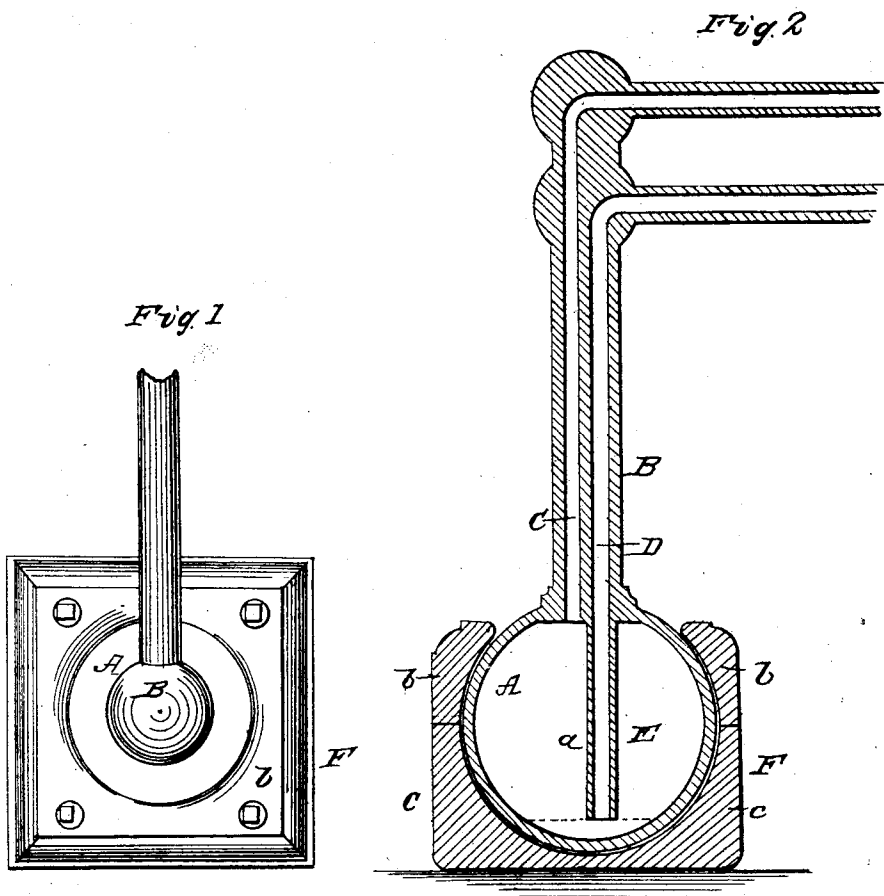


C. C. WALWORTH.
Sad-Iron Heater.

No. 9,494.

Patented Dec. 21, 1852.



UNITED STATES PATENT OFFICE.

CALEB C. WALWORTH, OF BOSTON, MASSACHUSETTS.

STEAM FLAT-IRON.

Specification of Letters Patent No. 9,494, dated December 21, 1852.

To all whom it may concern:

Be it known that I, CALEB CLARK WALWORTH, of Boston, in the county of Suffolk and State of Massachusetts, have invented a new steam flat-iron, for the purpose of ironing, smoothing, or polishing hats, bonnets, or other articles; and I do hereby declare that the same is fully described and represented in the following specification and the accompanying drawings, letters, figures, and references thereof.

Of the said drawings Figure 1 represents a top view, and Fig. 2 a vertical, central, and transverse section of my said steam flat iron.

In the said drawings A represents a hollow globe or sphere made of thin metal and having a steam chamber *a* formed within it. This globe is united to a column or handle or support B through which two passages C, D, are formed as seen in Fig. 2. The passage C is made to be connected with and to lead steam from a boiler or suitable steam generator and to open into the top or upper part of the chamber *a*. The passage D by means of a tube E is continued down into and nearly to the bottom of the said chamber *a*, the tube E being open at its lower end.

The smoother or polisher F is made with a spherical socket and so as to surround and freely turn on and closely fit against the external surface of the sphere A as seen in Fig. 2, it being so applied to such surface as to be capable of a free movement thereon in any direction.

The polishing block F may be made in two parts *b*, *c*, united together by screws or other suitable contrivances, the bottom and external sides of the block or such portion of the same as may be necessary being formed with a smooth and polishing surface such as is usually given to irons for smoothing hats or bonnets.

When steam is led from the boiler or generator through the pipe C it will enter the chamber *a* of the hollow sphere A and will heat the said sphere, whereby heat will be imparted to the block F so as to give to its smoothing surfaces and to maintain them at the degree of heat required for polishing or smoothing a hat or bonnet.

It is well known to those who use machines for polishing or smoothing hats or ironing them that the polishing blocks are generally constructed hollow and made to receive a hot iron placed within them for the purpose of heating them. Also that

these polishing irons must be so applied to their holders that during the movement of the hat beneath them or the table or block sustaining the hat they may be able to rock or move transversely so as to accommodate themselves to the varying surface of the hat or body ironed or smoothed. By the use of heated irons the polishing block is liable to be very irregularly heated; sometimes it may be so much heated as to burn or be liable to burn the fabric or hat against which it may be placed; and again it may soon cool down so as not to be sufficiently heated, the same requiring the heating iron to be removed, reheated, and returned to the block. By my improvement I am enabled to employ a means of heating the iron which will not only heat it to a temperature not likely to burn any fabric against which it may be placed, but will maintain or preserve that heat with little or no attention or labor of the person who directs the operations of the iron, for I allow steam to pass from the steam generator through the pipe C and into the chamber *a* and I employ the conducting passage D for the purpose of discharging the water produced from such steam as it may be condensed within the chamber *a*. It will readily be seen that the water of such condensed steam will be forced upward through the pipe D by the pressure of steam within the chamber *a*. The pipe D may be connected with the trap or reservoir for the reception of the water discharged from it.

Having thus explained my invention I would have it understood that I claim—

The steam ball and socket smoothing iron as made of a combination of a spherical socketed smoothing block F, and a hollow or chambered sphere A with induction and eduction passages C, D, arranged so as to admit steam and discharge condensed water all substantially as hereinbefore set forth, the block F being applied to the sphere A in such manner that it may be moved thereon in various directions transversely while passing over and against a hat or surface to be smoothed as specified.

In testimony whereof I have hereto set my signature, this sixth day of September, A. D. 1852.

C. C. WALWORTH.

Witnesses:

R. H. EDDY,
G. W. CUTLER.