W. McCARTY.

Flat-Iron and Heater.

No. 212,247. Patented Feb. 11, 1879.

Fig. 1

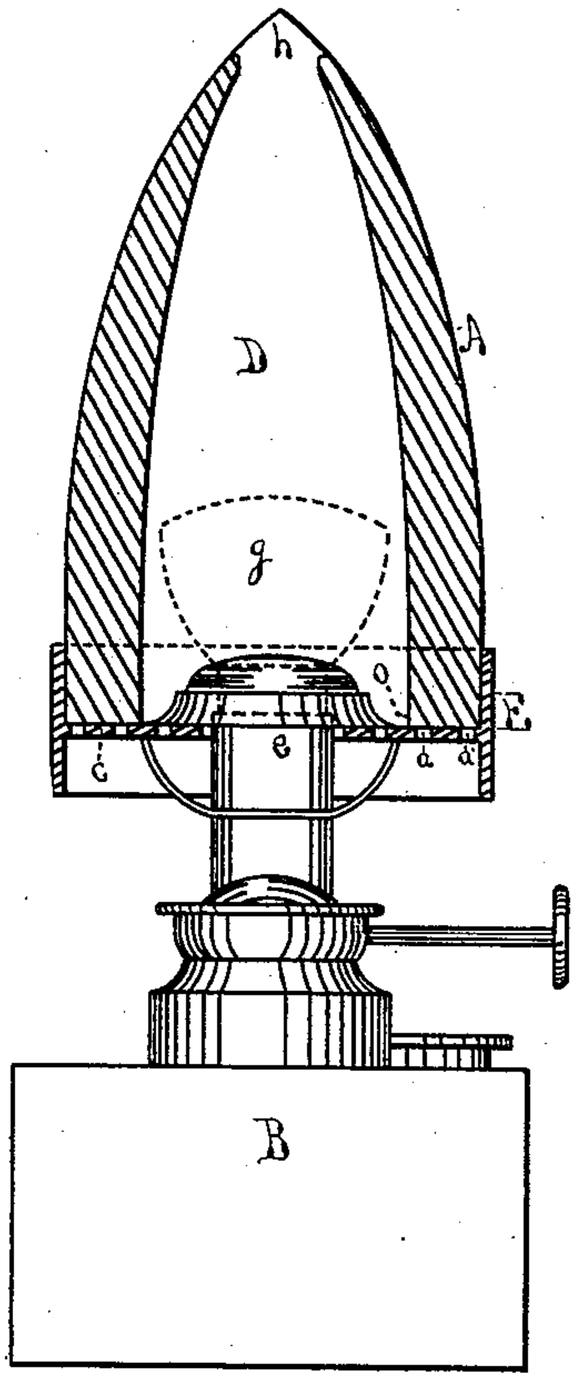


Fig. 2

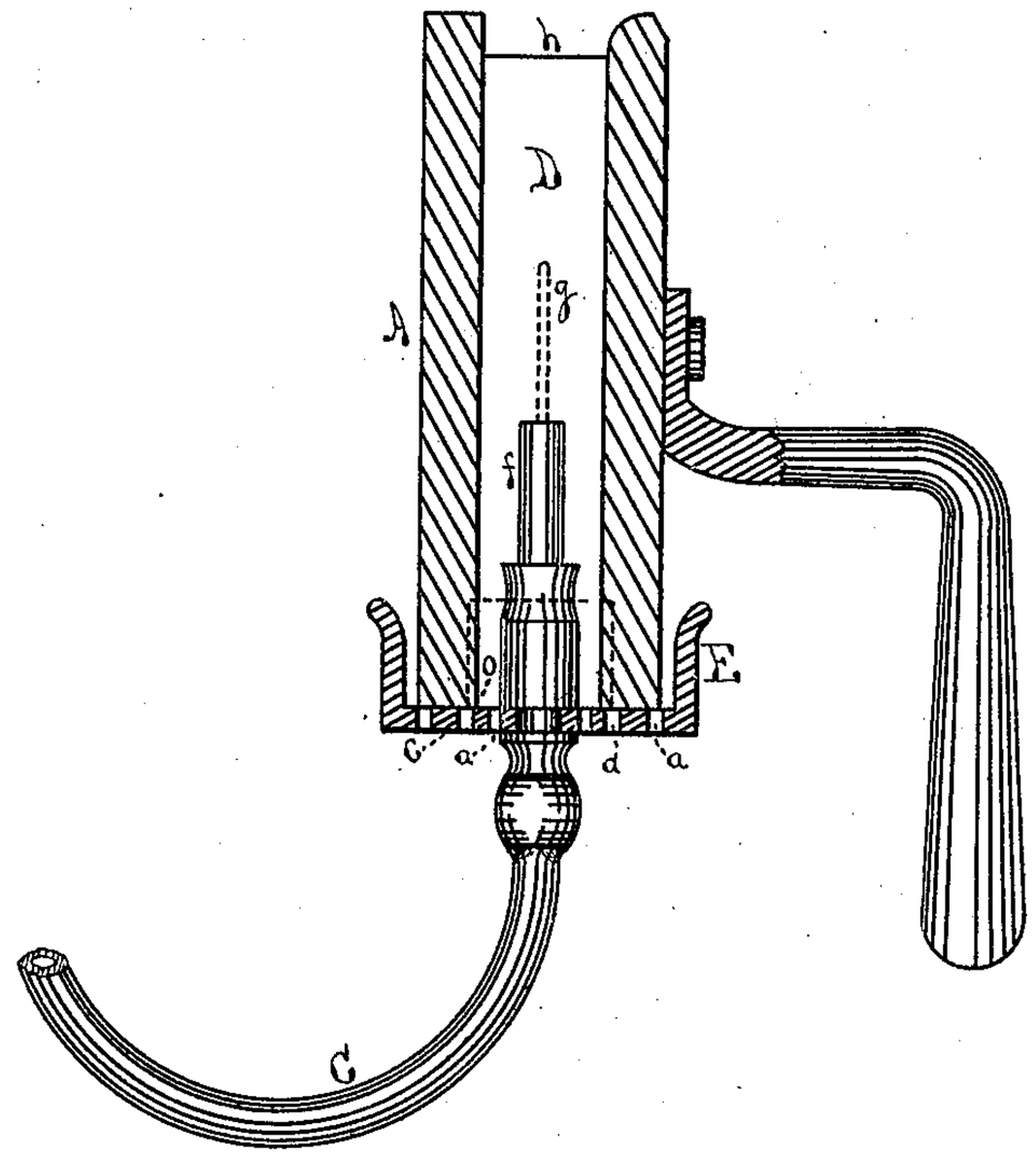
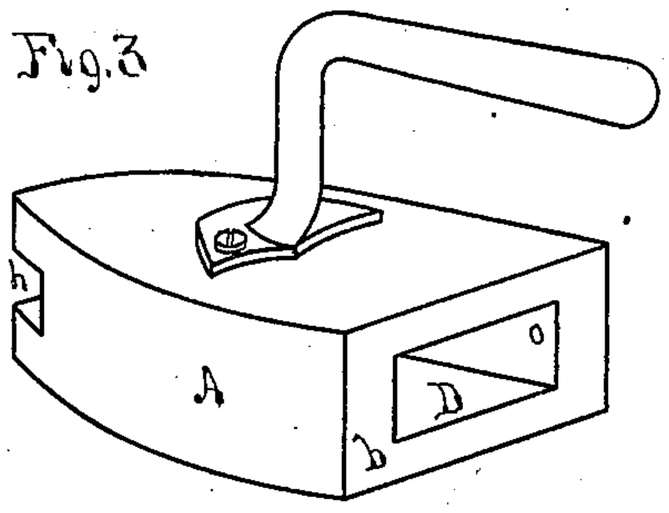


Fig. 3



Witnesses

G. F. Pratt

Charles Ed. Pratt

Inventor

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UNITED STATES PATENT OFFICE.

WILLIAM McCARTY, OF BOSTON, ASSIGNOR OF FOUR-FIFTHS HIS RIGHT TO FRANCIS AMORY, OF BEVERLY, AND SAMUEL SNOW, OF CAMBRIDGE, MASSACHUSETTS.

IMPROVEMENT IN FLAT-IRON AND HEATER.

Specification forming part of Letters Patent No. **212,247**, dated February 11, 1879; application filed March 30, 1878.

To all whom it may concern.

Be it known that I, WILLIAM MCCARTY, of Boston, Massachusetts, have invented Improvements in Flat-Irons and Apparatus for Heating the Same, of which the following is a specification:

The object of my invention is to furnish a flat-iron or sad-iron for smoothing starched linen and other articles, simple and convenient in size, weight, and form, which can cheaply, readily, quickly, and practically be heated by means of a lighted gas-jet or lamp, and a suitable and practicable means and method of adjusting and holding the flat-iron in a proper position in relation to the flame and burner of the lamp or gas-jet, so as to both heat the flat-iron speedily and cleanly, and allow of perfect combustion of the gases escaping from the burner when the flat-iron is in position for heating.

