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Jan. 1, 1929. 1,697,224

L. S. BUTMAN

SADIRON

Filed Nov. 30, 1925

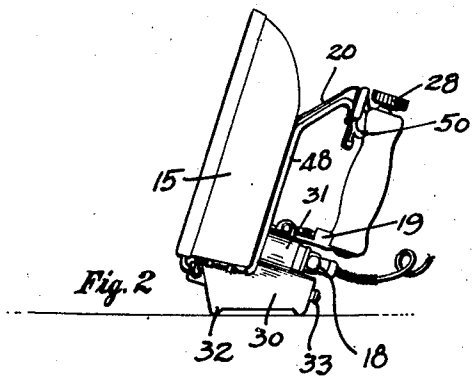


Fig. 2

Fig. 1

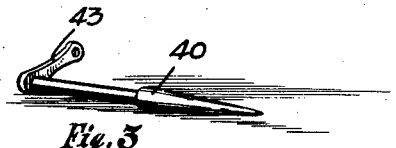


Fig. 3

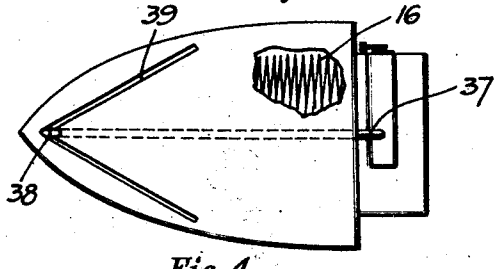


Fig. 4.

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UNITED STATES PATENT OFFICE.

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SADIRON.

Application filed November 30, 1925. Serial No. 72,352.

My invention relates to sad irons, and particularly, although not necessarily, to sad irons containing an electrical heating unit, and commercially known as electric sad irons.

It is a purpose of my invention to provide an electric sad iron having incorporated therein manually controlled means by which steam can be generated as desired and applied to the cloth or garment during the normal pressing operation of the sad iron, whereby a combined steaming and pressing of the cloth can be effected conveniently and expeditiously and to the elimination of the old method of employing a wet cloth for dampening.

I will describe only one form of sad iron embodying my invention and will then point out the novel features thereof in claims.

In the accompanying drawings,

Figure 1 is a view showing in perspective and partly in section one form of sad iron embodying my invention;

Figure 2 is a view showing a sad iron in side elevation and in upright position;

Figure 3 is an enlarged detail perspective view of the water valve embodied in the iron shown in the preceding views;

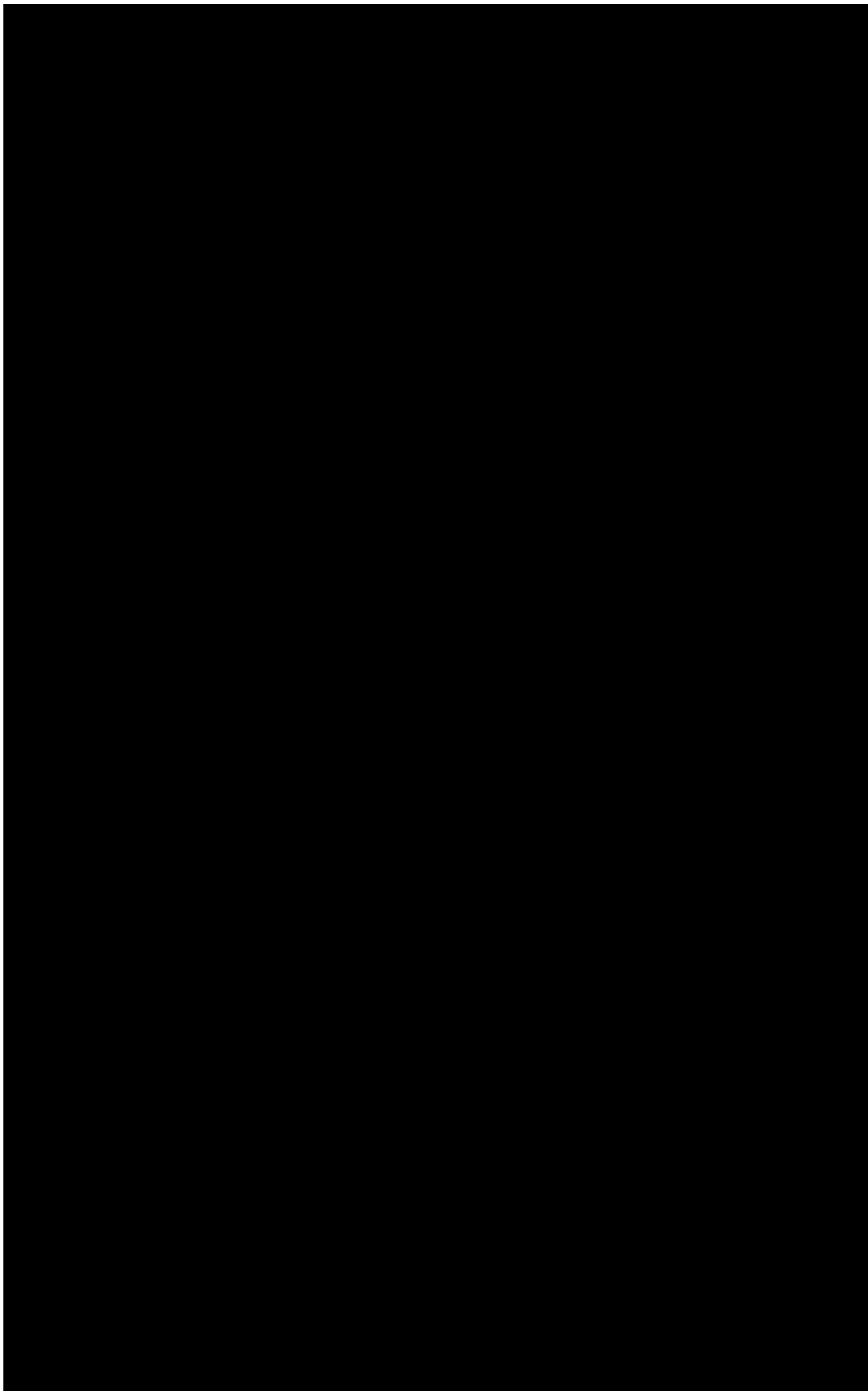
Figure 4 is a bottom plan view of the sad iron with a portion thereof broken away to reveal the electrical heating unit.

