May 4, 1926. 1,583,460

N. HANSSON

ELECTRIC IRON WITH REMOVABLE HEATING ELEMENT

Filed May 4, 1925

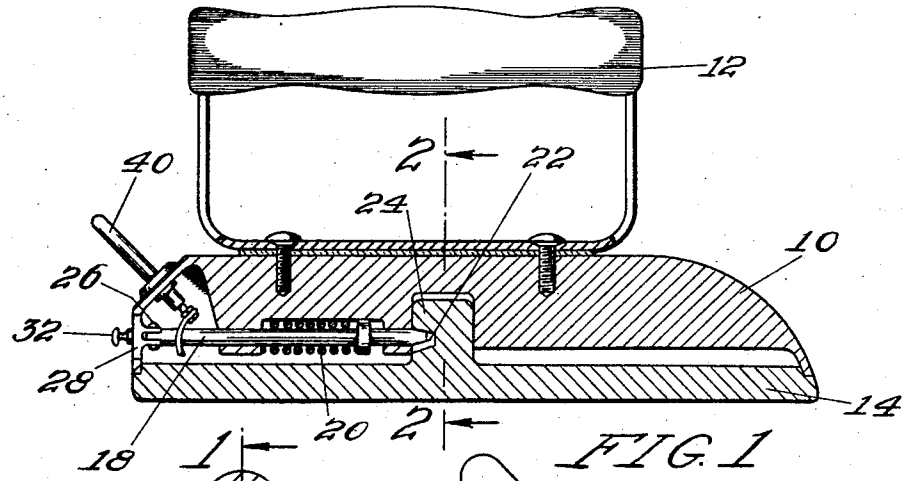


FIG. 1

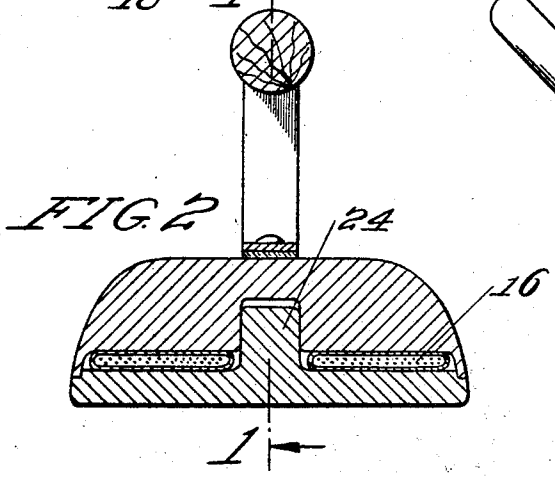


FIG. 2

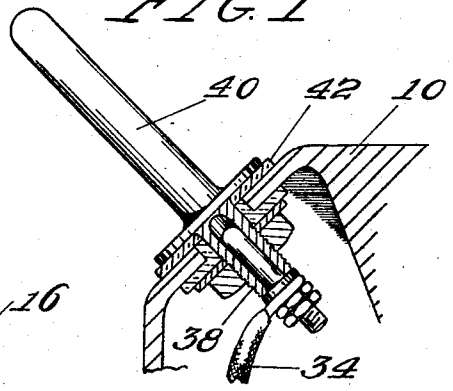


FIG. 3

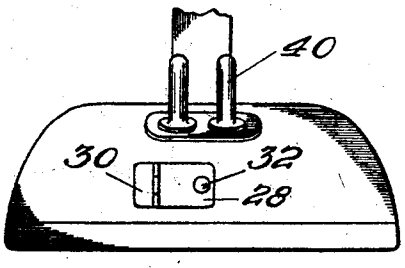


FIG. 4

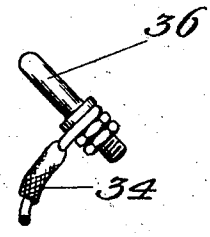


FIG. 5

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UNITED STATES PATENT OFFICE.

NILS HANSSON, OF CHICAGO, ILLINOIS.

ELECTRIC IRON WITH REMOVABLE HEATING ELEMENT.

Application filed May 4, 1925. Serial No. 27,947.

