

Sept. 24, 1940.

H. B. FAY

2,215,918

VENTILATED IRONING BOARD

Filed Jan. 22, 1940

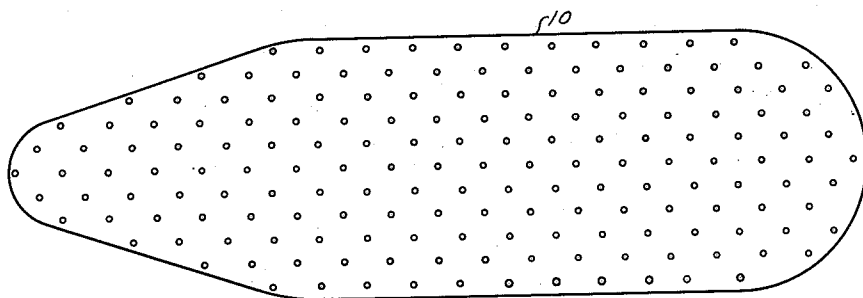


Fig. 1

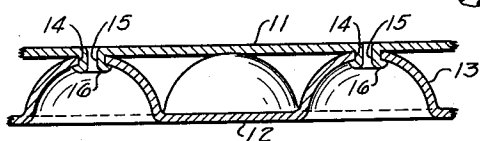


Fig. 2

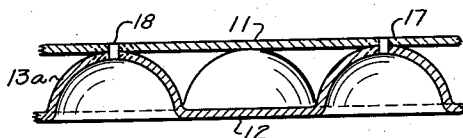


Fig. 3

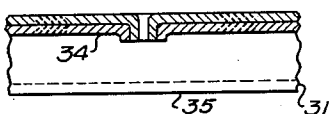


Fig. 4

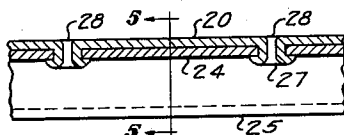


Fig. 5

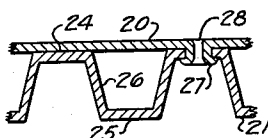


Fig. 6

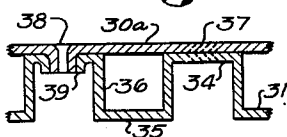


Fig. 7

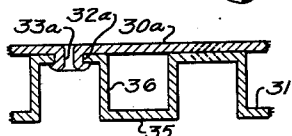


Fig. 8

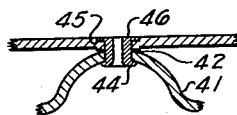


Fig. 9

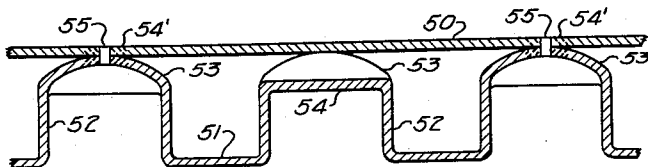


Fig. 10

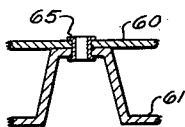


Fig. 11

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UNITED STATES PATENT OFFICE

2,215,918

VENTILATED IRONING BOARD

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corporation of Ohio

Application January 22, 1940, Serial No. 314,938

6 Claims. (Cl. 38—137)

The present invention relates to ironing tables or more particularly to the tops thereof or ironing boards in which the top is made of metal or has a metal top sheet. In ironing boards of this type, the all metal board or the board with a top sheet of metal or other completely waterproof material, the top does not absorb moisture as does the usual wooden board or top, and during continued ironing of heavy materials which carry large quantities of moisture, the pad which is mounted on the board top slowly becomes wet and soggy. As none of its moisture can be absorbed by the board and as substantially no air reaches the pad, the moisture content slowly increases thus tending to slow down the ironing operation as more and more of the heat from the iron must be used to dry the pad, thus reducing the amount of effective heat for ironing.

