E. F. STENMAN.

SAD IRON.

APPLICATION FILED MAR. 12, 1908.

915,242. Patented Mar. 16, 1909.

Fig. 1.

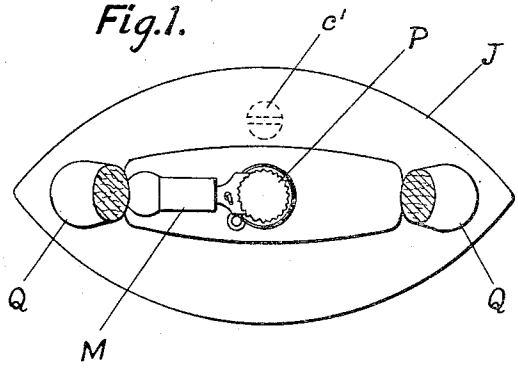


Fig. 3.

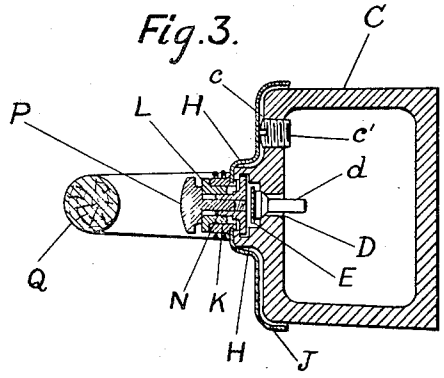


Fig. 2.

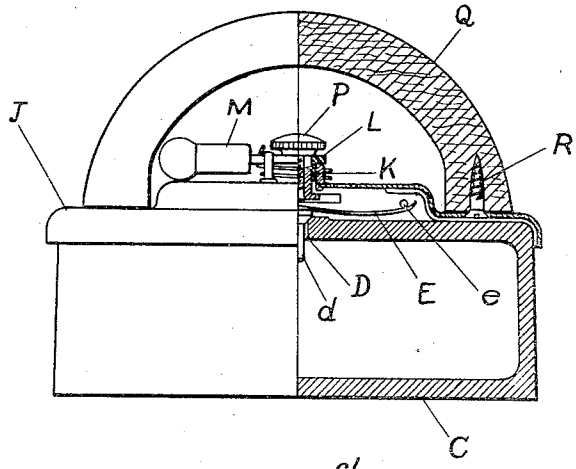


Fig. 4.

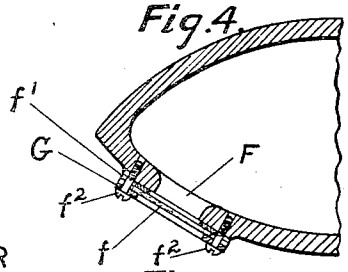


Fig. 5.

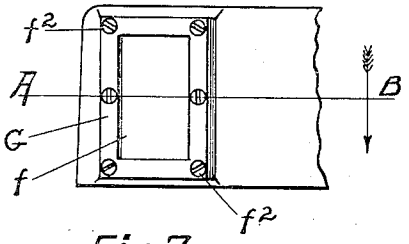


Fig. 6.

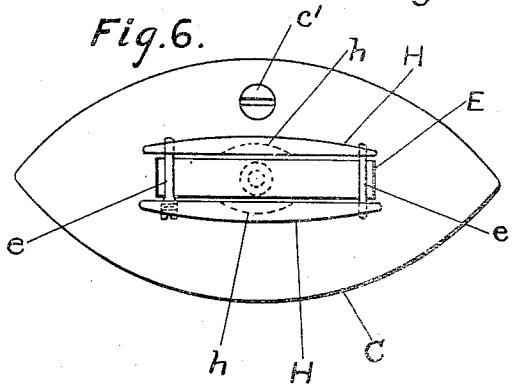


Fig. 7.

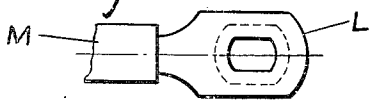


Fig. 8.

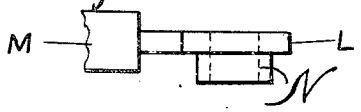


Fig. 9.

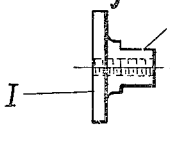
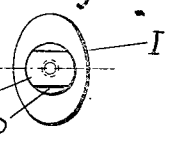


Fig. 10.



Witnesses:

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Robert N. Crandall

Inventor:

Ellis F. Stenman.

by Oscar A. Taft Atty.

UNITED STATES PATENT OFFICE.

ELLIS F. STENMAN, OF WORCESTER, MASSACHUSETTS.

SAD-IRON.

No. 915,242. Specification of Letters Patent. Patented March 16, 1909.

Application filed March 12, 1908. Serial No. 420,598.

To all whom it may concern:

Be it known that I, ELLIS F. STENMAN, a citizen of the United States, residing at Worcester, in the county of Worcester and Commonwealth of Massachusetts, have invented certain new and useful Improvements in Sad-Irons; 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, and to the characters of reference marked thereon, which form a part of this specification.

