

(No Model.)

H. C. FOX.

LAMP ATTACHMENT FOR SAD IRONS.

No. 359,016.

Patented Mar. 8, 1887.

Fig. 1

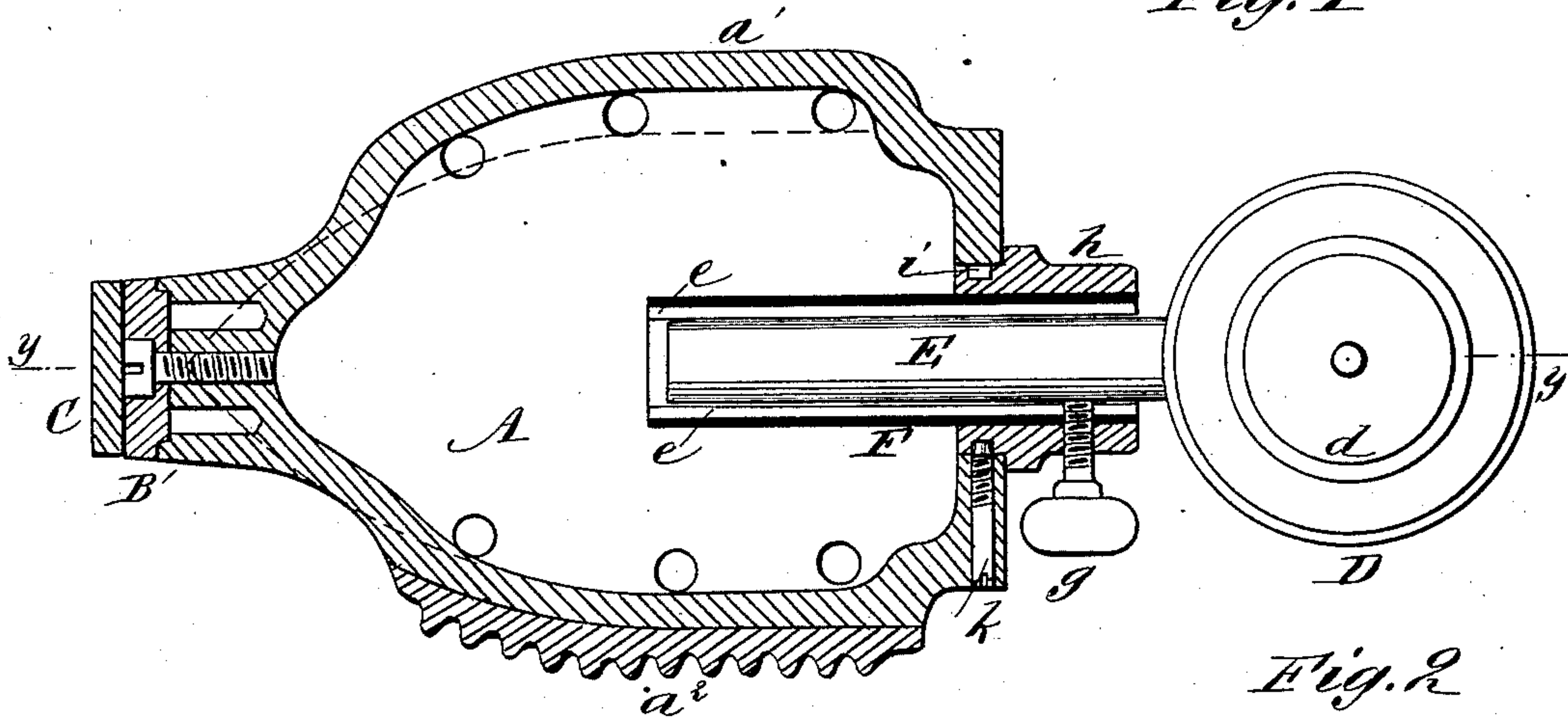


Fig. 2

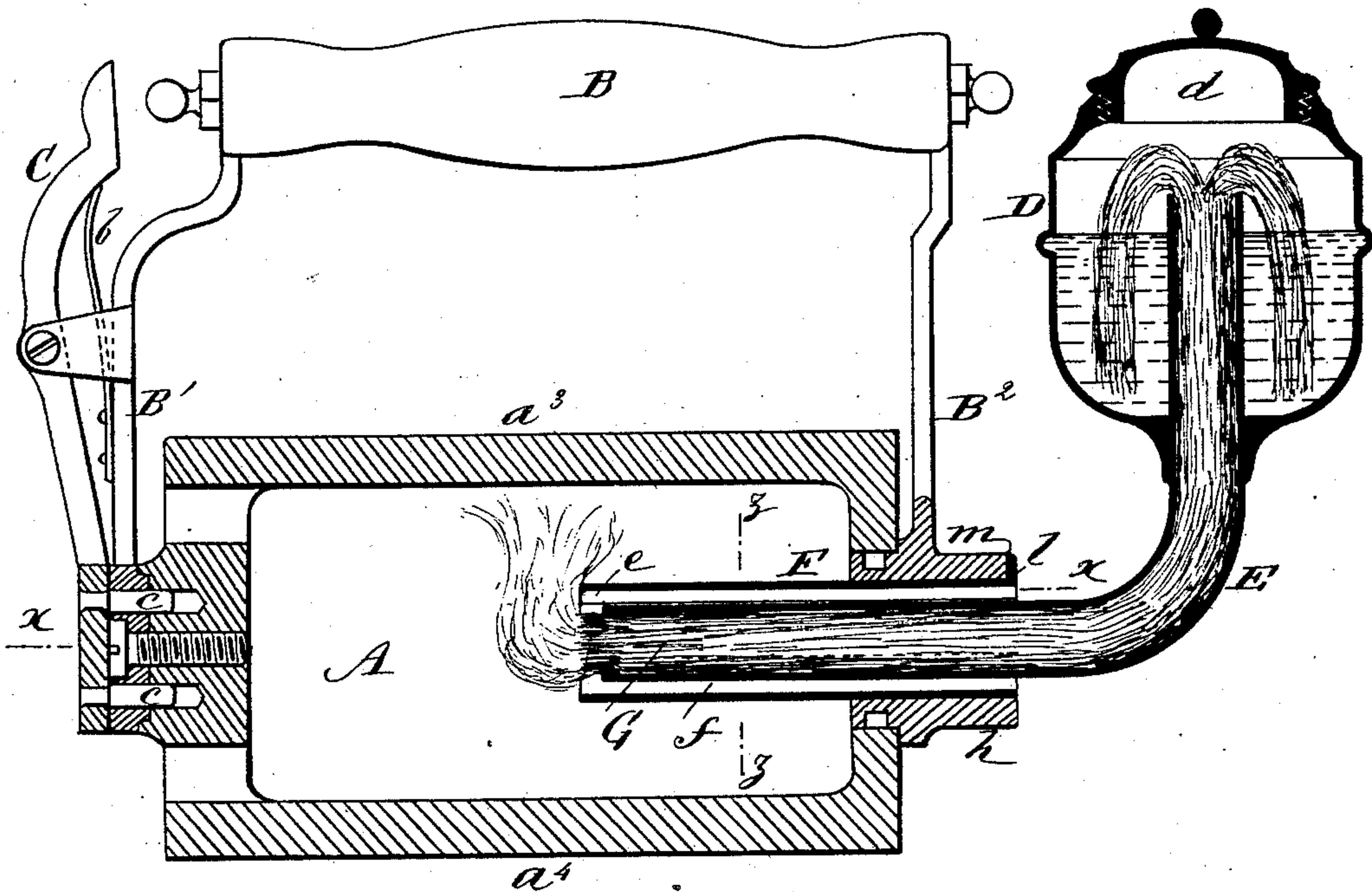
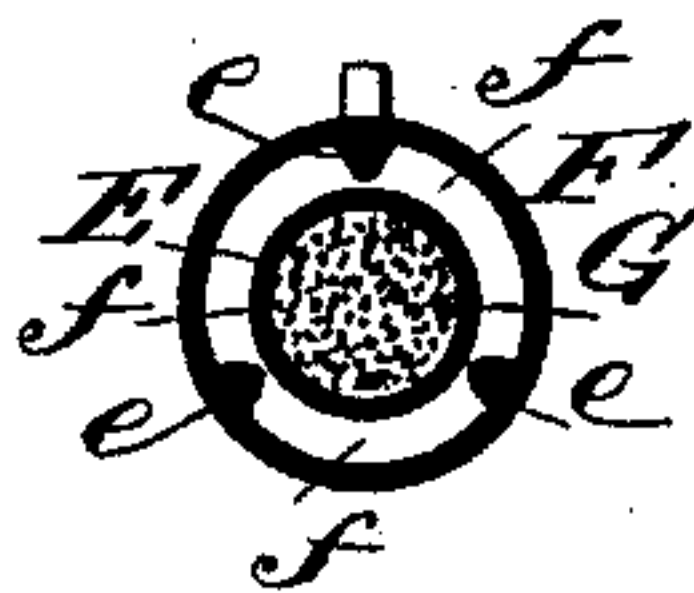


Fig. 3



WITNESSES:

C. Neveu
C. Sedgwick

INVENTOR:

H. C. Fox
BY *Munn & Co*
ATTORNEYS.

UNITED STATES PATENT OFFICE.

HENRY C. FOX, OF EVANSVILLE, INDIANA, ASSIGNOR TO THE FOX SAD-IRON COMPANY, OF NEW YORK, N. Y.

LAMP ATTACHMENT FOR SAD-IRONS.

SPECIFICATION forming part of Letters Patent No. 359,016, dated March 8, 1887.

Application filed November 10, 1885. Renewed January 21, 1887. Serial No. 225,042. (No model.)

