Aug. 17, 1926. 1,596,181

L. M. HILLS

SADIRON

Filed June 18, 1924

Fig. 1.

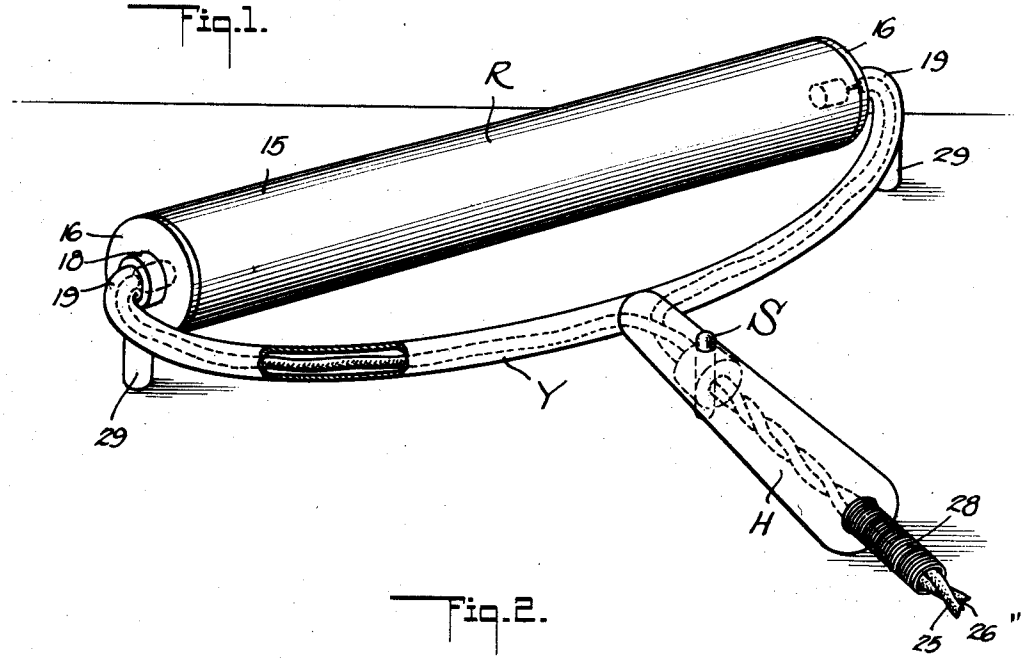


Fig. 2.

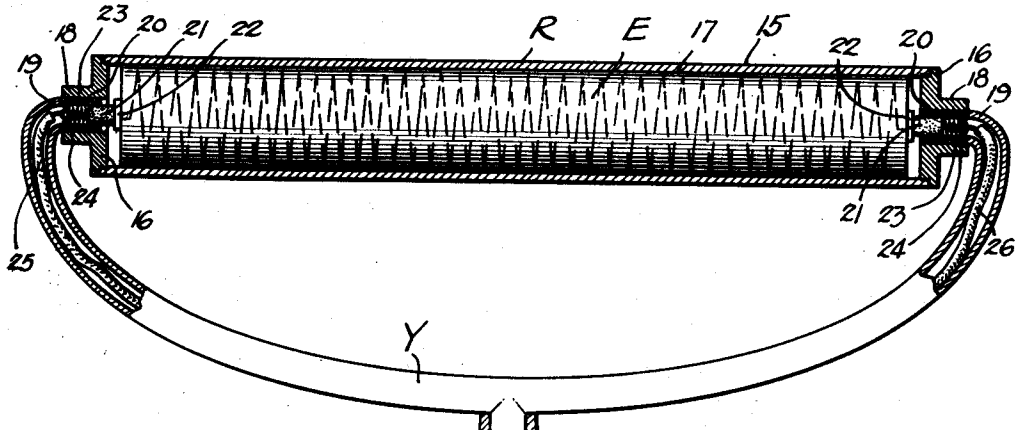
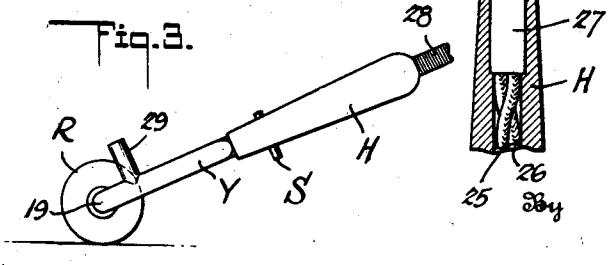


Fig. 3.



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UNITED STATES PATENT OFFICE.

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SADIRON.

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My invention relates to sad irons, and a purpose of my invention is the provision of a sad iron which is extremely simple, durable and heavy, and instead of sliding over the work as does the conventional sad iron, rolls on the work and allows the strength of the operator to be applied thereto in pressing, straightening or finishing.

It is also a purpose of my invention to provide a sad iron which comprises electrically heated roller mounted to allow rolling thereof over the work and having a pivoted yoke and handle which function as a lever to permit the application of any degree of pressure within the limits of the operator to the roller.

It is also a purpose of my invention to provide a sad iron of the above described character in which the yoke and handle are tubular to allow the extension therethrough of the conductors for supplying current to the heating element and in such manner as to support and thus prevent interference of the conductors with the manipulation of the iron and the breaking of the same.

A further object of my invention is the provision of a sad iron having means for supporting the roller in elevated position to prevent burning of the ironing board when the iron is not in use.

I will describe only one form of sad iron embodying my invention, and will then point out the novel features thereof in claims.

