(No Model.) 2 Sheets—Sheet 1.

T. E. SWANN.

SAD IRON.

No. 371,227. Patented Oct. 11, 1887.

Fig. 1.

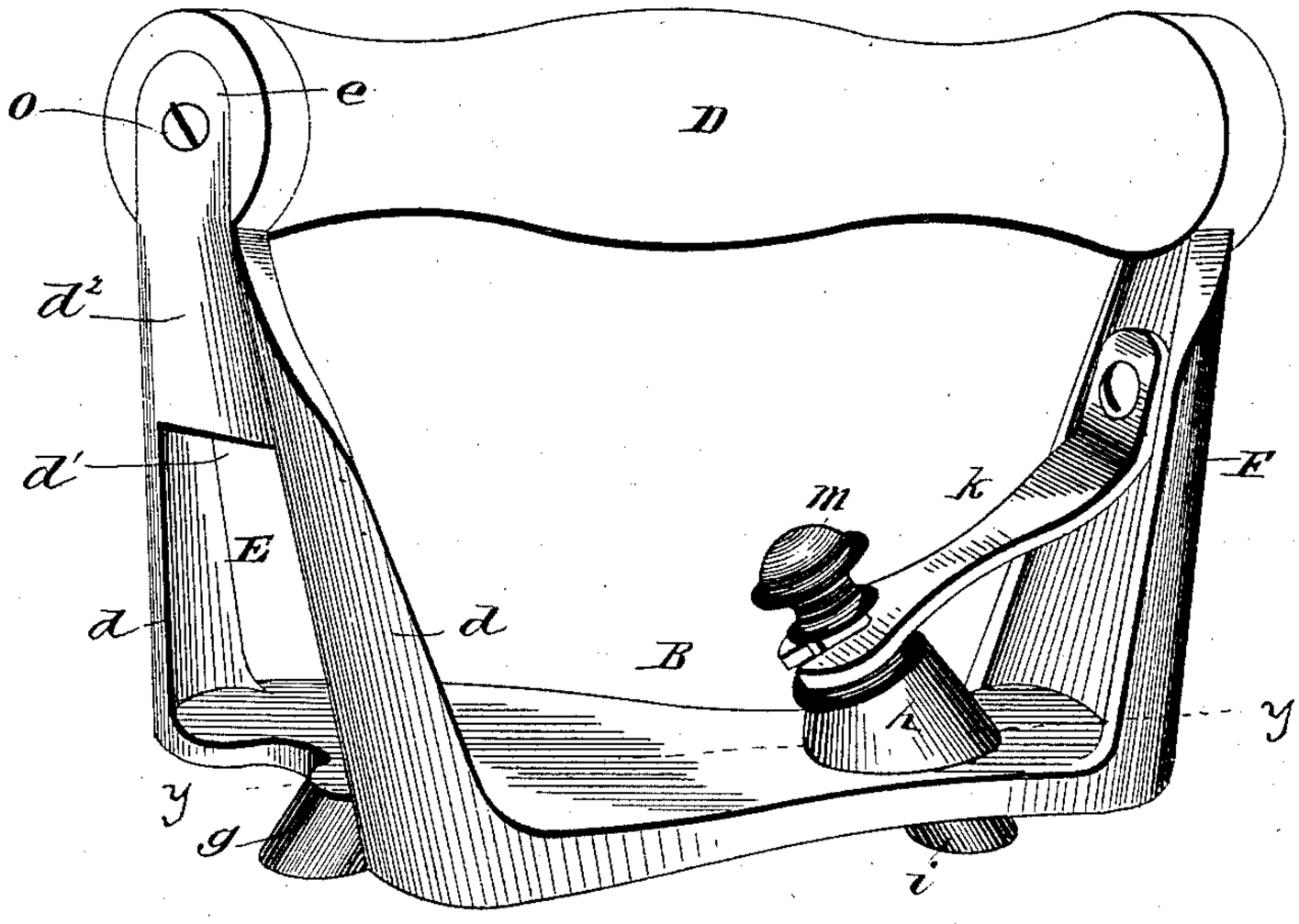
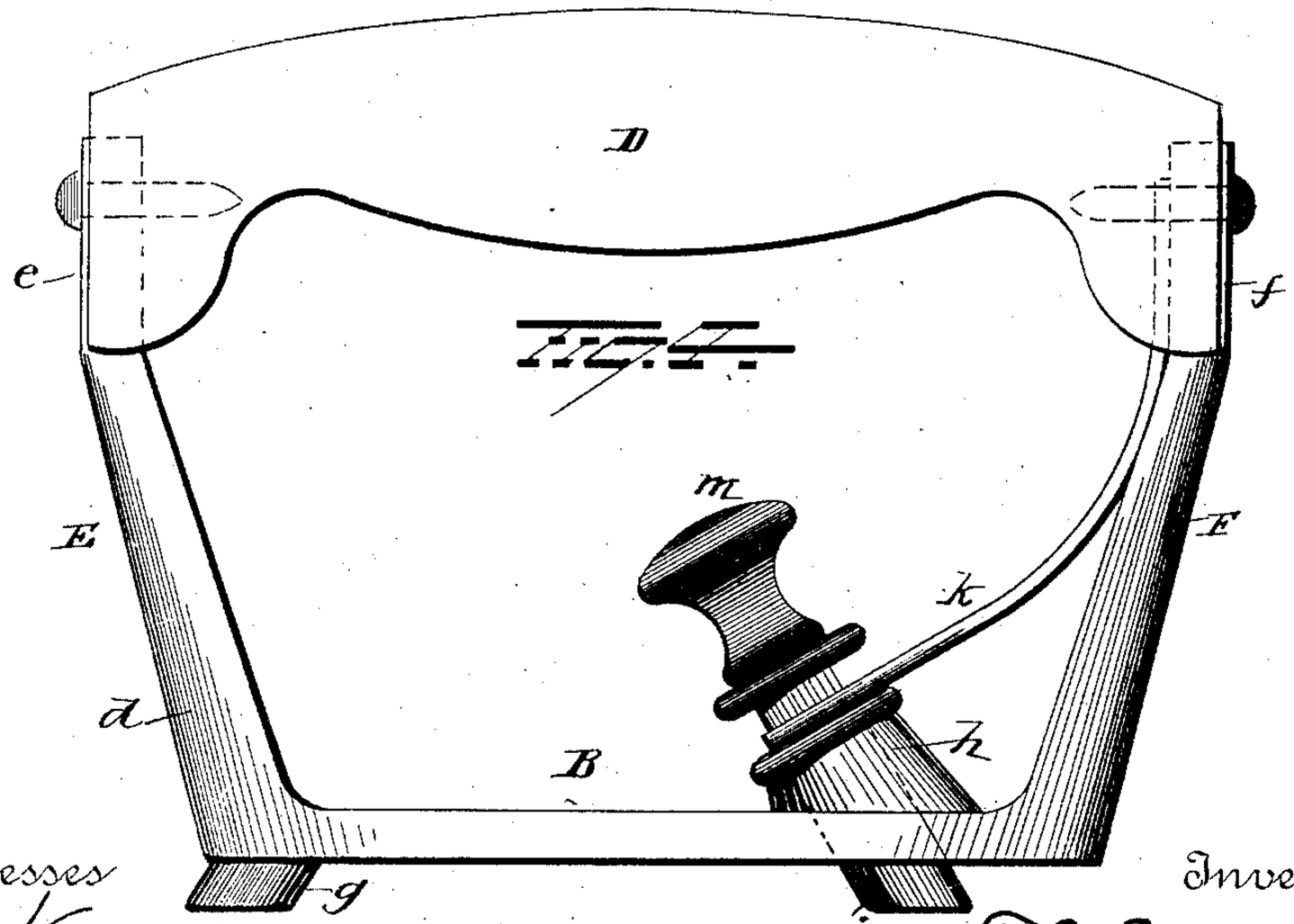


