

E. C. LOETSCHER.
SAD IRON.
APPLICATION FILED MAY 20, 1908.

1,007,215.

Patented Oct. 31, 1911.

Fig. 1.

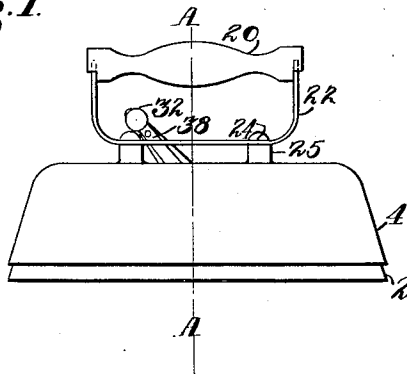


Fig. 4.

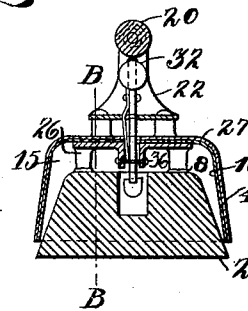


Fig. 2.

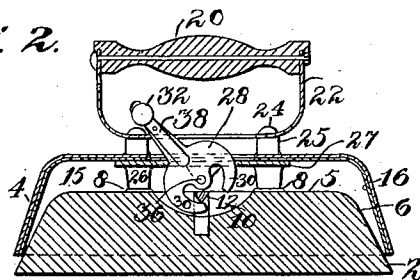


Fig. 5.

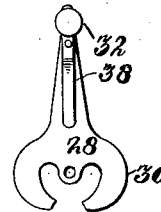


Fig. 6.

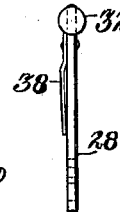


Fig. 3.

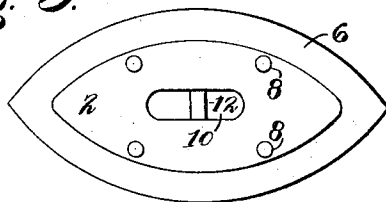


Fig. 7.

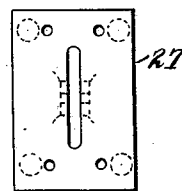
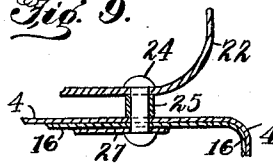


Fig. 8.



Fig. 9.



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UNITED STATES PATENT OFFICE.

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SAD-IRON.

1,007,215.

Specification of Letters Patent.

Patented Oct. 31, 1911.

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To all whom it may concern:

Be it known that I, EMIL C. LOETSCHER, citizen of the United States, residing at Dubuque, in the county of Dubuque and State of Iowa, have invented certain new and useful Improvements in Sad-Irons, of which the following is a specification.

My invention relates to sadirons with special reference to those composed of a core and a shell with the shell detachably held over the core and inclosing the core with the exception of the bottom or the smoothing surface and a small portion of the sides.

The object of my invention is to keep the shell with the handle attached thereto practically out of direct contact with the core whereby it is kept cool and thereby greatly increasing the usefulness of the iron as well as effecting a great economy in heat.

The following specification will specifically point out and describe the manner of construction and mode of operation when taken in connection with the drawings accompanying the same and forming a part hereof.

Figure 1 represents a side elevation of my improved sadiron with shell and handle attached. Fig. 2 is a longitudinal section through the center of Fig. 1. Fig. 3 is a plan of the body or core with the shell removed. Fig. 4 is a transverse section on the line A—A of Fig. 1 with the lever in a vertical position. Figs. 5 and 6 show one form of the locking cam or lever. Fig. 7 shows a plan view of the bearing plate for supporting the cam lever. Fig. 8 is a cross section of Fig. 7 through the center. Fig. 9 is a vertical, longitudinal section through a part of the shield, the ferrule, the shell and bearing showing the rivet through the ferrule, shell and bearing plate.

Like letters of reference denote corresponding parts in each of the figures.

Referring to the drawings, 2 represents the core and 4 the shell. The core is preferably formed in an elliptical shape on the base or polished surface, its upper surface 5 parallel with the base and beveled at 6. On the top 5 of the core are one or more lugs 8 which project up a slight distance above the upper surface of the core for the purposes presently to appear. In the upper surface 5 is an oblong recess 10 and centrally across the upper part of the recess

10 is a bar 12, leaving a space beneath the bar in the recess. The lugs 8 and the bar 12 are preferably integral with the core.

The shell 4 is formed of practically the same shape as the core 2, but of somewhat larger dimensions leaving an air space 15 between the core and the shell and preventing the shell from contacting with the core. The inside of the shell is lined with asbestos or some other nonheat conducting material 16.

The handle proper 20 is composed of some nonheat conducting material like wood and is secured at both ends to a shield 22 which extends down to near the top of the shell 4 and is secured to the shell by rivets 24 passing through the shield and ferrule 25, through the shell and through a bearing plate 27. The bearing plate 27, shown in Figs. 7 and 8 is provided with as many lugs 26 as there are lugs 8 on the core and is secured to the under side of the top of the shell with the asbestos between the shell and the plate by the rivets 24. This bearing plate is also provided with two arms 34 in which a cam lever hereinafter to be described is pivoted.

For the purpose of readily attaching and detaching the shell with the handle thereon over the core, there is provided a lever 28 provided with one or more arms or hooks 30 and a handle 32. This lever is pivoted in the arms 34 on the bearing plate 27 by the pin 36 passing through the arms and lever. Upon the side of the handle is secured a spring 38 for the purposes presently to appear.

The manner of operating my device is substantially as follows: The core is heated in the usual manner and the lever 28 is brought to a vertical position and the operator grasps the handle 20 and places the shell down over the top of the core with the two arms 30 of the lever, one on each side of the bar 12 in the recess 10, this brings the lugs 26 into contact with the lugs 8 on the core, then the operator grasps the handle 32 of the lever 28 and forces it over to either side near the shield 22 which causes one of the arms 30 to pass underneath and engage the bar 12 and hold the shell firmly over the core but not in contact therewith. Then the spring 38 comes into action and holds the lever 28 stationary. The shell may be

released by bringing the lever 28 to a vertical position.

It will be seen by this manner of construction and operation that the shell 4 will not
5 come into contact with the core 2 whereby it will be always kept cool and since it does not come in contact with the core especially along the outer edge of the core near the
10 bottom, the core will not be so readily cooled off nor will it be necessary to reheat the core so often and thus there will be great economy in heat.

Having now described my invention what I claim is:

15 1. In a sad iron, a core, a lug on the top of the core, a shell provided with a non-heat conducting lining, a plate secured to the under side of the top of the shell with the lining between the shell and plate and pro-
20 vided with a lug adapted to engage the lug on the core, and means for removably at-

taching the shell over the core without contact with the core.

2. In a sad iron, a core provided with a smoothing surface at the base, and a recess 25 in the top, a bar across said recess, lugs on the top of the core in combination with a shell provided with a handle and shield, a bearing plate secured to the under side of the top of the shell with the lining be- 30 tween said plate and shell, lugs secured to said plate and adapted to engage the lugs on the core, and a lever pivoted in the bearing plate and adapted to engage the bar across the recess in the core and hold the 35 shell over the core.

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

EMIL C. LOETSCHER.

Witnesses:

M. M. CADY,

W. B. KEOGH.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."