To all whom it may concern:

Be it known that I, HENRY C. FOX, of Evansville, in the county of Vanderburg and State of Indiana, have invented certain new and useful Improvements in Lamp Attachments for Sad-Irons, of which the following is a full, clear, and exact description.

This invention is more particularly designed to be applied to reversible sad-irons in which the iron or its body is made hollow, and is provided with heating devices within, and has several faces, either one of which may be brought into use by shifting the position of the handle, which is adjusted in relation to the iron by means of a spring-catch, substantially as shown and described in Letters Patent No. 265,401, issued to me October 3, 1882, only differing therefrom in certain details connecting the handle with the iron and spring-catch with the same.

The invention consists in the lamp and its attachment with such or other hollow reversible sad-iron for heating the iron, substantially as hereinafter described, and pointed out in the claim, and whereby the iron may be more uniformly and perfectly heated, the flame intensified and regulated at pleasure, and the alcohol or other burning-fluid used in the lamp economized and prevented from passing into the body of the iron.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar figures of reference indicate corresponding parts in all the figures.

Figure 1 represents a mainly sectional plan upon the line xx in Fig. 2. Fig. 2 is a vertical longitudinal section upon the line yy in Fig. 1, and Fig. 3 a transverse section upon the line zz in Fig. 2 through the wick and air tube of the heating attachment.

A indicates the hollow body of the iron, which may be constructed with four working-faces, $a' a^2 a^3 a^4$, and with numerous holes at the corners and ends, to permit of the escape of the products of combustion from the heating devices within.

B B' B² is the handle of said iron, fitted at the lower ends of its arms B' B² to the ends of the body A, to permit of said body or iron proper being turned to make either of its faces $a' a^2 a^3 a^4$ the working one, subject to control

and engagement when adjusted of a spring-catch, C, substantially as described in my Letters Patent hereinbefore referred to, only substituting an elongated flat spring, b , for a spiral spring and duplicate locking-studs $c c$ for a single one, to lock the handle with the iron when adjusted.

The means for heating the iron, however, by an attached lamp essentially differ. Thus the reservoir D of the lamp, which holds the alcohol or burning-fluid, is made to occupy an elevated position in rear of the handle of the iron, and is provided with a screw-cap, d , preferably of considerable size, to give ready access to the interior of the reservoir and wick therein, to facilitate filling the reservoir and adjustment or renewal of the wick. The wick-tube E of the lamp is fitted to project up within the reservoir above the level of the fluid therein, so that the fluid cannot escape through the wick-tube into the body of the iron otherwise than by capillary attraction through the wick, thus avoiding waste of fluid and detriment to the work by escaping fluid.

Below the reservoir the wick-tube E is bent to form a forward horizontal arm, which projects within the body of the iron, or, rather, within an air-supply tube, F, fitted to project within said body from its rear to or near the middle of the body, and which is made to inclose the entering end portion of the wick-tube. Said air-tube F, which is open both in front and rear, is of larger area than the wick-tube E, to allow of the free passage of a current or currents of air through it to feed the flame at the inner or front end of the wick G. The horizontal portion of the wick-tube, which passes within or through said air-tube, and which is preferably slightly longer than the air-tube, is supported within the air-tube by means of longitudinal ribs e on the interior surface of the air-tube, leaving air-spaces f between the wick-tube E and air-tube F. By thus admitting air to the burning end of the wick the flame is greatly intensified, and by sliding the wick-tube portion of the lamp, which fits within the air-tube, in or out the flame may be regulated as desired. When thus adjusted in or out to give a greater or less exposure of the burning portion of the wick within or beyond the inner end of the air-tube

F, the lamp and its attached wick-tube E are secured in position by a set-screw, *g*, arranged to pass through a sleeve, *h*, on the lower end of the arm B² of the handle, and through the
5 air-tube F, and so as to bear against the side of the wick-tube E. The sleeve *h* forms the rear bearing of the handle for the body A of the iron to turn upon when being adjusted to put in proper position either of its working-
10 faces, a front bearing for said body also being provided on the lower end of the front arm of the handle. Said sleeve *h* has an annular groove, *i*, near its inner end, with which a retaining-screw, *k*, engages. The air-tube F is
15 locked with the handle, when inserted, by a lip, *l*, on it engaging with a notch, *m*, in the rear end of the ring or sleeve *h*, whereby said tube is prevented from turning, except in com-
mon with the handle.

20 By the isolated position of the lamp-reser-

voir at a distance from the body of the iron all heating and volatilization of the alcohol or burning-fluid in the reservoir of the lamp is effectually prevented.

Having thus described my invention, what I 25 claim as new, and desire to secure by Letters Patent, is—

The air-supply tube F, provided with interior projections or ribs, *e*, in combination with the bent wick-tube E, adjustable longitudi- 30 nally within said air supply tube, the elevated reservoir D of the lamp, the reversible hollow body A of the iron, the handle B B' B², and the lamp and wick-tube holding-screw *g*, substantially as shown and described.

HENRY C. FOX.

Witnesses:

A. GREGORY,
C. SEDGWICK.