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E. N. DERDEN ET AL

2,939,939

PRESSER FOR GARMENT TUCKS AND THE LIKE

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2 Sheets-Sheet 1

Fig. 1

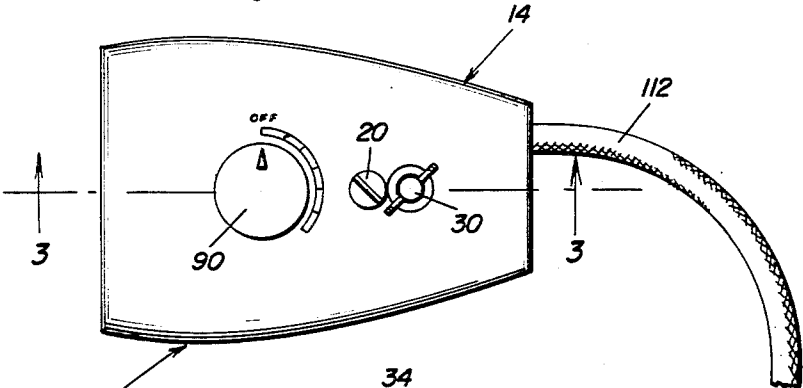


Fig. 2

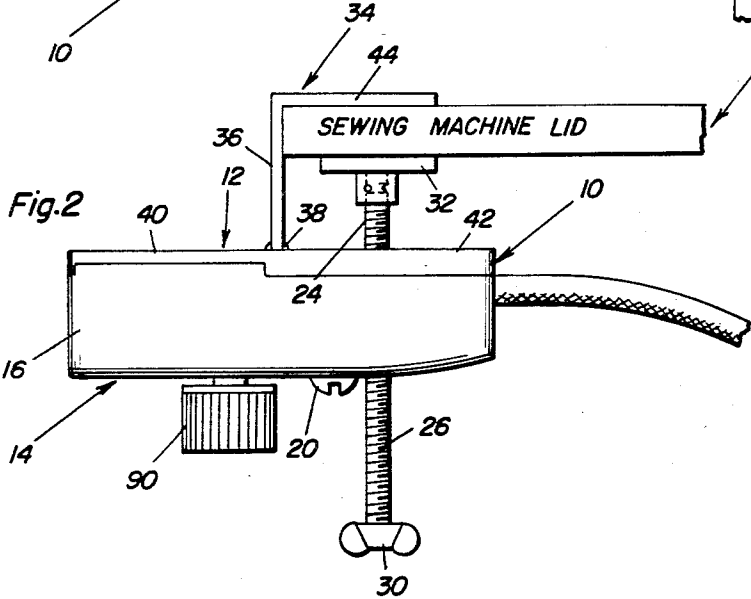
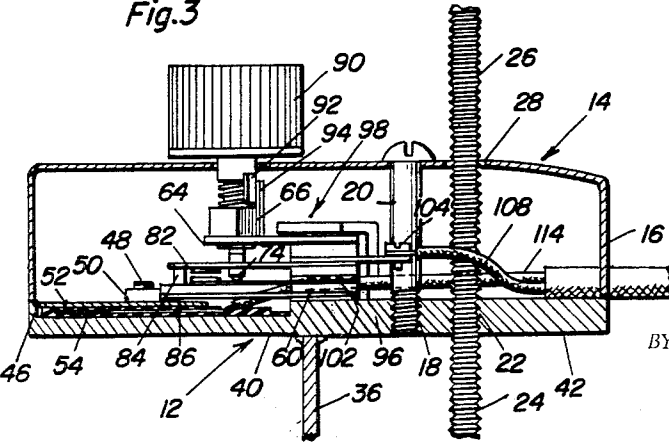


