N. W. L. BROWN.

OIL PRESS BOX.

APPLICATION FILED MAR. 23, 1910.

978,840. Patented Dec. 20, 1910.

Fig. 1.

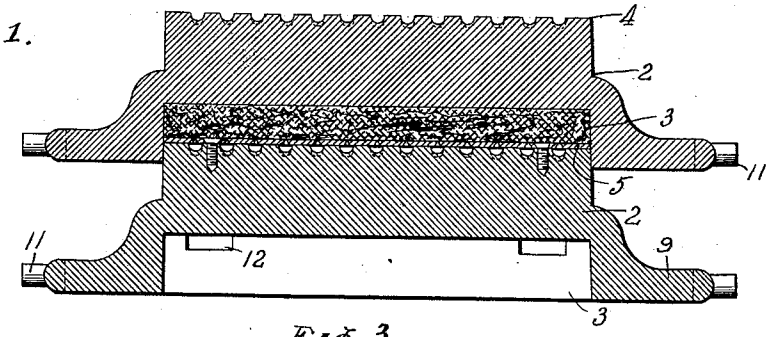


Fig. 3.

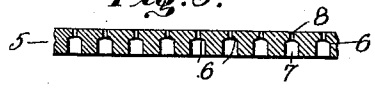


Fig. 2.

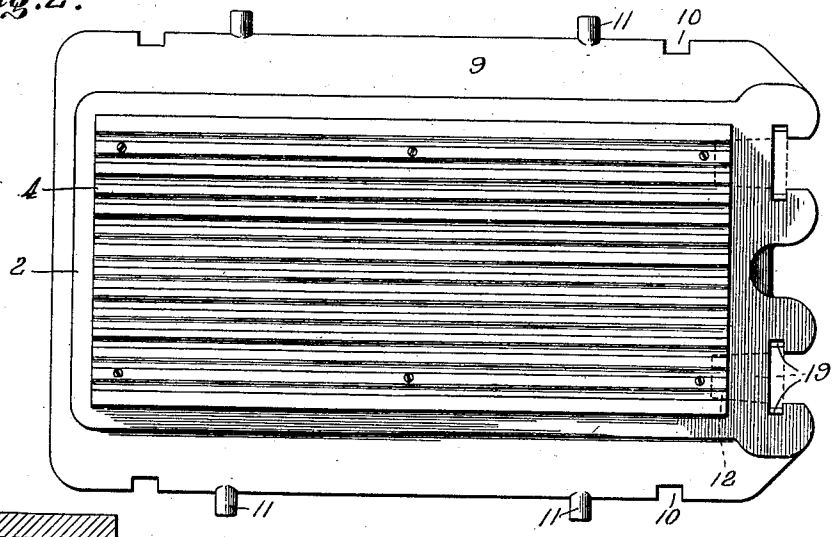
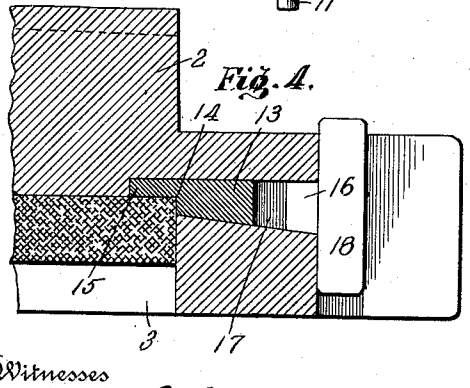


Fig. 4.



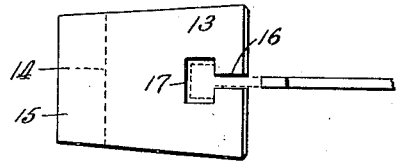


Fig. 5.

Witnesses

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UNITED STATES PATENT OFFICE.

NIMROD W. L. BROWN, OF MARIETTA, GEORGIA.

OIL-PRESS BOX.

978,840. Specification of Letters Patent. Patented Dec. 20, 1910.

Application filed March 23, 1910. Serial No. 551,186.

To all whom it may concern:

Be it known that I, NIMROD W. L. BROWN, a citizen of the United States, residing at Marietta, in the county of Cobb and State of Georgia, have invented new and useful Improvements in Oil-Press Boxes, of which the following is a specification.

The present invention relates to oil press boxes, and is an improvement on the press box shown in my Patent No. 953,317, granted Mar. 29, 1910, in which the generic features embodied in the present case are shown.

Stated generally, my invention relates to that class of hydraulic presses commonly in use for extracting oil from cotton seeds and other materials and includes as its essential features an oil press box which is inclosed on all four sides and provided with provision for drainage so that the meats, which are usually inclosed in a press cloth and placed inside the box, may be thoroughly squeezed and the oil expressed therefrom.

