No. 897,913. PATENTED SEPT. 8, 1908.

A. LUETHI.

SAD IRON.

APPLICATION FILED SEPT. 17, 1906.

Fig. 1.

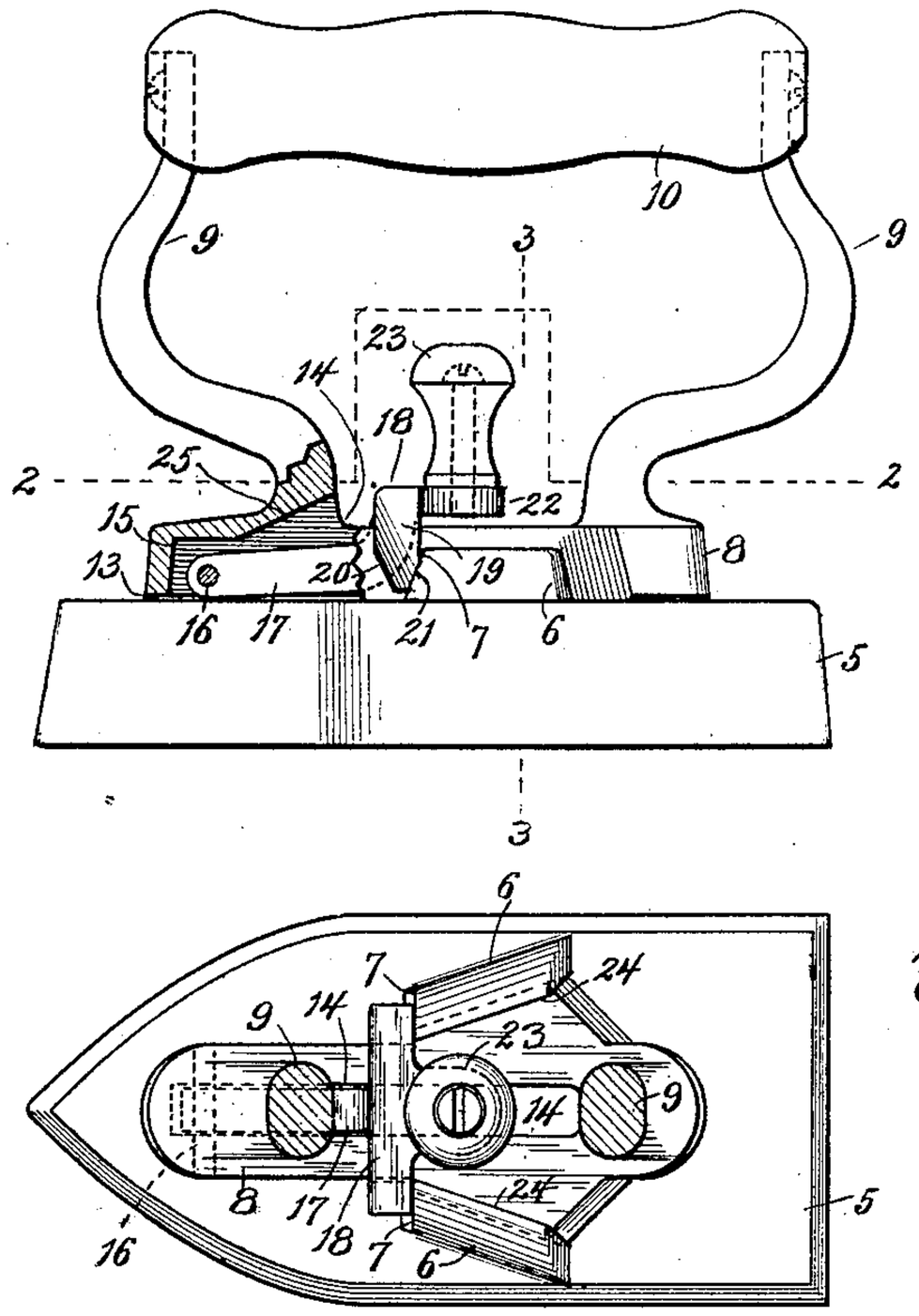


Fig. 2.

Fig. 3.