Fig. 2.



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(No Model.) 2 Sheets—Sheet 2.

T. E. SWANN.

SAD IRON.

No. 371,227. Patented Oct. 11, 1887.

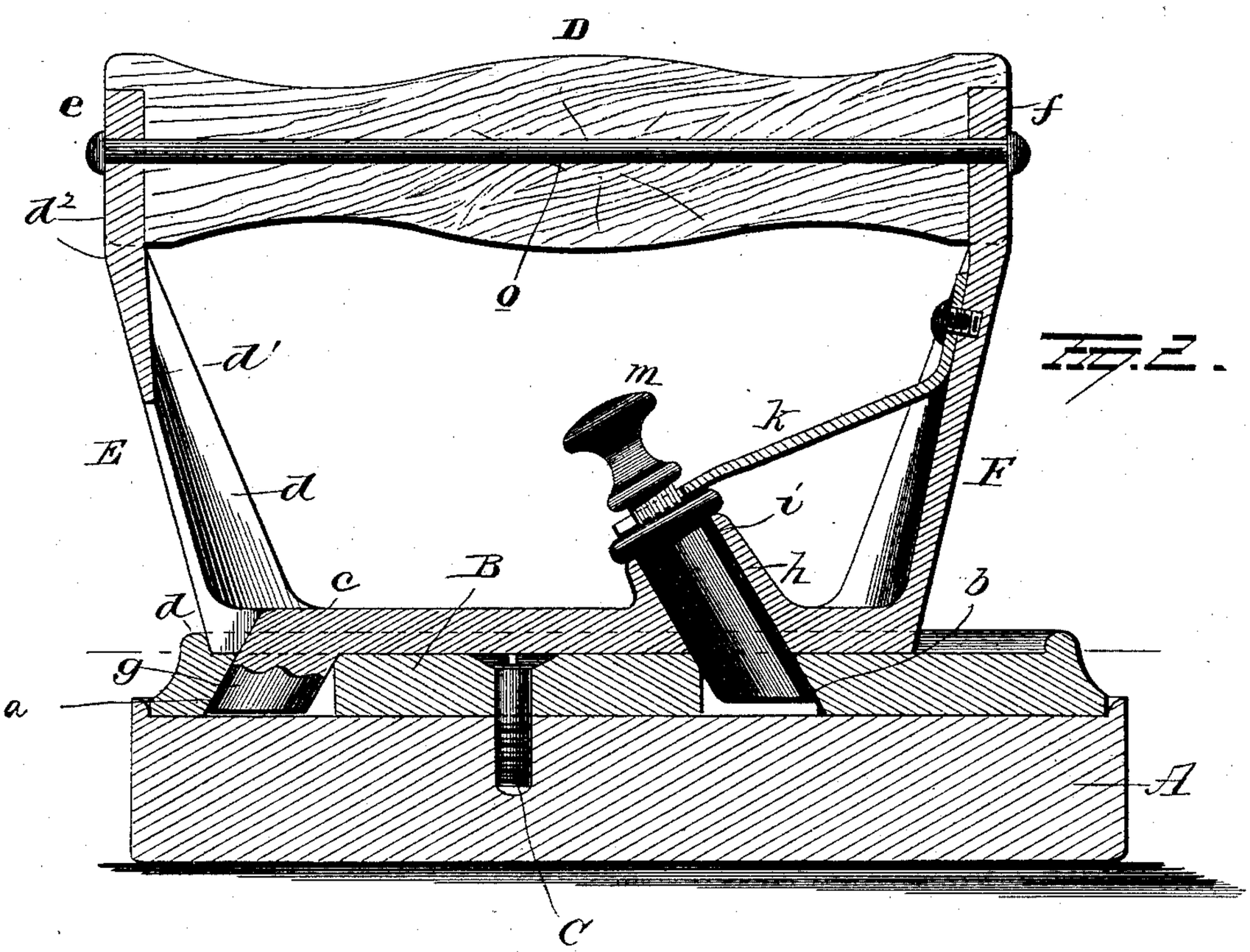

Fig. 2.

