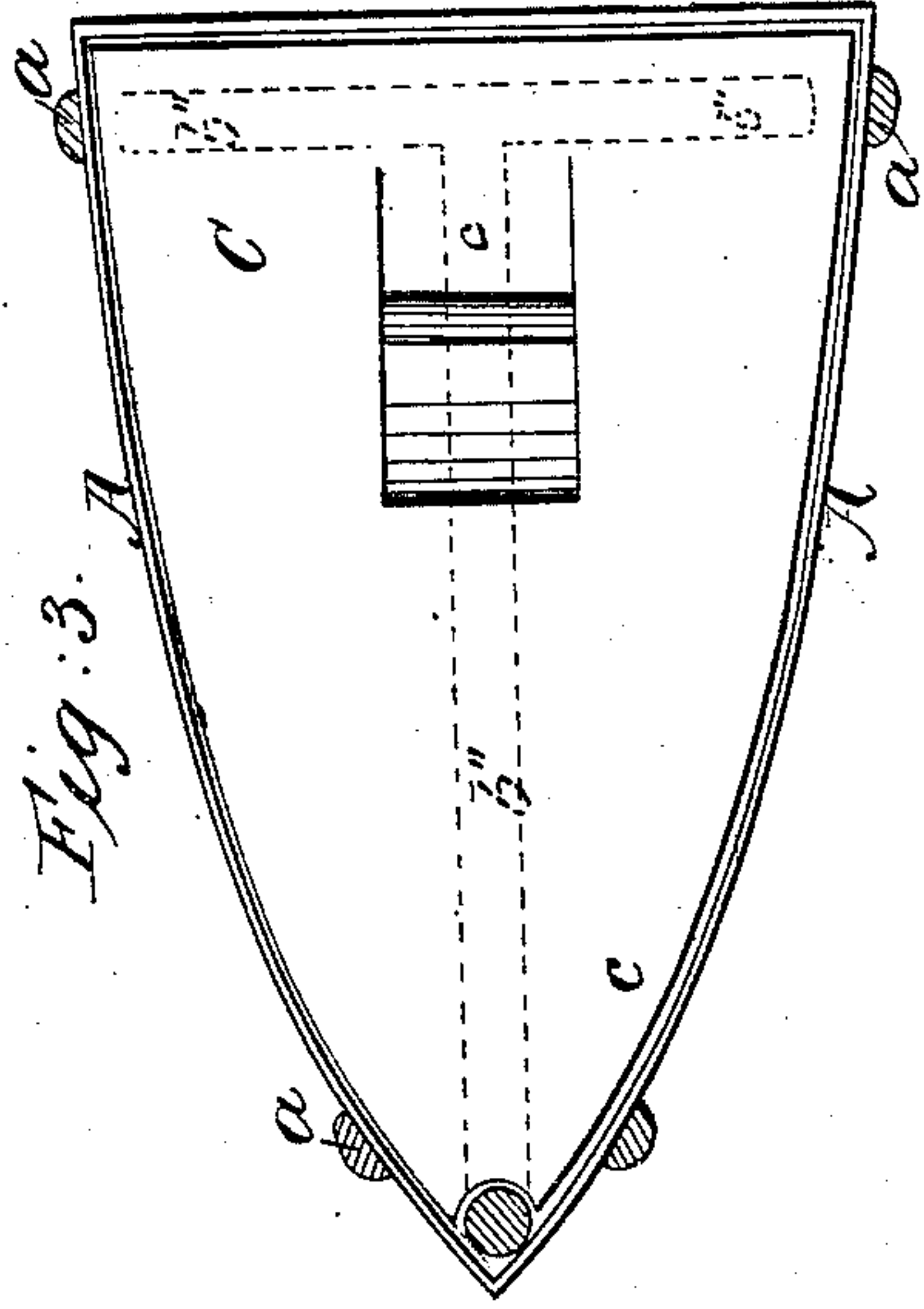
