

M. ELB.
BOX IRON.

Patented Sept. 3, 1895.

Fig. 1

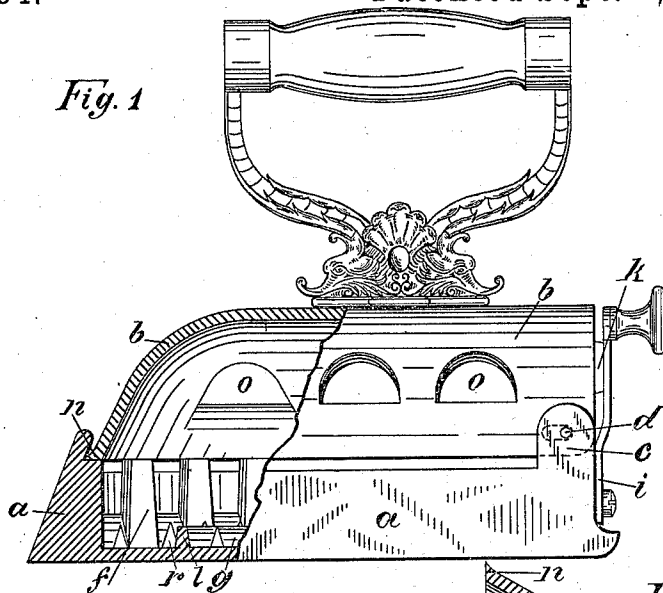


Fig. 2

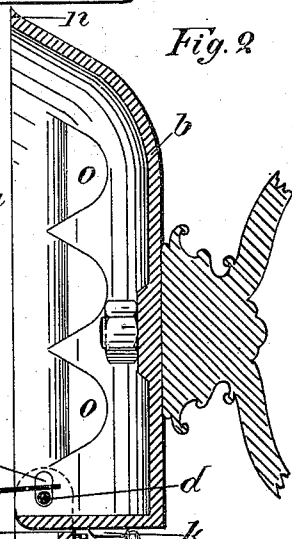


Fig. 3

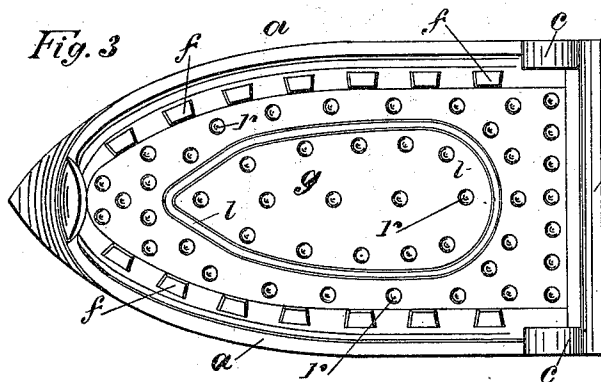


Fig. 4

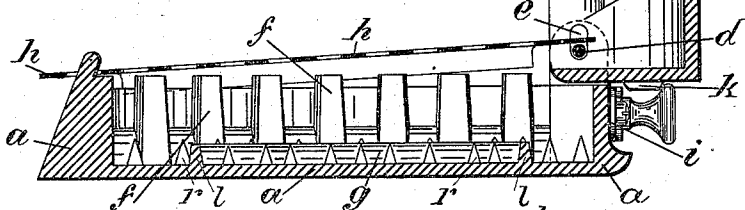
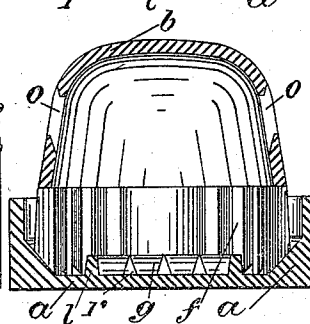


Fig. 5



Witnesses:
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Wallace Muddock

Inventor:

Max Elb.

by
Charles Shuman
his Atty.

UNITED STATES PATENT OFFICE.

MAX ELB, OF DRESDEN, GERMANY.

BOX-IRON.

SPECIFICATION forming part of Letters Patent No. 545,784, dated September 3, 1895.

Application filed September 8, 1894. Serial No. 522,510. (No model.) Patented in Germany November 1, 1893, No. 75,749; in England December 1, 1893, No. 2,309; in France February 20, 1894, No. 236,438; in Switzerland February 22, 1894, No. 8,261; in Sweden March 12, 1894, and in Austria-Hungary March 26, 1894.

To all whom it may concern:

Be it known that I, MAX ELB, a subject of the King of Saxony, residing at Dresden, in the Kingdom of Saxony, in the German Empire, have invented certain new and useful Improvements in Box-Irons, (for which I have obtained patents in Germany, No. 75,749, filed November 1, 1893; in Great Britain, No. 23,098, filed December 1, 1893; in Switzerland, No. 8,261, filed February 22, 1894; in France, No. 236,438, filed February 20, 1894; in Sweden, filed March 12, 1894, and in Austria-Hungary, filed March 26, 1894,) of which the following is a specification.

