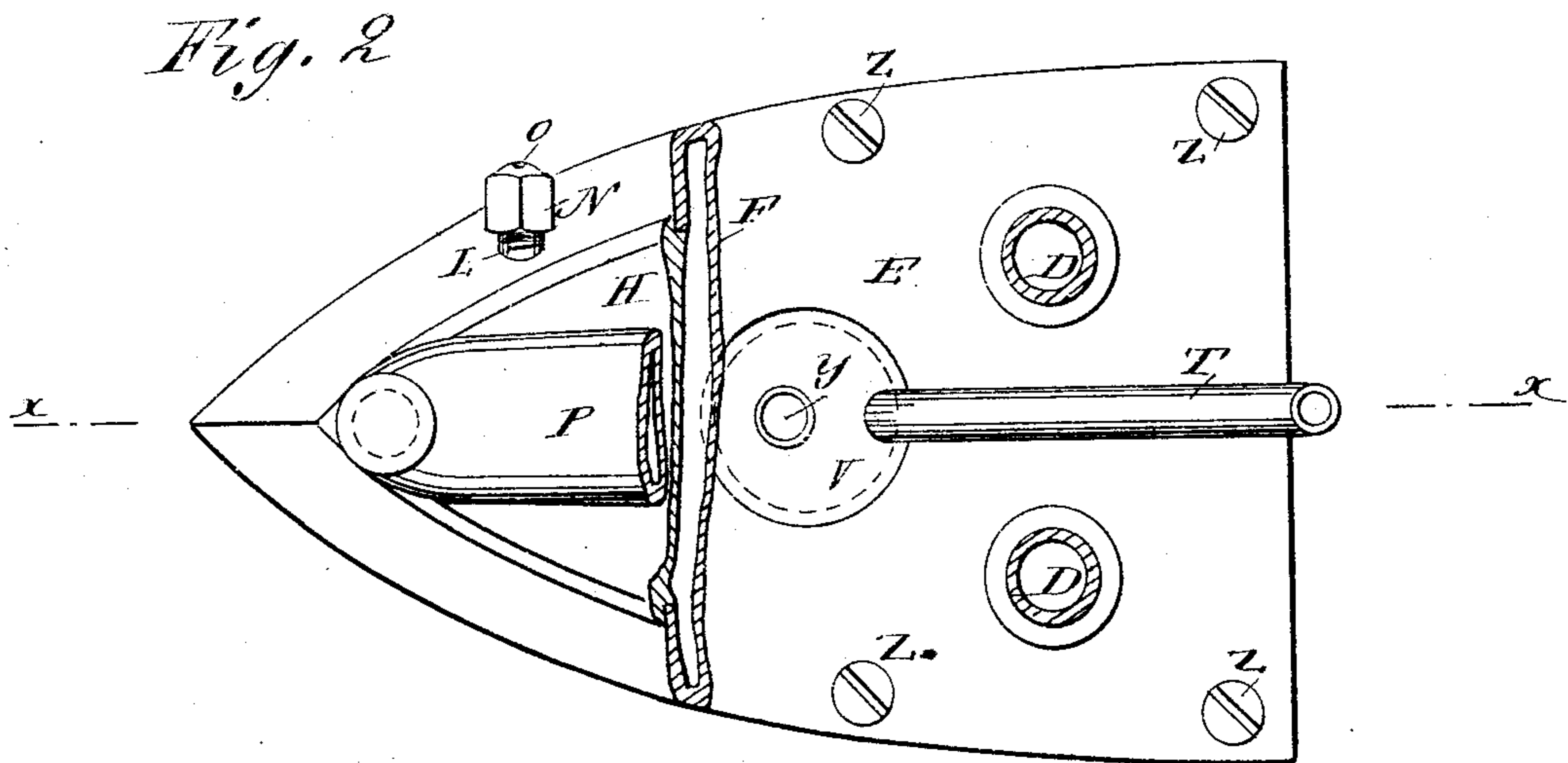
