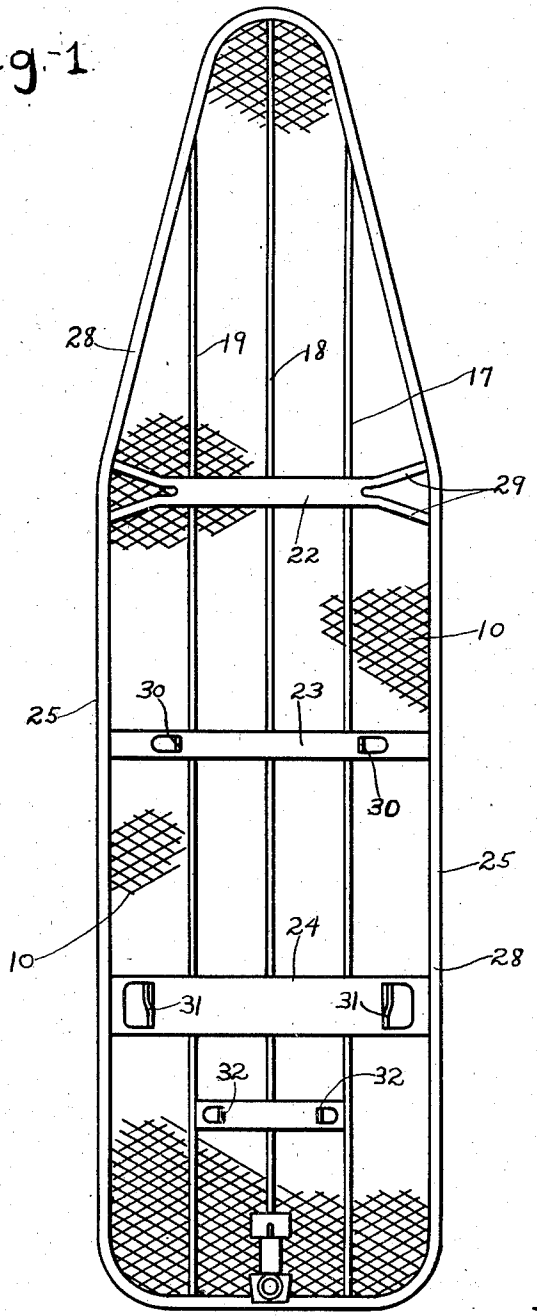
July 14, 1942. E. T. JOHN 2,289,653

VENTILATING METAL IRONING TABLE TOP

Original Filed March 8, 1941 2 Sheets-Sheet 1

Fig. 1



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VENTILATING METAL IRONING TABLE TOP

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Fig.-2

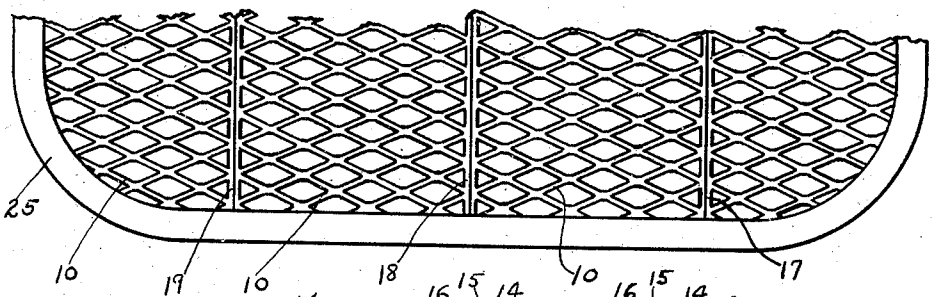


Fig.-3

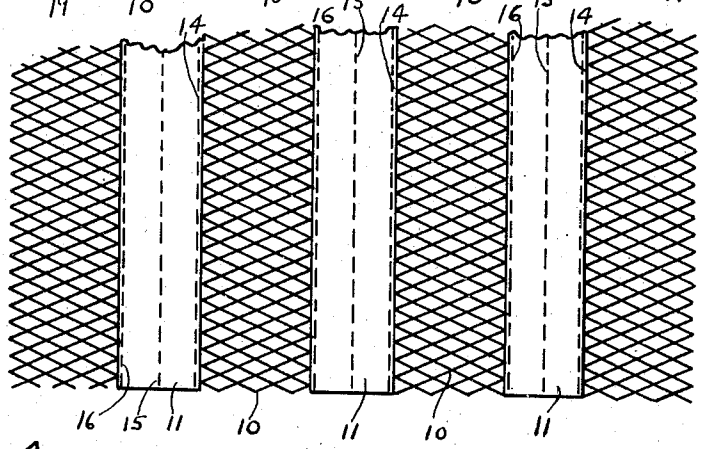
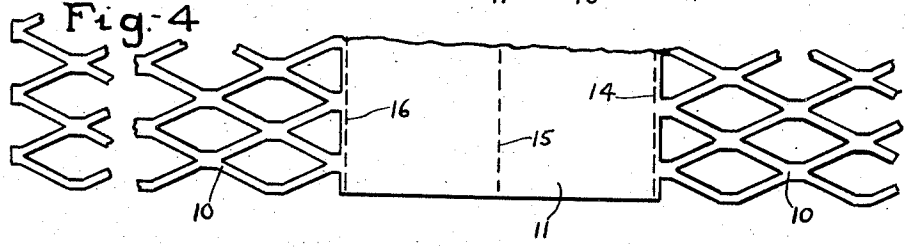


