

A. WICKS.
ELECTRIC IRON.
APPLICATION FILED MAR. 16, 1911.

Patented Aug. 1, 1911.

2 SHEETS—SHEET 1.

999,421.

FIG. 1

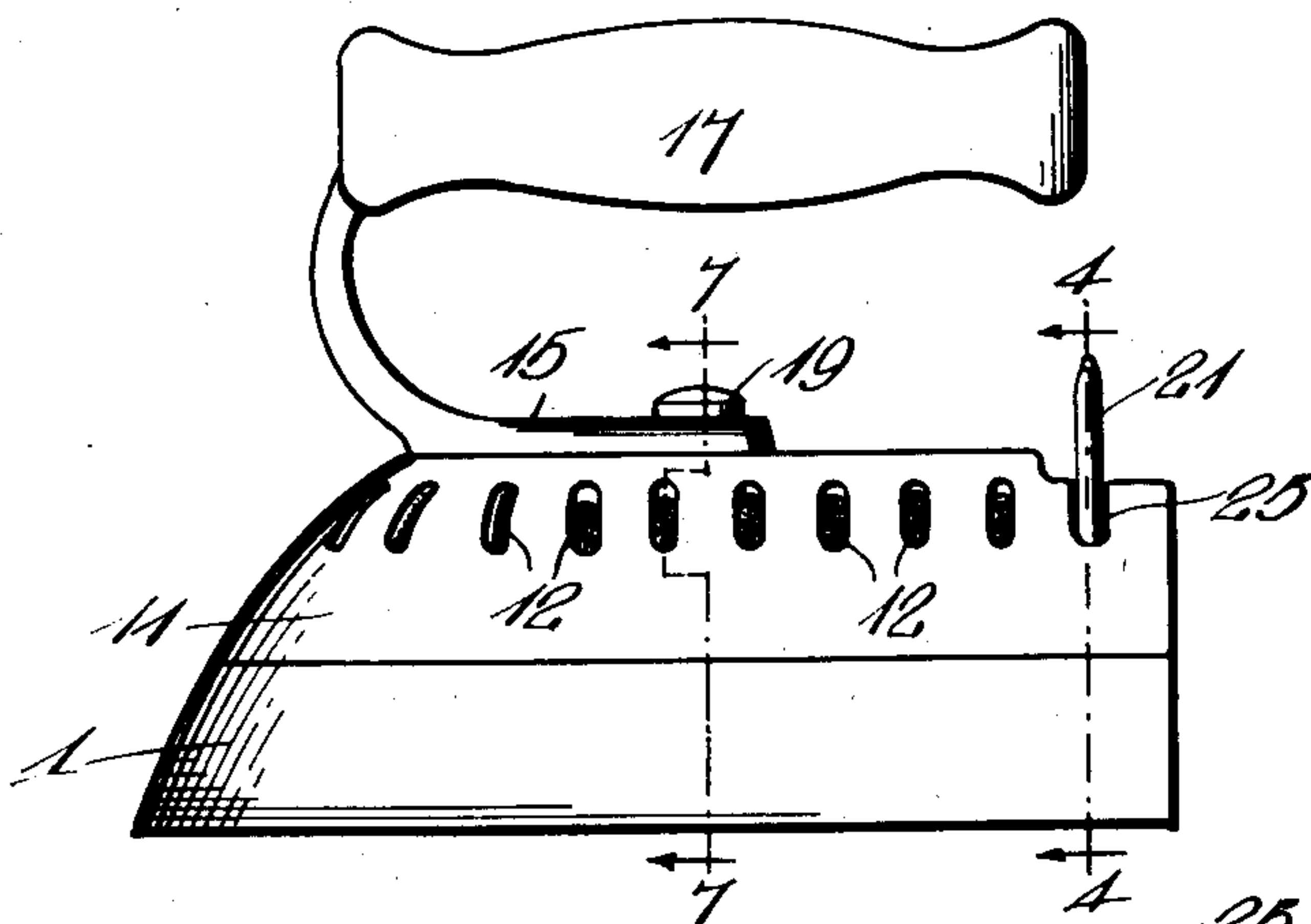


FIG. 2

