

(No Model.)

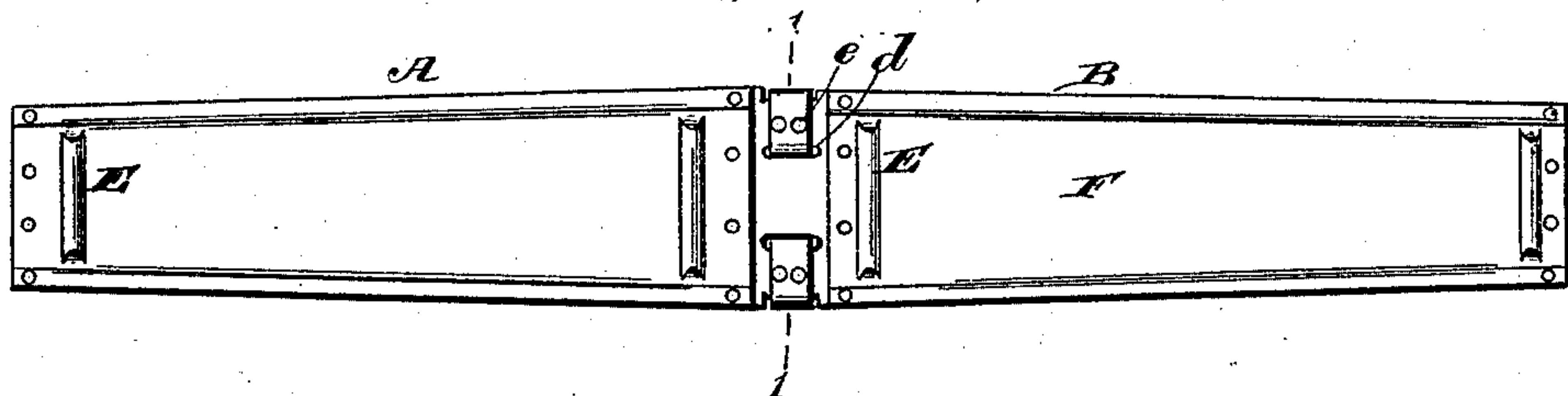
A. E. OSBORN.

OIL PRESS MAT.

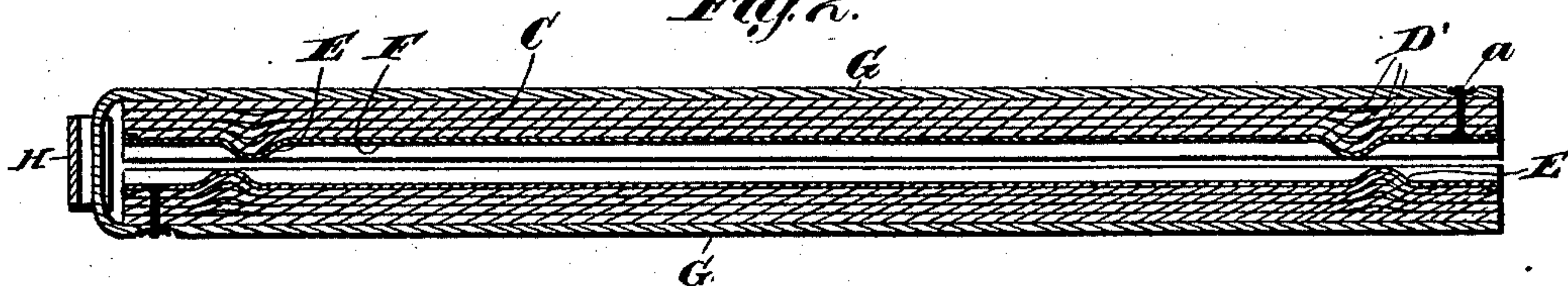
No. 285,300.

Patented Sept. 18, 1883.