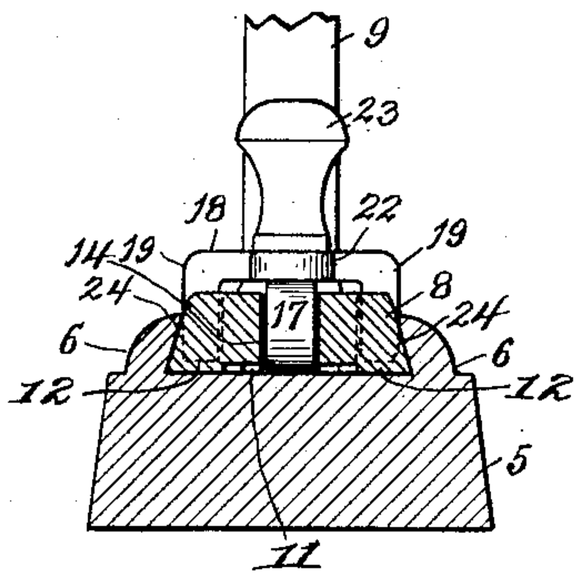
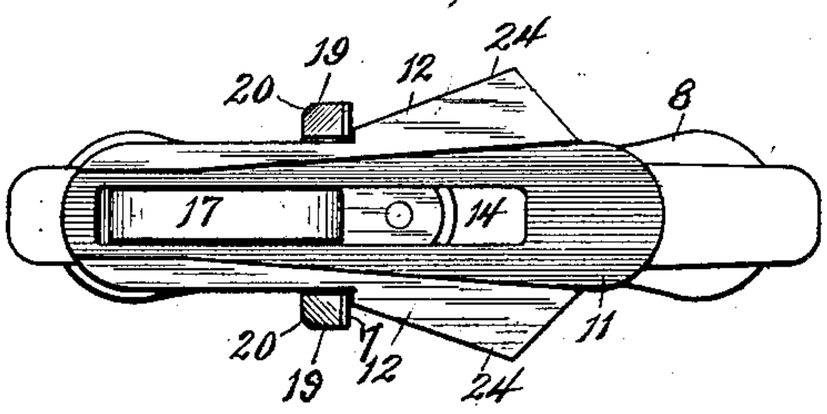


Fig. 4.



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UNITED STATES PATENT OFFICE.

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SAD-IRON.

No. 897,913. Specification of Letters Patent. Patented Sept. 8, 1908.

Application filed September 17, 1906. Serial No. 334,876.

To all whom it may concern:

Be it known that I, ALEXANDER LUETHI, of Lakemills, in the county of Jefferson and State of Wisconsin, have invented a new and useful Improvement in Sad-Irons, of which the following is a description, reference being had to the accompanying drawings, which are a part of this specification.

My invention has relation to improvements in sad irons, of that class wherein the handle portion is removably connected or attached to the body portion of the iron.

The primary object of the invention is to provide a construction embodying not only a simple means for readily attaching and detaching the handle portion, but furthermore a construction wherein the handle, when attached, is held in a most secure manner against becoming accidentally detached.

The invention further contemplates as an object a construction wherein the amount of heat transmitted from the body of the iron to the legs of the handle is reduced to the minimum.

With the above, and other incidental, objects in view, the invention consists in the devices and parts, or the equivalents thereof, as hereinafter more fully set forth.

In the accompanying drawing, Figure 1 is a side elevation of a sad iron embodying my invention, part being broken away; Fig. 2 is a horizontal section on the line 2—2 of Fig. 1; Fig. 3 is a transverse section on the line 3—3 of Fig. 1; and, Fig. 4 is an inverted plan view of the base of the handle.

Referring to the drawing, the numeral 5 indicates the main or body portion of the iron, which is of a usual or well known form of construction, excepting that its top surface is provided with upwardly-extending walls 6—6, spaced a desired distance apart laterally and converging inwardly toward each other from their rear ends forwardly, and preferably integral with the top of the body. These walls or lugs are advisably quite short in length, and their inner faces are by preference of dove-tail form, as most clearly shown in Fig. 3. The front ends of the walls or lugs are also preferably beveled downwardly and forwardly to form the wedging surfaces 7.

The detachable portion of the iron comprises the base 8, legs 9—9, and handle 10 which connects the upper ends of said legs. The under side of the base 8 is formed with a recess 11 extending longitudinally thereof. By providing this recess the only portions of the under side of the base which come in contact with the top surface of the body of the iron are the depending portions 12—12 which are left on opposite sides of the recess. It is therefore only necessary to plane or smooth off these portions 12 in order to provide for a smooth fit of the base to the top surface of the body of the iron, and hence a saving in labor and cost of manufacture is secured. The longitudinal recess 11 is open at opposite ends, or as specifically shown is open at its rear end and communicates at its forward end with a small recess 13 in the forward end of the base. In this manner, the opposite ends of the recess are in communication with the external air, whereby a draft or passage of air beneath the base is provided for, and consequently excessive heating of the base by reason of its contact with the body of the iron is to some extent guarded against. The base is also slotted longitudinally for a desired distance as indicated by the numeral 14, and the forward end of this slot merges or extends into a recessed portion 15 at the forward end of the base. The side walls of this recess support the opposite ends of a transverse pin 16 upon which is pivoted the forward end of a locking device 17. The shank of this locking device extends rearwardly to approximately the center of the base, and at this point is turned upwardly and enters between the side walls of the slot 14. The upper end of this upturned portion of the shank of the locking device is provided with a transverse head 18, and the opposite ends of this head are provided with depending locking fingers or dogs 19—19. The lower ends of the forward edges of these fingers or dogs are slightly rounded, as indicated by the numeral 20, and the lower ends of the rear edges thereof are slightly beveled or cut diagonally, as indicated by the numeral 21. Centrally the head 18 is provided with a rearwardly-extending projection 22, and to this projection is connected an upright knob or handle 23. By connecting the knob or handle to the rearwardly-projecting member, said handle is disposed at an intermediate point between the lower ends of the legs 9 of the handle portion of the iron, and hence in a convenient position to be readily grasped by the user.

