H. WONDERLICH

SAD IRON.

APPLICATION FILED JULY 17, 1907.

911,795.

Patented Feb. 9, 1909.

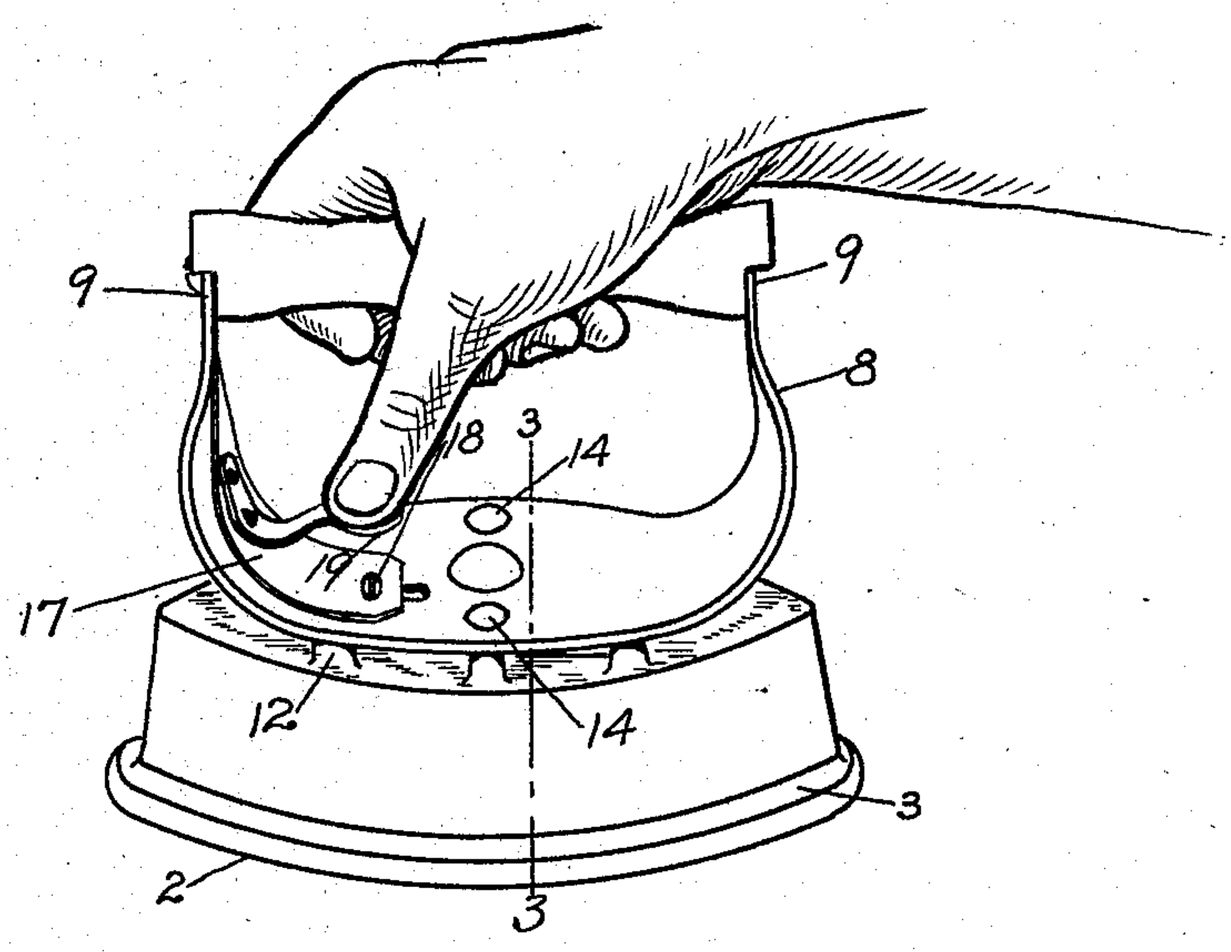

