No. 829,615. PATENTED AUG. 28, 1906.

H. WONDERLICH.

SAD IRON.

APPLICATION FILED NOV. 20, 1905.

Fig 1

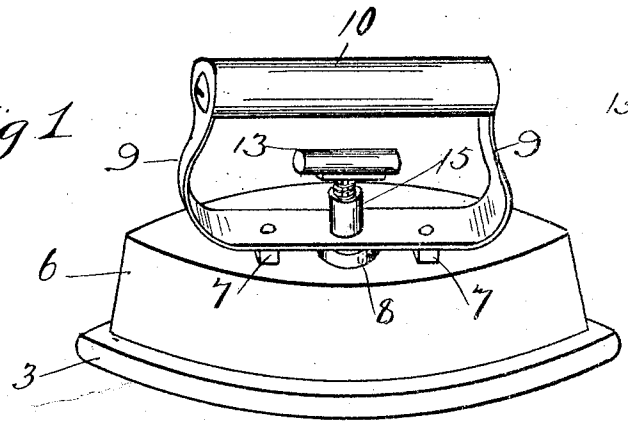


Fig 6.

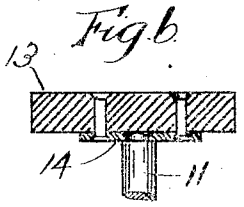
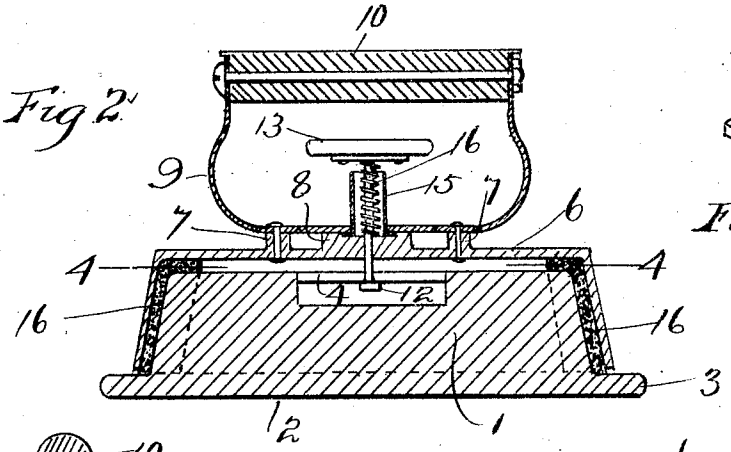


Fig 2.



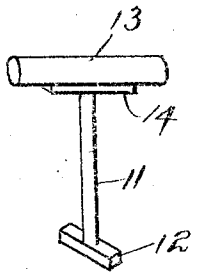
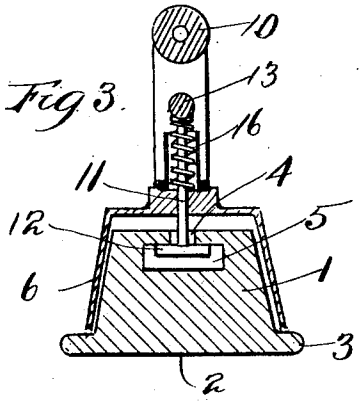


Fig 5

Fig 3.



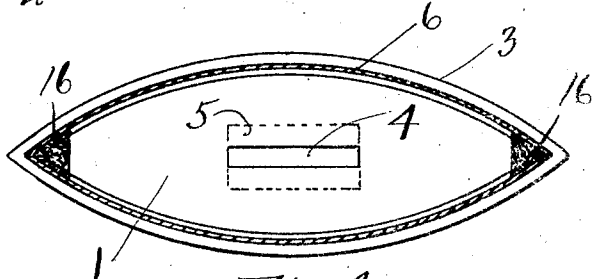


Fig 4

Witnesses

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SAD-IRON.

No. 829,615. Specification of Letters Patent. Patented Aug. 28, 1906.

Application filed November 20, 1905. Serial No. 288,165.

To all whom it may concern:

Be it known that I, HERMAN WONDERLICH, a citizen of the United States, residing at the city of Providence, in the county of Providence and State of Rhode Island, have invented certain new and useful Improvements in Sad-Irons, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to improvements in sad-irons, and has for its object to provide an iron having a body constructed of a metal core inclosed within an outer removable shell or casing, said shell being somewhat larger than the body portion of the core, whereby an intervening air-space is provided on both sides and the top of the said core to serve the purpose of preventing the radiation of heat therefrom and rendering the handle cool while the iron is in the hand of the operator.

A further object of this invention is to provide a cushion of suitable material whereby the metal of the shell and that of the core are prevented from coming in direct contact with each other, thereby obviating the harsh grating sounds of the rough contacting metals whenever the handle is applied and removed, and, again, by the application of this cushion the shell is caused to fit tightly onto the core and effectually prevent any shake or rattle of the parts.

An essential feature of this invention is the simple and convenient construction of lock whereby the shell may be readily attached and detached to and from the core.

The invention is fully set forth in this specification and more particularly pointed out in the appended claims.

