(No Model.)

B. F. HOSTETTER & I. C. H. GILMORE.

SMOOTHING AND POLISHING IRON.

No. 346,814. Patented Aug. 3, 1886.

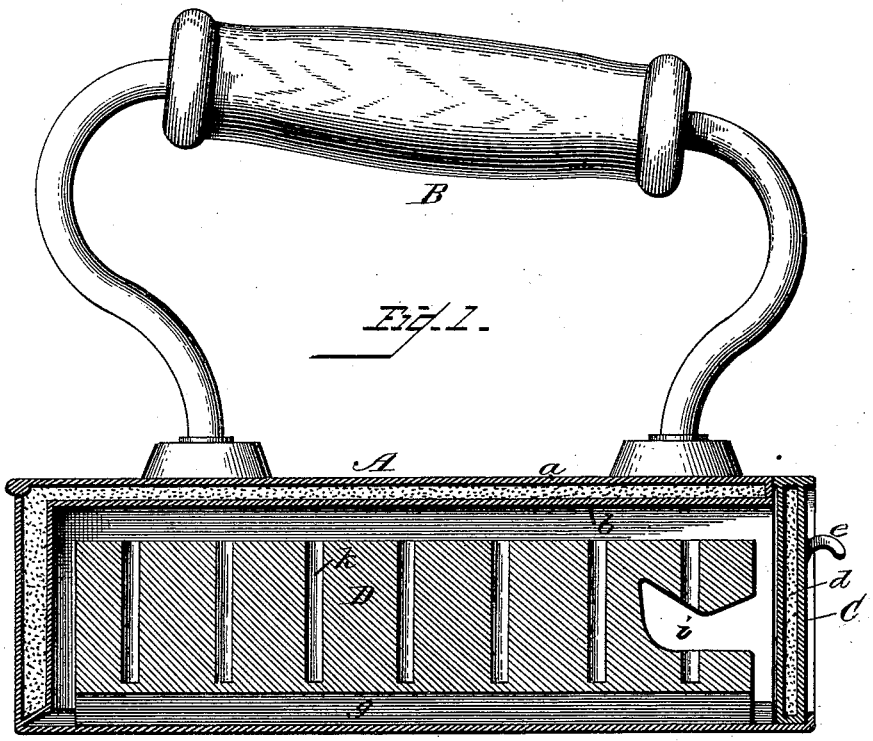

Fig. 1.

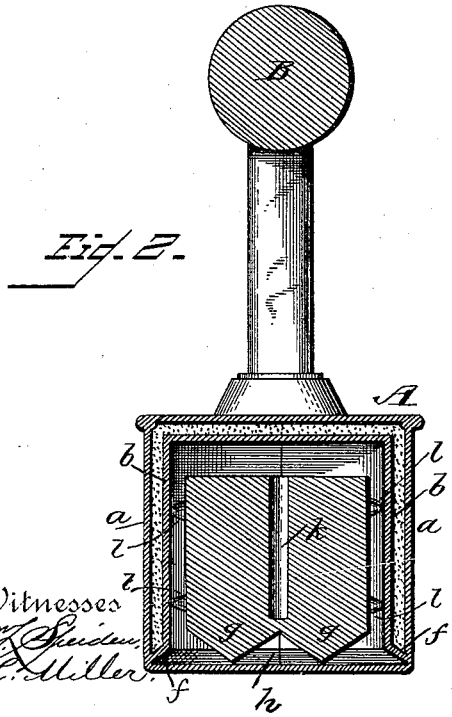

Fig. 2.

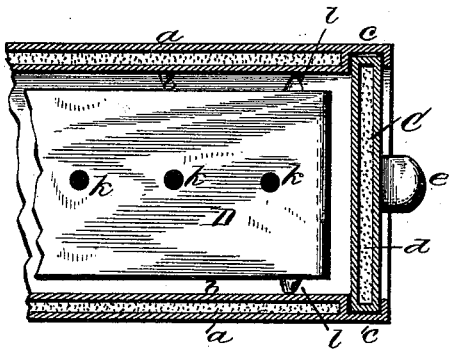

Fig. 3.

Witnesses
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UNITED STATES PATENT OFFICE.

BENJAMIN F. HOSTETTER AND ISAAC C. H. GILMORE, OF OSKALOOSA, IOWA.

