March 4, 1924. 1,485,397

H. KREISHELD

TRAVELER'S IRON

Filed Jan. 3, 1920

Fig. 1.

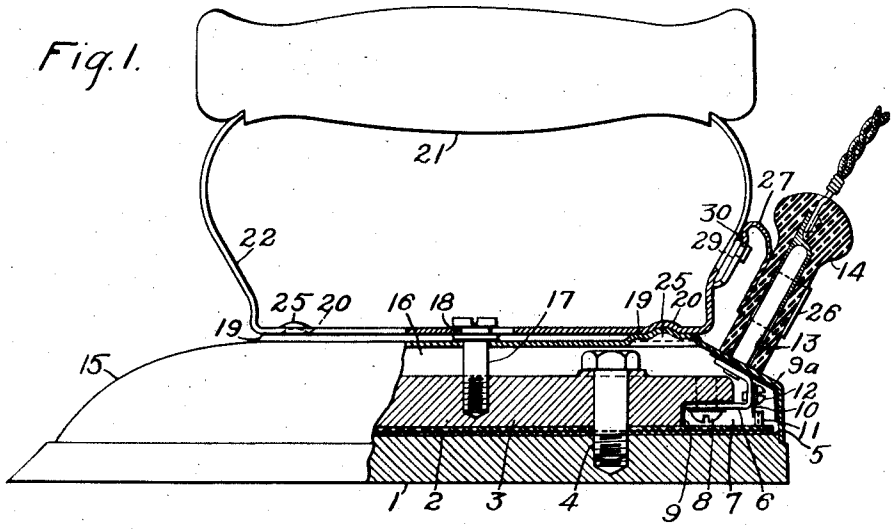



Fig. 2.

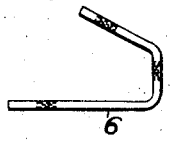



Fig. 3.

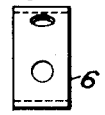



Fig. 4.

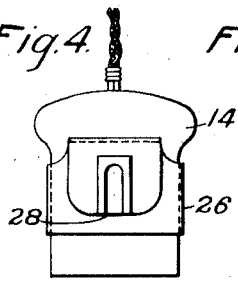



Fig. 5.

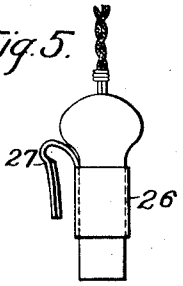
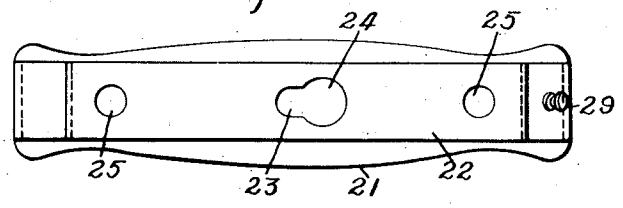



Fig. 6.




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# UNITED STATES PATENT OFFICE.

HENRY KREISHELD, OF MANSFIELD, OHIO, ASSIGNOR TO WESTINGHOUSE ELECTRIC PRODUCTS COMPANY, A CORPORATION OF MICHIGAN.

## TRAVELER'S IRON.

Application filed January 3, 1920. Serial No. 349,286.

*To all whom it may concern:*

Be it known that I, HENRY KREISHELD, a citizen of the United States, and a resident of Mansfield, in the county of Richland and State of Ohio, have invented a new and useful Improvement in Travelers' Irons, of which the following is a specification.

My invention relates to electrically heated apparatus and particularly to electric sad irons, and it has for its object to provide apparatus of the character designated which shall be of simple, durable and rugged construction, which shall have simple and novel means for holding the handle member in operative position on the iron and which shall permit of being easily and quickly disassembled.

More specifically, my invention provides an electric sad iron having a working member, a clamping plate, an electric heating element, the contact terminals of which are mounted on the clamping plate, and means for securing the clamping plate against the working member. A cover member is provided for said working member and is held in operative relation to said working member by means of a single bolt. A handle member is provided with a supporting strap which is held in operative relation to said cover by means of a slot in said strap co-operating with an annular groove in the head of the cover bolt. Integral projections on the cover engage co-operating depressions in the strap to prevent displacement of the handle during operation of the iron. A contact socket is provided with a spring member so that it may be mounted on the supporting strap when operatively associated with the contact terminals, this method of mounting operating to prevent displacement of the handle during operation of the iron.

In the accompanying sheet of drawings, Figure 1 is a side elevation—partly in section—of a sad iron constructed in accordance with my invention; Fig. 2 is a side elevation and Fig. 3 is an end view of part of the contact terminal; Fig. 4 is a rear view in elevation, and Fig. 5 is a view in side elevation, of the contact socket and mounting therefor, and Fig. 6 is a bottom plan view of the handle member.