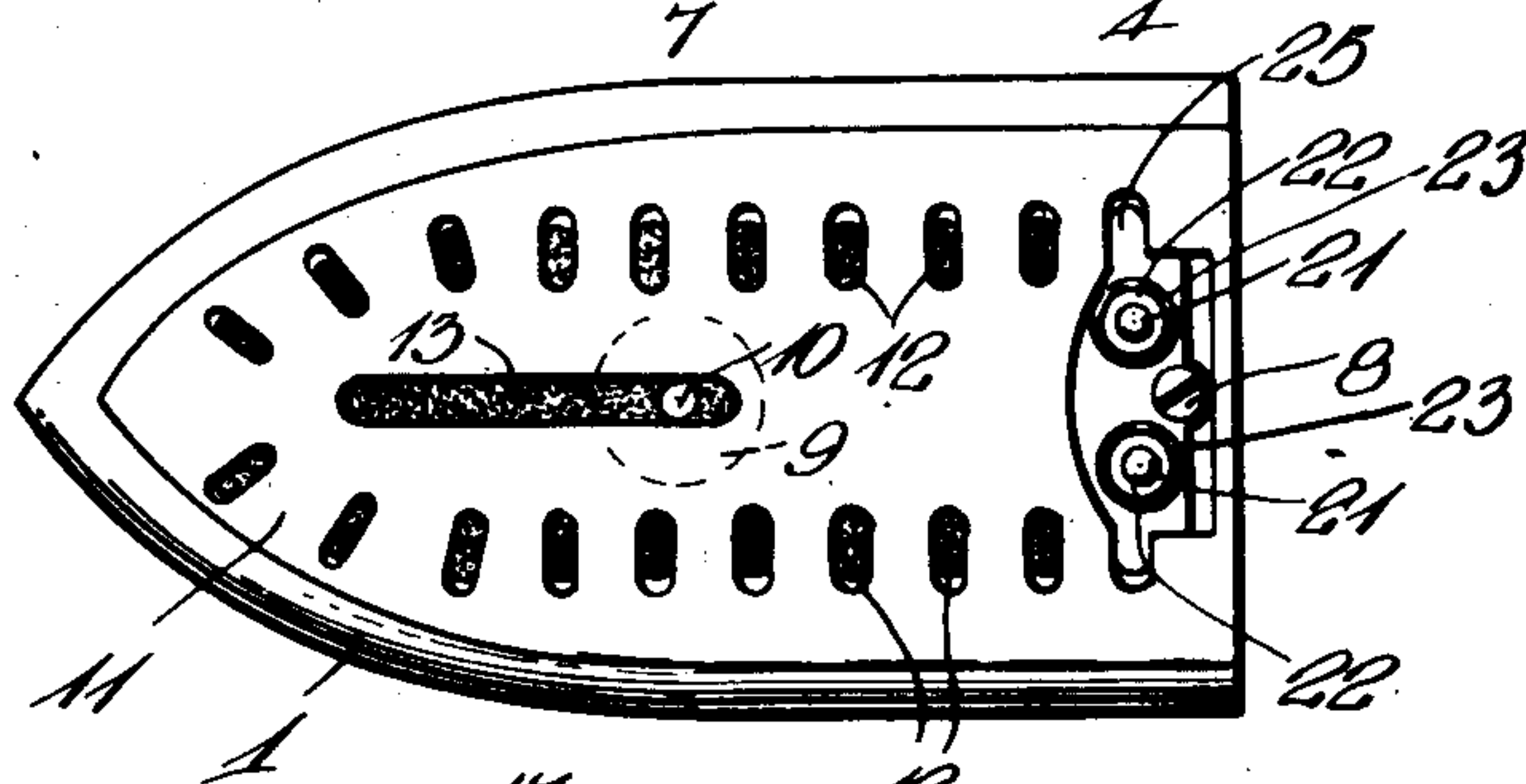
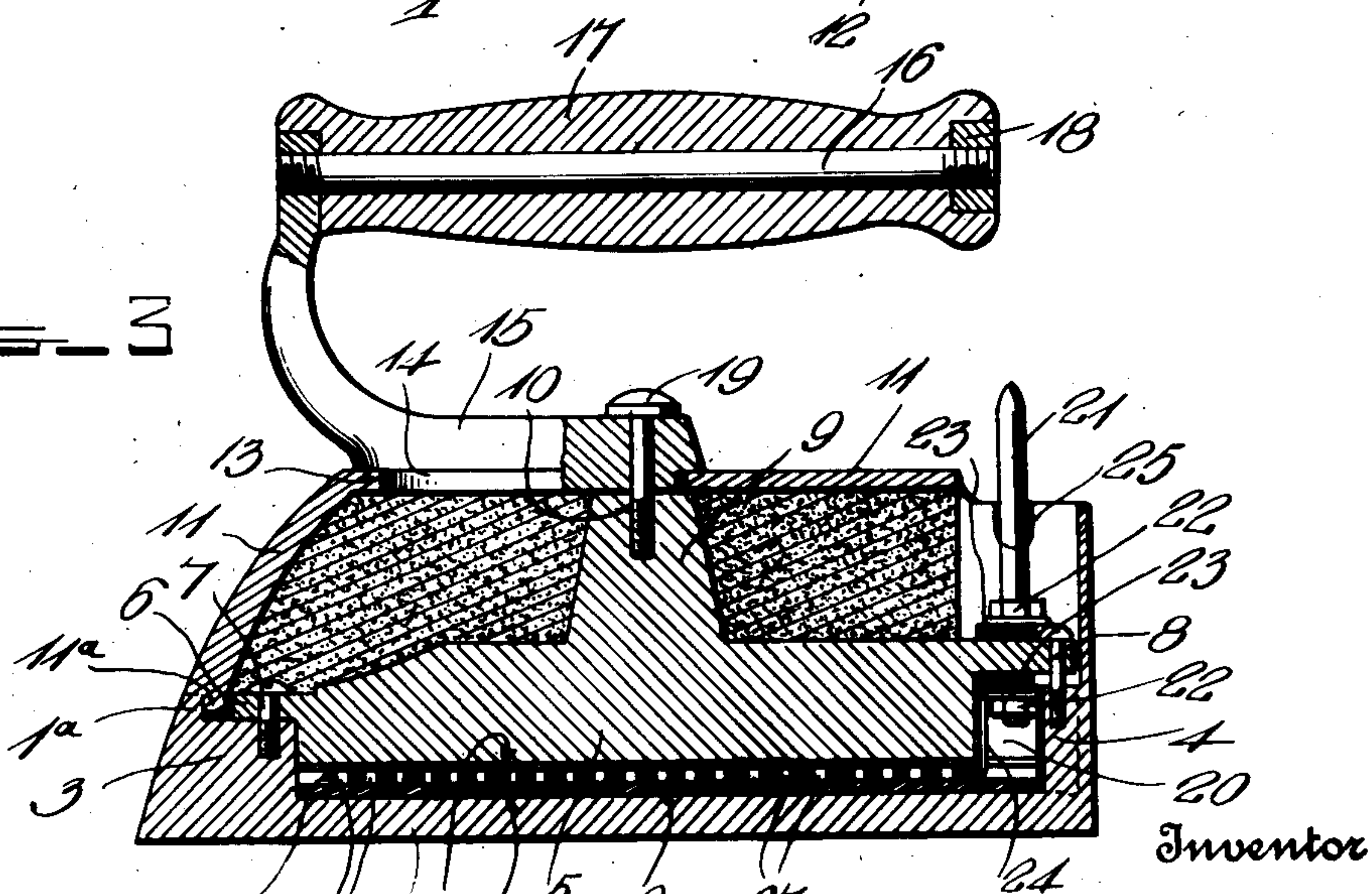


