which supplies the gas to the iron, the cock regulating the flow of gas. The side of the iron is provided with suitable air-openings, also the end piece, which is removable. Chimneys are also provided in the top for the escape of superfluous heat and to give the proper draft. A wire or perforated frame-work surrounds the gas-pipe inside the iron to keep in the heat and steady the flame, all as hereinafter fully described.

In the drawing, the figure represents a vertical cross-section of the device.

A represents the outside case or main body of the sad-iron, made hollow, forming a heating-chamber, A′, and with the usual handle *a* attached to the top. The sides, near the bottom, are provided with holes *b b b* to supply the necessary air inside for the burning of the gas, and the top of the iron has two chimneys or openings, *c c*, for the escape of superfluous heat and to create a draft. An additional top chimney, *c′*, at the side is provided, that leads into the inside of the iron also, but connecting with a hollow space or chamber, *i*, having openings *i′ i′*, one at each side, so as to get a better and more complete draft of air through the iron, and thereby a better and clearer combustion of the gas. The mouths of all these chimneys *c c c* are at the right hand of the handle, so that the user of the iron will not have the heat coming upward or inward while ironing, but always away from the hand, also preventing inhaling the heat and odor of gas.

An opening, *d*, in the side, is made to light the gas, and a slide or cover is provided to close the opening when the gas is lit.

The gas-pipe B extends nearly the length of the iron inside, and has on its under side a series of jet-openings, *e e*, which, when the gas is ignited, throw out a sheet of flame, making a diffusion of the heat all over the bottom of the iron. This pipe B is screwed firmly into a back-plate, C, which has air-openings *b′ b′*, like those (*b b*) in the sides, and which is fastened into the iron by a latch, *k*, at the top, and a groove at the bottom. On the outside of this back-plate C the gas-pipe B′ is continued in a worm or series of convolutions, *g g*, for the purpose of retaining therein the heat escaping from the gas-pipe inside; and, to prevent the rubber hose from being heated, this is important. It ends in a joint, provided with a regular gas stop-cock, *n*, to regulate or shut off the flow of gas. The flexible pipe will be attached to this joint when the iron is to be used, and connected to a gas-jet at or near the ironing-table. D is a wire frame-work or perforated piece, fitting around inside the iron, which is important in this connection, as it steadies and keeps the flame of the gas-jets from the sides and from rushing through the air-holes *b b*, preventing it thereby from scorching the clothes that are being ironed.

This iron is heated in a very few minutes, ready for use, and can be kept hot, and the heat regulated, as long as desired, requiring only one iron for any amount of work, and ready at all times where gas is used. It avoids all the trouble of inserting heated appliances, either iron, coal, kerosene, oil-lamps, &c.

I claim—

1. In a gas sad-iron, the gas-pipe B inside the heating-chamber A′, provided on the under side with a series of jet-openings, *e e e*, and outside ending in a worm or series of convolutions, *g g*, and a regulating-cock, *n*, substantially as and for the purpose specified.

2. The sad-iron case A, constructed with the air-openings *c c c*, chamber *i*, with openings *i′ i′*, as and for the purpose specified.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

CHARLES HENRY WESTPHAL.

Witnesses:

J. R. DRAKE,

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