Feb. 27, 1951 O. B. GROSS 2,543,239

ELECTRIC IRON CORD SUPPORT

Filed Feb. 7, 1950

Fig. 1.

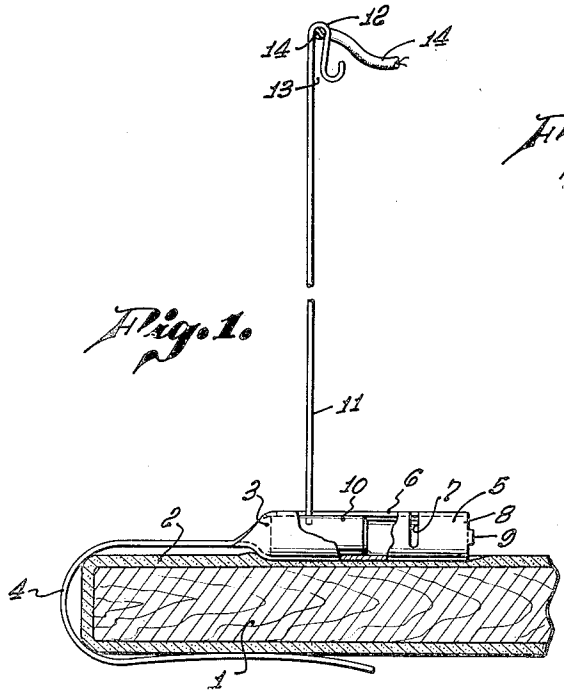


Fig. 2.

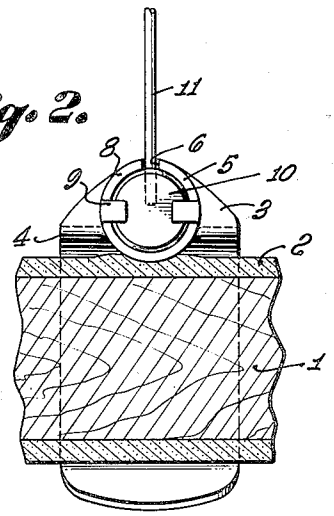


Fig. 3.

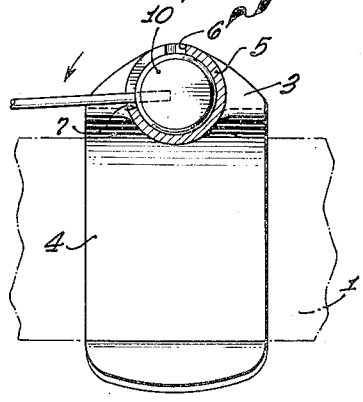


Fig. 4.

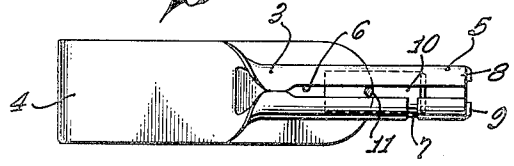


Fig. 5.

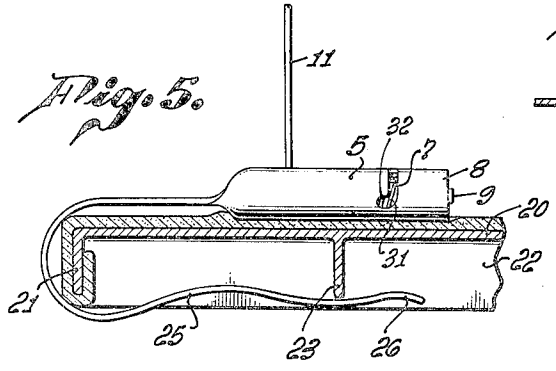
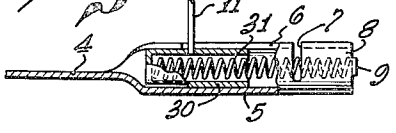


Fig. 6.



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ELECTRIC IRON CORD SUPPORT

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5 Claims. (Cl. 248—51)

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This invention relates to a device for yieldingly supporting the conductor of an electric iron high enough above an ironing board to afford the operator freedom of movement of the iron and so as to protect the cord from damage due to twisting or contact with the iron during the operation thereof.

It is the object of the present invention to provide a cord supporting device which may readily be clamped in position on the edge of the types of ironing boards in common use at the present time. It is a further object to provide the cord support which, while in use, may be held firmly clamped in upright position but which, when the ironing board is put away for storage may be swung downward into contact with the operating surface of the board. Another object is to provide means for locking the device in contact with the board.

