T. T. SMOTHERS.
Reversible Sad Irons.

No. 166,421. Patented Aug. 3, 1875.

Fig. 1.

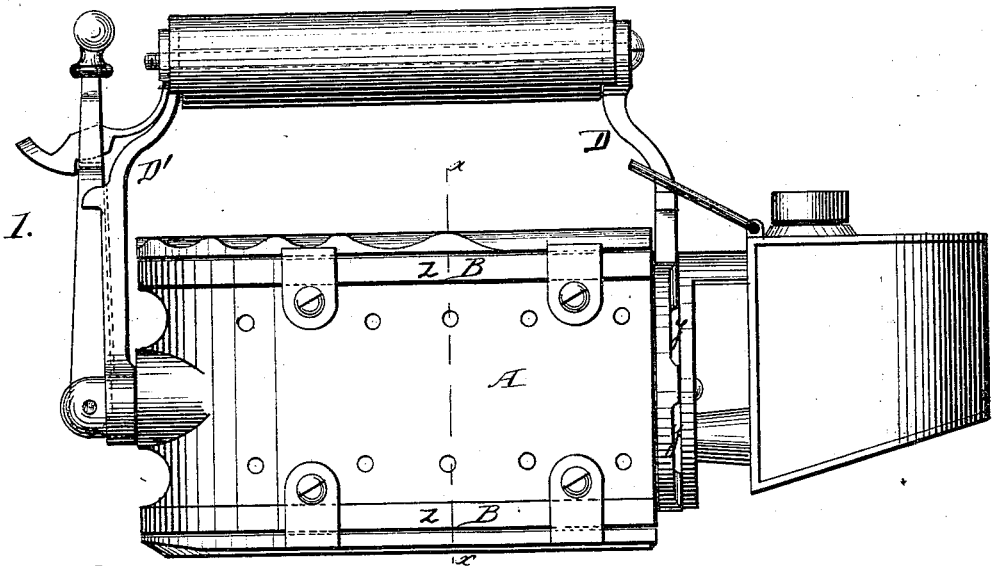


Fig. 2.

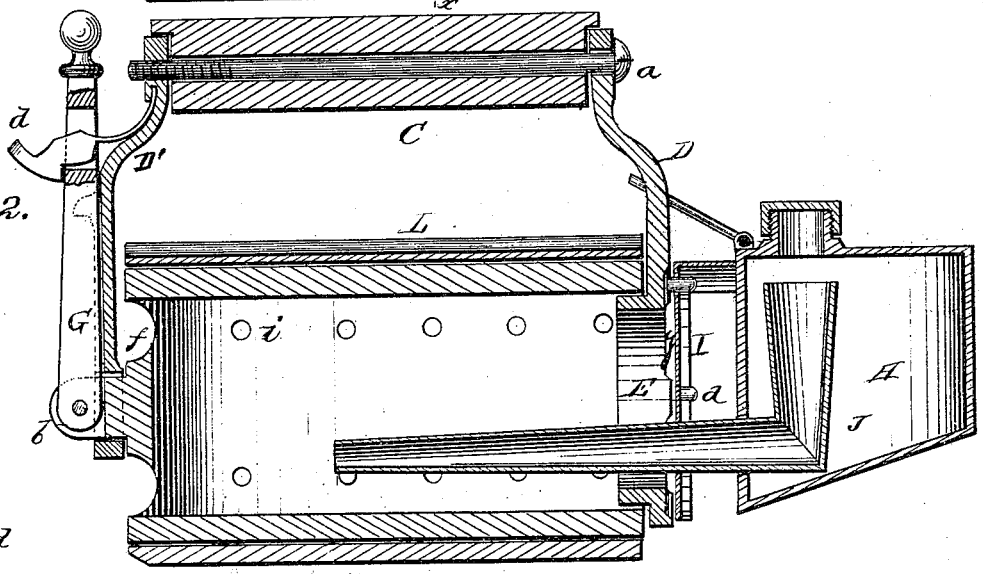


Fig. 5.

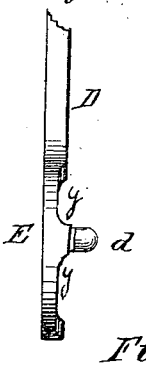


Fig. 3.