To all whom it may concern:

Be it known that I, NILS HANSSON, a subject of the King of Sweden, and having made application for United States citizenship, and residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Electric Irons with Removable Heating Elements; 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.

This invention relates to improvements in electric wires, and has for one of its principal objects the provision of an electric flat iron or the like from which the heating element is readily removable for purposes of repairs, substitution, or the like.

One of the important objects of this invention is to provide, in an electric iron, a removable heating element or elements and means for readily and conveniently disassembling the iron with a minimum of expenditure of time and trouble and without the use of special tools.

Other and further important objects of this invention will be apparent from the disclosures in the accompanying drawings and following specification.

The invention, in a preferred form, is illustrated in the drawings and hereinafter more fully described.

In the drawings:

Figure 1 is a vertical view, partly in section, of an electric iron constructed in accordance with the principles of this invention.

Figure 2 is a vertical section, taken on the line 2—2 of Figure 1.

Figure 3 is an enlarged detail view showing the construction and operation of the connecting plugs for use with the removable heating element.

Figure 4 is a rear elevation of the improved iron, illustrating the operation of the heating element removing means.

Figure 5 is a detail view showing one of the connecting plugs of the removable heating element.

As shown in the drawings:

The reference numeral 10 indicates generally the body of an electric iron, having a handle 12 thereon as in the usual construction and having a base 14 adapted to be heated by the passage of electric current through an adjustable heating element adjacent thereto. Heretofore in the event that the heating element was damaged or became useless from any cause, the services of an expert were necessary to replace the same, making such replacement virtually as expensive as a new iron. In the present invention a locking pin 18 is provided, normally maintained in locking position by means of a helical spring 20 and having its free end adapted to fit into a wedge-shaped notch 22 in an upstanding lug 24 forming a portion of the base 14, which lug itself fits into a socket provided therefor in the main body of the iron 10.

The rear end of the pin 18 is pivotally attached by means of a suitable bearing 26 to an inwardly extending lug integral with a suitable closure means 28 mounted by means of hinges 30 on the rear of the iron 10 and adapted to be operated by means of a handle or the like 32.

The current conducting wires 34 leading to the heating element 16 terminate in suitable plugs 36, which are in turn adapted to be inserted into corresponding sockets 38 forming part of the binding posts or terminals 40 similar to those embodied in the usual constructions of electric irons of this sort. The terminals 40 and sockets 38 are suitably insulated from the main body of the iron 10 by means of insulating washers and the like 42.

The operation is as follows:

Whenever for any reason it is desired to remove the heating element 16 the housewife or other operator merely pulls open the closure means 28 by means of the operating knob 32, which in turn withdraws the pin 18 from the socket 22, thereby allowing the base of the iron 14 to drop away from the main body 10. The heating element 16 can then be readily removed from its attachments with the terminals 40 by simply withdrawing the plugs 36 from their corresponding sockets 38, after which the heating element can either be replaced or repaired and as readily re-inserted into proper position when the iron is again ready for use.

I am aware that many changes may be made and numerous details of construction varied throughout a wide range without departing from the principles of this invention, and I therefore do not purpose limit-

ing the patent granted hereon otherwise than as necessitated by the prior art.

I claim as my invention:

1. In an electric iron, the combination of a removable heating element and locking means for maintaining said removable heating element in operating position, said locking means including a spring impelled pin and a cover member attached to the pin.

2. In an electric iron, the combination of a removable heating element, locking means for maintaining said removable heating element in operating position, said locking means including a spring impelled pin, and operating means comprising a closure member hingedly attached to one end of the pin.

3. In an electric iron, the combination of a removable heating element, locking means for maintaining said removable heating element in operating position, said locking means including a spring impelled pin, and operating means comprising a closure member hingedly attached to one end of the pin, the one end of said pin being wedge shaped and mounted to co-operate with a corresponding wedge shaped notch in the base of the iron.

4. An electric iron, comprising a removable base, a heating element removably associated with said base, current carrying plugs on the heating element, and sockets for said plugs, said sockets mounted on the main body of the iron and integral with binding posts fixed thereon together with locking means for maintaining the base in position, said locking means including a spring-impelled pin and a cover allowing access to the pin, said cover being operatively attached to the pin.

In testimony whereof I affix my signature.

NILS HANSSON.