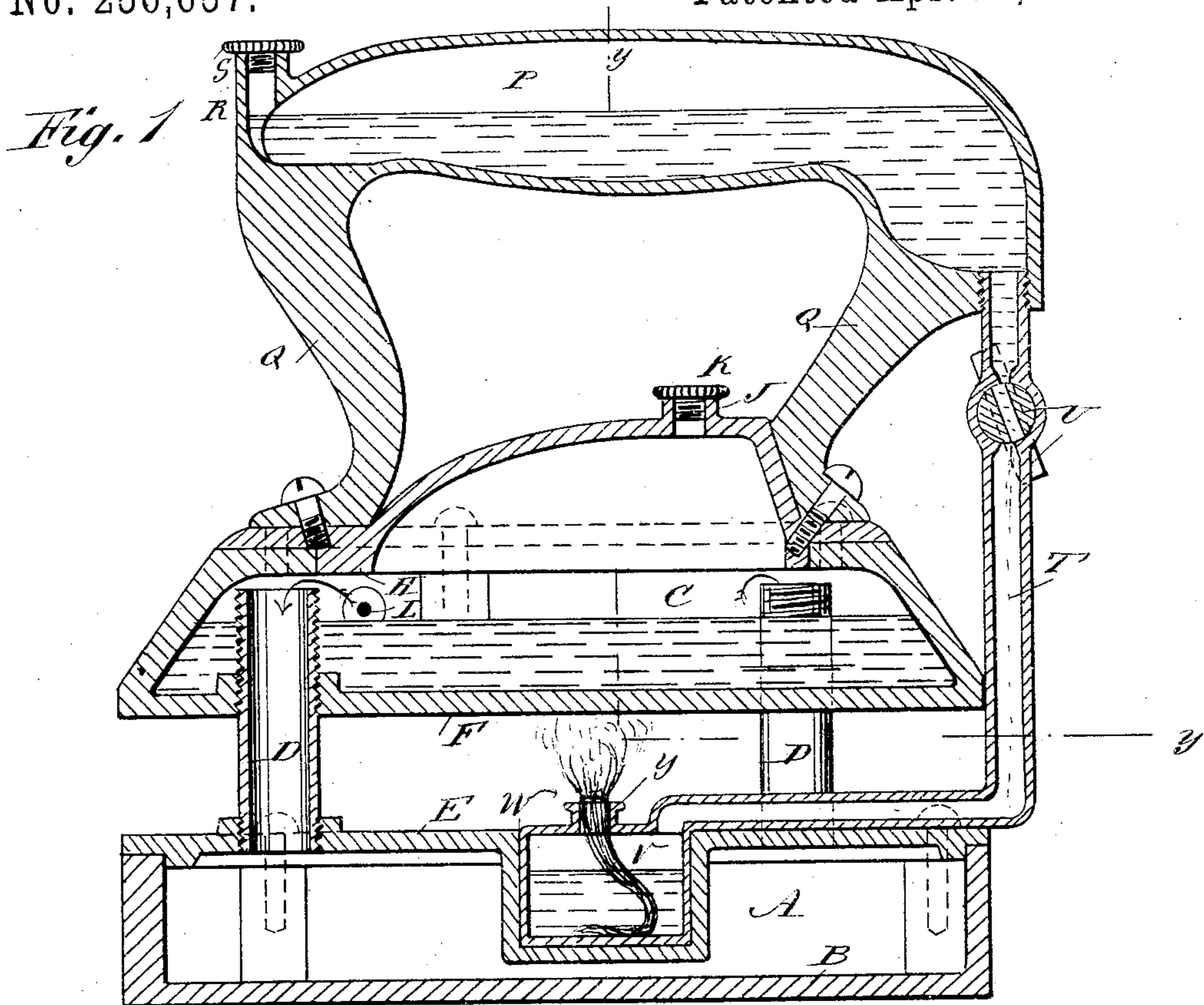