Referring to the drawings, the sad iron shown comprises a base or working member 1, a suitable electric heater 2 therefor, a clamping plate 3, and a plurality of bolts 4 (only one of which is shown) which hold the clamping plate, heating element and working member in proper operative position relative to each other. The working member 1 is provided with a raised portion 5 on its inner surface which is in intimate thermal contact with the heater which is preferably of the flat-ribbon type. The base member 1, heater 2, and the clamping plate 3 constitute what may be termed the body portion of the iron.

Two contact terminal supporting members 6 of substantially U-shape are mounted in a recess 7 which is provided at the rear of the clamping plate 3, and are attached to the plate 3 by means of suitable screws 8, a piece of mica 9 of L-shape being used to insulate these supporting members from the plate 3. Contact terminals 10, suitably connected to the ends of the resistor 11 of the heater 2, are secured to the supporting members 6 by means of screws 12. A contact post 13 is suitably secured to the upper leg of the member 6 and co-operates with a contact socket or plug 14 to permit the heating element to be energized when desired.

A cover member 15 is provided having the same outline as the working member 1 and in contact therewith only at its lower edge. An air space 16 between the cover 15 and the clamping plate 3 operates to restrict the flow of heat to the cover member and insures a relatively low operating temperature thereof. The cover 15 is held against the working member 1 by means of a centrally located bolt 17 which is screwed into the clamping plate 3. The head of the bolt 17 is provided with an annular groove 18 for a purpose to be hereinafter set forth. On its upper surface, the cover member 15 is provided with two spaced and longitudinally-alined bosses or guiding surfaces 19, each of these surfaces having a raised central portion 20, for a purpose to be here-

inafter set forth. The contact terminals 13 project through an opening (not shown) in the cover member 15 and are suitably insulated from the cover by means of a sheet of mica 9a.

A handle member 21 is provided with a supporting strap 22 of substantially U-shape. At substantially the middle of its length, the strap 22 is provided with an opening 23 of such dimension that it will fit into the annular groove 18 in the head of the bolt 17. A larger circular opening 24 communicates with the opening 23, the diameter of the opening 24 being slightly larger than the diameter of the head of the bolt 17. The under surface of the supporting strap 22 is provided with two alined and longitudinally-spaced depressions 25, which register, and co-operate with, the raised central portions 20 of the bosses 19 to maintain the handle member 21 in its proper operative position on the cover 15.

The contact socket 14 is provided with a metal casing member 26 which has a rearwardly-extending resilient portion 27 of substantially U-shape. The outer leg of the portion 27 is provided with a longitudinal slot 28, the metal adjacent to the slot 28 being slightly depressed, as best shown in Fig. 5.

A stud 29 is suitably secured to one leg of the supporting strap 22 and is provided with an annular groove 30, the depth of the groove 30 being such as to co-operate with the slot 28 in the member 27 to position the contact plug on the supporting strap 22.

If it is desired to mount the handle member on the sad iron preparatory to using or operating it, this may be done as follows, it being assumed that the handle member and the contact plug have been removed from their operative positions. The handle member is placed on the cover member in a position which is angularly displaced from its normal operative position and with the head of the bolt 17 in the opening 24 in the supporting strap 22. The handle member is then moved longitudinally so that the opening 23 will engage the bolt 17 at the annular groove 18, after which the handle member is given a slight angular movement until the projections 20 register with the depressions 25 and co-operate therewith to hold the handle member in its operative position on the cover. The relative location of the groove 18 and of the projections 20 in a vertical plane is such that there will be a slight downward spring of the supporting strap at the bolt 17, thus providing a resilient mounting for the handle member. The handle member is so mounted on the cover that the stud 29 is located at the back of the sad iron. The contact plug 14 may then be placed in its operative position on the contact posts 13, the annular groove 30 in the stud 29 fitting into the slot 28 in the resilient projection 27. I thus provide a resilient mounting for the contact plug 14 which, at the same time, operates to prevent displacement of the handle member.

To disassemble the sad iron, the contact socket is disengaged from the contact terminals 13 and the strap 22, after which the handle member is given a slight rotative movement to disengage the projections 20 from the depression 25. The handle member is then so moved that the opening 24 registers with the head of the bolt 17 when the handle member may be withdrawn from operative engagement therewith.

The device embodying my invention thus provides an electric sad iron comprising relatively few parts, which may be easily and quickly assembled and disassembled and which provides novel means for maintaining the relative operative positions of the various parts while in use.

Various modifications may be made in the device without departing from the spirit and scope of my invention, and I desire, therefore, that only such limitations shall be placed thereon as are imposed by the prior art or are specifically set forth in the appended claims.

I claim as my invention:

1. In a sad iron, the combination with a working member, a clamping plate, a heating element located between said working member and said clamping plate, and means for clamping together said working member and said clamping plate, of a cover member for said working member, a handle member, supporting means for said handle member, and a single means for holding said cover member against said working member and for holding said handle-supporting member in operative relation to said cover member.

