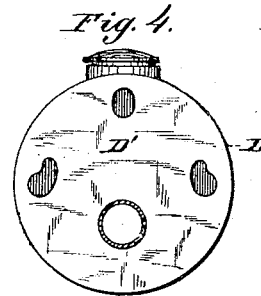
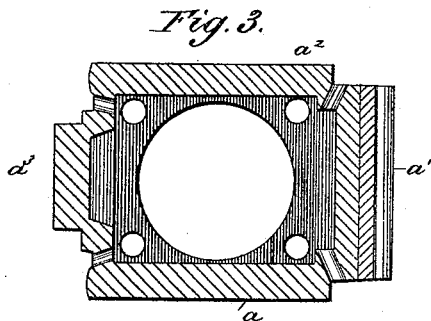
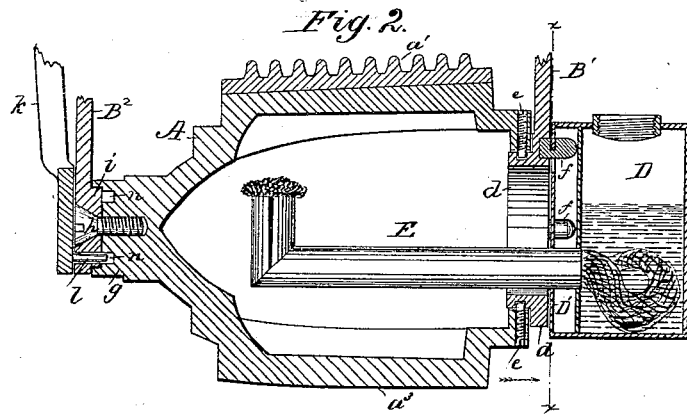
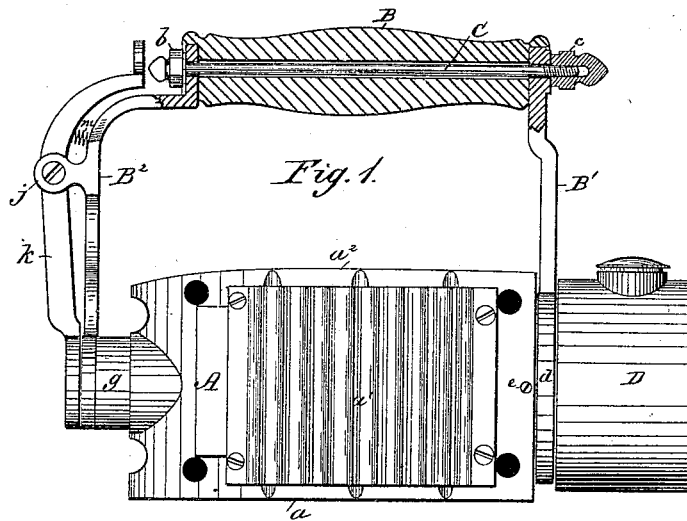


(No Model.)

H. C. FOX.
REVERSIBLE SAD IRON.

No. 265,401.

Patented Oct. 3, 1882.



WITNESSES:

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UNITED STATES PATENT OFFICE.

HENRY C. FOX, OF EVANSVILLE, INDIANA.

REVERSIBLE SAD-IRON.

SPECIFICATION forming part of Letters Patent No. 265,401, dated October 3, 1882.

Application filed May 19, 1882. (No model.)

To all whom it may concern:

Be it known that I, HENRY CLAY FOX, of Evansville, in the county of Vanderburg and State of Indiana, have invented a new and Improved Reversible Sad-Iron; 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, forming part of this specification, in which—

Figure 1 is a side elevation of the sad-iron, with the handle in section. Fig. 2 is a longitudinal section through the body of the iron, the position of the latter being turned a quarter of a revolution from that shown in Fig. 1. Fig. 3 is a transverse section of the iron; and Fig. 4 is a view of the lamp-body, taken on the line *x x* of Fig. 2, and looking in the direction of the arrow.

My invention relates to certain improvements in reversible sad-irons, in which the iron 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.

My improvements consist in the peculiar means for connecting the rotary adjustable handle to the iron, as will be hereinafter fully described.

In the drawings, A represents the iron itself, or the body portion of the device, which is made hollow, and has four working-faces, with numerous holes at the corners and ends to permit of the escape of the products of combustion from the heating devices within. One of the faces, *a*, of the iron is a smoothing-face, which is a true or flat plane. The opposite face, *a*², is the glossing-face, which is made with a slight curve to its plane, while upon the sides of the iron between these two faces there is a fluting-face, *a*¹, on one side and a smaller or band-smoothing face, *a*³, on the other, the office of which latter is to smooth narrow bands.