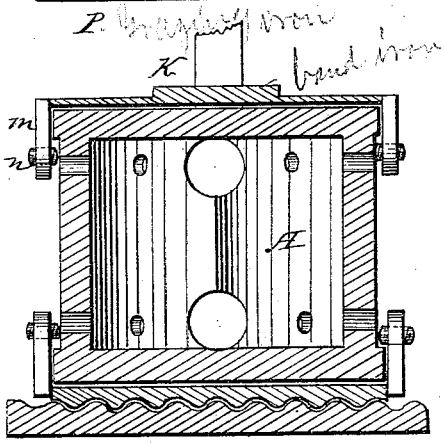
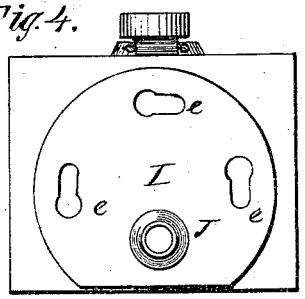


Fig. 4.



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UNITED STATES PATENT OFFICE.

THOMAS T. SMOTHERS, OF BRYAN, TEXAS.

IMPROVEMENT IN REVERSIBLE SAD-IRONS.

Specification forming part of Letters Patent No. **166,421**, dated August 3, 1875; application filed July 24, 1875.

To all whom it may concern:

Be it known that I, THOMAS T. SMOTHERS, of Bryan, in the county of Brazos and State of Texas, have invented certain new and useful Improvements in Irons; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form part of this specification.

The nature of my invention consists in the construction and arrangement of a reversible sad-iron, with lamp and attachments, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a side elevation of my sad-iron. Fig. 2 is a longitudinal vertical section, and Fig. 3 a transverse vertical section of the same. Fig. 4 is an end view of the lamp. Fig. 5 represents a side view of the hollow trunnion.

A represents the body of the sad-iron, cast in one piece, with two smoothing-surfaces, B B. Extending around the side of the body, directly under each surface, is a rib or bead, *z*, for the purpose hereinafter set forth. C is the handle of the iron attached by means of a bolt, *a*, between the ends of two arms, D D′. The other end of the arm D forms an enlarged hollow trunnion, E, inserted in a circular opening formed in the heel of the iron, while the other end of the arm D′ is placed on a trunnion, *b*, cast in the center of the toe of the iron, allowing the iron to rotate between them. The end of the trunnion *b* is slotted, and in the same is pivoted a lever, G, which, when raised, is caught and held by a spring-catch, *d*, attached to the arm D′, and thereby preventing the iron from rotating. By releasing the lever G the iron may be turned so as to bring either face B down for use. H represents an oil-reservoir substantially of the form shown in the drawing, which has a plate, I, connected to it, and this plate is provided with slots, *e e*, of the form shown in Fig. 4, to fasten on screws or headed pins, *d d*, attached to the hollow trunnion E. From the reservoir H extends an L-shaped tapering wick-tube, J, into the body of the iron for heating the same. The iron *a* is provided with ventilating openings, *i i*, along the sides near each face, also openings *f f* in the toe of the iron, above and below the solid trunnion *b*. These, together with the hollow trunnion E, supply sufficient air to the interior of the iron to cause perfect combustion and prevent any smoke from the lamp. The hollow trunnion E is provided with recesses, *y y*, on its outer face, between the studs *d d*, so that when the plate I of the lamp-reservoir is attached thereto the air is allowed to freely circulate through the sad-iron body and out through the recesses *y y*, so that the blaze from the lamp is thoroughly and continually ventilated.

In connection with the iron thus constructed I use a band-iron, K, a fluting-iron, L, and a glazing-iron P, and made of separate plates, properly constructed for the purpose designed, and of suitable size to fit on either of the faces B. Each of these attachments is provided with lugs or flanges, *m*, through which set-screws, *n*, are passed for fastening them to the body of the iron under the ribs or beads *z z*, as shown in the drawing.

The various metal parts of the iron are to be nickel-plated, while the oil-reservoir and wick-tube should be made of galvanized iron.

It will be noticed that an air-space is left between the oil-reservoir H and the plate I—by means of which it is fastened to the iron—so that the heat from the iron will have no effect thereon.

It will be seen that the sides of the faces B are extended to form ruffling-irons, when neither of the attachments are used.

The iron may be heated by gas from the inside, if so desired.

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

1. In combination with a reversible sad-iron provided with the openings *f i*, as described, and the lamp-reservoir H, the hollow journal E, having the recesses *y y* and the studs *d d* on its face, for allowing the air to circulate through the iron and between the jour-

nal E and the lamp-attaching plate I, substantially as and for the purpose set forth.

2. In combination with a reversible sad-iron having the ribs or beads *z z*, a detachable face-plate, having projecting ears or flanges *m*, and connected to the sides of the iron body by set-screws *n*, as set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

THOMAS T. SMOTHERS.

Witnesses:

P. C. DIETERICH,

W. C. MCARTHUR.