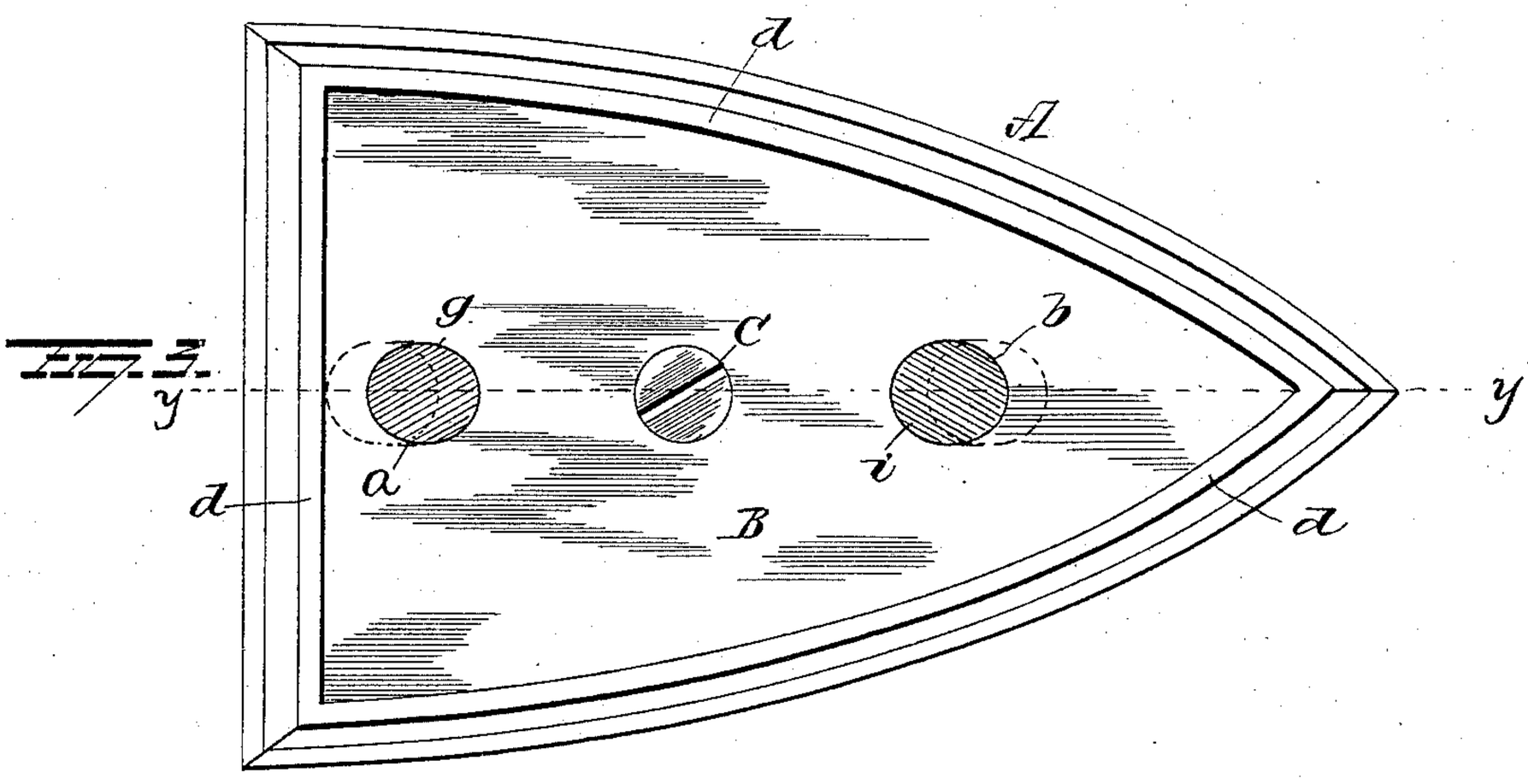

Fig. 3.

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UNITED STATES PATENT OFFICE.

THOMAS EDWIN SWANN, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO ALFRED C. REX & CO., OF SAME PLACE.

SAD-IRON.

SPECIFICATION forming part of Letters Patent No. 371,227, dated October 11, 1887.

Application filed March 22, 1887. Serial No. 231,896. (No model.)

To all whom it may concern:

Be it known that I, THOMAS EDWIN SWANN, of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Sad-Irons; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to an improvement in sad-irons, the object being to provide a detachable handle for a sad-iron that will be of simple construction, reliable in operation, and that can be produced at a low initial cost.

With these objects in view my invention consists in certain features of construction and combinations of parts, that will be hereinafter described, and pointed out in the claims.