Fig.-4



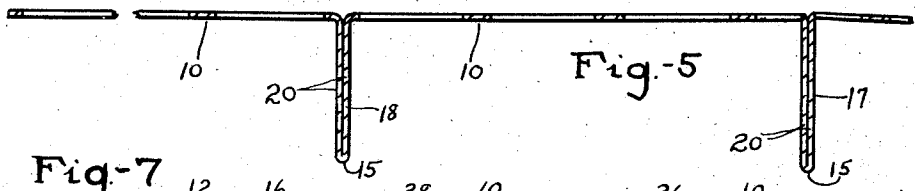
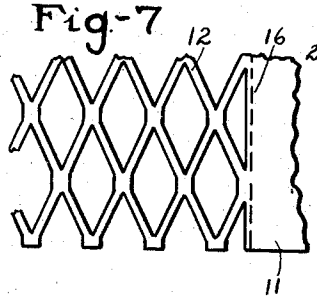


Fig.-5

Fig.-7



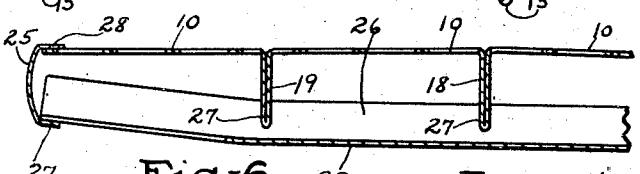


Fig.-6

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Patented July 14, 1942

2,289,653

UNITED STATES PATENT OFFICE

2,289,653

VENTILATING METAL IRONING TABLE TOP

Edward T. John, Minneapolis, Minn., assignor to The J. R. Clark Company, Minneapolis, Minn., a corporation

Original application March 8, 1941, Serial No. 382,359. Divided and this application October 20, 1941, Serial No. 415,727

4 Claims. (Cl. 38—137)

My invention relates to ventilating metal ironing table tops and has for its object to provide an ironing table top having its upper surface and a series of supporting members comprised in a single sheet of expanded metal so formed that parts of said sheet will be imperforate and can be folded to form longitudinal ribs. This application is a division of my application Ser. No. 382,359, filed March 8, 1941, and now issued as Patent No. 2,276,981.

Efforts to obtain a metal ironing table top have not been successful because when a sheet of metal is subjected to the heat of a flatiron those heated parts of the area, within unheated parts of the sheet, at the heated place will expand rapidly and produce serious buckling which ultimately becomes permanent and results in a deformed and uneven top. Further efforts heretofore have failed because sheet metal does not permit passage of steam or moisture therethrough. It loses heat rapidly from the underside and thus results in condensation of steam upon the sheet metal. Accumulations of moisture follow which interfere with the ironing operation and increase the direct outflow of steam about the wrist and arm of the ironer.

As noted in the above identified application I have discovered that a top sheet of expanded metal applied to a supporting framework, preferably also of metal, so that the expanded metal becomes the ironing surface, solves the problems of a metal ironing table top and overcomes the difficulties which have made the use of metal ironing table tops ineffective and unsuccessful. I have further discovered that expanded metal may be made in sheets wherein alternate portions are formed of expanded metal with intervening strips of imperforate sheet metal and that said strips can be bent upon themselves to form longitudinal supporting members with very great advantage in the positioning and means of support of the expanded metal surface.

It is a principal object of my invention therefore to form the expanded metal ironing table top of alternate portions of expanded metal and unperforated metal with the unperforated metal folded to bring the edges of expanded metal strip together and provide longitudinal supporting ribs for the entire table top.

It is a further object of my invention to provide a framework including said longitudinal strips so formed, wherein transverse strips and a peripheral member with inwardly turned top flange, which member may be U-shaped in cross section, all are integrally united together.

The full objects and advantages of my invention are quite fully detailed in the specification hereinafter presented and its novel features which produce the advantageous results above noted will be particularly pointed out in the claims.

In the drawings illustrating an application of my invention in one form:

Fig. 1 is a plan view of my ironing table top viewed from the underside.

Fig. 2 is an enlarged plan view of the large end of the ironing table top embodying the features of my invention.

Fig. 3 is a plan view of a metal sheet formed with alternating strips of expanded metal and unperforated sheet metal.

