

No. 649,912.

L. D. CLARK.
SAD IRON.

Patented May 22, 1900.

(Application filed Aug. 20, 1896.)

(No Model.)

Fig. 1

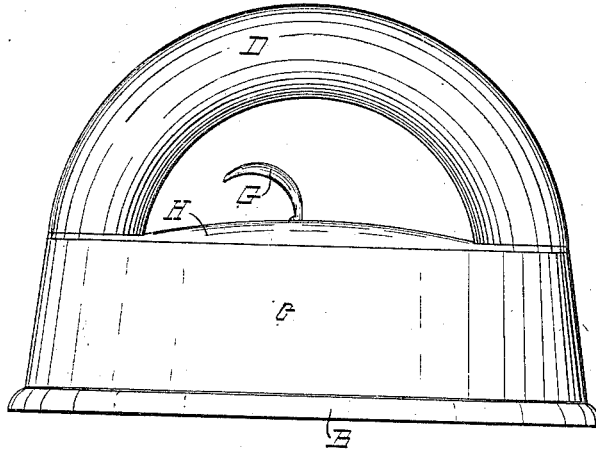


Fig. 2

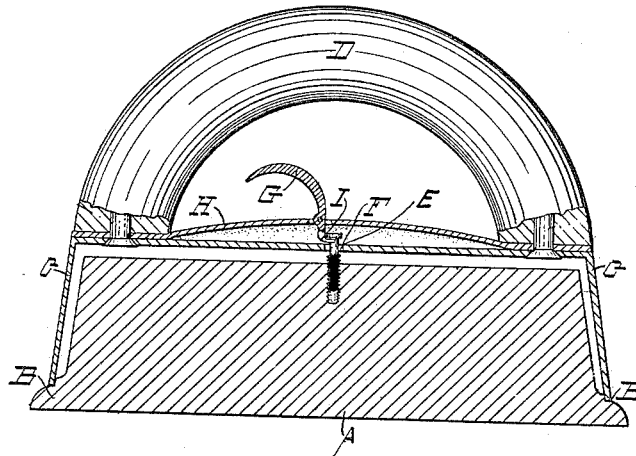


Fig. 3



Witnessed.

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LORENZO D. CLARK, OF STOUGHTON, WISCONSIN, ASSIGNOR TO CHARLES
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SAD-IRON.

SPECIFICATION forming part of Letters Patent No. 649,912, dated May 22, 1900.

Application filed August 20, 1896. Serial No. 603,398. (No model.)

To all whom it may concern:

Be it known that I, LORENZO D. CLARK, a citizen of the United States, residing at Stoughton, in the county of Dane and State of Wisconsin, have invented new and useful Improvements in Sad-Irons, of which the following is a specification.

My invention relates to improvements in sad-irons, and pertains especially to the construction of the body of the iron, whereby a solid metal core provided with a smoothing-surface is inclosed at the top and sides by a removable shell with an intervening non-heat-conducting space located between the shell and core, whereby the former is rendered effective in preventing the radiation of the heat from the latter. By "non-heat-conducting space" I mean a space occupied by air or any other suitable non-heat-conducting material, such as is used for covering boilers, steam-pipes, &c.

The objects of my invention are, first, to prevent as far as possible the radiation of heat from the core, and, second, to provide means for readily and quickly attaching and detaching the shell and body, whereby a single shell can be used interchangeably upon several different cores.

In the following description reference is had to the accompanying drawings, in which—

Figure 1 is a side view of my improved sad-iron; and Fig. 2 is a central longitudinal sectional view of the same, the handle being shown in full. Fig. 3 is a top view of the bifurcated clutch-lever for locking the parts together.

Like parts are identified by the same reference-letters throughout the several views.

The core A of my sad-iron is provided with the usual smoothing-surface at the bottom and a narrow bead or bearing B around the lower edge, against which the lower edges of the shell engage.

The shell C is larger than that portion of the core which it incloses and is provided with a handle D, rigidly attached thereto. It incloses the entire core, with the exception of the smoothing-surface and the bead or bearing B, and forms a dead-air space between the shell and core. This space may, if desired,

be filled with any other non-heat-conducting material instead of air, the substance used being in such case rigidly affixed to either the shell or core to prevent it from falling away when the shell is removed, as any non-heat intervening conductor, whether of air or any other of the numerous well-known materials adapted to resist heat radiation, may be used for this purpose if so disposed that it will not interfere with the removal and replacement of the shell.

For temporarily holding the shell and core together I have provided a form of fastening or catch which is adapted to be quickly adjusted in either the open or locked position to release the core from or engage the same in the shell, and I call this device a "temporary" fastening as distinguished from those fastenings which are designed to bind the parts permanently together, except when it is desired to make repairs. As a preferred form of such temporary fastening I have provided the core with a headed screw E, projecting from its upper surface and adapted to project through a hole F in the shell when the latter is in place upon the core. A locking-lever G is pivotally supported in a slot in the shield H and is provided with a bifurcated clutch-hook I on its lower end, which is adapted to engage the head of the screw E, and thereby bind the shell and core together. The screw E being vertically adjustable, it is obvious that it may be set so that the shell and core will be rigidly bound together and will not shake or rattle.

It will be observed that with this construction the base or smoothing surface of my sad-iron possesses the same efficiency as that of the ordinary sad-iron, in which the parts are all formed integrally, while the heat radiation from the upper portions is almost entirely prevented. I am also enabled to remove the handle and shell, using the same interchangeably upon several different cores, the result of my combination being to attain in a single sad-iron the advantage of a maximum efficiency of the smoothing-surface, together with the greatest possible economy of heat and the greatest possible convenience in manipulating the iron.

I attach great importance to the fact that the core is, with the exception of the smoothing-surface and the bead or bearing for the lower edge of the shell, entirely inclosed by the non-heat-conducting space, and also to the fact that the parts are provided with a temporary fastening, which permits of the release or engagement of the core without loss of time.

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

1. In a sad-iron, the combination of a core, provided with a smoothing-surface, a shell adapted to inclose the core, with the exception of the smoothing-surface, and a narrow bead or bearing around the edge thereof, a non-heat conductor located between the shell and core, and a fastening adapted to temporarily bind the shell and core together, substantially for the purpose set forth.

2. In a sad-iron, the combination of a core provided with a smoothing-surface, a removable shell adapted to inclose the core with the exception of the smoothing-surface, and a narrow bead or bearing around the edge thereof, a fastening for temporarily holding the shell and core together, and a non-heat conductor surrounding the inclosed portion of the core, said shell being adapted to impinge upon said bead or bearing at its lower edge, and to form

a heat-retaining dead-air-space, substantially as described.

3. A sad-iron, consisting in the combination of but two separable parts, comprising a core having a smoothing-surface, and a shell for inclosing the core, with the exception of the smoothing-surface, and a narrow bead or bearing around its lower edge, said shell being provided with a handle, and a fastening for binding the shell and core together, and being arranged to coöperate with the core to form a heat-retaining envelop of dead air between it and the core, when the parts are united, substantially for the purpose set forth.

4. The combination of a core provided with a smoothing-surface, and a shell adapted to inclose the core with the exception of the smoothing-surface, and a narrow bead or bearing around the edge thereof, with a non-heat-conducting space between the core and shell, a vertically-adjustable screw projecting from the upper surface of said core, and a bifurcated clutch-lever adapted to engage said screw and bind the shell and core together, substantially as described.

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

LORENZO D. CLARK.

Witnesses:

BEN. E. WAIT,
GERHARD M. DAHL.