This invention relates to a hollow box-iron, which is adapted to be heated by means of solid glowing fuel, such as charcoal or other similar combustible material, more especially in the form of briquettes or blocks of compressed fuel. This improved iron differs from the well-known box-iron in general use by reason of the following characteristics: The upper part is constructed as a hollow shell rounded in form, which is connected to a flat lower part by a hinge. The bell shape of this upper part enables flounces, frills, ribbons, and the like to be fluted and goffered. A special arrangement of ash-tray circumscribed by a number of tapering studs surrounds the central portion of the heating-area, the air-feed arrangement being in the form of an open channel or space on the bottom plate or sole of the iron. A special mode of heating and a wedge device for closing the box-iron are also employed.

The accompanying drawings show the improved box-iron.

Figure 1 is a side view, the front portion of the shell broken away so as to show the point of the iron in section. Fig. 2 is a vertical section of the iron when open. Fig. 3 is a view of the bottom part, seen from above. Fig. 4 is a back view, and Fig. 5 a cross-section.

On a flat hollow base *a* is seated an upper part or shell *b*, hinged to the former, whereby it is capable of being turned on a bolt *d* passing through eyes in two lugs cast on the base *a*. The said upper part *b* is formed of a bell-shaped shell and provided with a suitable handle, and the openings *e* in the shell, through

which the bolt or pivot *d* passes, are flattened or made oval, so as to give a certain amount of play to the said upper part *b* and allowing it to slide to and fro on the base *a*. As the base is slightly the larger, the top *b* in the closed state will not rest upon the outer margin of the base *a*, but upon the studs *f*, which are trapezoidal in section and taper upward, arranged at regular intervals apart and at a regular distance away from the outside rim of this part, and surround the interior heating-space, so as to prevent the fuel from falling out without hindering the free access of air. Thus the glowing block of fuel lies in the body of the iron, so that the air can reach it freely on all sides. This arrangement is the more advantageous because the fuel in the point of the box-iron is freely played upon by the air and brought to a glowing heat at the point where heat is most wanted. Openings *g* in the upper shell give vent to the hot air.

The open channel or space between the wall of the base *a* and the studs *f* serves as an ash-pan and provides so large an area for that purpose that the improved box-iron may be in use for several hours without the ash-pan becoming so choked with ashes as to interfere with the air-supply and necessitate emptying. The floor of the same is formed to slope inward all round, Fig. 5, to facilitate the removal of the ashes, which, when the iron is closed, can readily be effected by laying the iron down on its side. Further, also, this arrangement has the advantage of preventing, even with the most unskillful handling, all risk of the linen, &c., being soiled in the laundry by the falling out of small cinders, ashes, and dust. Moreover the bosses *r* on the floor of the improved box-iron are so arranged that those ranged toward the outside of the central heating-space are higher than those ranged near the center, for which reason the heated fuel stands askew with an inward inclination which obviates all difficulty in closing the iron. At the same time the bell-shaped shell *b* of the upper part, when closed down on the outer edge of the studs *f*, tends to press any loose particles of glowing fuel inward. On the bottom surface of the central heating-space also a curvilinear rib *l*

incloses a hollow or basin *g*, which for heating purposes, serves to hold spirit while the perforated bed-plate *h* may be utilized to receive the fuel, its front edge being slipped over the pivot *d* of the bell-shaped top and the handle being laid on the point of the base *a*, Fig. 2. In this way the heating of the box-iron can be attended to with certainty and celerity, the fuel being held up above the spirit and in position to be ignited therefrom.

The base or body *a* of the box-iron is provided with a sharp cone-shaped point and is rounded off at the edge behind for use as a glazing-iron.

As a closing device to secure the connection of the bell-shaped top *b* with the base or body *a*, a lever-handle *i* is arranged to turn on a pivot fixed to the back of the base *a*. This lever-handle slides on a wedge-shaped block *k*, fixed to the back plate of the top *b*, causing a forward displacement, whereby the nose *n* is made to engage in a notch in the base *a*, establishing the firm connection of the parts, so as to prevent the lifting or turning back of the bell-shaped top *b*.

I claim—

1. In a hollow box iron, the combination with the movable cover or top section having

the handle thereon, of the base section having the pressing surface on the bottom, the series of upwardly extending lugs or fingers upon the ends of which the edge of the top section rests and the upwardly extending imperforate walls outside of the projections or fingers of greater diameter than the diameter of the top section leaving a peripheral air space down around the edge of the top section and fingers; substantially as described.

2. In a hollow box iron, the combination with the hollow base section having the centrally located rim or projection in the bottom thereof to form a receptacle for spirits, and the removable perforated fuel plate supported on the top of the base section, of the hollow or domed top section hinged to the base section and overlying the perforated plate for covering the fuel on the perforated plate and a peripheral air inlet around the top section; substantially as described.

In testimony whereof I have hereunto set my hand in presence of two witnesses.

MAX ELB.

Witnesses:

RUD. SCHMIDT,
ALFRED H. CLARKE.