Fig. 3



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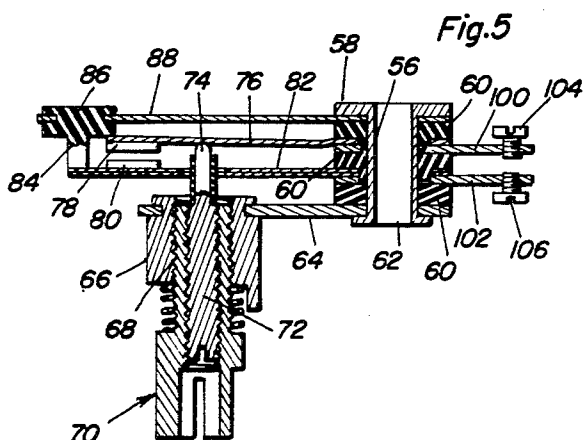
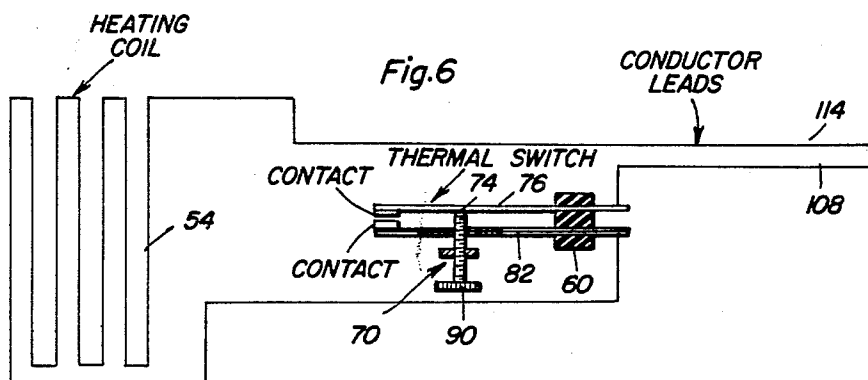
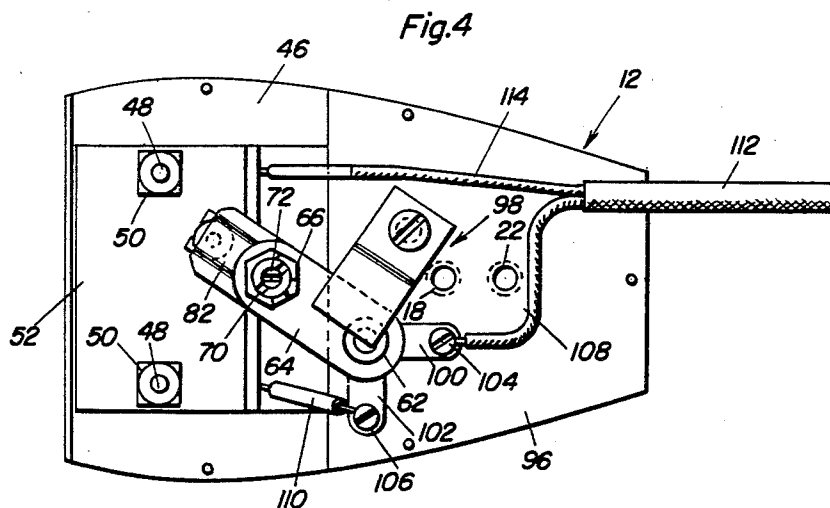
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PRESSER FOR GARMENT TUCKS AND THE LIKE

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2 Sheets-Sheet 2



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PRESSER FOR GARMENT TUCKS AND THE LIKE

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4 Claims. (Cl. 219—25)

The present invention relates to a time and labor-saving electrically heated specially constructed iron which is designed and adapted to be used in conjunction with a sewing machine and which may be effectually used by a seamstress, dressmaker or other user of the machine while sewing a garment or other apparel.

As is generally well-known when one is sewing a garment of any kind it is the practice for her to repeatedly get up from the sewing machine, go to a near-by ironing board and, using an electric iron or the like, to press a dart, a tuck or the like and to then return to the machine to continue the next step. This procedure is also involved when pressing seams open, making collars and so on. It follows, and as will be hereinafter evident, that existing sewing practices and procedure have posed a problem. Therefore, it is an objective in the instant matter to solve the problem. As a matter of fact, and as a result of trial and error and much thought and experimentation, practical and effectual means has now been worked out and provided with a view toward enabling the seamstress or other user of the sewing machine to stay put, so to speak, and to conveniently turn to and utilize our close-at-hand novel and practical tuck and dart pressing device.

In carrying out a preferred embodiment of the invention we have found it expedient and practical to utilize a suitably and satisfactorily constructed portable electric iron. To this end, the iron is provided with a properly constructed and located clamp, similar to a C-clamp, whereby to permit the iron to be clamped upside down on the lid, cover or other part of the machine adjacent to the operator of the machine. The construction is such that at least one-half portion of the sole plate of the heated iron projects beyond the marginal portion of the cover or lid thus offering a simple firm heated anvil-like surface that may be conveniently and effectively used for the progressively required pressing steps. It is within the purview of the invention to build a machine with the iron a permanent part of the machine.