To overcome such disadvantages, I have provided means for ventilating such boards, thus allowing air to pass through the pad and carry off the accumulated moisture, as well as allowing water to actually pass through the board. In the all metal types of boards and particularly types such as are shown in my co-pending application for United States Letters Patent Serial No. 223,441 in which two metal sheets are formed into a hollow box-like structure, I have provided ventilating means through the board, which means, however, preferably seals the ventilating passages from the interior open box-like spaces of the board thus preventing moisture from entering and causing rusting and deterioration thereof while allowing air to freely pass through the same.

To the accomplishment of the foregoing and related ends, said invention, then, consists of the means hereinafter fully described and particularly pointed out in the claims; the annexed drawing and the following description setting forth in detail certain structure embodying the invention, such disclosed means constituting, however, but one of various structural forms of which the principle of the invention may be used.

In said annexed drawing:

Fig. 1 is a top plan view of an ironing board; Figs. 2 and 3 are cross-sectional views showing two forms of holding the sheets together and forming ventilating openings through the board;

Fig. 4 is a fragmentary longitudinal section through a modified form of board;

Fig. 5 is a transverse section as illustrated by the line 5—5 of Fig. 4;

Figs. 6 and 7 are views similar to Figs. 4 and 5 but showing a modified form of construction;

Fig. 8 is a cross-section similar to Fig. 7 but showing a different aperture construction;

Fig. 9 is a fragmentary cross section similar to Fig. 2 but showing the use of inserted rivets;

Fig. 10 is a cross-section through a different form of board showing ventilating apertures formed therein; and

Fig. 11 is a cross-section similar to Fig. 5 but showing a modified arrangement.

In the forms shown in Figs. 1, 2 and 3, I have illustrated an ironing board or top of usual shape which is formed of a top sheet 11 of metal and a bottom supporting sheet 12, this sheet being deformed to provide a series of spaced buttons 13 pressed out of the plane of the sheet and having their tops in contact with the under surface of the top sheet 10 to which they are secured. In Fig. 2 I have shown the two sheets secured together by forming openings 14 in the tops of the buttons and by punching the top sheet through such openings forming elongated necks 15 which are upset to form heads 16 below the buttons to rigidly secure the two sheets together. The necks are hollow and provide air passageways through the board to allow ventilation and to allow any water accumulating on the board to run through.

In Fig. 3 a modified type of ventilating passage is provided. In this form the buttons 13a are welded to the top sheet over an area 17 and then holes 18 are drilled or punched through the welded area forming the passageways through the board.

In the forms shown in Figs. 4 and 5, I have shown the metal iron board or table top formed of two sheets of metal, the top sheet 20 being relatively flat and shaped to usual ironing board configuration. The bottom sheet 21 is formed into a series of longitudinally extending ribs or channels, having upper and lower flat portions 24 and 25 connected by relatively vertical portions 26.

The upper flat portions 24 contact the under surface of the top sheet 20 to which they are rigidly united together by means of rivets 27 which may be integrally formed from one of the sheets which pass through apertures in the other and also form the ventilating passages 28 through the board.

In Figs. 6, 7 and 8 a slightly different form of board is employed in which the bottom sheet 31 is provided with rectangular channels or ribs instead of the angle ribs of Fig. 5. Here the upper flat portions 34 contact the top sheet and are connected to the bottom flat portions 35 by vertical

sections 36. In the form shown in Fig. 7, the two sheets are welded together at spaced points 37 and the ventilating passageways 38 are formed by punching both sheets into turned down necks 39.

5 In the modification shown in Fig. 8 the passageways are formed in the manner shown in Figs. 4 and 5 by punching the top sheet 30a through apertures 32a in the bottom sheet 31 and upsetting the necks 33a of the top sheet to form rivet heads

10 below the bottom sheet.

In Fig. 9 I have shown another form in which the bottom sheet 41 is formed into corrugations instead of angular channels. In this form the contacting part 42 of the corrugation and the top sheet are provided with aligned apertures, and hollow rivets 44 are used to secure the two sheets together, the top sheet being recessed as at 45 to receive the rivet head 46 to form a flush upper surface.

