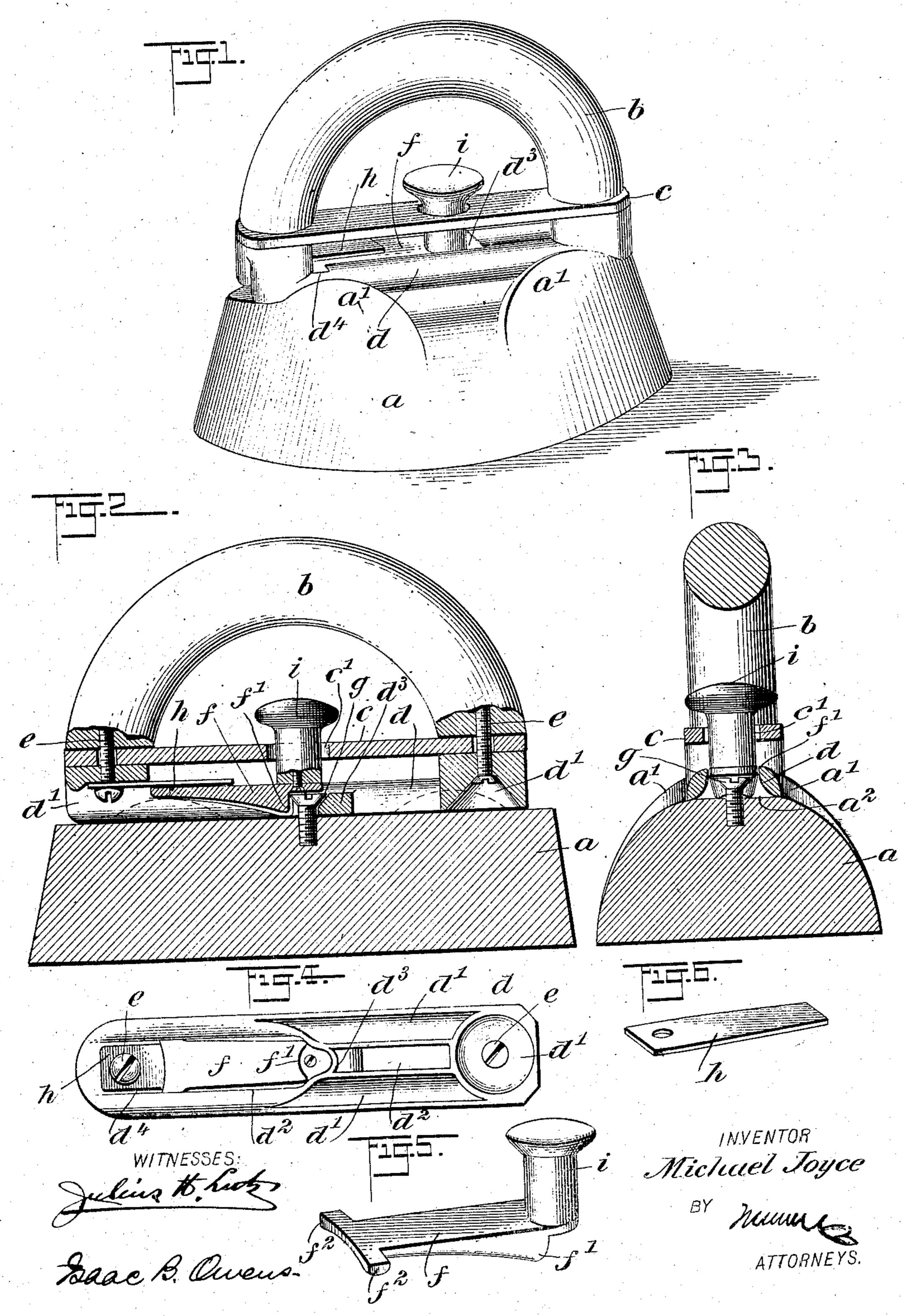
No. 757,198.

M. JOYCE.

SAD IRON.

APPLICATION FILED MAY 4, 1903.

NO MODEL.



## United States Patent Office.

MICHAEL JOYCE, OF SALT LAKE CITY, UTAH.

## SAD-IRON.

SPECIFICATION forming part of Letters Patent No 757,198, dated April 12, 1904. Application filed May 4, 1903. Serial No. 155,551. (No model.)

To all whom it may concern:

Be it known that I, MICHAEL JOYCE, a citizen of the United States, and a resident of Salt Lake City, in the county of Salt Lake and 5 State of Utah, have invented a new and Improved Sad-Iron, of which the following is a full, clear, and exact description.

This invention relates to sad-irons of the type disclosed in my prior patents, Nos. 686,080 o and 686,081, dated November 5, 1901—that is to say, in which the handle is separate from the iron proper and provided with devices for

removably connecting the two.