Fig. 4 is an enlarged fragmentary plan view of a part of what is shown in Fig. 3.

Fig. 5 is a transverse sectional view showing the manner of forming the supporting ribs in conjunction with the strips of expanded metal.

Fig. 6 is a transverse sectional view across the ironing table top showing the relation of the ribs of Fig. 5 to the transverse supporting members.

Fig. 7 is an enlarged plan view of a small portion of a sheet formed of alternate strips of expanded metal mesh and unperforated sheet metal with the expanded metal diamonds positioned transversely to the position of those diamonds in Figs. 10 and 11.

As shown in Figs. 3, 4 and 7 it is known and practical to make expanded metal wherein successive strips 10 of expanded metal are formed integral with intervening strips 11 of sheet metal which is unperforated, the strands of the expanded metal being integrally continuous at their points of union with the uniform plane unperforated sheet metal strips 11, as clearly shown in Figs. 3, 4 and 7. The expanded metal strips 10 of Figs. 3 and 4 have the diamonds forming the body of expanded metal with their longer dimensions at right angles to the strips 11 of unperforated metal. In Fig. 7 strips 12 of expanded metal have their longer dimensions of the diamonds forming the mesh of expanded metal running parallel to the edges of the unperforated metal strips 11.

In forming the expanded metal top the imperforate strips 11 of sheet metal will be scored as indicated at 14, 15 and 16 in Figs. 3 and 4, and, in a suitable former, will be doubled back upon themselves so that the scorings 15 become the ends and the scorings 14 and 16 become the top bases of longitudinal rib members 17, 18 and 19,

the parts of which are brought together as indicated at 20 in Fig. 5 to form longitudinal supporting ribs.

As shown in Figs. 1, 2 and 6, the resulting sheet metal structure is united through the ribs 17, 18 and 19 with transverse supporting members 22, 23 and 24 and with a peripheral rim member 25 which completely surrounds the outer margins of the ironing table top of the form shown in Fig. 1. The transverse members 22, 23 and 24 embody upstanding flange members 26 shown in detail in Fig. 6, which transverse members at their ends rest upon the bottom flange 27 of the peripheral member 25, as shown in Fig. 6. The integral rib members 17, 18 and 19 enter slots in the flange members 26, as indicated at 27 in Fig. 6, being held so as to raise the expanded metal strip portions 10 to give a crown effect, as clearly shown in Fig. 6. Also as shown in Figs. 1 and 6 the lateral margins of expanded metal strips of the outer expanded metal strips 10 underlie the top peripheral flange 28. The forward transverse member 22 is preferably bifurcated as indicated at 29, and ears 30, 31 and 32 form means of attaching the ironing table top to suitable leg structure for supporting the same.

The advantages of my invention will sufficiently appear from the foregoing description. Not only is there a frame supported metal ironing table top which is light and strong for its weight and which has a large percentage of its upper surface open so that the act of ironing and resulting generation of steam beneath the hot iron will have the effect of inducing steam through the pad over the metal top and through the openings in said expended metal top away from the hand of the operator, but further that the expanded metal top is itself made integral with the longitudinal supporting ribs, and their flanges into which the longitudinal ribs are countersunk, makes an exceptionally strong construction and one in which the ironing surface is smooth and supported in the most effective manner possible.

I claim:

1. An ironing table top comprising a single sheet of metal having perforated and unperforated portions extending along its longer dimension, the unperforated portions being folded down from the top face of the ironing table and brought together to form longitudinal supporting ribs, the perforated portions being positioned and held in a common plane over and integral with said ribs to form the ironing surface, and spaced members secured to the ribs and to the edges of the sheet along its sides for restraining the top from transverse bending movements.

2. An ironing table top comprising a single sheet of metal having expanded metal perforated portions and intervening unperforated portions extending along the longer dimension of the sheet, the unperforated portions being folded down from the top face of the ironing table and brought together to form longitudinal supporting ribs, the expanded metal perforated portions being positioned and held in a common plane over and integral with said ribs to form the ironing surface, and spaced members secured to the ribs and to the edges at the sides of the sheet for restraining the top from transverse bending movements.

3. An ironing table top comprising a single sheet of metal having perforated and unperforated portions extending along its longer dimension, the unperforated portions being folded down from the top face of the ironing table and brought together to form longitudinal supporting ribs, the perforated portions being positioned and held in a common plane over and integral with said ribs to form the ironing surface, and a peripheral member secured to the ends of said ribs and to the edges of the sheet.

4. An ironing table top, comprising a surface member formed of a continuous sheet of metal having alternate strips of expanded metal and unperforated metal, said strips of unperforated metal being folded together to form longitudinal supporting ribs integral with the expanded metal surface part of the top, and a series of transverse supporting members having upstanding flanges, said integral ribs and upstanding flanges being countersunk relatively to form a unitary supporting frame.

EDWARD T. JOHN.