FIG. 3



Witnesses

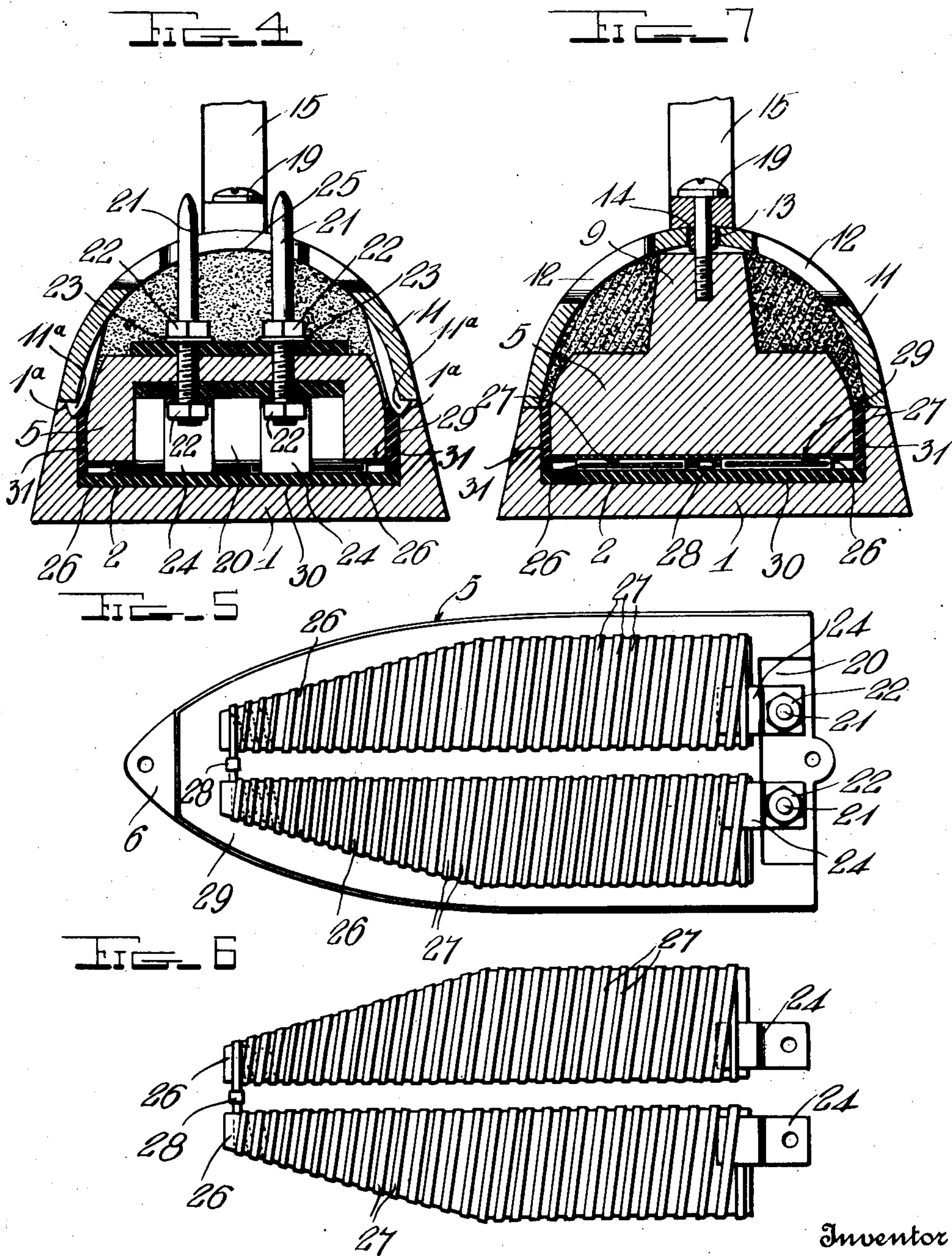
E. G. Griesbauer

E. H. Griesbauer

Albert Wicks

by *A. B. Winslow & Co*

Attorneys



Witnesses
C. H. Grieshaber.