FIG. 1

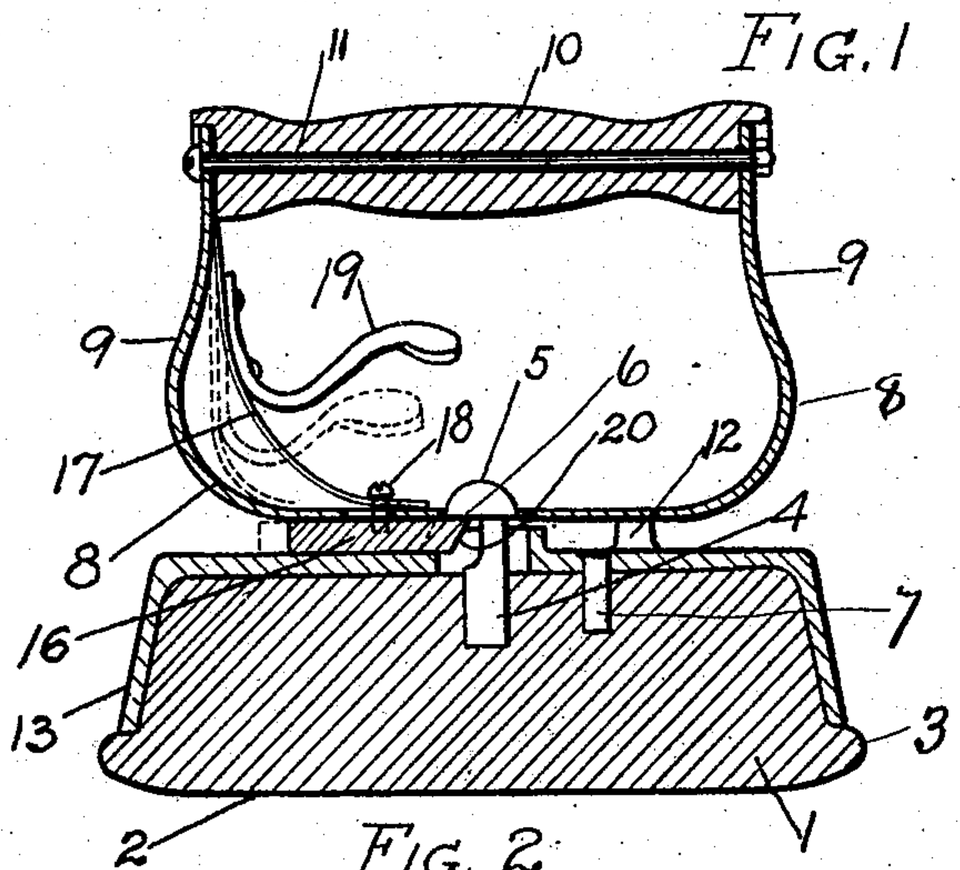

FIG. 2

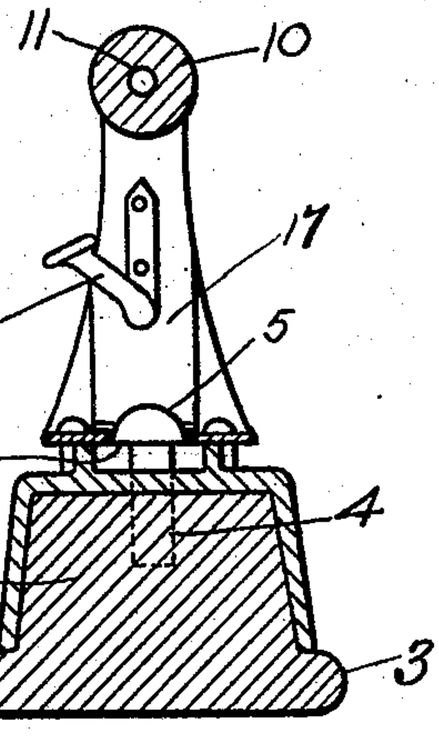

FIG 3.