Referring to the drawings making a part of this specification, Figure 1 is a perspective view of the handle-frame of the sad-iron. Fig. 2 is a side elevation in section of the iron on line *y y* of Figs. 1 and 3. Fig. 3 is a plan view of the sad-iron with the handle removed. Fig. 4 is a modified form of the wooden handle.

A represents the body of the iron. It is given any approved form, the preferred shape being triangular and formed by the junction of two curved sides that terminate in a point at the front end. The rear edge of the body is at right angles with a longitudinal center line, the general conformation being common to such laundry implements. The top surface of the body A is recessed slightly to form a shallow cavity. The bead or rim thus produced at the edge of the body A serves to hold from lateral displacement the cap-plate B, which is secured in place by a single center screw, C.

The cap plate B is provided at the points *a b* with holes which are wider on the under side than on the upper side, and also are made slightly oval on their top edges to conform with the inclination of the securing-dowels of the handle. The attachable cap-plate B is provided to facilitate the rapid production of the sad-iron, as it permits the quick and accurate duplication of the perforated top without the necessity of drilling or other costly machine-work, the cap-plate being available for use as it leaves the foundry. A detachable handle, D, is thus constructed: The base-plate *c* is made of a length to fit inside the ribbed projecting edge of the cap-plate, its heel being widened to permit an extended surface-bearing of this plate upon the cap-plate B, and thus afford stability to the handle. The rear end of the base-plate *c* is upwardly projected to form integral limbs *d*, which unite at a point, *d'*, and from this point are continued as a single limb, d^2, the whole forming one bracket-arm, E, of the handle-frame D. It will be observed that the diagonal position of the limbs *d*, as placed on the base-plate, (see Fig. 1,) and their rearward inclination, will allow the handle to be molded in an ordinary flask and be cast without additional work.

The front bracket-arm, F, of the handle-frame D is given the same degree of inclination from the perpendicular that the rear arm has, and the two arms E F have perforated bosses *e f* formed on their upper ends. A handle, D, preferably made of wood, is attached securely to the bosses by a center rod, *o*, which may be threaded and introduced into place as a screw, or be riveted to make a rigid connection of the parts.

At the rear end of the base plate *c*, central between the upwardly-projected limbs *d*, a short cylindrical pin, *g*, is formed on the base-plate, from which it depends and is adapted to enter the hole *a* in the cap-plate B, the conical enlargement or widening of the hole from the lower surface of the plate affording an easy entrance to the diagonal inclination of the body of the pin *g*.

On the forward portion of the base-plate *c*, immediately in the rear of the bracket-arm F, a socket or inclined bearing, *h*, is made to receive a sliding dowel-pin, *i*, which is held by the plate-spring *k* in position to engage its corresponding socket-hole in the cap-plate.

Upon the upper end of the cylindrical dowel-pin *i* a knob, *m*, preferably made of a non-conductor of heat, is secured in a permanent manner. The spring *k*, being attached to the inner surface of the bracket-arm F, is of sufficient strength to hold the pin *i* well down in the socket and yet readily yield to the pulling action of the fingers of the operator.

The attachment of the handle to the body of the iron is effected by inserting the rear pin in its socket-hole. The dowel-pin *i* is then withdrawn by pulling the knob on its top end. The base-plate of the handle is now brought in close contact with the top surface of the cap-plate of the iron, and the dowel-pin released to enter its socket-hole in the cap-plate B, thus effecting a stable and secure connection of the handle and body of the iron. A reversal of the operation will release the handle, which can remain disconnected while the body of the iron is being heated.

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

1. In a sad-iron, the combination, with a body having two inclined sockets, of a handle-frame having a rigid pin near one end adapted to enter one of said sockets, and a sliding pin adapted to enter the other socket, the said sliding pin being mounted in an inclined bearing, substantially as set forth.

2. In a sad-iron, the combination, with a solid cap-plate having two socket-holes which are made conical and wider at their bases, the plate being secured to the body of the iron, of a handle-frame having a fixed inclined dowel-pin projecting from the under side thereof at one end, and a spring-actuated sliding dowel-pin normally held in locked engagement with the front socket-hole of the base-plate when the rear dowel-pin is in secured position in the socket-hole made for its reception, substantially as set forth.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

THOMAS EDWIN SWANN.

Witnesses:
WM. H. VAN HORN,
CHAS. F. VAN HORN.