Similar reference characters refer to similar parts in each of the several views.

Referring specifically to the drawings, my invention, in its present embodiment, comprises an iron body 15 conventional in form and having therein an electrical heating unit 16, the terminals of which latter are electrically connected to a conventional plug 17 extending upwardly from the upper side of the iron body and adapted for connection with a conventional socket member 18 shown in dash lines in Figure 1, to which latter are connected the usual conductors for supplying current to the heating unit, as will be understood. Fixed to the upper side of the iron body 15 is a frame comprising a rear post 19 and a front post 20. Formed integral with the rear post and disposed horizontally is a cylinder 21, and this cylinder is secured to the front arm 20 and is encased in a tube 22 of heat insulating material which is shaped to provide a handle adapted to be gripped in the operation of the iron. The rear end of the cylinder is closed by a screw plug or head 23 having therein a check valve 24 opening inwardly to admit air to the cylinder. The front end of the cylinder is closed by a screw plug or head 25 formed centrally with an opening to slidably receive the rod 26 of a piston 27 reciprocable in the cylinder, the outer end of the rod being provided with a knurled handle 28 which is adapted to be manually gripped in effecting reciprocation of the piston. The plug 25 is provided with a port 29 for admitting air to the cylinder to permit the proper operation of the piston.

The cylinder and piston constitute an air pump operable to place water contained in a tank 30 under pressure and to thus permit the discharge of water from the tank or reservoir in relatively small quantities, in order that it may be converted into steam. This tank 30 is secured to the rear end of the iron body by a bracket 31 embracing the plug 17, the inner side of the tank conforming in part to the curvature of the rear end of the iron body so as to have snug engagement therewith. The outer side of the tank is inclined and provided at its far corners with projections 32 in order that it may function to support the entire iron in upright position when not in use, as clearly illustrated in Figure 2. The tank 30 is provided with a filling plug 33 by which water may be supplied to the tank, and in such manner as to partly fill the tank so that an air chamber is provided above the body of water, as illustrated in Figure 1. The cylinder of the air pump is in communication with the air chamber of the tank through the medium of a pipe 34 connected at one end to the rear end of the cylinder 21, and at the other to the inner side of the tank 30 adjacent the top thereof. The bottom of the tank is provided with an outlet nozzle 35 having a relatively small restricted duct 36 for discharging water in relatively small quantities into a pipe 37 extending longitudinally of and within the bottom portion of the iron body, as illustrated in dash lines. This pipe 37 terminates adjacent the pointed end of the iron body and communicates with a discharge port 38 formed in the bottom or working surface of the iron body, and diverging from this port are grooves or channels 39 in the bottom of the iron body designed for the purpose of distributing steam projected from the port 38 over the working surface of the iron.

The discharge of water from the nozzle 35



reservoir and working surface of the iron, means carried by the iron and communicating with the reservoir for placing water in the latter under pressure, and means for controlling the discharge of water from the reservoir to the conduit, whereby water discharged into the conduit will, during transit through the latter, be converted into steam by the heating means and discharged from the working surface of the iron.

6. A sad iron as embodied in claim 5 wherein the handle of the iron is hollow and said means for placing water in the reservoir under pressure comprises a manually operable air pump in the handle and having its discharge in communication with the reservoir.

7. A steam generating sad iron comprising a body having a water reservoir on the top and rear side thereof, the lower surface of the reservoir being spaced above the working surface of the body, and the rear side of the reservoir being substantially flat, whereby a stand is provided for the iron when the latter is in an up-ended inoperative position.

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