(No Model.) 3 Sheets—Sheet 1.

J. M. FINK.

PRESS FOR FORMING LEATHER SADDLE TREES.

No. 382,962. Patented May 15, 1888.

Fig. 1.

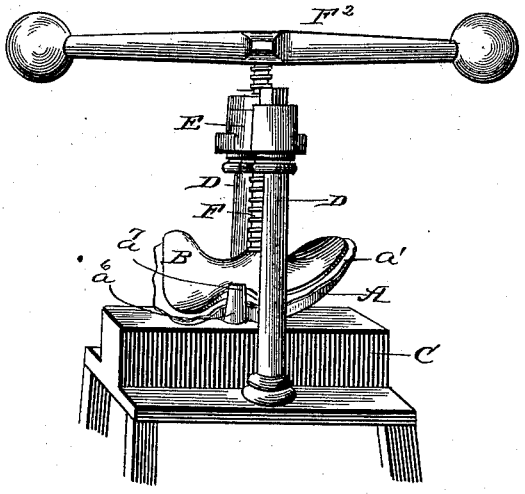
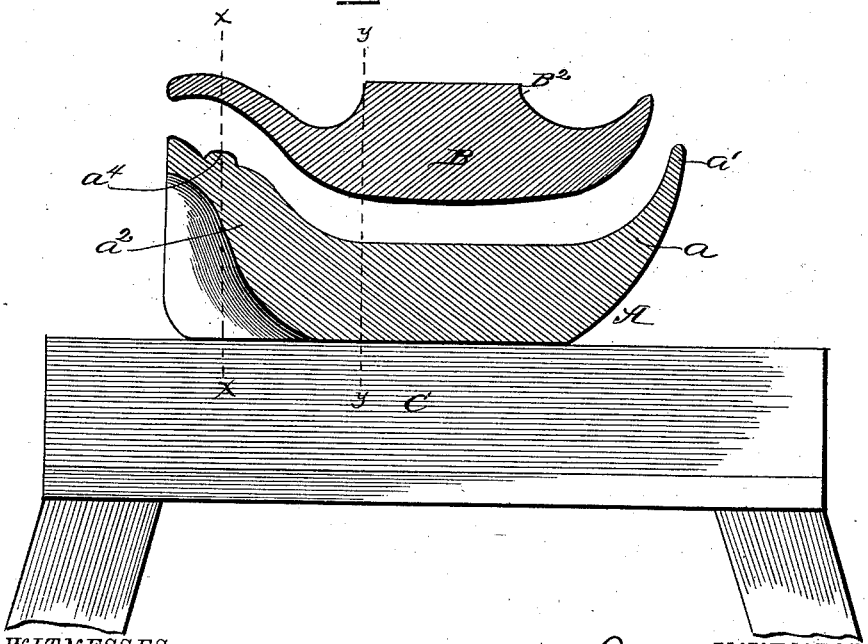


Fig. 2.



WITNESSES.

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John M. Fink,

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Attorney.

(No Model.)

3 Sheets—Sheet 2.

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PRESS FOR FORMING LEATHER SADDLE TREES.

No. 382,962. Patented May 15, 1888.

Fig. 2.

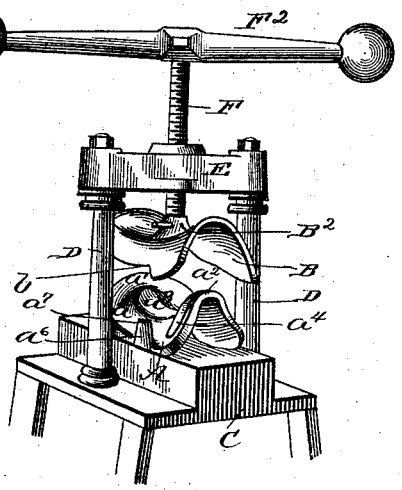


Fig. 4.

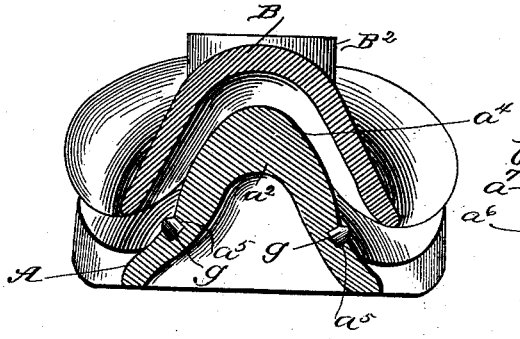
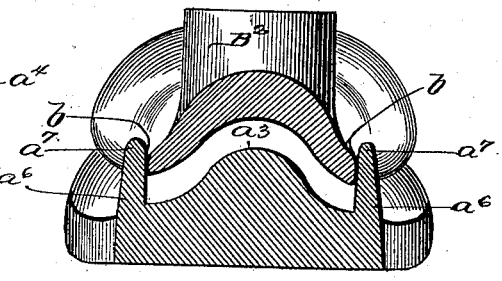


Fig. 5.



WITNESSES.

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(No Model.) 3 Sheets—Sheet 3.

J. M. FINK.

PRESS FOR FORMING LEATHER SADDLE TREES.