In the accompanying drawings:—

Figure 1 is a view showing in perspective one form of sad iron embodying my invention;

Figure 2 is a horizontal sectional view of the sad iron shown in Figure 1;

Figure 3 is a view showing in end elevation the sad iron shown in the preceding views.

Referring specifically to the drawings, in which similar reference characters refer to similar parts, my invention in its present embodiment comprises a roller R formed of metal or other suitable material and of the desired diameter and length, such roller including a cylinder 15 and head 16 threadedly associated with the ends of the cylinder, as clearly illustrated in Figure 2, to permit the detaching of the heads from the cylinder to allow the application of an electrical heating element E to the cylinder or the removal thereof from the same for the purpose of repair. The heating element E comprises a resistance wire coiled in a support 17 of insulating material which snugly fits within the cylinder 15. The head 16 is formed with axial openings which register with integrally formed collars 18 which constitute bearings for the inturned ends 19 of a yoke Y. Within the inturned ends 19 are insulating sleeves 20 and in the sleeves are movably mounted carbon brushes 21 which are urged into engagement with contacts 22 in the ends of the insulating support 17 and constituting the terminals of the coil E. These brushes 21 are urged into engagement with the contacts 22 by means of coil springs 23 arranged within the sleeves 20 and interposed between the brushes and disk heads 24 fixed within the sleeves. Conductors 25 and 26 are connected to the heads 24, and these conductors are adapted to supply current to the heating coil, as will be understood.

The yoke Y is of a substantially U-form and by virtue of the manner in which it is associated with the roller R provides a support for the latter in which the same is adapted to rotate. This yoke is of tubular form, as illustrated in Figures 1 and 2, so that the conductors 25 and 26 may be extended therethrough to the brushes 21, and a handle H which is also of tubular form receives an extension 27 formed on the medial portion of the yoke Y to provide a detachable connection between the handle and yoke. The conductors 25 and 26 are extended through the handle as illustrated in Figure 1, and a coil spring sleeve 28 projects from the outer end of the handle and yieldingly embraces the conductors at this point to prevent breaking of the latter. A conventional switch S is mounted in the handle H and is associated with the conductors 25 and 26 to control the passage of current therethrough to the heating element E.

For the purpose of supporting the roller R in elevated position when not in use, the yoke Y is provided adjacent the inturned ends 19 with depending posts 29. With the yoke in the position shown in Figure 1, these posts serve to support the roller in elevated position so as to prevent burning of the ironing board as will be understood. When the iron is in use, as illustrated in Figure 3, the yoke is swung to an inverted position with respect to that

shown in Figure 1, so that the posts extend upwardly from the yoke instead of downwardly and therefore do not interfere with the manipulation of the roller.

In practice, the sad iron is used in the manner illustrated in Figure 3, the hand of the operator gripping the handle H and moving the roller to and fro over the work to be ironed. The yoke and handle cooperate to provide a lever through which pressure can be exerted by the operator upon the roller R to set up the necessary pressure for effect in the proper ironing of clothes, and it is to be particularly noted that by virtue of the remote position of the handle with respect to the roller that a great leverage is obtained by which greater pressure can be exerted upon the roller when the latter is not sufficiently heavy to produce the desired pressure. However, when employing a heavy roller to produce the desired pressure, the sad iron can be operated with comparative ease as the rotation of the heavy roller requires only a minimum exertion of effort.

Although I have herein shown and described only one form of sad iron embodying my invention, it is to be understood that various changes and modifications may be made herein without departing from the spirit of the invention and the spirit and scope of the appended claims.

What I claim is:—

1. A sad iron comprising an electrically heated roller, a yoke on which the roller is journaled, and posts carried by and extending laterally from the yoke for the purpose described.

2. A sad iron comprising a tubular yoke, a roller journaled on the yoke, a tubular handle fixed to the yoke and extending from the medial portion thereof, an electrical heating element on the roller, conductors extending through the handle and yoke and having electrical connection with the heating element and posts extending laterally from the yoke adjacent the roller for supporting the latter in elevated position when not in use.

3. A sad iron comprising a tubular yoke, a roller journaled on the yoke, an electrical heating element mounted within the roller to occupy a fixed position with respect to the roller, and means interiorly of the yoke having sliding contact with the heating element by which current is supplied to the element during rotation thereof.

4. A sad iron as embodied in claim 3 wherein said means comprises brushes movably mounted in the yoke and urged into direct contact with the heating element to allow rotation of the element and yet maintain electrical connection therewith.

5. A sad iron comprising a tubular yoke, a roller journaled on the yoke, a tubular handle fixed to the yoke and extending from the medial portion thereof, an electrical heating element mounted in the roller for rotation therewith, contacts fixed upon the ends of said heating element, brushes slidably mounted in the in-turned ends of the yoke and engaging said contacts, and resilient means in the yoke having electrical connection with the conductors and engaging said brushes for urging the latter into engagement with said contacts.

6. A sad iron comprising a tubular yoke, a roller journaled on the yoke, a tubular handle fixed to the yoke and extending from the medial portion thereof, an electrical heating element mounted in the roller for rotation therewith, contacts fixed upon the ends of said heating element, sleeves of insulated material fixed in the in-turned ends of the yoke, disks fixed to the outer ends of the sleeves and to which the conductors are electrically connected, brushes slidably mounted in the sleeves and engaging said contacts, and coil springs in the sleeves interposed between said disks and brushes for urging the latter into engagement with said contacts.

7. A sad iron comprising a tubular yoke having its free ends inturned, a roller journaled upon the inturned ends, an electrical heating element mounted within the roller to occupy a fixed position with respect to the latter, and means movable in the inturned ends of the yoke and having sliding contact with the heating element by which current is supplied to the latter during rotation thereof.

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