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ACCESSORIES FOR IRONING APPARATUS

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1 Claim. (Cl. 35—107)

This invention consists in certain improvements in ironing equipment, particularly such apparatus as is employed in laundry operation.

An important object of the invention is to consolidate the parts comprising the ironing equipment used by a single operator into as limited space as possible in order to minimize the movements necessary to be made by the operator, and also to locate the iron and other accessories in such a way as to standardize the movements executed by the operator in the use of these devices.

For carrying out these primary purposes of the invention, I provide a main ironing board which is equipped with either an arm or separate standard for supporting the iron and other accessories in such relation as to be conveniently accessible to the operator, and also in entirely spaced relation to the main ironing board so as not to obstruct or limit the use of the ironing surface thereon in any way for ironing purposes, and thereby enable a main ironing board of shorter length than the conventional design to fulfill all the essential requirements of such portion of the equipment. Where an auxiliary supporting arm is provided for carrying the accessory equipment, this arm as well as the ironing board are both made adjustable with reference to the main supporting structure.

In adapting the equipment for use with an electric iron, the invention further provides electric heating connections having means for automatically shutting off the current from the iron so long as the latter is not in use, as well as means for independently cutting off the current through the supply connection and also indicating whether or not the supply connections are connected with the service outlet.

Other objects or purposes of the invention will appear in the course of the detailed specification.

With the foregoing objects in view, the invention will now be described by reference to the accompanying drawings illustrating apparatus found especially adapted for the embodiment of the proposed improvements, after which those features and combinations deemed to be novel and patentable will be particularly set forth and claimed.

In the drawing—

Figure 1 is a perspective view showing an ironing board construction embodying the present features of improvement;

Figure 2 is a plan view of the same on a slightly smaller scale;

Figure 3 is an end elevation of apparatus similar to that shown in Figure 1, but employing a separate supporting standard for carrying the accessory devices;

Figure 4 is a front elevation of the construction illustrated in Figure 2; and

Figure 5 is a horizontal sectional view representing a section taken on a line 5—5 of Figure 4.

This is a continuation-in-part of my application Ser. No. 244,972 filed December 10, 1938.

Floor space in the ironing and finishing departments of all up-to-date laundry establishments is always at a premium, due not only to the necessity of providing room for all the accessory equipment for each ironing station, but also on account of the space taken up by the appliances used for carrying and transporting the garments as these are being handled or treated in their course through the ironing and finishing department.

While it is desirable to save floor space, from the standpoint of that consideration alone, it is obviously much more important to design the ironing equipment in such a way as not only to save floor space but also to reduce as much as possible the necessity on the part of the operator for moving from one point to another about the apparatus, for unnecessary movements of the sort waste both time and labor, not to mention the expense of maintaining unduly large pieces of equipment.

Where apparatus of this character is equipped with electrically heated irons, some disadvantages have arisen due to overheating of the iron and other faults, according to the type of iron used. In the case of irons having a heat control switch, this requires constant attention on the part of the operator, who may neglect to manipulate the switch properly or even forget it altogether, thus overheating the iron or underheating the iron. One particular disadvantage of underheating the iron, for example, is that it slows down the work compared to working with a properly heated iron, for it is the hot iron which speeds up the operation by requiring rapid ironing strokes on the part of the operator.

A type of electric iron, called the cordless iron, requires the operator to place it back upon a stand for reheating, and while it has some advantages it is still subject to the objection that regardless of the fact that the iron is hot to begin with, it nevertheless is gradually cooling off during the time it is in use.

One important purpose of the present improvement therefore is to provide for maximum efficiency of the ironing device throughout its ac-
tual operation, doing this by reversing the principle of the so-called cordless iron, i.e., by maintaining the electric heating current in circuit through the iron during all the time it is in use, and automatically cutting off the heating current when the iron is not in use by causing said circuit to be broken automatically and simultaneously with the setting of the iron on its stand, in inoperative position. The loss of heat by the iron in this position, on its stand, is less rapid and of course much less serious than during the ironing operation, and as soon as the iron is lifted off the stand the heating current is restored to the iron and maintained throughout the period of operation until the iron is again placed on its stand.