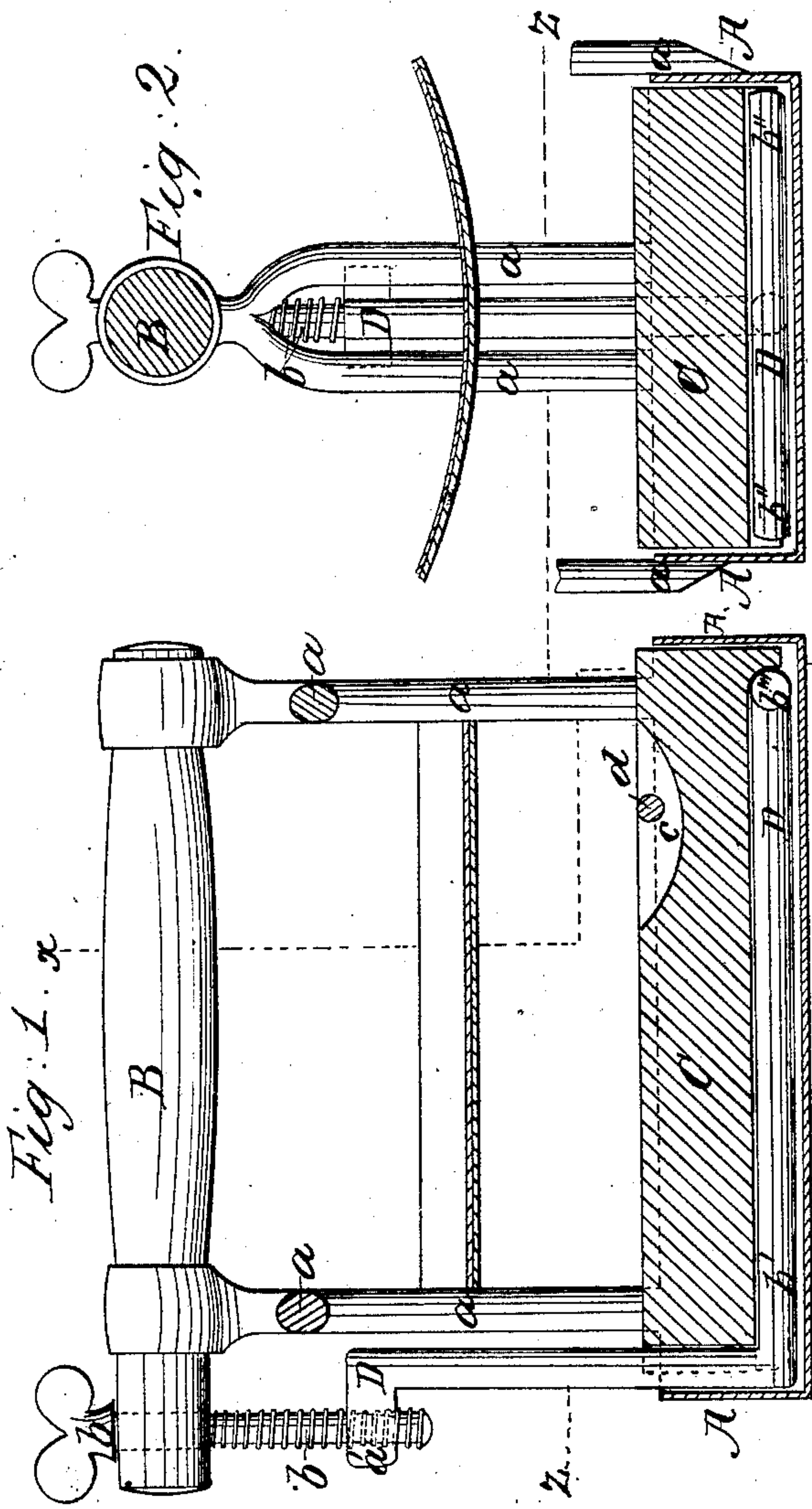