More specifically, the invention comprises a sectional iron, that is a construction which is characterized by a heating coil, temperature or thermal control unit and switch are all systematically and properly mounted. A shell-like cover is bolted to the sole plate and serves to house the stated parts between itself and the sole plate. The cover is also provided with an accessible knob which serves as an off-on switch and a ways and means of properly regulating the desired degree of heat thought to be necessary for the varying operations.

Novelty is also predicated on the construction stated and wherein a simple L-shaped bracket has one limb or arm joined to the central portion of the sole plate. The iron proper is provided with an adjustable clamping screw which cooperates with the bracket and facilitates suspension and maintenance of the upside-down iron in a projected operating position.

Other objects, features and advantages will become

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more readily apparent from the following description and the accompanying drawing.

In the drawing wherein like numerals are employed to designate like parts throughout the same:

Fig. 1 is a bottom plan view of an attachment or iron constructed in accordance with the principles of the present invention.

Fig. 2 is a side or edge elevation of the same showing the clamping means and illustrating how the clamping means may be employed to suspend the iron in its desired pressing position on a sewing machine lid or other part of the machine.

Fig. 3 is a section with parts in elevation, taken on the central longitudinal line 3—3 of Fig. 1, looking in the direction of the arrows.

Fig. 4 is a plan view of the interior or top side of the sole or base plate.

Fig. 5 is an enlarged view in section and elevation showing the combination control unit and switch.

Fig. 6 is a diagrammatic view showing the heating coil, the thermostatic type switch and leads of the current conductor.

Referring now to the drawing and with reference first to Fig. 2 the reference numeral 8 designates a part of a sewing machine. The expression "part" is used here since it is within the purview of the concept to mount the invention wherever it may be most conveniently and aptly supported and used. As a general rule the customary hinged lid or cover which also serves as a shelf has been found to be a satisfactory support member, which accounts for the showing seen in Fig. 2. The pressing device or "iron," as a structural entity, is denoted by the numeral 10. The expression "iron" is being used advisedly inasmuch as the device is in effect an iron but of course is clamped on the machine and then becomes a temporary or stationary part and is consequently an anvil-like pressing device for parts of a garment which is in the process of being made on the sewing machine. In any event, the aforementioned base or sole plate is denoted by the numeral 12 and the shell-like cover by the numeral 14. The cover has a marginal rim 16 which cooperates with marginal edge portions of the base plate in the manner shown in Fig. 3. The base plate is provided with a screw-threaded hole (Fig. 3) which is denoted at 18 to accommodate the screw-threaded portion of an assembling and retaining screw or bolt 20 for the cover. There is a similar screw-threaded hole at 22. The purpose of this hole is to accommodate the cooperating portion 24 of a clamping screw. The other portion 26 of the clamping screw passes through the hollow portion of the iron and up through an opening 28 provided therefor in the top of the cover. As seen in Fig. 2 the portion 26 of the set-screw is provided with a finger-grip 30 of appropriate construction. The other end portion is provided with a swivel-type clamping disk 32. The essential part of clamping and suspension means comprises an L-shaped bracket 34 having a vertical limb 36 which is welded at 38 to a central portion of the sole plate thus dividing the sole plate into an outward half-portion 40 and an inward or rearward half-portion 42. The other arm 44 of the clamp parallels the swivel-disk 32 and these parts function like any ordinary C-clamp to hook the device over the lid and to secure the same in operative position. The projecting portion 40 constitutes the heated anvil on which the tuck or other part is pressed. The under-hanging part 42 underlies the shelf where it is, of course, out-of-the-way.

The heating coil, switch, control unit or means may vary within the meaning of the over-all concept of the invention. For example in the embodiment seen in Fig. 4 the recessed end portion 46 of the interior or bottom side

of the plate is provided with studs 48 carrying accessible nuts 50 which serve to hold a clamping plate 52 in place. Sandwiched between the clamping plate and the sole plate is the electric heating coil 54 (Fig. 3).

