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K. P. A. HANSEN ET AL

STAND AND AUTOMATIC SWITCH FOR ELECTRIC SADIRONS

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Fig. 1.

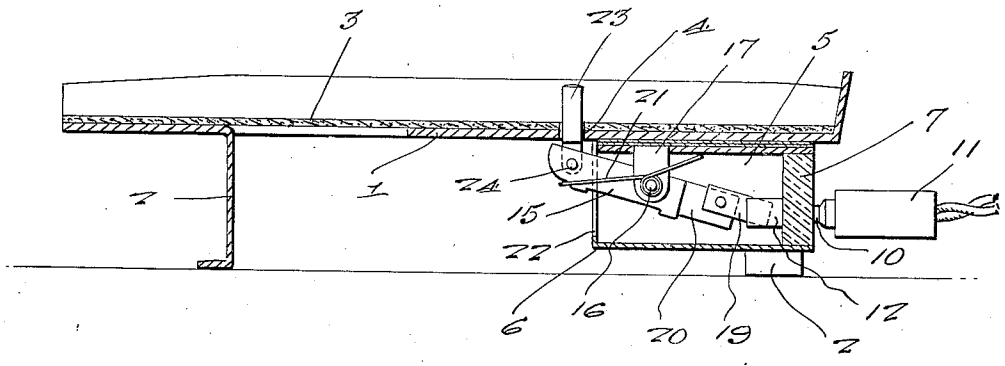
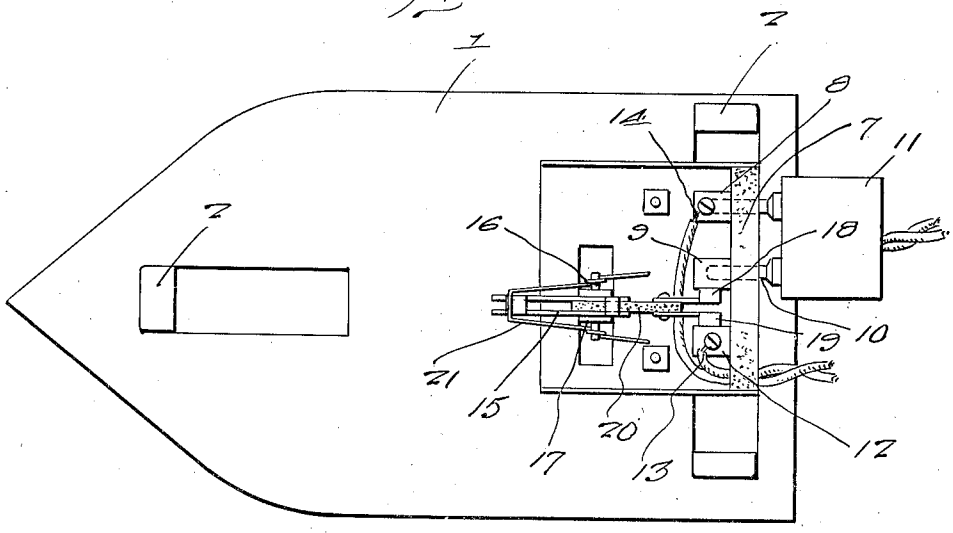


Fig. 2.



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UNITED STATES PATENT OFFICE.

KRIS P. A. HANSEN AND VIGGO CHRISTIANSEN, OF ASTORIA, OREGON.

STAND AND AUTOMATIC SWITCH FOR ELECTRIC SADIRONS.

Application filed December 2, 1924. Serial No. 753,512.

To all whom it may concern:

Be it known that we, KRIS P. A. HANSEN and VIGGO CHRISTIANSEN, citizens of Denmark, residing at Astoria, in the county of Clatsop and State of Oregon, have invented certain new and useful Improvements in a Stand and Automatic Switch for Electric Sadirons, of which the following is a specification.

This invention relates to improvements in stands for electric sad irons, and has for its principal object to provide means in connection therewith for automatically cutting off the current to the electric iron, when the same is placed on the stand in a predetermined position, whereby the unnecessary waste of electrical current is eliminated.

A further object of the invention is to provide a stand and an automatic switch of the above mentioned character, wherein the switch is normally closed, so that current will flow to the iron for heating the same during its use, and furthermore, the current may be permitted to continue to be supplied to the electric iron, when the latter is not in use, by placing the iron across the top of the stand, instead of placing the iron in its proper position on the stand.

A further object of the invention is to provide a device of the above mentioned character, which is simple in construction, inexpensive, strong and durable, and further well adapted for the purposes for which it is designed.