In the accompanying drawings, Figure 1 is a perspective view of my improved sad-iron, illustrating the construction of the operating-handle and also the locking-handle. Fig. 2 is a longitudinal central sectional view of the complete iron. Fig. 3 is a transverse central sectional view of the iron. Fig. 4 is a plan view of the core, showing a section of the shell on line 4 4 of Fig. 2. Fig. 5 is a detail view of the locking-bolt. Fig. 6 represents the locking-handle in section.

Referring to the drawings, at 1 is the body portion of the sad-iron, which is provided with the usual smoothing-surface at the bottom 2 and is also preferably provided with a beading 3 around its lower edge. In the upper face of this body is formed a long narrow slot 4 (see Fig. 4) by coring or otherwise, which slot is preferably undercut at 5, as shown in Fig. 3, for the purpose of receiving and permitting the engagement of the T-shaped head of the lock-bar hereinafter described.

At 6 is the shell or casing that preferably incloses the top and sides of the core or body portion, said shell being made larger than that portion of the core-body it incloses, so as to provide an air-space on both sides of the same to prevent the radiation of heat therefrom. On the upper face of this shell are raised three lugs 7, 7, and 8, to which the handle-frame 9 is secured, and bolted between the upper ends of this frame is the handle 10, that may be made of wood, asbestos, or other suitable non-heat-conducting material. By raising this handle-frame from the shell and supporting the same on the lugs 7 7 a sufficient space is left around the same for the air to circulate freely, and thus prevent the frame from becoming hot, and so transmit its heat to the handle 10. Attached to the inner side of the shell and preferably located at either end of the same is a thin layer of semiflexible material 16—such as mineral wool, asbestos, magnesia, or the like—to form a cushion and prevent the iron of the two members from coming in direct contact one with the other, thereby causing the shell to fit nicely onto the core and prevent any moving or shaking of the parts. This cushion also serves to deaden the sound and produce more of a springy effect when the shell is applied to the body or core. The cushioning material may be attached to the shell, or it may be fixed to the body or core, if preferred.

The locking-bolt (see Fig. 5) has a long shank 11, with T-shaped head 12 at its lower end and a wooden handle 13, riveted to the cross-bar 14 at its upper end, (see Fig. 6,) set at right angles to the said T-head. In assembling the parts of this lock the upper end of the shank 11 is passed up through the bottom of the shell 6 and through the short tube 15, the tension-spring 16 is dropped over the shank, the plate 14 and handle 13 are riveted in place, and the lock is in operative condition. When applying the shell to the core or body, the T-shaped head 12 sets parallel to the slot 4 in the core, and the handle-bar 13 is transversely disposed or set at right angles to the operating-handle 10. In this position the thumb and finger may

readily straddle the said handle 10 and press the lock-bar down against the spring tension, and at the same time the handle-bar 13 is carried around parallel or in line with the handle 10, and the shell is securely locked to the core. The use of an air-space on both sides of the core in combination with the cushioning of the shell at its ends on the core is a new and distinctive feature. It not only saves the trouble and expense of finishing and fitting of the parts together to keep them from shaking, but it at the same time renders the operation of the whole device much more satisfactory and effective.

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

1. In a sad-iron, a core or body provided with a smoothing-surface, a shell larger than said core and adapted to inclose a portion of the same, thereby providing an air-space between the top and sides of the core and shell, a handle on said shell, cushioning means interposed between the shell and core at both ends thereof to prevent the two parts from coming in direct contact, and a spring-tensioned lock for securing said shell to said core.

2. A sad-iron comprising a core having a recess in its upper surface, said recess being provided with shoulders having an entering slot between them, a shell having a handle and adapted to inclose the top and sides of said core, a rotatable lock-bolt in said shell, a T-shaped engaging head on the lower end of said bolt to engage said shoulders, a non-metallic cross-bar on the upper end of said bolt, said cross-bar being adapted to be pressed down to carry said head into said slot and then turned to cause said head to engage said shoulders, a tubular member extending upward from the shell beneath said handle, and a coiled tension-spring within said tube and acting on said cross-bar to press said lock-bolt upward.

3. In a sad-iron, a core or body having a smoothing-surface, said body having a recess in its upper surface, provided with shoulders having an entering slot between them a shell having a handle, said shell being made larger than said core and adapted to inclose the top and sides of the same whereby an air-space between said top and sides is provided, a spring-tensioned rotatable lock-bolt in said shell having a T-shaped engaging head, a handle-bar on said bolt adapted to be pressed by the thumb and fingers and turned to cause said T-shaped head to engage the shoulders in the core to removably secure the shell thereto, and cushioning means interposed between the core and the shell at both ends thereof.

4. In a sad-iron, a core or body provided with a smoothing-surface, a shell having a handle, said shell being formed larger than said core and adapted to inclose and form an air-space between the top and sides of the same, a spring-tensioned rotatable lock-bolt in said shell having a T-shaped engaging head, a handle-bar on said bolt adapted to be pressed and turned to cause the head of said bolt to engage said core to secure the shell thereto, and cushioning material interposed at each end of the iron between the shell and core to prevent the shaking of one part within the other.

In testimony whereof I affix my signature in presence of two witnesses.

HERMAN WONDERLICH.

Witnesses:

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E. I. OGDEN.