The combination off-on switch and thermostatic control means or unit is such that it may be fitted into the space housed by the cover 14. With reference to Fig. 5 it will be seen that the numeral 56 designates a hollow rivet with a base flange 58 at one end and the stem of which is encircled by a plurality of insulation washers 60. The flanged end portion 62 serves to accommodate a rigid arm 64 carrying a nut 66 into which the screw-threaded sleeve portion 68 of the operating member 70 is threaded. This sleeve portion is internally screw-threaded to accommodate an adjusting screw 72 the tip 74 of which is engageable with a resilient arm 76 carrying a contact button 78 cooperable with an opposed contact button 80 on the thermal arm 82. The free end of this arm 82 is cooperable with the post portion 84 carried by an insulator 86 which is in turn mounted on a retaining arm 88 carried by the aforementioned hollow rivet. The spring-biased or returned knurled knob 90 has a lug 92 cooperating with the lug 94 for purposes of turning the shaft 70 in the nut 66. This construction makes it possible to turn the iron off and on and also to regulate the temperature at which it will respond and automatically cut-off. The structural unit shown in Fig. 5 and also appearing in Fig. 3 is held in place on the elevated portion 96 of the sole plate by way of an L-shaped adapter bracket 98. The members 100 and 102 serve to accommodate binding posts or setscrews 104 and 106 with which the leads 108 and 110 respectively connect. The lead 8 is from the conductor 112 and the conductor also includes another lead 114 which is electrically connected with the heating coil, all as is brought out in the drawings and shown in diagrammatic form in Fig. 6. In connection with the switch and thermostat means herein disclosed, it is to be pointed out that it is believed to be new in the art to recess a sole plate on the interior surface to provide a recess 46 and to mount in this recess a thermostatically controlled heating coil which is held down by a bolted plate 52. The reason for this construction is that it more or less confines the source of heat to the half-portion 40 which is the primary anvil for the user's pressing needs.

The foregoing is considered as illustrative only of the principles of the invention. Further, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction and operation shown and described, and accordingly all suitable modifications and equivalents may be resorted to, falling within the scope of the invention as claimed.

What is claimed as new is as follows:

1. An electric iron comprising a sole plate having a replaceable electric heating coil and retaining plate removably mounted on an interior surface portion of the plate, a heat control unit cooperable with said coil and retaining plate, switch means for said unit, all of said parts being accessibly based on and carried by the sole plate, a shell-like cover removably bolted on said sole plate and enclosing and housing said parts and equipped with an "off" and "on" knob for the switch, an L-bracket carried by said sole plate, and a complemental clamping

screw passing at right angles through the sole plate and cover.

2. For use by a seamstress or dressmaker in quick-pressing garment darts, tucks, seams, collars and the like, an electric iron having self-contained manually regulable heating means and characterized by a flat sole plate, and means carried by and for supporting said iron securely as on a marginal edge portion of said sewing machine lid so that an ample surface portion of the sole plate projects outwardly and accessibly beyond said edge portion for practical use so that said sole plate serves to provide an upwardly facing ever-available anvil-like pressing surface which may be located adjacent to the user of the machine, whereby to obviate the necessity of getting up and leaving the machine for pressing needs, as is usually necessary, and consequently saving valuable time and labor, said means comprising a clamp, one part of which is fixedly joined to a median part of said sole plate, and the other complemental part being carried by the iron proper, both parts being necessary and functioning conjointly to mount and hold said iron in its usably desired position.

3. For use by a seamstress or dressmaker in quick-pressing garment darts, tucks, seams, collars and the like, an electric iron embodying a sole plate and a cover removably mounted on said plate, an L-bracket having one arm fixed to a median part of the ironing surface of said plate and extending upwardly at right angles from said plate, the other arm being spaced from and parallel to said plate and adapted to be hooked over a sewing machine lid so that the upwardly facing sole plate is securely suspended with a usable surface portion extending outwardly beyond an edge portion of the lid, and a clamping screw spaced from and parallel to and having a median portion threaded in a screw-threaded hole provided therefor in said sole plate and operating through an aligned hole in said cover, the lower end of said screw having a thumb grip disposed for use and operation below the cover, and the upper end having a clamping head opposed to and cooperable with said other arm.

4. The structure defined in claim 3, and wherein the point of connection of said one arm relative to the sole plate is at the transverse central areal portion of said plate, thus dividing the plate into an outward half-portion and an inward half-portion, the former providing the above named "outwardly extending usable surface portion" and the inward half-portion underlying said "other arm," said clamping screw being confined to a position within the confines of the inward half-portion, said cover being removably bolted on the sole plate, said cover having a switch control knob positioned accessibly thereon, and electric heating and switch controlled means encased by said cover and accessibly based on the interior of said sole plate.

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