



(No Model.)

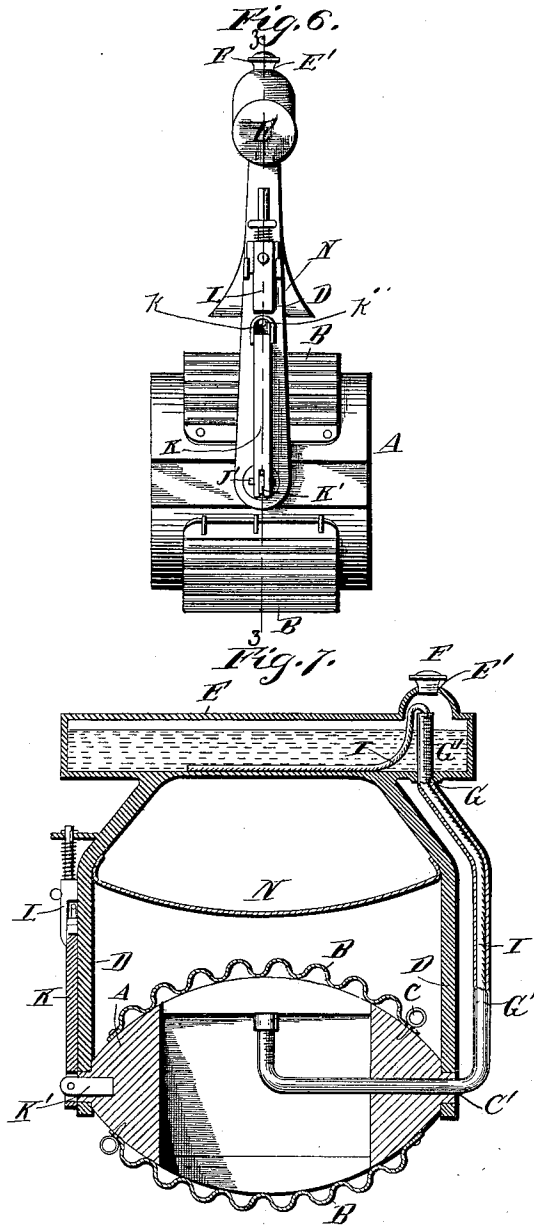
2 Sheets—Sheet 2.

J. EGAN.

COMBINED SELF HEATING SAD IRON AND FLUTING IRON.

No. 366,575.

Patented July 12, 1887.



Witnesses

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# UNITED STATES PATENT OFFICE.

JAMES EGAN, OF WAUCOMA, IOWA.

## COMBINED SELF-HEATING SAD-IRON AND FLUTING-IRON.

SPECIFICATION forming part of Letters Patent No. 366,575, dated July 12, 1887.

Application filed December 31, 1886. Serial No. 223,072. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES EGAN, a citizen of the United States, residing at Waucoma, in the county of Fayette and State of Iowa, have invented a new and useful Improvement in Combined Self-Heating Sad-Iron and Fluting-Iron, of which the following is a specification.

My invention consists in an improved self-heating combined sad-iron and fluting-iron, which is exceedingly simple in construction and convenient and efficient in operation, and which will be hereinafter fully described and claimed.

In the accompanying drawings, Figure 1 is a perspective view of my invention. Fig. 2 is a longitudinal vertical sectional view on the line  $xx$  of Fig. 3. Fig. 3 is a transverse vertical sectional view on the line  $yy$  of Fig. 2. Fig. 4 is an end view with the catch raised out of engagement. Fig. 5 is a sectional detail view of one end of the handle, hereinafter described. Fig. 6 is an end view of the iron adapted for use as a fluting-iron. Fig. 7 is a vertical longitudinal sectional view of the same on the line  $zz$  of Fig. 6.

Referring to the drawings, in which similar letters denote corresponding parts in all the figures, A represents the body of the iron, two diametrically-opposite faces of which are finished perfectly level, with rounded or beveled forward ends, in the usual shape of sad-irons, while the other diametrically-opposite sides of the body A are formed open, communicating with the interior space of the body and are covered by the corrugated fluting-plates B B, one (or both, if desired) of which is hinged at one end to permit of ready access to the interior of the iron for the purpose of lighting the heater, and is held in its closed position by a catch, C. The sides of the iron are flanged, and they are extended a suitable distance to terminate at lines within the edges of the fluting-plates, as shown at A', leaving sufficient room, however, for ready access to the interior space of the iron, this flanging of the iron causing it to retain the heat longer than it otherwise would. The space between the flanged sides of the body and the outward curves or corrugations of the fluting-plates

forms a perfect draft for the burner or heater, as will be readily seen.