The present embodiment of my invention discloses certain novel features which add to the strength of the box and which facilitate the handling of the cake of meats which are subjected to the expressing action of the boxes, and in the drawings which accompany and form a part of this specification,—Figure 1 is a sectional view showing a plurality (two) of boxes in operative relation to each other. Fig. 2 is a plan view of one of the boxes. Fig. 3 is a cross section, somewhat enlarged, of a portion of the cover plate for the box sections. Fig. 4 is a detail sectional view enlarged of a slicing bar aperture and the filling plug therefor. Fig. 5 is a detail of the filling plug and the plug handling tool which is preferably used.

Referring to the drawings by numerals, like numbers indicating like parts in the several views, the frames 2 have the cavities 3 on their under side, the two upper faces 4, and preferably the grooves inclined from the center outwardly to each end of the plate surface, these plates being topped or covered by perforated plates 5 suitably secured, said plates 5 having drainage holes 6 of larger diameter on the under side as at 7 than on the upper surface as at 8 in order that a proper drainage may be secured and danger of choking or jamming the perforations largely reduced. These frames or plates 2 are surrounded as shown by an extended flange 9 which serves to brace the entire frame, these flanges being notched on their side wings, as at 10, to engage the corner posts of the press (not shown).

The flange 9, as shown in Figs. 1 and 2, is provided with suitable lugs 11 projecting at right angles therefrom to which the operating links (not shown) of the press mechanism may be readily secured in order to move the boxes to and from their operative positions. The vertical end walls of this platen or oil box have the openings or passages 12 therethrough to receive the wedge shaped plug 13 which serves to seal these openings 12 during the expressing operation, and these plugs 13 have their forward ends cut away, as at 14, so that the contour of the oil cake will not be interfered with, but the projecting nose 15 of the plug 13, when such plug is withdrawn will form a recess above the cake into which the slicing bar can be readily entered and the cake pried from its seat without the necessity of first working a recess for the slicing bar into the cake itself. The plug 13 is, furthermore, provided with the slot 16 having the enlarged recess or opening 17 which will readily permit the insertion when the plug is in place in the frame of the T-shaped tool which on being entered into the recess 16—17 can be turned and the plug readily withdrawn from the opening 12. The plug 13 is locked in position by the shim or locking plate 18 as shown in the other views, suitable pockets 19 being provided at one end of plates or press box to receive these plugs or locking plates. This form of platen has some advantages over that shown and described in my application heretofore named, in that the relatively broad surrounding flange strengthens the platen without adding undue weight thereto. Furthermore, the arrangement of plugs which provides a slicing bar recess above the cake is also of value, and by the key hole slot arrangement described a suitable tool may be readily manipulated for withdrawing the plug from its recess.

While I have shown a particular embodiment of my invention, it will be understood that this disclosure is merely illustrative and is in no sense restrictive, and I do not therefore limit myself to the mechanical details shown and described except in so far as I am limited by the terms of the appended claims.

I claim:—

1. An oil press box having solid side and end walls, a relatively thin bracing flange surrounding said box, one at least of said box walls having openings therethrough to permit access to the box interior, and means for closing said openings.

2. An oil press box having solid side and end walls, a relatively thin bracing flange surrounding said box, plug seats formed in said surrounding flange and piercing one of the walls of said box to give access to the interior thereof, and closures for said plug seats.

3. An oil press box having solid side and end walls, a relatively thin bracing flange surrounding said box, link engaging lugs projecting from said flange, plug receiving apertures traversing the end flange of said box to permit access to the interior, and wedge-shaped plugs having reduced end portions fitted to said apertures.

4. An oil press box having solid side and end walls, an opening through one of said walls to permit access to the interior, and a plug having a cut-away or notched end fitted in said opening.

5. An oil press box having solid side and end walls, an opening through one of said walls to permit access to the interior, and a plug having a tool receiving recess in its outer end closing said aperture.

6. An oil press box having solid side and end walls, an opening through one of said walls to permit access to the interior, a plug of tapering form, the forward end of which is cut away or notched on its under surface fitted to and closing said opening, and a locking shim to secure said plug in place.

7. An oil press box having solid side and end walls, an opening through one of said walls to permit access to the interior, a wedge-shaped plug fitted to said opening and having its forward end notched or cut-away to give a recess above an oil cake in said box, said plug having a T-shaped cut in its outer end to receive a headed tool.

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

NIMROD W. L. BROWN.

Witnesses:
RALPH WEAVER,
W. C. FOWLER.