Feb. 20, 1945. L. V. LUCIA 2,369,677

COMBINATION STEAMING AND PRESSING IRON

Filed Aug. 26, 1942

Fig. 1.

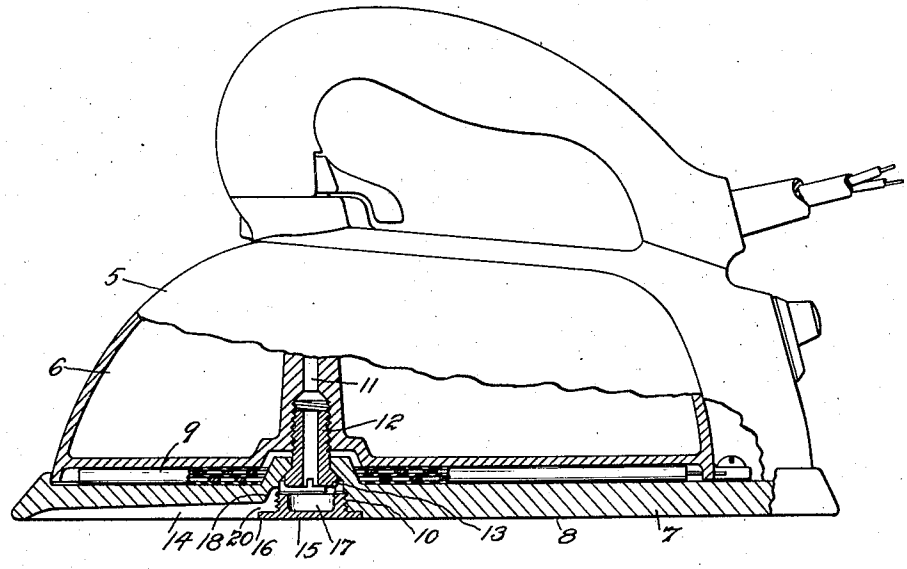


Fig. 2.

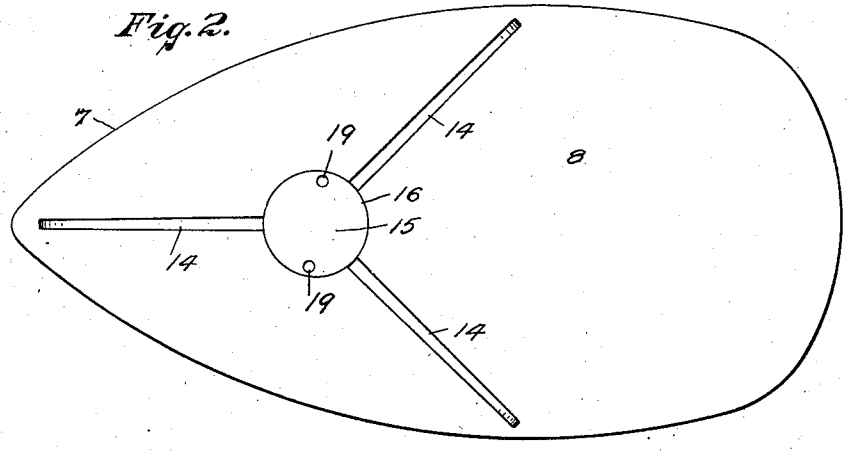


Fig. 3.

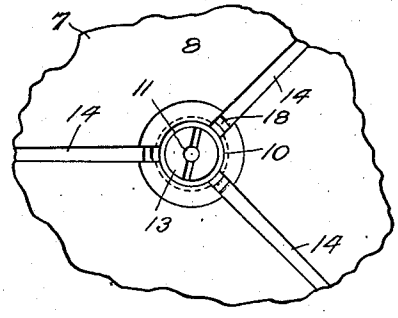
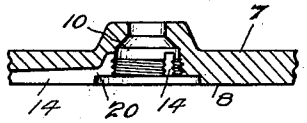


Fig. 4.



INVENTOR.

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Patented Feb. 20, 1945 2,369,677

UNITED STATES PATENT OFFICE

2,369,677

COMBINATION STEAMING AND PRESSING IRON

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Application August 26, 1942, Serial No. 456,228

5 Claims. (Cl. 38—77)

This invention relates to steaming irons and more particularly to combination electric steaming and pressing irons such as shown and described in the co-pending application of Frank E. Wolcott, Serial No. 364,425, filed November 5th, 1940, now Patent No. 2,329,807.

It is an object of this invention to provide a steaming iron having all of the advantages set forth in the said co-pending application and, in addition thereto, improved steam distributing means in the sole plate of the iron having certain novel advantages over the construction described in said co-pending application.