These and other objects of the invention, together with the many advantageous features thereof will be better understood from the following detailed description, particularly if reference is had to the accompanying drawing, in which:

Fig. 1 is a fragmentary cross-sectional end view of an ironing board showing the device of the invention clamped in position thereon as in practice;

Fig. 2 is a substantially corresponding cross-sectional side view of a portion of the board with the device of the invention clamped in position thereon;

Fig. 3 is an end view of the cord support as it appears in its relation to the ironing board and in a different position of adjustment;

Fig. 4 is a substantially corresponding plan view of the device;

Fig. 5 shows a clamping element of the device modified as required for mounting on a different type of ironing board; and

Fig. 6 is a side elevational view of the device with portions thereof broken away in order to disclose the interior mechanism thereof.

As illustrated in Fig. 1, the numeral 1 denotes a conventional wooden ironing board to which is shown applied the usual padding 2. The cord support of the invention consists mainly of a body portion 3 from which extends a clamping member or tongue 4 which is shaped to fit over the side edge of the ironing board. This cord support is conventionally made from a strip of metal of sufficient strength and resilience to maintain it firmly in position on the ironing board when pressed against the side edge thereof.

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The material of the upper portion of the strip is shown upwardly folded to form a cylindrical tube 5 and it is important to note that in forming this tubular member the side edges of the strip do not meet but that the narrow opening or gap 6 is formed between the edges for the purpose which will now be described. The end 8 of the body is partly closed as by means of lips 9.

A cylindrical body or plunger 10 is fitted to slide within the tubular body 5 and this plunger is radially recessed from the circumference thereof to receive and rigidly support a wire or rod 11 which, as best shown in Fig. 2, rises through the gap 6 of the tubular body 5. The rod is at the upper end thereof shown downwardly folded to form a hook 12 of a width to provide therein a recess 13 into which the cord 14 of the electric iron may be seated. When the rod 11 is made from resilient material, such as piano wire or the like, it is found not only that the cord may be held firmly clamped in position within the hook 12 but also that the rod, when of sufficient height to maintain the cord supported a considerable distance above the surface of the board, will yield to any pull on the cord incidental to operations of the iron.

As shown in Fig. 1, the rod is rigidly held in upright position within the gap 6 and will remain in this position during ordinary operations of the iron. When the ironing board is no longer to be used and is to be stored away until required for further use, it is merely required to withdraw the cord support therefrom and to put it away until again needed. This method may, however, be found disadvantageous for the reason that storing space must be provided for the cord support after it has been removed from the board and that when removed it may be mislaid and not readily found when required for use. It may also be found that, due to careless handling, the support may be damaged or perhaps even entirely ruined. It is for these reasons found advantageous so to construct the device that the rod may be folded against the surface of the ironing board when not in use in which case it may remain permanently in position thereon and stored away with the board. For the purpose of such folding I have shown a slot 7 extending from the gap 6 downward along the outer wall of the tubular member 5 to a position near the bottom thereof. This slot is of a width to receive therein the rod 11 when the plunger is axially moved within the support until the rod reaches the position of registration with the

slot whereupon the rod may be swung downward in the position substantially as shown in Fig. 3. When this slot is nearer the right end 8 of the support and when the plunger is carefully fitted to slide within the support, it is found that it will remain securely in any position of adjustment.

While the conventional wooden ironing boards are preferred by most users, it is at times found more convenient to use a board which is made from other material such as a metal casting or perhaps a plastic molding. Such a board is, in Fig. 5, shown to consist of a relatively thin plate the side edges of which are downwardly extended to form thin flanges 21 and 22. In order to reinforce such structure and so as to be able to make it out of thin light material it is customary to place an additional flange 23 near each side edge of the board and in parallel spaced relation to these edges. When this type of board is used, it becomes necessary in order to clamp the cord support securely in position thereon to extend the lip 25 inwardly far enough to come to rest against this additional flange 23. As indicated at 26, the tongue is extended inwardly a distance beyond this flange and this is done to make certain that the tongue may adapt itself to variations in distance between this flange and the outer flange of the board.