SMOOTHING AND POLISHING IRON.

SPECIFICATION forming part of Letters Patent No. 346,814, dated August 3, 1886.

Application filed February 11, 1886. Serial No. 191,548. (No model.)

To all whom it may concern:

Be it known that we, BENJAMIN F. HOSTETTER and ISAAC C. H. GILMORE, citizens of the United States, residing at Oskaloosa, in the county of Mahaska and State of Iowa, have invented certain new and useful Improvements in Smoothing and Polishing Irons; and we do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a longitudinal section of our invention; Fig. 2, a transverse section thereof, and Fig. 3 a horizontal section of a portion.

In the accompanying drawings, A represents the body or shell of the iron, formed of an outer wall, *a*, and an inner wall, *b*, the top of the body or shell having a suitable handle, B. This handle is preferably formed, as shown, inclining upward in a direction toward the front end of the iron, to adapt it to the motion of the iron, which is back and forth, rendering it much easier to the operator.

The body or shell of the iron, consisting of the walls *a b*, is cast in one piece, a space being left between the two walls for a filling of plaster-of-paris or any other suitable heat-non-conducting material.

In casting the body or shell the bottom, side walls, and the inner wall of the top are all cast in one piece, the outer wall of the top of the iron being cast separately, and secured in place by screws or any other suitable fastening. The outer side walls, *a*, at their rear ends are cast with L-shaped guides *c*, to receive a sliding door, C, said door being formed hollow, and containing a filling, *d*, of plaster-of-paris or other heat-non-conducting material, said door having a suitable knob or thumb-piece, *e*, for raising it.

It will be noticed that the heating-core D is introduced through the opening at the rear end of the iron, and also withdrawn in the same manner, instead of removing the top of the iron, thereby preventing to a certain extent the too rapid escape of heat and the cooling of the iron.

The inner side walls, *b*, do not extend on the same vertical plane from top to bottom of the body or shell A; but at their lower edges the walls extend at an angle outwardly or in a direction toward the outer side walls, *a*, as shown at *f*. The object of this is to have the entire inner surface of the face or bottom of the iron exposed to the heat, so that it will be heated uniformly from the center to the edges of the ironing-surfaces.

It is the purpose of the invention to so construct the bottom of the heating-core D that as little of its surface as possible will come in contact with the bottom of the shell or body of the iron, in order to prevent its becoming too hot. To attain this end, the core D is cast with V-shaped ribs *g*, the apex thereof formed by the angles resting on the bottom of the body or shell A, thus having only a slight point of contact of the core with the bottom, and also forming spaces between the ribs for the circulation of the heated air. The air-space *h* extends the entire length of the core D, and is open at its ends, to allow the air to pass along the space and out at the ends, extending up the sides and over the top of the core, thus keeping up a circulation of air and equalizing the temperature of the iron, and preventing burning the goods.

The rear ends of the heating-core D is cast with a recess, *i*, to receive a lifter or other convenient tool, and is formed with holes *k*, extending into the core some distance on a line between the ribs *g*. The holes *k* do not extend entirely through the core D, and therefore are closed at their lower ends, the object thereof being to insure the core heating as rapidly at or near its center as at its surface.

The core D is cast at its sides with lugs *l*, to prevent the core from shifting its position centrally to the sides of the body or shell, thereby holding it stationary and preserving a space for the circulation of the heated air between the sides of the core and the inner side walls.

We provide a core-heating sad-iron having all of its sides except the operating-face packed with non-conducting material. By the angular part *f* of the side walls we allow the heat to affect the entire working face or bottom. By forming the operating-face smooth it will heat evenly, and by giving the core the small-

est possible bearing upon the bottom we further insure a regular uniform heating of the operating-face.

Having now fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

In a core-heating iron, the combination, with the core thereof, of the body or shell formed of an outer and an inner wall and a heat-non-conducting filling between the same, the inner side walls at their lower edges extending outwardly at an angle and joining the outer side walls at the outer edge to leave the entire inner surface of the bottom of the iron or body or shell exposed to the heat, substantially as and for the purpose specified.

In testimony that we claim the above we have hereunto subscribed our names in the presence of two witnesses.

BENJAMIN F. HOSTETTER.
ISAAC C. H. GILMORE.

Witnesses:
JOHN W. MOCK,
W. A. WILCOX.