20 In Fig. 10 another of my forms of metal ironing boards is shown, in which the buttons of the form shown in Figs. 1 to 3 are combined with the rib type board of the other forms. In this form the usual flat top sheet 50 is employed with a bottom sheet 51 which has channels or ribs 52, there being buttons 53 pressed out of the upper flat surfaces 54 of the channels. These are shown as welded together as at 54' with the passageways 55 formed through the weld spots 54' in the same

30 manner as shown in Fig. 4.

In Fig. 11 I have shown another method of forming the passageways, here shown in a rib form of board like that shown in Fig. 5, there being a top sheet 60 and bottom sheet 61 with its ribs or channels. The contacting portions are provided with aligned apertures and metal eyelets 65 are inserted therein between weld spots. Here the top surface is not flush but the eyelet is so thin that the overlying portion is absorbed in the pad which covers the board.

40 In the present invention I have illustrated the use of ventilating passageways through a metal top ironing board and in each case have provided for sealing such passageways from the interior spaces of the board to prevent moisture from entering between the sheets. Any moisture passing through such passageways must drop through and not be taken in between the sheets of the board, thus preventing interior rusting and deterioration. As the board will normally be painted or finished with similar material after manufacture, the edges of the rivets and passageways will be covered and completely sealed, thus further sealing the interior of the board.

55 The passageways will be of such a size and so spaced as to provide thorough ventilation for the board under heavy ironing conditions, but will be so spaced as not to weaken the board.

60 Other modes of applying the principle of my invention may be employed instead of the one explained, change being made as regards the mechanism herein disclosed, provided the means

stated by any of the following claims or the equivalent of such stated means be employed.

I therefore particularly point out and distinctly claim as my invention:

1. An ironing board consisting of a metal top sheet having a flat upper surface and a bottom supported member secured together in fixed relation and means for ventilating the board consisting of apertures extending through both top sheet and bottom member and hollow metal members secured in said apertures and extending from one side of the board to the other and providing air passageways through said board.

2. A ventilated metal ironing board consisting of a substantially flat top sheet and a deformed bottom sheet having portions in contact with said top sheet and rigidly secured thereto and apertures in said two sheets at their contacting portions communicating with each other to provide ventilating passages through said board.

3. A ventilated metal ironing board consisting of a substantially flat top sheet and a deformed bottom sheet having portions in contact with said top sheet and rigidly secured thereto, apertures in said two sheets at their contacting portions communicating with each other to provide ventilating passages through said board and means for sealing such passages to the space between said two sheets.

4. A ventilated metal ironing board, consisting of a substantially flat top sheet, a coextensive bottom sheet having a series of longitudinal ribs having their upper surfaces contacting said top sheet and rigidly secured thereto and ventilating passages in said two sheets at their contacting areas and communicating with each other and so arranged as to be sealed from the space between said sheets of said board.

5. A ventilated metal ironing board, consisting of a substantially flat top sheet, a coextensive bottom sheet having a series of longitudinal ribs having their upper surfaces contacting said top sheet and rigidly secured thereto and ventilating passages through said board at contacting areas so arranged as to be sealed from the space between said sheets of said board, said passages consisting of tubular members extending through said two sheets and sealed thereto on the upper and lower surfaces of said top and bottom sheets respectively.

6. A ventilated metal ironing board, consisting of a substantially flat top sheet, a coextensive bottom sheet having a series of longitudinal ribs having their upper surfaces contacting said top sheet, said two sheets being welded together at spaced points along said contacting surfaces and ventilating holes formed through said board at such welded points, such holes being located centrally of said weld points to prevent openings from the space between the sheets of the board to said ventilating holes.

HORACE B. FAY.

CERTIFICATE OF CORRECTION.

Patent No. 2,215,918.

September 24, 1940.

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It is hereby certified that error appears in the printed specification of the above numbered patent requiring correction as follows: Page 2, second column, line 7, claim 1, for the word "supported" read --supporting--; and that the said Letters Patent should be read with this correction therein that the same may conform to the record of the case in the Patent Office.

Signed and sealed this 29th day of October, A. D. 1940.

(Seal)

Henry Van Arsdale,
Acting Commissioner of Patents.