It was above stated that, when the plunger is carefully fitted within the tubular support, it may be relied upon to remain in any position of adjustment during ordinary operation of the device. In addition, it is possible, if desired, to provide means designed to urge the plunger toward the bottom of the tubular support in order that in case it should accidentally become shifted between the open end of the support it will instantly be returned to its initial completed seated position. Illustrative of such device I have, in Fig. 6, shown a thimble-shaped plunger 30 mounted within the support for movement therein in the same manner that the plunger 10 is movable within the support. A compression spring 31 is placed within this plunger to occupy the space between the bottom thereof and the lips 9 which close the entrance to the support. The tension of this spring should be calculated surely to return the plunger to bottom position and at the same time to permit of manual movement of the plunger within the support as required in order to fold the rod against the surface of the board. In addition, it may be found advantageous in cases where the support remains in position on the board while the latter is folded and stored away to provide means for locking the rod in position against the surface of the board. In order to do this, it is merely required to extend the bottom of the slot 7 axially a short distance to the left, as indicated at 32 in Fig. 5. When this recess is added it is found that the rod, as it is swung downward through the slot 7, will by the spring 31 be pushed into this recess thereby to lock the rod in collapsed position against the surface of the board.

I claim:

1. For use on an ironing board, a support for a flexible current conducting cord including a tubular body having a board clamping member extending from the inner end thereof, the body having at the top an axially directed slot therein and a downwardly directed extension of said slot nearly to the bottom of the body along one side and near the outer end thereof, there being an axially directed recess at the bottom of said slot extension, a plunger slidable within said body, a spring urging the plunger against the inner end of the body, a rod rising from the plunger through said slot for movement with the plunger along said slot against the tension of said spring into registration with and downwardly through said vertical extension of the slot to the bottom thereof, the tension of the spring urging the rod into said recess to lock the rod in position therein.

2. For use on an ironing board, a support for a flexible current conducting cord made from a strip of flat resilient material, one end of the strip being folded to provide a tubular body having in the upper surface thereof an axially directed slot from which extends a downwardly directed slot along one side of the body, the opposite end of the strip being downwardly and inwardly bent to form a clamp shaped for engagement with the board at the edge thereof to maintain the support firmly clamped in position thereon, a plunger seated for axial movement within the body, the outer end of the body having inwardly bent lips limiting movement of the plunger therein, a rod rising from the plunger through said slot for axial movement therein with the plunger into registration with and downwardly through said vertically directed slot.

3. For use on an ironing board, a support for a flexible current conducting cord made from a strip of flat resilient material, one end of the strip being folded to provide a tubular body having in the upper surface thereof an axially directed slot from which extends a downwardly directed slot along one side of the body, the opposite end of the strip being downwardly and inwardly bent to form a clamp shaped for engagement with the board at the edge thereof to maintain the support firmly clamped in position thereon, a thimble shaped plunger seated for axial movement within the body, the outer end of the body having inwardly bent lips limiting movement of the plunger therein, a compression spring in the plunger bearing against said lips to urge the plunger against the inner end of the body, a rod rising from the plunger through said slot for axial movement therein with the plunger against the tension of said spring into registration with and downwardly through said vertically directed slot, the outer end of the rod being shaped to receive and tightly to hold said cord.

4. For use on an ironing board, a support for a flexible current conducting cord made from a strip of flat resilient material, one end of the strip being folded to provide a tubular body having in the upper surface thereof an axially directed slot from which extends a downwardly directed slot along one side of the body, the opposite end of the strip being downwardly and inwardly bent to form a clamp shaped for engagement with the board at the edge thereof to maintain the support firmly clamped in position thereon, a plunger seated for axial movement within the body, the outer end of the body having inwardly bent lips limiting movement of the plunger therein, a compression spring between the plunger and the said lips to urge the plunger away from said downwardly directed slot, a rod rising from the plunger through said slot for axial movement therein with the plunger against the tension of said spring into registration with and downwardly through said vertically directed slot, the outer end of the rod being shaped to receive and tightly to hold said cord.

5. For use on an ironing board, a support for

a flexible current conducting cord made from a strip of flat resilient material, one end of the strip being folded to provide a tubular body having in the upper surface thereof an axially directed slot from which extends a downwardly directed slot along one side of the body terminating in an axially directed recess, the opposite end of the strip being downwardly and inwardly bent to form a clamp shaped for engagement with the board at the edge thereof to maintain the support firmly clamped in position thereon, a thimble shaped plunger seated for axial movement within the body, the outer end of the body having inwardly bent lips limiting movement of the plunger therein, a compression spring in the plunger bearing against said lips to urge the plunger away from said downwardly directed slot to the inner end of the body, a rod rising from the plunger through said slot for axial

movement therein with the plunger against the tension of said spring into registration with and downwardly through said vertically directed slot, the tension of the spring urging the rod into said recess, the outer end of the rod being shaped to receive and tightly to hold said cord.

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REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
1,172,134	Harold	Feb. 15, 1916
1,606,065	Eveleth	Nov. 9, 1926
1,673,704	Palmer et al.	June 12, 1928
1,999,089	Dowden	Apr. 23, 1935
2,478,498	Myers	Aug. 9, 1949