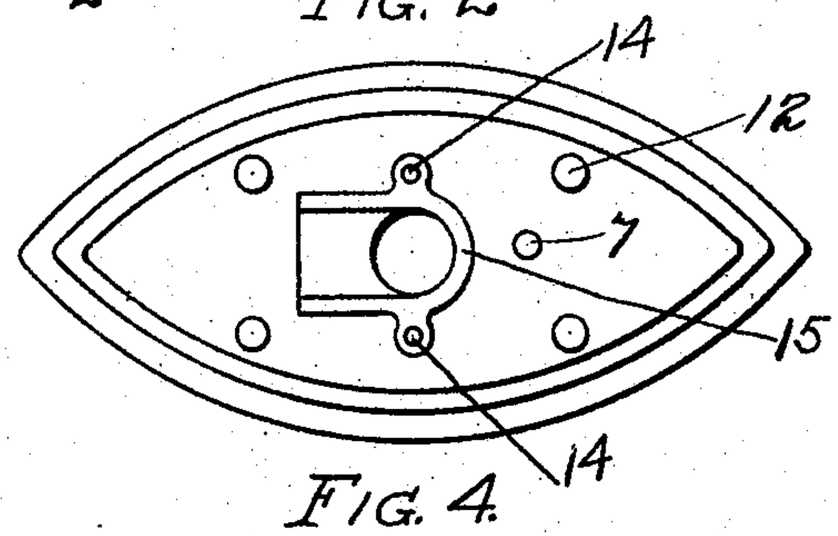

FIG. 4.

Witnesses

Robert E. Lamphear.

E. D. Ogden

Inventor

Herman Wonderlich.

By

Howard E. Barlow.

Attorney

UNITED STATES PATENT OFFICE.

HERMAN WONDERLICH, OF PROVIDENCE, RHODE ISLAND.

SAD-IRON.

No. 911,795. Specification of Letters Patent. Patented Feb. 9, 1909.

Application filed July 17, 1907. Serial No. 384,255.

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 drawing.

My invention relates to improvements in sad-irons in which the handle is removable from and interchangeable with a number of cores or bodies and the object of the invention is to provide a simple, practical and effective means of detachably connecting the handle with the core body. In many of the irons of this character heretofore constructed it has been found inconvenient or awkward to operate the detaching means. My present invention therefore is designed to obviate this difficulty and provide a spring lock with an operating arm, which on account of its long leverage is very easy to manipulate and withdraw the latch by a slight pressure of the thumb of the hand operating the iron.

In the preferred form of my invention the handle and the locking device are connected to a shell which fits over the sides of the core or body, but the inclosing of the core within the shell is not absolutely essential.

With these objects in view, the invention consists of certain novel features of construction, as will be more fully described and particularly pointed out in the appended claims.

In the accompanying drawings: Figure 1—represents a perspective view of the sad iron with the handle and shell on the body or core, and showing a hand in position on the handle operating the locking device. Fig. 2—is a central longitudinal section of Fig. 1. Fig. 3—is a cross-section through the iron on substantially the lines 3—3 of Fig. 1. Fig. 4—is a top view of the shell or cover with the handle removed.