2. In a sad iron, the combination with a working member, a clamping plate, a heating element located between said clamping plate and said working member, and means for clamping together said clamping plate and said working member, of a cover member for said working member, a handle supporting means for said handle, said handle and supporting means being removable from said cover, means for holding said cover member against said working member, and means, integral with said cover member for normally preventing displacement of said handle and said supporting member but permitting the quick removal thereof from said cover by a turning movement thereon.

3. In a sad iron, the combination with a working member, a clamping plate, a heating element located between said working member and said plate and means for clamping together said working member and said plate, of a cover member for said working member, a handle member, a supporting

strap for said handle, a single means for holding said cover member against said working member and for holding said supporting strap in operative relation to said cover member, a terminal device associated with said heating element and said clamping plate, and means associated with said terminal device for preventing displacement of said supporting strap.

4. In an electrically-heated apparatus, the combination with a sad-iron body portion comprising an electrical heating element, contact terminals for said heating element mounted on said body portion, a cover member for said sad-iron body and means for holding said cover member in operative relation to said body portion, of a handle member, a supporting strap for said handle, means integral with said cover-holding means for holding said strap against said cover member, a contact socket operatively connected to said contact terminals, and means associated with said contact socket for preventing displacement of said supporting strap.

5. In a sad iron, the combination with a working member, a clamping plate, a heating element located between said plate and said working member, means for clamping together said working member and said plate, and contact terminals for said heating element supported by said clamping plate, of a cover member for said working member, a quickly detachable handle, a supporting strap for said handle, a bolt for holding said cover in operative relation to said working member and for holding said handle member against said cover, means integral with the cover member for preventing displacement of said strap, and a contact socket operatively connected to said contact terminals and resiliently mounted on said handle-supporting strap.

6. In an electrically-heated apparatus, the combination with a sad-iron body comprising an electrical heating element, a top plate and a working member, contact terminals for said heating element mounted on said top plate, a cover member for said sad-iron body and means for holding said cover member in operative relation to said working member, of a removable handle member, a supporting strap for said handle member of substantially U-shape, a contact socket co-operating with said contact terminals to energize said heating element, and means associated with said contact socket and co-operating with means on said supporting strap for maintaining the relative operative location of said contact socket and said handle member.

7. In an electrically-heated apparatus, the combination with a sad-iron body, a handle member and a supporting strap of substantially U-shape for said handle member, of a cover member for said sad-iron body, and means for holding said cover member against said sad-iron body and embodying means on the outer surface of said cover member co-operating with said cover-holding means for holding said handle member in operative relation to said cover member.

8. In an electrically-heated apparatus, the combination with a sad-iron body, a quickly detachable handle member, and a supporting strap of substantially U-shape for said handle member having a plurality of depressions therein, of a cover member for said sad-iron body provided on its upper surface with two spaced and alined guiding projections for engaging the depressions in said strap for normally preventing displacement of said handle member, and a single bolt for clamping said cover to said sad-iron body and for co-operating with said depressions and projections to prevent displacement of the handle member.

9. In an electrically-heated apparatus, the combination with a sad-iron body, a quickly detachable handle member, and supporting means therefor, of a cover member for said sad-iron body, means for clamping said cover against said sad-iron body, and means integral with said cover co-operating with said cover clamping means for preventing displacement of said handle member.

10. In an electrically-heated sad iron, the combination with a working member, a clamping plate, an electrical heating element located between said working member and said clamping plate, means for clamping said plate on said working member, contact terminals for said heating element mounted on said clamping plate, a removable handle member and a supporting strap of substantially U-shape for said handle member, of a cover member for said heating element having projecting therefrom a plurality of spaced integral surfaces for positioning said supporting strap on said cover, means for clamping said cover against said working member and for holding said strap against said cover, a contact socket operatively associated with said contact terminals, and means associated with said contact socket and with said supporting strap for preventing removal of said handle member.

11. In an electrically-heated traveler's sad iron, the combination with a sad-iron body portion comprising an electrical heating element, a cover member therefor, and a contact socket operatively associated with said heating element, of a handle for said iron quickly detachable from said cover member, and means associated with said contact socket for permitting the removal of said handle only after the removal of said contact socket.

12. In an electrically-heated traveler's sad iron, the combination with a sad-iron body comprising an electric heating element, a

cover member for said sad-iron body, means for clamping said cover member on said sad-iron body, and a terminal device operatively associated with said heating element, of a quickly removable handle for said iron, embodying means on said cover co-operating with said cover-clamping means to hold said removable handle means in operative relation to said iron, and means associated with said terminal device for preventing the displacement of said removable holding means.

13. In an electrically heated sad-iron, the combination with a sad-iron body and a cover member therefor having integral upwardly extending projections thereon, of a quickly detachable handle strap for the iron having integral depressions adapted to engage said cover projections, and a single means for clamping said cover on said body and for causing said co-operating depressions and projections to operatively engage each other.

In testimony whereof, I have hereunto subscribed my name this 5th day of December, 1919.

HENRY KREISHELD.