The iron is formed at each end with a projection, circular in cross-section, which form journals for the lower ends of the arms D D of the tubular handle E. This hollow or tubular handle E is provided with an opening, E', having a screw-cap, F, which is removed for the purpose of filling the handle with alcohol or oil, which are the fluids I use for heating. The handle is also provided with a threaded opening, G, under the cap F, and the upper threaded end of the wick-tube G' is secured into said opening G until it extends up into the opening E' in the said handle. Said wick-tube passes down along one of the arms of the handle and through the hollow journal C' at that end of the iron into the interior space of the iron to a point about the center of the length of the same.

I indicates the wick, which extends from the hollow handle down through the tube, as shown.

The journal C' at the other end of the iron is formed with two deep grooves, J J', (see Fig. 4,) crossing each other centrally at right angles, either of which is adapted to receive a pivoted catch, K', on the lower end of a removable latch, K. The catch K' is pivoted at one end to the lower end of the vertical latch K, that is arranged to bear against the outer side of one of the arms of the handle, and the upper end of this latch K is provided with a bail, k, which is adapted to fit over or take over a fixed pin, k', on one of the arms of the handle. A spring-actuated detent or catch, L, is arranged above the latch, and it is normally impelled downwardly by its spring, so that the lower end thereof will fit over the bail and pin and the upper end of the latch K, whereby the latch is held against one of the arms of the handle by the detent engaging the upper end thereof and the pivoted catch fitting in one of the recesses or grooves of the journal C'.

The lower end of the tube G within the iron is formed with an exterior screw-thread, and a cap may be screwed on the said end when the iron is not in use, to prevent leakage or evaporation.

N represents a shield, which is secured at

its ends to the arms of the handle, as shown, and serves to protect the hand from the heat arising from the iron.

In operation, the fluid, having been placed in the hollow handle through the opening E', passes down through the wick-tube, saturating the wick, the end of which within the iron is lighted after the screw-cap has been removed from the end of the tube; and as soon as one face of the iron is heated said iron is reversed by releasing the latch K from the catch L and drawing the pivoted catch K' out of the recess or groove J, replacing it in the same recess when the other face of the smoothing-iron is turned down in its operative position. When it is desired to use the fluter, the pivoted catch K' is inserted in the other groove, J', thus holding the iron with one of the fluting-plates down in its operative position, and the iron is reversed, as described, to heat the two fluting-plates successively.

From the foregoing description, taken in connection with the accompanying drawings, the construction, operation, and advantages of my improved self heating reversible sad-iron and fluter will be readily understood. It will be seen that I provide an improved iron in which the heating-fluid is stored in the handle, and thereby dispense with any attachment for containing the fluid, thus adding greatly to the compactness and convenience of the iron, while the alcohol, being at the farthest possible distance from the blaze, will not be heated. The fluting-plates form a perfect draft for the flame within the iron, while by flanging the sides of the iron, as described, the heat is retained much longer than would otherwise be possible. The fluting-plates, being hinged, afford convenient access to the in-

terior of the iron. The handle serves the double purpose of a handle and a fluid-reservoir. The grooved bearing and catch for reversing the iron and fluting-plates and holding them in their adjusted positions are exceedingly simple and effective in operation.

The entire device is exceedingly simple and compact in construction, being devoid of all unnecessary attachments, and is exceedingly convenient and efficient in operation.

Having thus described my invention, what I claim, and desire to secure by Letters Patent of the United States, is—

A sad-iron having the journals at opposite ends thereof, one of the journals having a continuous passage therethrough and the other a recess in its outer face, a hollow handle forming a reservoir and having arms which are fitted on the journals, a wick-tube entering the reservoir of the handle at one end and passing through the hollow journal into an interior chamber of the iron at its opposite end, a latch, K, bearing against the arm of the handle, which is fitted on the recessed journal, and having at its upper end a bail which is connected to said arm, a sliding detent, L, confined on the arm above the bail of the latch, a spring for normally forcing said detent over the upper end of the latch, and a catch, K', pivoted to the lower end of the latch and entering the recess in one of the journals, as and for the purpose described.

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

JAMES EGAN.

Witnesses:

P. H. BRANNON,  
E. H. FURLEY.