Other objects and advantages of this invention will be more clearly understood from the following description and from the accompanying drawing in which:

Fig. 1 is a view partly in central vertical section of a combination steaming and pressing iron embodying my invention.

Fig. 2 is a bottom view thereof.

Fig. 3 is a fragmentary bottom view showing the removable plug detached therefrom.

Fig. 4 is a fragmentary view of the sole plate in central vertical section.

As illustrated in the drawing, the numeral 5 denotes the casing of said steam iron which has a steam chamber 6 therein and a sole plate 7, with an ironing surface 8 at the bottom thereof, which are heated by means of an electric heating element 9 preferably located between said casing and sole plate.

The said sole plate is provided with a downwardly opening recess 10 which communicates with the steam chamber 6 through a steam passage 11 that extends through a fastening member 12 having a head 13 in said recess.

The ironing surface 8 of the sole plate is provided with steam distributing grooves 14 which extend from and communicate directly with the recess 10, as clearly illustrated in the drawing, and the said recess is provided with a plug, or closure, 15 having a flange 16, flush with the ironing surface, and a well 17 therein which underlies the passage 11 to retain sediment or condensate from the steam.

The tops of the grooves 14 are extended upwardly, as at 18, at their junction with the recess 10, to receive steam from said recess over the top of the plug 15, or the annular wall therein which surrounds the well 17.

The said plug is threaded to the wall of the recess 10 and is provided with spaced recesses 19, in the bottom surface thereof, to receive a wrench for turning said plug when attaching it to or detaching it from said recess.

In the operation of my improved steaming iron, steam is supplied from the steam chamber 6, through the passage 11 into the steam distributing chamber 10. From the said steam distributing chamber, the steam will pass over the top of the plug 15 into the grooves 14 and be distributed thereby along the pressing surface 8 and over the surface of a material being ironed.

It will be noted that the flange 16 of the plug extends partly into the groove 14 and underlies the portion of said groove which receives the steam from the recess 10. This flange serves to deflect the steam laterally into the groove and in the direction thereof as it enters the end of the groove from the recess 10. The particular formation of the top of the groove, as shown in the drawing, also serves to provide a restriction in the groove between the edge of the flange and the top of the groove which serves as a jet, as at 20, for forcing the steam along the length of the groove and thereby aiding in the distribution of the steam along the ironing surface of the sole plate.

By my invention, I have provided a plug for the steam distributing chamber 10 which requires no apertures, or the like, to permit the passage of steam from the steam distributing recess into the grooves, as are required in the construction shown in the above mentioned co-pending application. Further, the said construction permits the use of a deep well in the plug 15 for retaining sediment, and also provides a longer and more durable thread on the inner surface of the recess 10 and the outer surface of the plug 15.

By reason of my improved construction, it is rendered possible to produce sole plates having the steam distributing recess 10 and grooves 14 formed in said sole plate by a single die-casting operation and the plug 15 may also be formed in a more economical manner since it does not require apertures for the passage of steam.

I claim:

1. A steaming iron of the character described comprising a sole plate having a pressing surface with a downwardly opening recess therein, means for supplying steam to said recess, a plug for said recess, a groove in said surface communicating directly with said recess at a point above said plug, and means externally on said plug for closing a portion of said groove to form therewith a jet.

2. A steam iron comprising a sole plate having

an ironing surface and a downwardly opening recess, means for supplying steam to said recess, a plug in said recess, a well in said plug surrounded by an annular wall, and an open groove in said sole plate communicating with said recess over said annular wall; the said plug having a flange extending into said groove for directing steam therein in the direction thereof.

3. A steaming iron comprising a sole plate having an ironing surface and a downwardly opening recess therein, means for supplying steam to said recess, a plug in said recess having a laterally extending flange, and an open groove in said surface having the top thereof extending over said flange and through the wall of said recess above said plug.

4. A steaming iron comprising a sole plate having an ironing surface and a downwardly opening recess therein, means for supplying steam to said recess, a plug in said recess having a laterally extending flange, and an open groove in said surface having the top thereof extending over a portion of said flange and then upwardly through the wall of said recess above said plug, whereby steam is directed from said recess into said groove, downwardly toward said flange and by said flange in the direction of said groove.

5. A steaming iron comprising a sole plate having a pressing surface and a downwardly opening recess, means for supplying steam to said recess, a plug for said recess, an open groove in said surface communicating directly with said recess at a point above said plug, and means externally on said plug closing a portion of the said groove to form therewith a jet for directing steam in the direction of said groove.

LOUIS V. LUCIA.