Other objects and advantages of this invention will become apparent during the course of the following description.

In the accompanying drawing, forming a part of this specification, and in which like numerals designate like parts throughout the same:

Figure 1 is a longitudinal sectional view of the stand and the casing for the switch, the latter being shown in side elevation, and

Figure 2 is a bottom plan view thereof, with the bottom of the casing removed.

In the drawing, wherein for the purpose of illustration is shown the preferred embodiment of our invention, the numeral 1 designates the metallic stand, the supporting feet 2 thereof being stamped out therefrom. An asbestos lining 3 is placed in the bottom of the stand upon which the bottom of the electric said iron is adapted to rest when in its proper position on the stand. An opening 4 is provided in the stand 1 adjacent the rear end thereof, and the purpose thereof will hereinafter be more fully described. A casing 5 is supported on the bottom of the stand 1, adjacent the rear end thereof, the bottom of the casing and the front end thereof being open and normally closed by the removable cover 6. An insulated block 7 is arranged in the rear end of the casing 5, and carried by the block 7 are the metallic sockets 8 and 9 respectively, which provide a means for receiving the terminals of the plug 11 which is associated with an electric sad iron, not shown, in the usual manner.

A contact or binding post 12 is also carried by the insulated block 7 and is spaced from the inner end of the socket 9, in the manner as clearly shown in Figure 2. Current to the electric iron is adapted to be supplied by means of the electric wires 13 and 14, which are fastened to the binding post 12 and the inner end of the socket 8 respectively, as also clearly illustrated in Figure 2.

The switch comprises a lever 15, which is pivotally supported intermediate its ends on the pivot pin 16, the latter extending through a pair of registering openings provided in the depending ears 17 struck out from the top of the casing 5. The rear end of the lever 15 supports thereon the contacts 18 and 19 respectively, which are insulated from the metallic lever by means of the strip of insulation 20. The contacts 18 and 19 are adapted to engage the contacts 9 and 12 respectively, whereby the circuit is closed, and current is supplied to the electric iron. The contacts 18 and 19 are normally held in engagement with the contacts 9 and 12 by means of the axial coil springs 21, in the manner as clearly illustrated in Figure 1.

The forward end of the lever 15 extends through a suitable slot 22 provided in the front wall of the cover 6 for the casing 5 and a button or the like, shown at 23, is pivotally supported at its lower ends on the forward end of the lever 15, as illustrated at 24. The button 23 is adapted to extend upwardly through the opening 4 in the stand 1 and through a similar opening in the asbestos lining 3, in the manner as also shown in Figure 1.

When the electric flat iron is placed in its proper position on the stand 1, so that the bottom of the iron will rest on the asbestos

lining 3, the button 23 will be urged downwardly, causing the rear end of the lever to be raised upwardly and moving the contacts 18 and 19 out of engagement with the contacts 9 and 12 respectively, whereby the circuit is broken, and the current to the electric iron is cut off. When it is not desired to cut off the current to the electric flat iron, the flat iron may be placed crosswise on the stand, so that the bottom thereof will not engage the button 23.

Assuming that the electric iron is in its proper position on the stand 1, and the switch is opened, as soon as the electric iron is removed from the stand, in order to permit the use of the iron, the spring 21 will return the lever to its normal position, whereupon the contacts 18 and 19 will again be brought into engagement with the contacts 9 and 12, thus closing the circuit and supplying current to the electric iron, to permit the latter to be heated.

The provision of a device of the above mentioned character will save considerable expense in the elimination of unnecessary waste of electric current when the iron is not in use, and furthermore a fire due to the overheating of the iron is prevented.

While we have shown the preferred embodiment of our invention, it is to be understood that various changes in the size, shape, and arrangement of parts may be resorted to, without departing from the spirit of the invention, and the scope of the appended claim.

Having thus described our invention, what we claim is:

In a stand for electric said irons, a casing mounted below the stand, a pair of sockets in the casing for receiving the projections of a plug, a binding post on one socket, a second binding post in the casing spaced from the other socket, a pivotally mounted circuit closer in the casing including a pair of spaced plates, a strip of insulation between the plates at one end thereof, a pair of contacts, one on each side of the strip and one engageable with the last mentioned binding post, and the other engageable with the last mentioned socket, a push button pivoted between the other ends of the plates and normally extending upwardly through the stand, and means normally holding the circuit closer in a closed position with the button projected upwardly through the stand whereby when an iron is placed on the stand the push button will be pushed downwardly for swinging the circuit closed to an open position.

In testimony whereof we affix our signatures.

KRIS P. A. HANSEN.
VIGGO CHRISTIANSEN.