An object of this invention is to produce a sad iron consisting of a hollow body adapted to contain water and means for attaching the handle to the body.

A further object of this invention is to provide an escapement for the steam and in connection therewith, means for directing the steam over the edges of the top of the body and deflecting it on the material operated upon by the iron.

A still further object of the invention is to provide novel means for securing the handle and its accompanying parts to the body of the iron whereby the hand of the user of the iron is protected from the escaping steam or from the heat radiating from the body of the iron.

Finally an object of the invention is to produce a device of the character noted, which will possess advantages in simplicity, efficiency and durability, proving at the same time comparatively inexpensive to manufacture.

With the foregoing and other objects in view, the invention consists in the details of construction and in the arrangement and combination of parts to be hereinafter more fully set forth and claimed.

In describing the invention in detail, reference will be had to the accompanying drawings forming part of this specification wherein like characters denote corresponding parts in the several views, in which—

Figure 1, is a top plan view of an iron with the handle thereof in section; Fig. 2, illustrates a side elevation of the iron with a portion thereof sectioned longitudinally; Fig. 3, is a transverse sectional view through the center of the iron; Fig. 4, is a horizontal sectional view of a fragment of the body of the iron on the line A—B of Fig. 5; Fig. 5, illustrates a side elevation of a fragment of the body of the iron; Fig. 6, is a top plan view of the iron body with the handle removed; Figs. 7 and 8 are respectively a plan view and side elevation of the inner end of the locking lever for retaining the handle to the body of the iron; and Figs. 9 and 10 are detail views of parts of the locking mechanism.

In these drawings C, indicates a hollow body of a sad iron having a threaded opening *c*, for the application of water to the interior of the body, said opening being normally closed by a threaded plug *c'*. Centrally of body, the upper wall is provided with an aperture D, normally closed by the escapement valve *d*; which escapement valve has its upper surface engaged by a spring E, said spring preventing undue movement of the valve with relation to its seat.

The body of the iron is provided with a side opening F, covered by a transparent plate *f*, which plate preferably rests on a gasket *f'*, lying against the body of the iron, said plate being held in place by screws f^2, which are threaded in the body of the iron and pass through the frame G and through the plate *f*.

The top of the body of the iron is provided with two parallel ribs H, H, extending longitudinally of the body having their inner walls undercut at *h*, *h*, to form seats for the cam I, forming a part of the locking mechanism for retaining the handle and body in operative relation. The spring E, heretofore referred to is retained in operative relation to the valve by means of the cross-pins *e*, which are seated in holes in the parallel ribs H, H.

A shield J, fully covers the body of the iron and has a flanged edge embracing the edge of the body of the iron, the said flange deflecting the steam to prevent its coming in contact with the hand of the operator, and serving to direct the steam to the material which is being ironed. The shield is preferably supported by the ribs H, H. The shield is provided centrally with an aperture and a tube K, is applied thereto and extends upwardly, the upper edge of the said tube forming a seat for the flange L, of the operating handle M, said operating handle having a depending hollow portion N, to receive the shank O of the locking cam I. The shank O, has flattened portions *o*, which are engaged by the operating lever for the purpose of partially rotating the cam I. The shank of the cam is centrally threaded and the screw P, engages the threads of the shank, the head of the screw bearing against the upper surface of the operating handle for the purpose of

binding the flange of the handle against the upper edge of the tube K, and forming a frictional lock to prevent the turning of the handle for releasing said cam I.

The handle Q, is attached to the shield by means of the screws R, as fully shown in Fig. 2, although any appropriate means may be substituted for securing the handle to the shield.

When the shield is to be detached from the body of the iron, the screw P, is turned to disengage the head thereof from the upper surface of the operating handle and said handle is then free to be turned. A slight movement of the handle results in partially rotating the cam I, until it disengages from the undercuts in the ribs H, when the said shield and handle may be removed. In this detached condition of the shield and body, the plug c', may be removed for the purpose of filling the body of the iron with water and when the plug c', has been restored to its normal position, the shield and handle may be reapplied to the body of the iron. A reverse movement of the operating handle will effect an engagement of the cam with the shoulders of the ribs and by turning the screw P, as heretofore described, the operating handle is fastened against movement.

I claim:—

1. In a sad iron, a hollow body adapted to contain water, said body having an escapement for steam, a shield extending over the surface of the body and provided with a flange extending over the top of the body for deflecting the steam downwardly.

2. In a sad iron, a hollow body adapted to contain water, said body having an escapement for steam in its top wall, a shield extending over the upper surface of the body and supported above said upper surface, said shield having a flange extending over the upper edge of the body for deflecting steam downwardly.

3. In a sad iron, a hollow body adapted to contain water, said body having an opening in its upper wall, a valve in the opening, means for retaining the valve normally seated, a shield extending over the surface of the body and supported thereabove, said shield having a flange depending over the edge of the body for deflecting steam downwardly.

4. In a sad iron, a hollow body adapted to contain water, said body having an opening in its upper wall, a valve controlling the said opening, means for retaining the valve normally seated, ribs on the upper wall of the body, a shield supported on said ribs, said shield having a flange depending over the edge of the body and adapted to deflect steam downwardly.

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