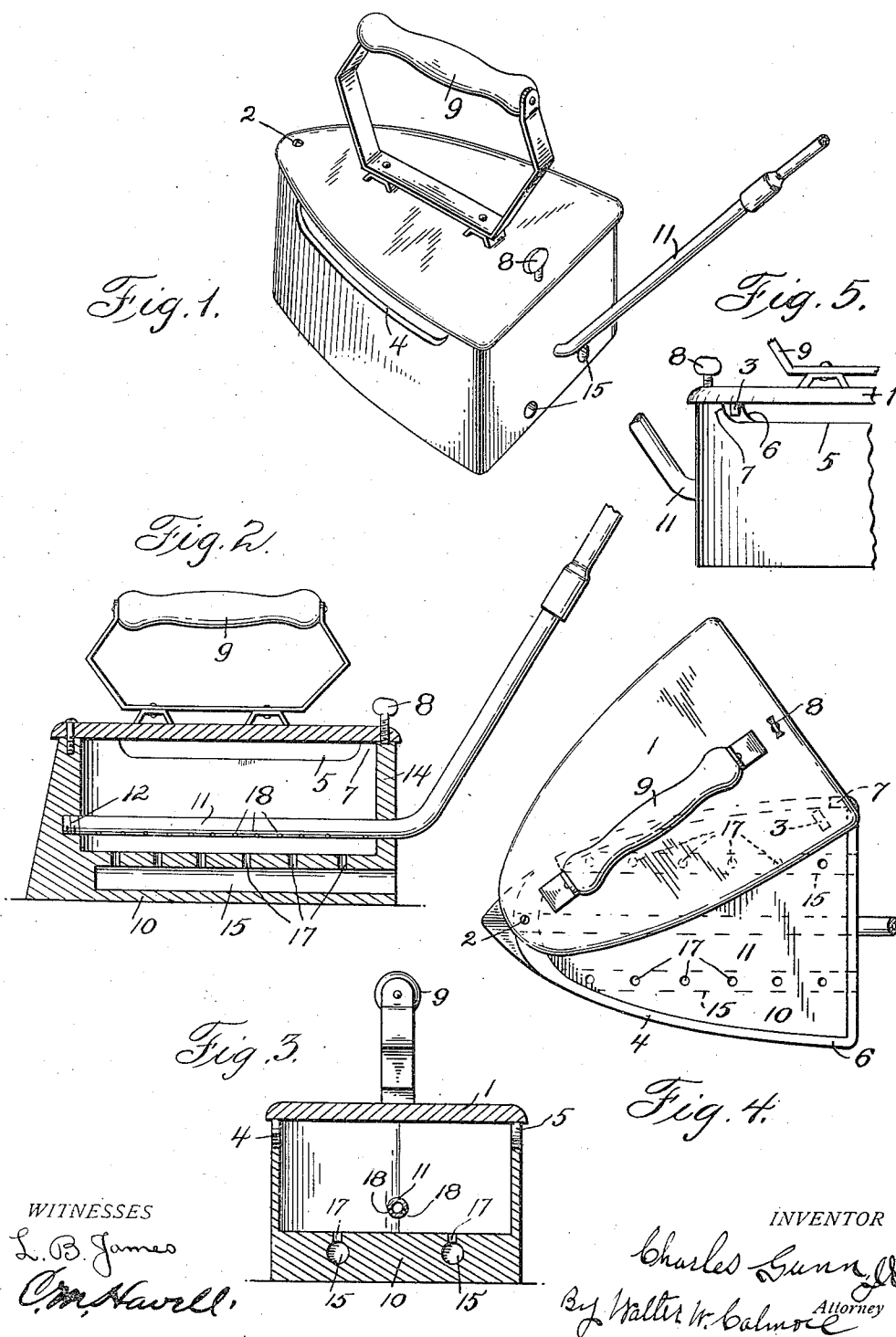


C. GUNN, JR.
SELF HEATING SAD IRON.
APPLICATION FILED DEC. 28, 1912.

1,063,254.

Patented June 3, 1913.



WITNESSES
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CHARLES GUNN, JR., OF MOUNT ROYAL, NEW JERSEY.

SELF-HEATING SAD-IRON.

1,063,254.

Specification of Letters Patent.

Patented June 3, 1913.

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To all whom it may concern:

Be it known that I, CHARLES GUNN, JR., a citizen of the United States, residing at Mount Royal, in the county of Gloucester and State of New Jersey, have invented certain new and useful Improvements in Self-Heating Sad-Irons, of which the following is a specification.