(No Model.)

J. M. EDMUNDS.
SAD IRON.

No. 256,657.

Patented Apr. 18, 1882.



WITNESSES:
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C. Sedgwick

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UNITED STATES PATENT OFFICE.

JOHN M. EDMUNDS, OF SALT LAKE CITY, UTAH TERRITORY, ASSIGNOR TO
HIMSELF AND GOUVERNEUR M. FORBES, OF SAME PLACE.

SAD-IRON.

SPECIFICATION forming part of Letters Patent No. 256,657, dated April 18, 1882.

Application filed May 18, 1881. (No model.)

To all whom it may concern:

Be it known that I, JOHN MARION EDMUNDS, of Salt Lake City, in the county of Salt Lake and Territory of Utah, have invented a new and Improved Sad-Iron, of which the following is a specification.

The subject of my invention is a steam-heated sad-iron in which the steam is generated by means of a lamp that is supplied with oil or burning-fluid from a reservoir formed in the handle; and my invention consists, first, in having the body of the iron made in two separate hollow parts, arranged one above the other, connected by intercommunicating tubes, and constituting water and steam chambers, respectively, the tubes projecting upward inside the water-chamber to near the top thereof; and, second, in combining with the aforesaid parts a receptacle for a lamp, all as will be hereinafter explained.

In the accompanying drawings, Figure 1 is a longitudinal sectional elevation of my improved sad-iron on the line *xx*, Fig. 2. Fig. 2 is a plan view of the same on the line *yy* of Fig. 1.

The sad-iron is composed of a lower chamber, A, the bottom B of which is the smoothing-surface of the sad-iron, and of an upper compartment, C, connected with the lower chamber, A, by a series of tubes, D, screwed into the top E of the same, and also screwed into the bottom F of the upper chamber, C, and extending almost to the top H of the same, or above the water-line, so that only steam will escape to the steam-chamber below. This upper chamber is provided on its top with a vent, J, for pouring water or other fluid into this chamber, which vent is closed by means of a screw-cap, K. This upper chamber is provided with a safety-valve, L, projecting from the side and consisting of an externally-threaded tube, which is screwed into the wall of the chamber, and upon the outer end of which tube a thin plate, M, of metal, preferably copper, is placed and is held thereon by a cap, N, with a central orifice, O. The safety-valve projects from the side of the chamber C, so that the escaping steam cannot scald the hands of the operator. A hollow handle, P, provided with solid shanks Q Q, is secured

to the top H of the upper chamber, C, and this hollow part of the handle is provided with a vent, R, for admitting oil or other suitable burning-fluid into the same, and this vent is closed by means of a screw-cap, S. A tube, T, provided with a regulating-cock, U, is screwed into the lower part of the hollow handle P and passed down to the top E of the lower chamber, A, and along the same to a lamp, V, contained in a recess, W, in the top E of the lower chamber. This lamp is provided with some suitable burner, Y.

The operation is as follows: The upper chamber, C, is filled with water almost to the top of the tubes D, and the screw-cap K is screwed firmly into the vent J. The hollow handle P is filled with oil, alcohol, or some other suitable burning-liquid, and the cock U is opened more or less to allow the liquid to pass from the hollow handle P through the tube T in such quantities as the lamp V may require. The wick of the lamp is ignited and heats the water in the chamber C, and this water is converted into steam, which passes through the tubes D D, as indicated by the arrows, into the lower chamber, A, and heats the same in a very short time. The condensation-water collects in the chamber A. If the pressure of the steam in the chambers rises above a certain degree, it will burst the metal plate M of the safety-valve L, and escapes through the vent O of the nut N. A fresh plate, M, must then be fastened on the end of the tube L. This sad-iron can be heated very rapidly. It does not soil the articles that are ironed nor the hands of the operator, as it does not come in contact with a stove or grate. It is very economical, as no heat is wasted, as is the case if the irons are heated on a stove. If the condensation-water is to be removed from the chamber A, the screw Z and the top E of the lower compartment, A, are removed. The liquid in the hollow handle P keeps the same cool.

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

1. In a steam-heated sad-iron, the water-chamber C, supported above and connected to the steam-chamber A, which forms the bottom of the iron, by screw-threaded tubes D D pass-

ing through an intermediate heating-space and projecting inside the chamber C to near the top thereof, whereby only steam is allowed to escape into the steam-chamber, as and for the purpose specified. 10

5 2. The steam-chamber A, provided with a recess, W, formed in its top plate to receive a lamp, V, in combination with the water-cham-

ber C and tubes D, the latter being arranged one near the nose and the other two near the heel of the iron, as and for the purpose specified.

J. M. EDMUNDS.

Witnesses:

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