J T Warren,

Sad Iron.


N^o 63,588.

Patented Apr. 2, 1867.



Inventor;

Witnesses;
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 Attys.

United States Patent Office.

J. T. WARREN, OF STAFFORD, NEW YORK.

Letters Patent No. 63,588, dated April 2, 1867.

IMPROVED SAD-IRON.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, J. T. WARREN, of Stafford, in the county of Genesee, and State of New York, have invented certain new and useful improvements in Sad-Irons; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a portion of this specification, in which—

Figure 1 is a partial vertical longitudinal section of a sad-iron constructed according to my invention.

Figure 2 is a vertical transverse section of the same taken in the line $x x$ of fig. 1.

Figure 3 is a horizontal section of the same taken in the line $z z$ of figs. 1 and 2.

This invention consists in the combination of an adjustable heating plug with the hollow shell of a sad-iron, in such manner that by placing the said plug at a greater or less distance from the bottom of the shell the heat imparted to the smoothing or ironing surface of the latter may be graduated to any required degree, and whereby the plug may be made much hotter than in the smoothing irons hitherto devised, thus enabling the iron to be used for a proportionally greater length of time without reheating. The invention further consists in a novel means whereby the facile and convenient adjustment of the heating plug is secured.

To enable others to understand the nature and construction of my invention, I will proceed to describe it with reference to the drawings.

The hollow shell A is made of any suitable form, and its flat under side or surface constitutes the smoothing or ironing surface of the iron. The horizontal handle B is situated longitudinally at a suitable distance above the shell A, and is attached thereto by means of suitable upright braces a . One end of the aforesaid handle projects beyond the braces a , adjacent to the said end, and has passed vertically through it a thumb-screw, b , the lower portion of which projects downward below the aforesaid end of the handle B, and which operates in the vertical adjustment of the heating plug, as will be hereinafter fully explained. This plug is shown at C, and consists of a block of iron or other suitable metal of any appropriate thickness, and of a shape corresponding to that of the interior of the shell A. Formed in the upper side of the plug C is a recess, c , furnished with a small transverse bar, d , which enables the plug to be removed from or placed in the shell A by means of a separate or detachable hook or handle or other proper instrument. D indicates the supporting frame which sustains the plug C, and which is composed of a bent rod, the horizontal portion, b' , of which is situated longitudinally within the shell A, and is furnished at one end with a transverse horizontal piece, b'' . This horizontal portion of the frame D is fitted into grooves of corresponding shape, formed in the under side of the plug C, which is placed upon and supported by the aforesaid portion. That portion of the rod constituting the aforesaid frame opposite the end upon which the cross-piece b'' is formed, is turned upward into a vertical position, and is provided at its upper end with a head or outwardly projecting knob, a' , which is provided with a female screw, into which is screwed the lower portion of the thumb-screw b in such manner that, by turning the said thumb-screw in one direction or the other, the frame D, and consequently the plug C, may be raised or lowered as desired. The plug C being first made hot is placed in the shell A, and resting upon the horizontal portion of the frame D, and is raised or lowered by means of the thumb-screw b , as just herein set forth, to a greater or less distance from the bottom of the shell, according as it is desired to communicate a greater or less degree of heat thereto. Thus, for instance, if a comparatively high heating of the aforesaid bottom is desired, the plug is placed nearly or quite in contact therewith, but in case it is desirable to have it heated to a lower degree, the plug is raised upward to a suitable distance therefrom, so that by these means the heat communicated to the smoothing surface of the iron, or, in other words, the temperature of the bottom of the shell, may be graduated to any degree required, at the same time that, inasmuch as the plug may be made much hotter than would be admissible if it were intended to be placed permanently upon the bottom of the shell, it follows that the bottom of the iron may be kept properly heated for a proportionately greater length of time without reheating the plug. If desired, a guard, E, formed of any suitable material, may be interposed between the handle B and the plug C, with its ends attached to the braces a for the purpose of protecting the hand of the operator in using the iron from the heat radiated from the plug.

What I claim as new, and desire to secure by Letters Patent, is—

1. The combination of the adjustable heating plug C, with the hollow shell A, whereby the smoothing surface of the said shell may be heated to a greater or less degree by adjusting the plug at a greater or less distance from the bottom of the aforesaid shell, substantially as herein set forth.

2. The thumb-screw b , and supporting frame D, combined in relation with each other, and with the handle B, heating plug C, and shell A, substantially as herein set forth for the purpose specified.

J. T. WARREN.

Witnesses:

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