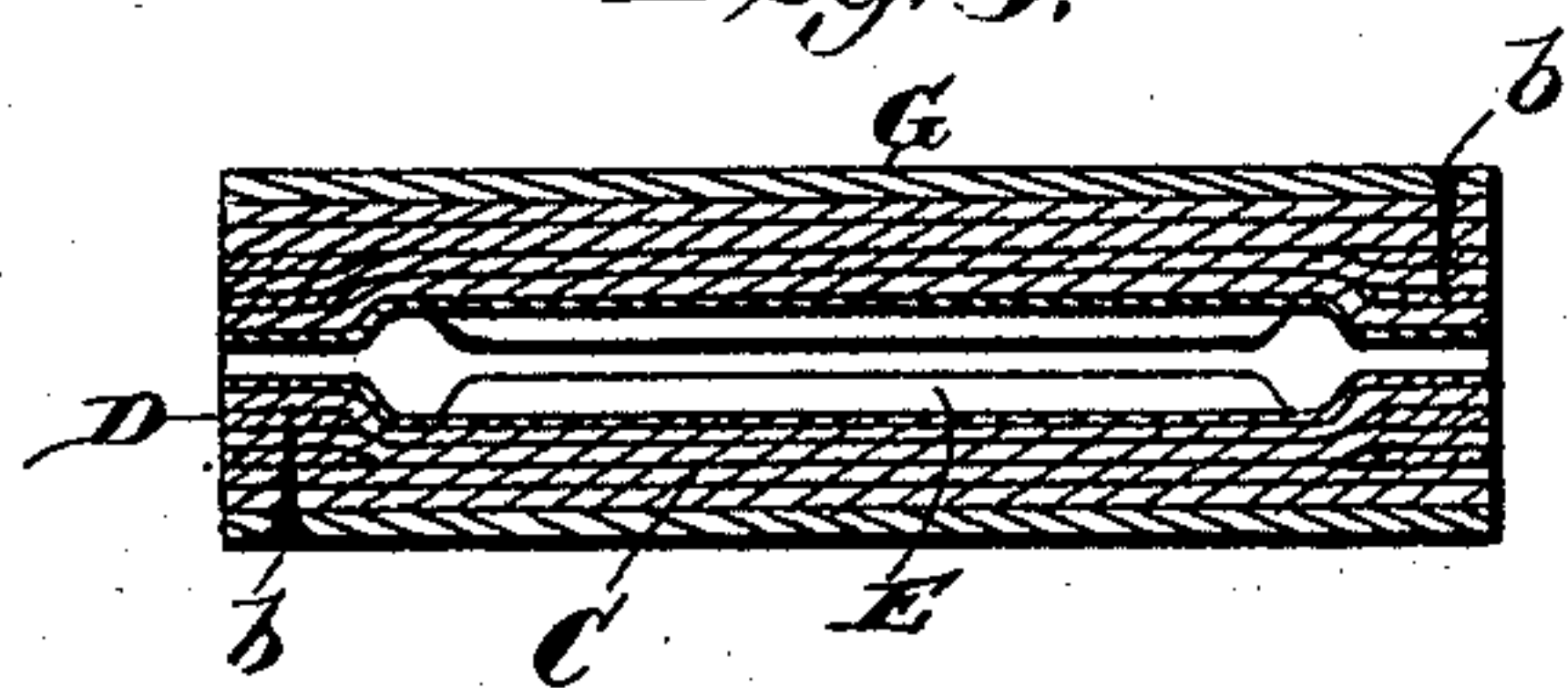
*Fig. 1.*



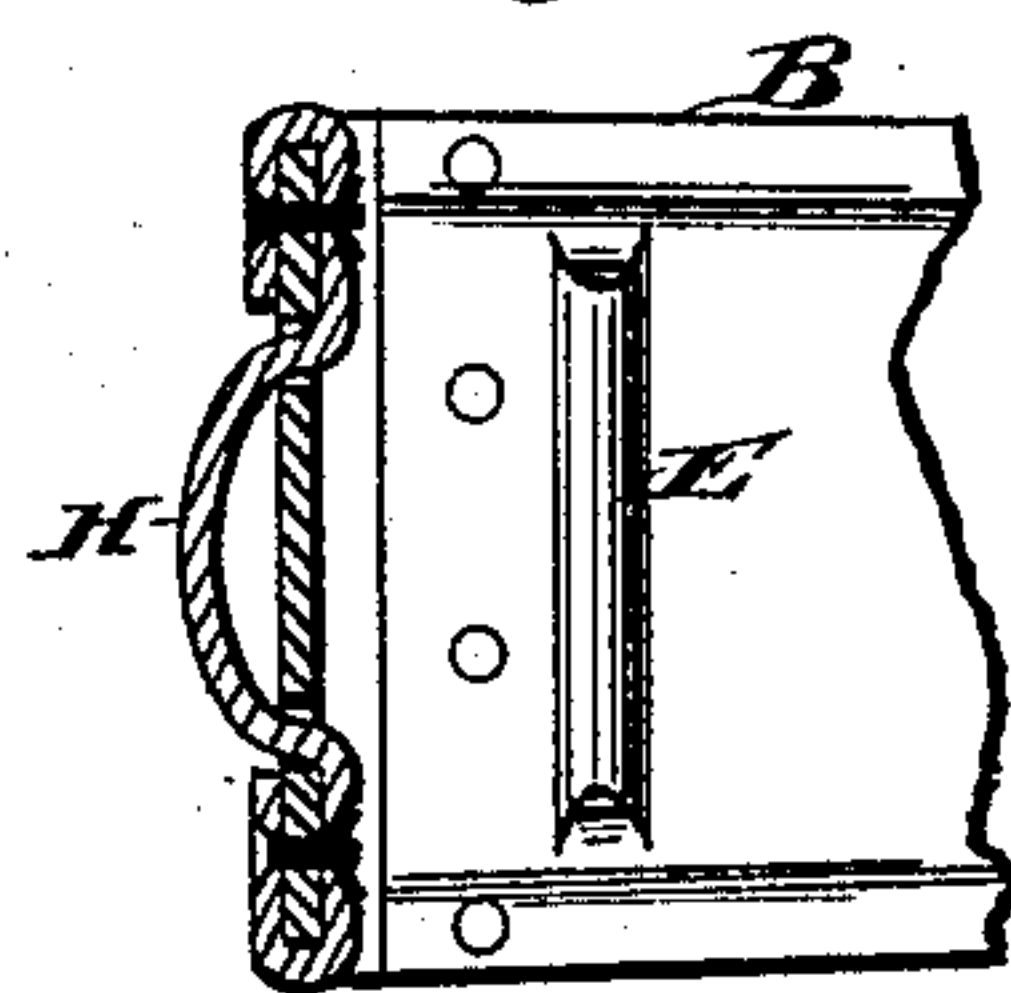
*Fig. 2.*



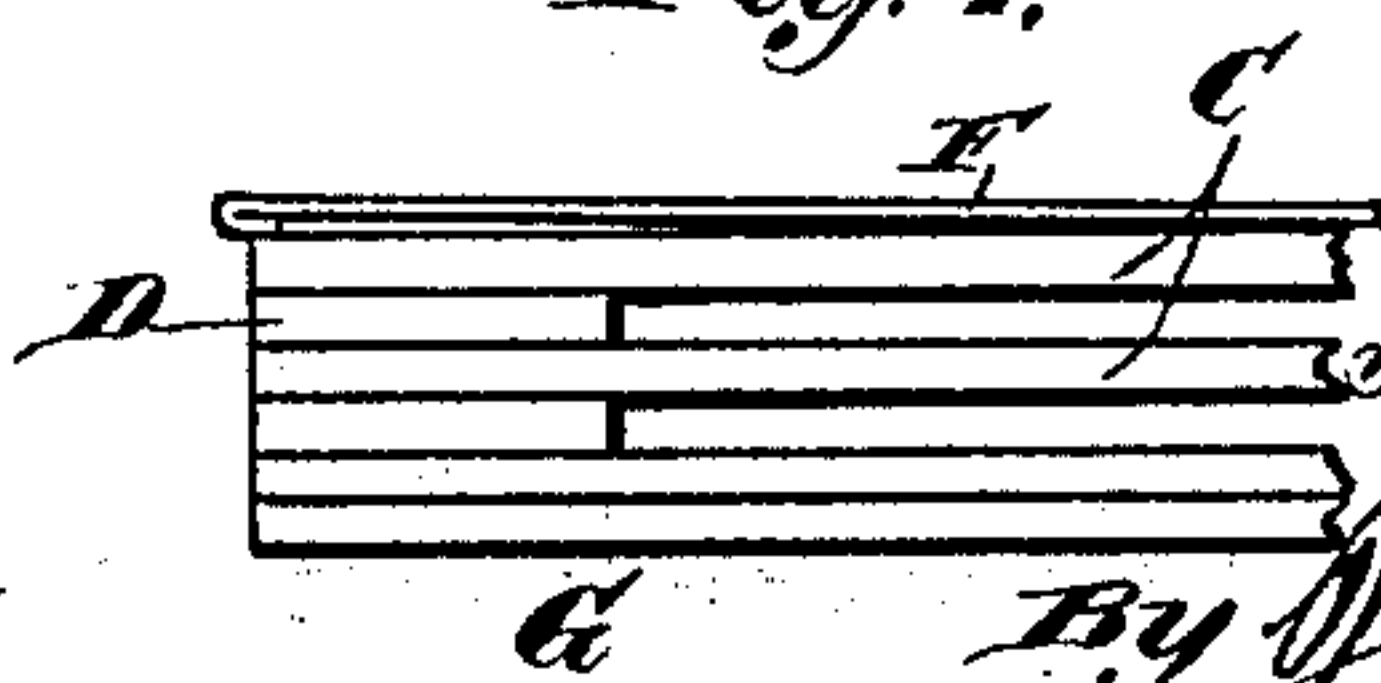
*Fig. 3.*



*Fig. 5.*



*Fig. 4.*



*Witnesses.*

*Robert Everett.*  
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*Inventor.*

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*By James L. Norris.*  
*Att'y.*



# UNITED STATES PATENT OFFICE.

ADELBERT E. OSBORN, OF WACO, TEXAS, ASSIGNOR TO THE MODEL MACHINE COMPANY, OF SAME PLACE.

## OIL-PRESS MAT.

SPECIFICATION forming part of Letters Patent No. 285,300, dated September 18, 1883.

Application filed August 2, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, ADELBERT E. OSBORN, a citizen of the United States, residing at Waco, in the county of McLennan and State of Texas, have invented new and useful Improvements in Oil-Press Mats, of which the following is a specification.

My invention relates to apparatus for pressing cotton-seed to extract the oil; and it consists in a mat for oil-presses of new and improved construction, whereby I attain increased durability with an economy in expenditure.

My invention consists more particularly in an oil-press mat having its body portion composed of card-board cut to the size of the press-box, the adjacent faces being covered with sheet metal, which is pressed or stamped into the paper body to give the required cavity, which is bounded by raised margins and transverse ribs struck up from the metal, and supported by paper strips interposed between the layers of card-board, the two leaves of the mat having a leather backing and being hinged together.

My invention also consists in a handle of peculiar construction, in combination with the leather backing of the mat, and in such other features of construction and arrangement as are fully set forth hereinafter and pointed out in the claims.

Referring to the drawings forming part of this specification, Figure 1 is a plan view, showing both leaves of the mat spread open. Fig. 2 is a central longitudinal section of the same, the leaves being closed. Fig. 3 is a transverse central section of Fig. 2. Fig. 4 is an end elevation before the parts are submitted to pressure, showing the manner of constructing the body of the mat and supporting the edges of the sheet-metal covering. Fig. 5 is a central cross-section of Fig. 1 on the line 1 1, showing the construction of the hinge.