Inventor
Albert Wicks
By *H. B. Wilson & Co.*
Attorneys

UNITED STATES PATENT OFFICE.

ALBERT WICKS, OF GUELPH, ONTARIO, CANADA, ASSIGNOR, BY DIRECT AND MESNE ASSIGNMENTS, OF ONE-HALF TO NORMAN A. WICKS AND ONE-HALF TO HARRY J. COMPTON, OF WOODSTOCK, ILLINOIS.

ELECTRIC IRON.

999,421.

Specification of Letters Patent.

Patented Aug. 1, 1911.

Application filed March 16, 1911. Serial No. 614,862.

To all whom it may concern:

Be it known that I, ALBERT WICKS, a subject of the King of Great Britain, residing at Guelph, in the county of Wellington and Province of Ontario, Canada, have invented certain new and useful Improvements in Electric Irons; and I do 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.

This invention relates to improvements in electric sad irons.

One object of the invention is to provide an electric sad iron having an improved construction and arrangement of parts whereby the upper portion of the body of the iron will be prevented from becoming heated.

Another object is to provide a simple, strong and durable iron of this character, the parts of which may be easily manufactured and assembled.

A further object is to provide an improved construction and arrangement of heating element by means of which the electricity is applied to the lower part of the iron for heating the same.

With these and other objects in view, the invention consists of certain novel features of construction, combination and arrangement of parts as will be more fully described and particularly pointed out in the appended claim.

In the accompanying drawings: Figure 1 is a side view of an electric iron constructed in accordance with the invention; Fig. 2 is a top plan view with the handle removed; Fig. 3 is a central vertical longitudinal section of the iron; Fig. 4 is a vertical cross section on the line 4—4 of Fig. 1; Fig. 5 is a bottom plan view of the core of the iron showing the construction and arrangement of the electric heating element; Fig. 6 is a detail view of the electric heating element removed from the iron. Fig. 7 is a vertical cross section on the line 7—7 of Fig. 1.

Referring more particularly to the drawing, 1 denotes the body or base portion of the iron which may be of any suitable shape and has formed therein a recess or cavity 2 corresponding to the shape of the base 1. In the toe portion of the base is formed an offset or shoulder 3 having a threaded

socket the purpose of which will be hereinafter described. In the rear or heel end of the base is formed a centrally disposed lug 4 which is also provided with a threaded socket. Arranged in the recess 2 of the base 1 is a solid iron core or heat retaining element 5, said core having a shape corresponding to the shape of the recess 2 and is provided on its toe end with an overhanging apertured lug 6 which is adapted to engage and rest on the shoulder 3 in the base of the iron, and with said apertured lug and threaded socket is engaged a fastening screw 7 by means of which the forward end of the core is secured in the base. In the rear or heel end of the core is also formed a passage through which is inserted a fastening screw 8, said screw being engaged with the threaded socket formed in the lug 4 at the heel end of the iron thus securing this end of the core in place. In the center of the core 5 is formed an upwardly projecting boss 9 having formed therein a threaded socket 10.