In order to provide for the proper fit of the base between the upstanding lugs 6, the opposite side edges of said base converge to-

ward each other forwardly for a desired distance, as indicated by the numerals 24—24, to conform to the convergence of the lugs 6, and said portions 24 are also beveled downwardly outwardly so as to wedgingly fit the dove-tail inner faces of the lugs 6.

In adjusting the removable handle portion to the body of the iron the base is pushed between the lugs 6, with the forward end of said base entering between the diverged rear ends of the lugs. After the base has been thus pushed between the lugs for a certain distance, the wedging engagement prevents any further movement of the base, and at this time the head 18 is just in advance of the forward ends 7 of the lugs. Downward pressure is now applied to the knob 23, and this will cause the inclines or bevels 21 of the locking fingers 19 to wedge tightly against the beveled front ends of the lugs 6 beneath a horizontal line drawn transversely through the latch pivot and hold the same in locked engagement therewith. When it is desired to release the handle portion of the iron, an upward pull is exerted on the knob, and this of course will withdraw the locking fingers 19 from engagement with the forward ends of the lugs 6, and consequently the base 8 can then be readily drawn rearwardly out of engagement with the lugs. It will be noticed that the rear portion of the top wall of the recess 15 is on an incline rearwardly, as indicated by the numeral 25. This provides sufficient clearance for the shank 17 of the locking device, when the knob 23 is pulled upwardly as just explained.

It will be evident from the foregoing description that the engagement between the lugs 6 and the base 8 prevents any accidental separation of the parts in a forward direction, and the engagement of the locking fingers 19 with the forward ends of the lugs 6 prevents accidental separation of the parts in a rearward direction. In fact, the forward movement of the body of the iron over an article under process of being ironed has the effect of making a tighter wedging engagement.

In many forms of sad irons of the class to which my invention relates the base of the removable portion has a sliding connection with a recess cut in the top of the body of the iron. As a consequence, the bottom, sides and ends of the base of the handle portion are in direct contact with the hot body portion of the iron, and thus a great portion of the heat of said body is transmitted to the base of the handle portion and thence along the legs of the handle portion, frequently resulting in severe burning of the fingers of the user of the iron.

By my construction only the bottom of the base of the handle portion, and small portions of the side edges are in contact with the body of the iron, and hence the remaining portion of the base is exposed to the cooling effects of the external air, and consequently the base and legs of the handle portion are prevented from becoming unduly heated. The longitudinal recess 11 on the under side of the base also aids in keeping said base in a comparatively cool condition, and besides an additional air passage is formed by the extension of the slot 14 for a considerable distance of the length of the base. I further claim for my device that it is a very simple, inexpensive and an easily manipulated construction. Also, there are but few parts exposed and liable to injury when the base 8 is adjusted to the body of the iron, as the pivot for the locking device and the shank of said locking device are incased or housed in the recess 15, and the only exposed portions, therefore, are the head 18, with its depending locking fingers 19, and the upwardly extending knob 23.

What I claim as my invention is:

A sad iron, comprising a body portion provided on its top surface with vertically projecting and forwardly converging lugs provided with angular inner faces and beveled forward ends, a removable handle for said body portion comprising a slotted base provided with angular sides constructed to fit the angular inner faces of the lugs and to be brought into engagement therewith, a latch positioned within the slot and pivotally connected to said base near its forward end, and provided at its free end with a transverse portion with depending beveled fingers to engage the beveled forward ends of the lugs beneath a horizontal line drawn transversely through the latch pivot to draw the angular sides of the base portion into wedging engagement with the angular inner faces of the lugs and hold the same in locked engagement therewith, a handle for operating said latch, and a handle portion connected to said base.

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

ALEXANDER LUETHI.

Witnesses:
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ANNA F. SCHMIDTBAUER.