No. 382,962. Patented May 15, 1888.

Fig. 6.

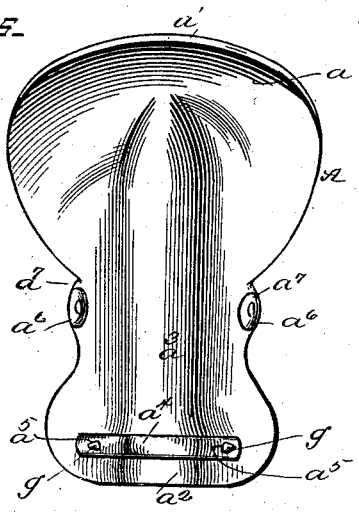


Fig. 7.

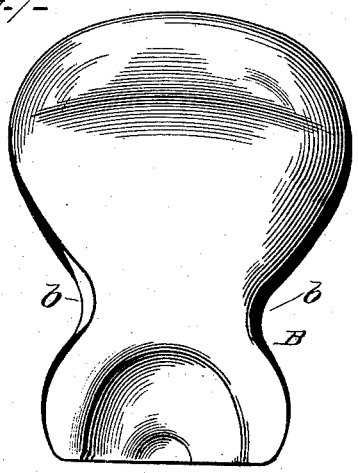


Fig. 8.

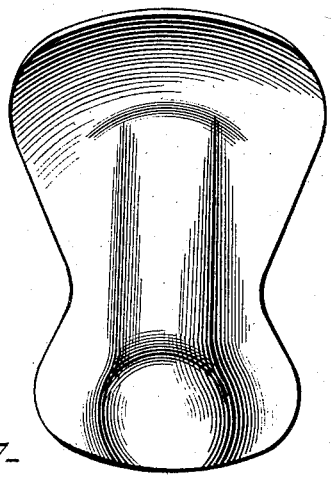


Fig. 9.

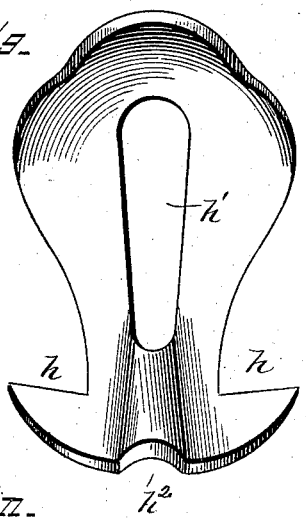


Fig. 10.

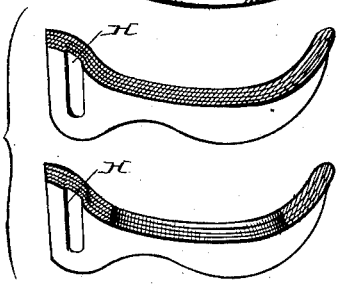
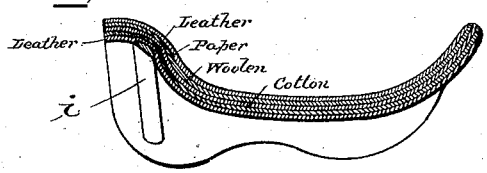


Fig. 11.



WITNESSES.

Edwin L. Yewell.

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John M. Fink,

by J. R. Littell,

Attorney.

UNITED STATES PATENT OFFICE.

JOHN M. FINK, OF LOUISVILLE, KENTUCKY, ASSIGNOR OF ONE-HALF TO HENRY B. FELDHAUS, OF SAME PLACE.

PRESS FOR FORMING LEATHER SADDLE-TREES.

SPECIFICATION forming part of Letters Patent No. 382,962, dated May 15, 1888.

Application filed January 3, 1888. Serial No. 259,570. (No model.)

To all whom it may concern:

Be it known that I, JOHN M. FINK, a citizen of the United States, residing at Louisville, in the county of Jefferson and State of Kentucky, have invented certain new and useful Improvements in Presses for Forming Leather Saddle-Trees; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to a press for forming saddle-trees of layers of leather or other flexible material, and has special relation to the construction and form of the dies used in compressing and forming saddle-trees of this character.

The object of my present invention is to provide a simple press of this class by which the process of forming saddle-trees of layers of leather or other flexible material may be effectually, conveniently, and economically carried out and an improved tree (such as that covered by my Patent No. 318,610, dated May 26, 1885) produced.

In the drawings, Figure 1 is a perspective view of a press embodying my invention, showing the dies together. Fig. 2 is a similar view showing the dies separated. Fig. 3 is a vertical longitudinal sectional view. Fig. 4 is a vertical transverse sectional view upon the line *x x*, Fig. 3. Fig. 5 is a corresponding view on the line *y y*, Fig. 3. Fig. 6 is a top or plan view of the bottom die. Fig. 7 is a bottom or inverted plan view of the top die. Fig. 8 is a plan view showing one of the trees formed by the press. Fig. 9 is a similar view illustrating another form of tree of the class mentioned. Fig. 10 is a detail sectional view taken through the trees illustrated in Figs. 8 and 9. Fig. 11 is a detail transverse sectional view of a tree formed by the within described press of layers of cotton, wool, or the like.