Referring now to the drawing in detail, the improved construction is illustrated as comprising a pedestal structure consisting of a base portion 20 carrying an upright member 22 upon which is adjustably mounted a top portion 23 having slots 24 for adjustably securing said top portion to the upright member 22 by means of clamping screws 25. This top pedestal portion carries the main ironing board member 27.

The top pedestal member 23 is provided with a plurality of tray receptacles 36 extending across the corresponding end of the main ironing board 21, for spoons, pins, or other supplies.

To the rear side of the pedestal is secured an accessory supporting arm 54 extending in upward rearwardly inclined position and having slots 55 for accommodating securing bolts 27 whereby the upper end portion of the arm 54 may be secured at varying levels as well as in spaced relation to the rear side of the main ironing board 21, thus leaving the latter free and unobstructed for the ironing operation throughout its full length, as clearly illustrated in Figures 1–3. The upper end of the arm 54 is provided with a horizontal shelf 58 accommodating a series of removable trays 60 for accessory purposes (such as water, brushes, moistering devices, etc.); it also provides a support for an iron holder such as a stand 62 for an iron 64 of the character shown in my Patent No. 2,227,910, dated Jan. 7, 1941, and adapted to support the iron in a somewhat tilted position, as illustrated in Figure 3.

Associated with the arm 54 and platform 58 is an upright member 66 provided with a safety switch device for the electric iron 64, as particularly shown in Figure 5. An electric cord 61 is connected with the source of electric current supply and also with the ironing cord 68, and both cord 67 and 68 are connected with switch or cut-out contacts comprising a fixed contact 70 and a movable contact 72 carried by a movable arm 74 pivoted at 75 and projecting through an opening 76 in a keeper 77 into position for engagement by the iron when the latter is thrust into the stand 62. The arm 74 is normally actuated by a spring 78 in a direction to engage the contacts 70 and 72 and thus close the heating circuit through the iron as long as the same is in use in the ironing operation, but is actuated in the opposite direction (by pushing action of the iron) to interrupt or cut off the heating current whenever the iron is thrust into the stand 62 (i.e., is not in use for ironing), as represented in Figure 5. As a further safety measure the upright member 66 carries a socket 81 for the cord 68 together with connections including the said light in the circuit with the iron cord 68, as controlled by the man-
scribed. In consequence of the sloping character of the support afforded by the iron supporting stand, the iron is prevented from becoming casually displaced from supported position, and hence maintains a firm and substantially uniform pressure against the arm 74 for insuring that the circuit will remain interrupted or broken as long as the iron is on the stand. In addition the provision of a signal light 88, which always glows as long as the current remains available for the iron cord connection by way of the switch 83, provides a safeguard against the operator inadvertently shutting down the apparatus without either throwing said switch 83 or disconnecting the supply cord 67 from the current supply outlet.

It will therefore be seen that I have devised a very practical and efficient construction for carrying out the aforesaid objects of my invention, and while I have illustrated and described what appears to represent preferred forms of embodiment of the improved features I desire to be understood as reserving the right to make such changes or modifications as may fairly be deemed to fall within the spirit and scope of my invention as defined by the following claim.

What I claim and desire to secure by Letters Patent is:

In apparatus of the character described, an ironing board, an iron support located separate from the ironing board, an electric iron having a cord for conducting an electric heating current to the iron, electric switch operating means associated with said support and tending normally to close said heating current through the iron, said switch operating means comprising an arm mounted on a vertical axis for horizontal swinging movement above the support and across the path of movement of the iron horizontally onto said support and actuated by the iron in its horizontal movement for shutting said heating current off from the iron as long as the latter is carried on said support, said iron support having sloping supporting means carrying said iron in tilted position for pushing against said arm while the iron is in supported position to maintain constancy of the current controlling action.

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