Referring to the drawings at 1 is the core or body which is made substantially in the form heretofore in common use including the smoothing surface 2 at the bottom, and preferably provided with an extended rim or bead 3 around its lower edge. This core is provided with a pin 4 which is inserted and rigidly fastened preferably in the middle of the upper surface of the core. The pin is provided with an enlarged head 5 preferably rounded on its upper surface, but the same may be otherwise tapered to engage and cause the lock bolt to automatically withdraw as the cover or handle is pressed onto the core. The head of this pin forms an overhanging or projecting lip 6 under which the end of the lock bolt is designed to extend. The core or body 1 may also be provided with another pin or dowel 7 (see Fig. 2) extending upwardly from its upper face to enter a corresponding hole or recess in the shell or plate of the handle. The handle portion 8 is preferably formed of a piece of sheet metal turned up at its ends at 9—9 between which up-turned ends is secured the wooden handle 10 by means of the binding bolt 11. This handle portion is adapted to rest on the four up-turned bosses 12 on the top of the shell or plate 13 and be secured in position thereon by means of the rivets 14, or other suitable means. It will be observed that by this construction the handle is raised somewhat above the shell to allow for a circulation of air and prevent heating, and also to provide a space in which the locking latch bolt 16 is adapted to slide. A guide-way 15 is provided (see Fig. 4) in which this latch is adapted to slide between the shell and the handle portion 8.

An essential feature of my invention is the simple and effective means by which this bolt or latch is operated. A flat spring 17 is secured at its upper end by the same bolt 11 which also secures the handle 10. The lower end of this spring rests and slides on the upper surface of the handle member 8 and is connected to the slide bolt by means of the pin 18. This spring is so bent as to form a short curve and to act on the latch bolt 16 to normally hold it in its engaging position, thereby leaving considerable space between it and the turned up end of the handle portion whereby the same is adapted to be moved in a rearward direction to withdraw the bolt from its engagement with the latch pin 4. Another and essential feature of my improved locking device is the pressing arm 19 which may be connected to this spring by riveting or any other suitable means. This arm may be made of any desired material and have its outer end that is engaged by the thumb, covered with wood or other heat non-conducting material, if desired. The arm is arranged to extend forward and is slightly offset so as to be readily engaged by the thumb of the hand

that holds the iron and by a slight downward pressure may be moved into the position illustrated in dotted lines in Fig. 2, to withdraw the bolt from its engagement with the latch pin to remove the shell from the core.

The shell 13 is preferably made to fit down over the core or body 1 as tightly as is consistent with making it interchangeable with other cores and providing some slight space for the expansion incident to heating the core without making it impossible to remove the shell from the same. It is obvious, however, that the shell or plate 13 need not extend as far over the core as shown in the drawings.

The operation of my improved device may be more fully described as follows: When it is desired to use the core or body portion for smoothing or ironing the shell 13 with the handle attached thereto is pressed over the core which naturally brings the head of the pin in line with the holes through the shell and lower member of the handle. As the handle is pressed downward the rounded head of the pin engages the wedge-shaped surface 20 on the underside of the latch bolt 11 pressing the same back against the tension of the spring 17. As soon as the head of the pin has passed above the upper surface of said latch the spring carries the latch forward under the head thereby rigidly securing the handle to the core. When it is desired to remove the handle the thumb is pressed against the operating arm which withdraws the bolt from the latch pin and the shell and handle may be separated from the core.

My arrangement is of simple and inexpensive construction and extremely practical and efficient in its operation, and by its use the handle may be quickly and easily attached to the core and removed therefrom.

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

1. In a sad iron a base having a centrally disposed vertical pin with a rounded head, a handle portion comprising a cap adapted to incase said base, a curved plate secured thereto and spaced from the upper surface thereof, a handle secured between the ends of said curved plate, a latch adapted to engage said pin located in and adapted to slide in the space between said cap and said curved plate, a spring plate secured to said latch and to the end of said handle and an angled operating thumb lever secured to said spring plate by means of which said latch may be released from its engagement with said pin.

2. In a sad iron, a base provided with an upwardly extended headed pin, a detachable shell constructed to incase said base, a curved plate secured to said shell and spaced from the upper surface thereof, a handle supported between the ends of said curved plate, a latch slidably mounted between said shell and said curved plate and arranged to engage said pin, a flat spring secured at one end to said curved plate, the free end of said spring being connected to said latch, and means secured to said spring for releasing said latch from said pin.

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

HERMAN WONDERLICH.

Witnesses:

HOWARD E. BARLOW,

E. I. OGDEN.