B B' B² represent the handle, of which B is a wooden or other non-conducting cross-piece, which is designed to be grasped by the hand, and which is fastened to the two arms B' B² of the handle by a metal rod, C, running through the wooden cross-piece and through perforation in the ends of the arms, and held in place by a fixed head, *b*, at one end of said rod and

a nut, *c*, at the other. The rear one of the arms, B', terminates at its lower end in a ring, *d*, which swivels in a circular opening in the rear end of the iron, and which ring is held in place by two diametrical screws, *e e*, in the body of the iron, which enter a groove in the ring *d*, thus permitting the ring to turn without coming out. Fastened to the outside of this ring is the lamp-chamber D, which is designed to be filled with alcohol or other similar burning-fluid, and has a wick-tube, E, that projects into the hollow iron to supply the necessary heat for the same, the wick-tube being preferably slotted at its end, so as to distribute the heat along the iron, and turned up to prevent the fluid from flowing out too freely. For holding the lamp-chamber D onto the ring, the latter is provided with three studs, *f*, that are nicked transversely at the point where they join the ring. The lamp-chamber has also a false head, D', with key-hole slots in it. When the lamp is to be put in place the studs *f* on the ring enter the key-hole slots in the head, and then by a slight drop or turn of the lamp the edges of the narrow portion of the key-hole slots are made to enter the transverse nicks in the studs, and thus hold the lamp-chamber firmly in place. This false head, it will be seen, serves the double purpose of securing the lamp and also acts as a shield or partition to separate the hot air within the iron from direct contact with the lamp-chamber, and thus preventing the undue heating and volatilization of the alcohol or burning-fluid. Between the head D' and the lamp-chamber holes are made in the side walls to permit a circulation of air between, to further cool the lamp-chamber and prevent heating and pressure.

For connecting the front arm, B², of the handle to the iron A, the latter has at its front end a circular boss or projection, *g*, with a circular recess in its end, and the lower extremity of arm B² is formed with a circular projection, *i*, that enters said recesses, while a central pivotal screw, *h*, passes through the lower end of the arm, and is screwed into the center of the recessed boss. The object of the recessed boss and the projection *i* on the handle-arm is to prevent or take up looseness or lost motion due to wear, which would soon exist if the arm had a bearing around the screw alone.

For locking the iron in any of its positions,

the front handle is provided with lugs or ears *j*, between which is fulcrumed a lever-catch, *k*, whose upper end extends to the range of the thumb of the hand grasping the handle, and
 5 whose lower end is provided with a disk bearing a stud, *l*. This lever-catch *k* has its lower end always pressed in by a spiral spring, *m*, except when the pressure of the thumb is brought to bear against the upper end. The stud at
 10 the lower end of the lever-catch plays through a hole in the lower end of handle-arm B², and, according to the position the handle occupies, enters any one of four holes, *n*, in the recessed boss at the end of the iron to lock it in
 15 its several positions.

I am aware that the rear handle-arm of a sad-iron has been connected to the body portion by means of a swiveling ring, and that the front handle-arm has been provided with a
 20 locking-lever to fix the relation of the handle to the body of the iron in its adjustment; and I do not claim such, broadly. In my device the ring on the rear handle-arm is grooved peripherally and held in place by studs *e e*, while with
 25 the devices in front the screw *h*, which holds

the front handle-arm, is housed or covered by the end of lever *k*, so that said screw cannot work loose, the whole making a more secure connection of the handle to the iron.

Having thus described my invention, what I claim as new is—

1. The combination of the iron A, having recessed boss *g* in front, with locking-holes *n*, the handle-arm B², having projection *i*, the screw
 35 *h*, connecting the handle-arm to the body of the iron, and the locking-lever *k*, having its lower end covering the screw *h*, and provided with a locking-pin, *l*, passing through the handle-arm into the iron, as set forth.

2. The combination, with the iron A, of a
 40 rotary adjustable handle having arm B' connected to the iron by a grooved ring, *d*, and studs *e*, and having the arm B² connected by a screw, *h*, with a locking-lever, *k*, overlapping the head of said screw, substantially as shown
 45 and described.

HENRY CLAY FOX.

Witnesses:

J. N. MCCOY,

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