Arranged on the base 1 and over the core 5 is a hollow removable top or upper section 11, the upper side and front portion of which is rounded or curved as shown. In the front end and in the opposite sides near the rear end of the base 1 are formed notches 1^a with which are engaged lugs 11^a formed on the upper section whereby the latter is centered and held against lateral movement. In the curved or rounded upper portion of the top or upper section is formed a series of vertically disposed passages or slots 12 and a central longitudinally disposed slot 13. The slots 12 are provided to form ventilating openings through which the heat of the iron is permitted to escape, thereby keeping the upper portion of the iron cool. The slot 13 is provided to receive a tongue or rib 14 formed on the lower side of the handle attaching shank 15 which curves upwardly from the upper portion of the iron as shown. In the upper end of the shank 15 is screwed a bolt 16 on which is arranged a handle 17 formed of wood or other suitable material, said handle being secured in place by a nut 18 arranged on the outer end of the bolt as shown. In the rear end of the lower portion of the shank 15 is formed a screw hole which aligns with the threaded socket 10 in the boss 9 and through said hole in the

tongue is inserted a handle and top fastening screw 19 which is screwed into engagement with the threaded socket in the boss 9 thereby securely fastening the handle and upper section of the body of the iron in place.

In the rear or heel end of the core 5 is formed a recess 20 in the upper wall of which is secured the lower ends of combined binding posts and connecting plugs 21 which are suitably insulated from and secured to the core 5 by clamping nuts 22 and insulated washers 23. To the lower ends of the posts 21 are connected one end of electric conducting strips or wires 24 by means of which the posts are electrically connected to the electric heating element arranged in the base of the iron as hereinafter described. The upper ends of the binding posts 21 project through an opening 25 formed in the rear end of the top section 11 of the iron and are adapted to receive the socket of a flexible conducting element (not shown) but by means of which electricity is supplied to the heating element of the iron. Above the core 5 and between the same and the top of the iron is arranged a filling or layer of asbestos or other non-heat conducting material.

My improved electric heating element comprises two bars or plates formed of mica or similar non-conducting material 26. The two plates or bars 26 are arranged side by side in parallel relation beneath the core 5 and between the same and the bottom of the base 1 and said bars or plates 26 are wrapped continuously by metal strips or wires 27, said wrappings forming resistance coils whereby the current of electricity passing through the same is caused to produce an intense heat. The forward ends of the strips 27 are connected together by a suitable clip 28 or said strips may be formed in one continuous piece. The opposite ends of the strips 27 are passed through apertures formed in the rear end of the plates 26 and are suitably fastened to the latter. With said rear ends of the strips 27 are connected the inner ends of the conducting strips or wires 24 the upper ends of which are secured to the binding posts 21 as shown.

Between the upper side of the wrapped bars, forming the heating element, and the core 5 is arranged a protecting plate 29, and below the heating element and between the same and the bottom of the base 1 is arranged a protecting plate 30. The protect-

ing plates 29 and 30 referred to may be formed of any suitable material but mica is preferably employed. The opposite edges of the core 5 are insulated from the sides of the base of the iron by strips 31 of mica or similar non-conducting material, while a similar strip of mica is arranged between the rear of the core and the adjacent rear end of the base.

From the foregoing description taken in connection with the accompanying drawings, the construction and operation of the invention will be readily understood without requiring a more extended explanation.

Various changes in the form, proportion and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of the invention as defined in the appended claim.

Having thus described my invention, what I claim is:

An electric iron comprising a base having a cavity formed therein, a heat retaining core arranged in the latter, said core having a toe and heel lug each of which is adapted to engage with shoulders forming the end walls of the cavity in the base, fastening devices passing through said lugs and into the shoulders for detachably securing the core to the base, binding posts secured to the core and projecting upwardly therefrom, an electric heating element arranged between the base and the core, said element comprising parallel arranged bars of non-conducting material, metal strips on said bars to form two resistance coils in series, electric conducting metallic strips to connect each end of said heating element with one of said binding posts, means for insulating the heating element from the remaining parts of the iron, a cover section detachably secured to the base into which the core projects, the latter having an upwardly projecting boss, and a handle secured to said cover and boss, whereby the core is secured to the cover within the longitudinal passage formed therein.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

ALBERT WICKS.

Witnesses:

WM. H. TOWLE,
GARFIELD WICKS.