A in the drawings represents one leaf of the mat, and B the other, the two being counter-parts. For this reason it will be necessary to describe the construction of one of said parts only.

The body of each leaf is composed of sheets of common paper or straw board C, cut to the

size of the press-box and placed together in successive layers to the required thickness, which, with the exception of the marginal portions, is not far from seven-eighths of an inch. Between the layers of straw-board, and extending from end to end upon both of the longer sides, I then insert strips D of the same material, having a width of about one inch and lying upon the margins of the straw-boards C, the outer edges of both being flush, as shown in Fig. 4. These strips D are covered with paste, as also are the straw-boards C, and a sufficient number are interposed to increase the thickness at the margin to a degree equal to the depth of the cavity within which the seed is to be compressed when placed in the mat. This depth is about one-fourth of an inch, and to that extent the longer edges of the mat are made thicker than the inner portion.

Near the ends of each leaf are laid transverse strips D' in a similar manner, making those portions of the body equal in thickness to the marginal portions. I then take a plate, F, of sheet-iron or other suitable metal, cut to a size a little in excess of the dimensions of the leaf, and having its edges folded over to make a smooth border. This sheet is laid upon the mat in the manner shown in Fig. 4, and the parts are then placed in the press-box, a former or die being imposed upon the plate, having the shape and size of the cavity to be formed in the leaf. Heavy pressure is then applied, whereby the metal plate is drawn into the form shown in Fig. 3. This die is of such shape as to compress the entire body of the leaf, grooves being formed therein to correspond with the end ribs, E, which are struck up by the thickening of the body portion by the strips D'. By the action of the die, which has a pressure of about six hundred tons, the several layers of card-board are united into a solid and rigid mass, and the sheet metal is forced into close contact with every portion of its surface. It is then removed from the press and rivets *a a* are passed through each end, binding the covering and body together.

A backing, G, of leather, is applied to each leaf, and is continuous between the two, forming a hinge by which the parts are connected.



This leather backing is fastened by nails *b*, driven into the card-board along its edges, and at the ends is held by the rivets *a*.

A handle is provided, having the following construction: A single strip of leather, *H*, of suitable length, has its ends passed through slots *d d*, cut in that portion of the leather backing *G* which unites the two leaves *A* and *B*. These ends are then passed beneath the leather and around its edge, and are doubled over upon its outer surface. Rivets *e* are then passed through to secure the parts in place, a sufficient slack being left in the strip *H* to permit the insertion of the hand. This affords a convenient means of carrying the mat and handling it when in use. The bars or ribs *E* run nearly across the cavity in each leaf, a space being left between their extremities and the raised margins in order to avoid rupturing the metal. These ribs are for the purpose of crimping the sack to prevent its stretching and breaking.

Having thus described my invention, what I claim is—

1. A mat for oil-presses, having a body composed of layers of paper or straw-board covered with sheet metal, and having a leather backing, substantially as described.

2. An oil-press mat having a body of straw-board or paper-board, with interposed marginal and transverse strips, a sheet-metal cov-

ering lying thereon, and a leather backing uniting the leaves, the paper-board composing the body being pasted, and the sheet-metal covering being laid thereon under heavy pressure, whereby it is drawn into shape and the card-board sheets and strips are united to form a solid body, substantially as described.

3. An oil-press mat composed of a body having a covering of sheet metal, the latter being provided with transverse ribs struck up from the metal and supported by an underlying thickened portion of the body, substantially as described.

4. The combination, with the body composed of straw or paper board, of the interposed marginal and transverse strips *D* and *E*, the sheet-metal covering *F*, and leather backing *G*, substantially as described.

5. The combination, with the continuous leather backing *G*, having slots *d d*, of the strip *H*, passing through said slots, doubled over the edge of the leather, and fastened by rivets *e*, substantially as described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

ADELBERT E. OSBORN.

Witnesses:

W. E. COLTON,  
J. C. JENKINS.