The nature of my invention will be apparent from the description, and pointed out in the claims.

In the drawings, Figure 1 represents a section of my flat-iron through the middle the broadest way, showing it in position in the bracket or holder for heating on a lamp. Fig. 2 represents a section of my flat-iron through the middle the narrowest way, showing it in position in the bracket for heating on a gas fixture or jet; and Fig. 3 is an outside view, in perspective, of my flat-iron in a convenient form.

A is the flat-iron, which may be of any convenient exterior form, (with any suitable handle,) and having an interior cavity, D, extending through it, and terminating at the apex in a smaller opening, *h*, and at the base *b* in a larger opening, *o*.

B is a lamp, for burning kerosene or other illuminating fluid, of any suitable form, having a burner, *e;* and C is a gas jet or fixture, having a burner, *f*.

The cavity D in the interior of the flat-iron A is of curved outline, and its termination at the opening *o* is of considerable size, so as to allow a sufficient entrance of air. Fig. 2 shows this cavity as having outlines nearly straight on the sides approaching nearest to each other; but I generally make these curved, so that the cavity will be largest in the middle in every horizontal direction. This cavity is so constructed as to practically operate, when the flat-iron is in position for heating, as shown in Figs. 1 and 2, as a chimney for the flame *g*, and thus cause complete combustion and a quick clean heat.

E represents in two forms, substantially alike, my bracket or holder, which is constructed so as to be steadily and firmly affixed upon and directly to the burner *f* or wick-tube *e*, as shown in the drawings, and has a bottom of proper size and shape to receive the base *b* of the flat-iron, and make a secure support for it when in position for heating. In this base are openings or perforations *a a*, through which air may pass to supply the draft for combustion, and has also upward projections, which make a double or closed joint with the base of the flat-iron, and serve to adjust the flat-iron laterally each way, and especially to prevent the entrance of air under the iron from above the perforated bottom, which would disturb the proper current of draft. The flame of the lamp or jet is represented by dotted lines at *g g*.

My flat-iron, when in operation, is used like any flat-iron in smoothing and polishing starched linen or other fabrics; but in order to make it and keep it ready for such use, I adjust the bracket E to the burner I desire to utilize, and place the flat-iron on it base downward, so that the flame of the burner will be within it, as shown, and burn as within an opaque chimney.

This arrangement and invention of mine affords a cheap, ready, cleanly, and quick means of heating the flat-iron, and admits of its being practically used in the toilet-chamber, or the open unfurnished shed, or wherever a table can be set or a lamp or jet be placed, and enables the user to avoid the heat of a stove in summer, and the dirt and trouble of a special fire in winter.

I am aware of the Letters Patent No. 39,171, to Preston and Barry, July 7, 1863; No. 61,911, to Wyncoop, February 5, 1867; No. 97,515,

to Jenkinson, December 7, 1869, all for flat-iron heaters; and also of Letters Patent No. 205,371, to Ezard, June 25, 1878, for sad-irons and heaters, and I disclaim all that is shown and described in either of those Letters Patent. I consider my contrivance as herein described and shown as embodying substantial improvements, both in structure and function, upon the devices above referred to, and beyond anything else in the same general class of which I have knowledge; and the features of my invention which I consider especially new are: a holder having the essential parts of a support or rest for the base of the iron, perforations or openings therein for air-draft, upward projections from the rest or support, making a lapped or closed joint with the walls of the iron or under attachment for holding it directly to the burner, and an adjustment of the same which brings the flame all substantially within the cavity of the flat-iron, the combination of such a holder with the flat-iron herein shown and described, and the combination of such a holder with a gas pipe or jet in the manner and for the purposes which are substantially herein described, and as shown in the accompanying drawings.

I claim as of my invention—

1. The bracket E, made attachable to the burner *e* or *f*, with openings *a a* in the bottom, and constructed so as to form a suitable support and adjustment for the base of a flat-iron, substantially as described.

2. The combination of the burner *e* or *f*, a flat-iron with cavity, D, and openings *o* and *h*, and a device, substantially as set forth, for supporting and adjusting the iron, all constructed and arranged substantially as described.

WILLIAM McCARTY.

Witnesses:

G. V. PRATT,

CHARLES ED'D PRATT.