Corresponding parts in the figures are denoted by the same letters of reference.

Referring to the drawings, A designates the under or bottom die, which is formed, substantially as shown in the drawings, with a concaved rear portion, *a*, having its edge turned upwardly, as shown at *a'*, and corresponding to the shape of the cantle of the saddle. The forward end of the bottom die projects upwardly, as shown at a^2, and is convexed. A rib or raised portion, a^3, extends centrally and longitudinally along the top face of the die from the convexed front portion, a^2, to the rear end, *a'*.

a^4 designates a transverse rib, which is provided over or across the upwardly-projecting front portion, a^2, and formed with a hole or perforation, a^5, at each end for the reception of pegs, the purpose of which will be hereinafter fully set forth.

At each side of the central or narrowed portion of the bottom die is preferably provided an extension, a^6, carrying an upright or guide, a^7.

B designates the upper or top die, the lower face of which corresponds approximately to the upper face of the bottom die. A recess, *b*, is formed at each side of the central or narrow portion of the top die to receive one of the guides a^7, by which the dies are retained in position and secured against lateral displacement. Upon the top of the die B is provided a projection, B^2, to which the operating screw or other power mechanism is connected and upon which it is adapted to bear.

The operating mechanism or press proper preferably comprises a suitable base, C, carrying two upright side pillars or standards, D D, connected at their upper ends by a cross-head, E. The power-screw F works through the cross-head E, and the lower end of the screw is connected with the projection B^2 in the usual or any suitable manner, the upper end of the screw being provided with the usual head or operating-bar F^2.

The method or process of forming saddle-trees such as that described in my above-mentioned patent, and consisting entirely of layers of leather or other flexible material, is carried out by the herein-described press in the following manner: Wooden pegs *g* are first inserted in the holes a^5 and a piece or layer of leather of the desired size is placed upon the bottom die, this first layer being retained in position upon the die by the pegs during the process of building up the remainder of the tree. Similar layers of leather are then placed upon the lower layer until the desired thick-

ness is obtained, and the whole is then compressed into the desired shape, so that the completed tree corresponds in contour to the face of the die. The edges of the trees thus formed may be cut to the desired shape, and the layers forming the tree may be secured together by stitching or in any other suitable manner, and after the tree is completed the seat-cover may be secured to it in the manner described in my above-mentioned patent or in any other suitable way.

It will be noted that a transverse recess, H, is formed in the forward convex-portion of the trees, in their under face, by the corresponding transverse rib a^4 upon the bottom die. This recess is adapted for the reception of a gullet-plate for strengthening the tree. It is further manifest that gullet-plates may also be provided in the cantle between the layers of leather during the process of building up and compressing the tree, or that they may be inserted at any other desired points.

In Figs. 8 and 9 I have shown two different forms of trees of the character herein mentioned, it being shown that the edges of the trees, after they are compressed, may be cut in any desired shape, as indicated in Fig. 8, or with the recesses *h h* and central slot, *h'*, or front notch, h^2, as shown in Fig. 9. Trees of this character may also be formed of layers of cotton or woolen fabric, rubber, or any other flexible material, as shown in Fig. 11, the gullet-plates used to strengthen this construction of tree being designated by *i*.

It is obvious that any suitable operating mechanism may be employed to operate the improved dies, and also that hand, steam, or other power may be employed. I do not, therefore, limit myself to the form of operating mechanism or press proper as herein illustrated; nor do I limit myself to the exact construction of dies herein shown, but reserve the right to all such modifications as properly fall within the spirit and scope of my invention. For instance, the guides upon the bottom die may be of any preferred shape or construction, or the general contour or shape of the dies may be altered to suit modifications in the form of tree to be pressed.

I claim as my invention—

1. In a press for forming saddle-trees of layers of leather or other flexible material, the combination of two independent dies, the top surface of the bottom one of which conforms to the under surface of the saddle-tree, and is provided with a central longitudinal raised portion and with a transverse rib at its front end, while the bottom surface of the top die conforms to the top of the saddle-tree, substantially as set forth.

2. In a press for forming saddle-trees of layers of leather or other flexible material, the combination of two independent dies, the top surface of the bottom one of which conforms to the under surface of the saddle-tree, and is provided with a central longitudinal raised portion and with a transverse rib at its front end, while the bottom surface of the top die conforms to the top of the saddle-tree, the bottom die being provided with guides which are engaged by the top die and retain the latter in position, substantially as set forth.

3. In a press for forming saddle-trees of layers of leather or other flexible material, a pair of dies having their inner faces corresponding to the contour of the saddle-trees and provided with a transverse rib at the forward portion of the bottom die, holes or perforations in the said rib for the reception of pegs adapted to retain the lower layer of material in position while building up the tree, and a longitudinal rib extending along the bottom die, substantially as and for the purpose set forth.

4. In a press for forming saddle-trees of layers of leather or other flexible material, a bottom die having guides thereon, and a top die provided with recesses for the reception of said guides, substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN M. FINK.

Witnesses:

GEO. B. DEL VECCHIO,

HENRY KOENIG.