The object of the invention is to provide a self-heating sad iron wherein the base thereof is provided with passages for supplying air to the interior of the iron, and wherein means are provided for arresting movement of the cover plate when the latter is in proper position to be secured to the iron proper.

With these and other objects in view, as will be pointed out in the following description, reference is had to the accompanying drawing forming a part of this specification and wherein like numerals of reference designate corresponding parts throughout the several views, in which:

Figure 1 is a perspective view of the invention, Fig. 2 is a vertical longitudinal sectional view thereof, Fig. 3 is a vertical transverse sectional view thereof, Fig. 4 is a top plan view with the cover out of its operative position, and Fig. 5 is a side elevation of a fragment of the invention.

In the drawing, reference numeral 1 designates the cover plate which is pivoted at 2 to the point end wall of the sad iron body, and this plate 1 is provided on its under side adjacent one rear corner with a depending stop lug 3. The upper edges of the side walls of the sad iron are cut out as at 4 and 5 and it will be observed that the cut-out portion 5 is longer than the one 4, the object of which is to have the side wall portions 6 and 7 of unequal length, so that when the cover plate is swung to its operative position, the said lug 3 will engage the wall portion 6 and arrest the cover plate in proper position to be secured by the set screw 8, and when the cover plate is swung to inoperative position, such as is illustrated in Fig. 4 as for lighting or inspection of the burner, the lug 3 may swing entirely clear and past the other wall portion 7 thereby entirely exposing the interior of the iron. The cover plate is equipped with the usual handle 9.

Extending through the longitudinal center of the sad iron and slightly above the base plate 10 thereof, is the tubular burner 11 having its forward end threaded at 12 into

the point end wall of the iron and closed thereby. The rear end of the burner passes loosely through the rear end wall 14 of the sad-iron and is provided with the usual fixtures for service, thus it will be seen that the burner pipe can be readily unscrewed and entirely removed from the sad-iron. A pair of parallel air openings or passages are provided in the base plate on opposite sides of the longitudinal center thereof and are indicated by numeral 15. These air passages, which may be bored or cast in the base, are open to the atmosphere at the rear end of the sad-iron and the opposite ends closed, the air entering obviously through the rear open ends thereof. Each air passage 15 communicates with the interior of the sad-iron by an alined series of orifices 17, both series of orifices being manifestly parallel and disposed on opposite sides of the longitudinal center of the sad-iron. The burner tube 11 is provided on opposite sides of its lower face with parallel series of jet orifices 18, which as will be noted, in Fig. 3 are disposed toward the points where the air orifices 17 enter the interior of the iron through the base plate.

In operation, the flame is projected from the jet orifices onto the base plate at points between the two series of air orifices and passing over the orifices sucks the air there-through causing the air to thoroughly mix with the flame and to thereby promote thorough and proper combustion with consequent maximum of heat with a minimum consumption of gas, while the odor of unconsumed gas is avoided. The products of combustion pass out through the openings 4 and 5.

Having fully described the invention, what is claimed as new is:

1. An iron comprising a body having a base of uniform vertical thickness throughout and edge walls, the inner surfaces of which are at right angles to the plane of the inner surface of the base, said base having passages extending longitudinally thereof and located between the upper and lower surfaces of the base and terminating at one end thereof, said passages also being located at the opposite sides of the median longitudinal dimension of the base and spaced from the inner surfaces of the edge walls, said base also having orifices which communicate with the said passages and the interior of the body, a tube extending along the me-

dian longitudinal dimension of the body and spaced from the base and provided at its lower portion with jet orifices disposed toward the inner ends of the first mentioned
5 orifices, the vertical walls having openings at their upper portions and a cover for the base.

2. In a sad iron, a burner extending longitudinally therein above the base thereof and
10 having opposite series of jet orifices in its lower face, the front end of the burner being closed by the point wall of the sad iron and the other end passing through the rear wall of the sad iron, the base being pro-

vided with parallel air passages and parallel rows of air orifices communicating with
15 said passages and with the interior of the sad iron, said air orifices being disposed on opposite sides of the burner and in the range of the jet orifices, and the air passages communicating with the atmosphere through
20 the rear end of the sad iron.

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

CHARLES GUNN, JR.

Witnesses:

ALLEN M. STEARNE,

HELEN SCHOFIELD.

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