The object of the present invention is to sim-15 plify the construction of the parts without departing from their effectiveness of action, thus enabling the iron to compete commercially with the cheaper irons, in which the handle and iron proper are in permanent connection. 20 This end I attain by casting the body of the iron in one integral piece, with guide-lugs projecting upward therefrom, and providing a wooden handle with a metallic connectionplate adapted to lie between the guide-lugs of 25 the iron-body and separated from the handle by a non-conducting shield, said connectionplate having a stop-bar and a spring-dog coacting with a headed pin or screw fastened on the upper side of the iron-body. By this con-30 struction effective engagement between the handle and the iron-body may be easily had, and yet the number of parts is so materially reduced and their construction simplified as to enable the irons to be placed on the market at 35 a comparatively low figure.

This specification is an exact description of one example of my invention, while the claim

defines the actual scope thereof.

Reference is to be had to the accompanying 40 drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts ir all the views.

Figure 1 is a perspective view of the invention. Fig. 2 is a longitudinal section thereof. 45 Fig. 3 is a cross-section taken at the point of the headed pin on the iron-body. Fig. 4 is an inverted plan view of the connection-plate. Fig. 5 is a detail view of the dog, and Fig. 6 is a detail of the spring which actuates the dog. a indicates the body of the iron, which, as

aforesaid, is preferably formed of an integral metallic casting and provided at each side with two upwardly-projected guide-lugs a', forming, essentially, a longitudinal guideway (indicated at a<sup>2</sup>) on the top of the iron-body. 55

b indicates the handle, which is preferably of wood, and c indicates the non-conducting shield-plate, which I also prefer to construct of wood and which extends from the ends of the handle longitudinally over the body of the 60 iron. This shield-plate, together with the connection-plate d, is fastened securely to the handle by means of screws e, which are passed upward through the two elements c and d into the handle b. The under face of the connec- 65 tion-plate d is formed with recesses, (indicated at d',) which are intended to reduce the weight of the connection-plate, and therefore the cost thereof, and also to reduce the heat-radiating capacity of the plate. Said connection-plate 70 is formed with longitudinal slots  $d^2$ , separated by a transverse abutment  $d^3$ , and in the forward slot  $d^2$  is located the dog f, the shouldered end f' of which is intended to bear against the headed pin or screw g, fastened to 75 the upper surface of the iron-body a in the said longitudinal guideway a<sup>2</sup>. The front end of the dog, as best shown in Fig. 5, is provided with transverse trunnion-like members  $f^2$ , which are mounted in cavities  $d^2$ , formed 80 in the connection-plate d, whereby the dog is arranged to swing vertically into and out of engagement with the stud g.

h indicates the spring for actuating the dog and throwing it normally into the position 85 shown in Fig. 2, and said spring is held at its front end by the adjacent screw e. The free end of the dog is fitted with a knob i, which projects up through an orifice c' in the shieldplate c in position to be grasped by the op- 90 erator.

The use of the invention will, it is thought, be readily understood from the prior art. To engage the handle with the body, it is only necessary to move the handle longitudinally 95 through the guideway  $a^2$ , the cavity d' at the front end of the connection-plate receiving the stud or pin g, and said pin automatically raising the dog f until the abutment  $d^s$  strikes the pin, and then the shouldered end f' of the 100 dog will drop into engagement with the opposite side of the pin, thus firmly fastening the handle in place. To disengage the parts, it is only necessary to lift the knob i and reverse the described movement of the handle. By adjusting the screw g the handle may be engaged with the body of the iron at any desired pressure, since the beveled head of the screw and the beveled front edge of the abutoment d³ coacting, as shown in Fig. 2, may be made to force the handle down on the iron to a degree depending upon the elevation of the screw above the top surface of the body of the iron.

The iron-body is here shown as pointed at each end; but it is obvious that other shapes may be adopted, notable among these being that in which the rear end of the iron is square. Various other changes in the form, proportions, and minor details of my invention may be resorted to at will without departing from the spirit and scope thereof. Hence I consider myself entitled to all such variations as may lie within the intent of my claim.

Having thus described my invention, I claim

as new and desire to secure by Letters Patent— A sad-iron, comprising a body provided with upwardly-projected lugs at each side of its

top forming a longitudinal guideway on the top of the body, a bevel-headed stud fastened 3° to the body in the guideway intermediate the ends thereof, an arched handle, a non-conducting shield-plate fastened to the bottom of the handle and having an opening therein, a connection-plate fastened to the handle be- 35 neath the shield-plate and having a longitudinal slot and a beveled transverse abutment at the inner end of the slot, said abutment being arranged to engage its beveled portion with the said bevel-headed stud, a dog having 40 at its front end a shoulder arranged to engage the stud on the side opposite the abutment, the other end of the dog having trunnion-like members rockably mounted in the connectionplate, a spring yieldingly pressing the dog 45 into active position, and a knob attached to the dog and projecting upward through the said opening in the shield-plate.

In testimony whereof I have signed my name to this specification in the presence of two sub- 5°

scribing witnesses.

MICHAEL JOYCE.

Witnesses:
ROBERT A. CANNING,
WILLIAM P. PHELAN.