

N. B. HENRY.
PRESS PLATE FOR COTTON SEED AND OTHER OIL PRESSES.
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1,348,004.

Patented July 27, 1920.

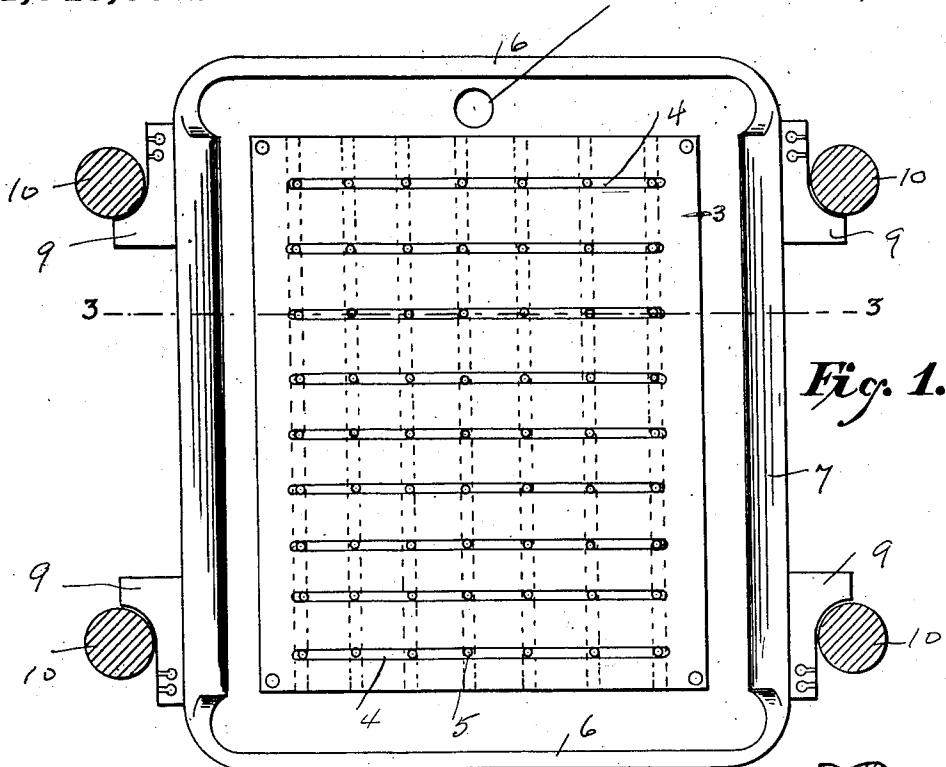


Fig. 1.

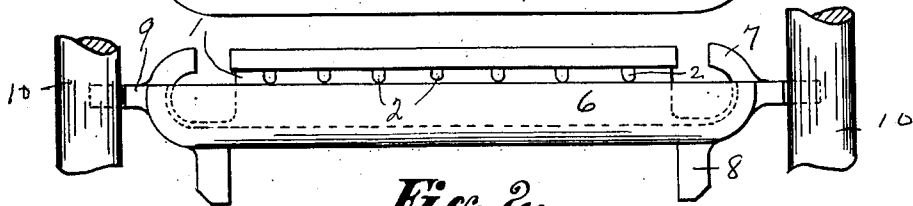


Fig. 2.

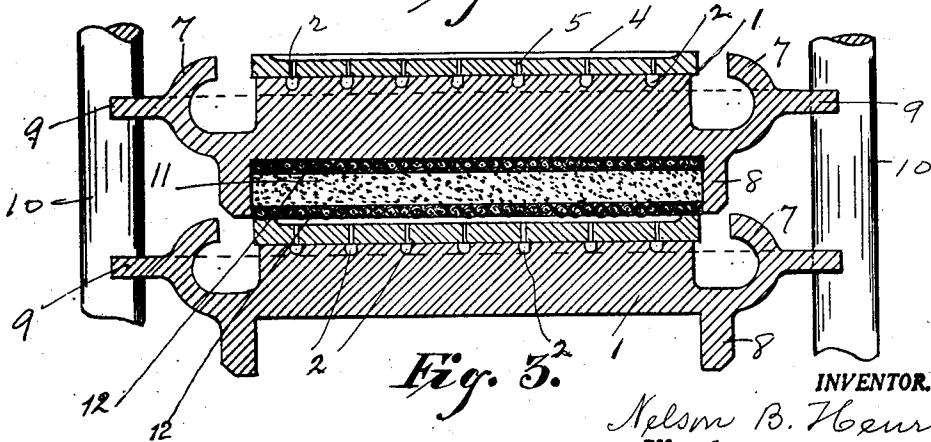


Fig. 3.

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PRESS-PLATE FOR COTTON-SEED AND OTHER OIL PRESSES.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, NELSON B. HENRY, a citizen of the United States, residing at Atlanta, in the county of Fulton and State of Georgia, have invented certain new and useful Improvements in Press-Plates for Cotton-Seed and other Oil Presses, of which the following is a specification.

My invention has relation to an improvement in plates for cotton-seed and similar oil presses, and in such connection it relates more particularly to the construction and arrangement of such plates.

In cotton-seed presses, of well known types, the oil cake is pressed between plates in superposed relationship. The plates were provided with ears, or lips, so that they could slide up and down upon the columns of the press.

The object of my present invention is to provide the plates with means whereby the same will interlock during the pressing operation, whereby pressure may be exerted more evenly upon the cake, and the plates may ride freely and evenly on each other during the application of pressure to the cakes in the press. An added object of my invention is in so arranging a portion of the interlocking means that the same may constitute a wall to retain the expressed oil in a chamber surrounding the operative portion of the press plate and conduct it to a suitable discharge opening.

The nature and scope of my invention will be more fully understood from the following description taken in connection with the accompanying drawings forming part hereof, in which:

Figure 1, is a top or plan view of a press plate embodying my invention.

Fig. 2, is an end elevational view of one of the plates; and,

Fig. 3, is a vertical sectional view taken on lines 3—3 of Fig. 1, and illustrating two of the plates in operative relationship.

Referring to the drawings, 1 represents the main body of the plate, having its upper face traversed longitudinally by the oil conducting ducts 2. Upon this body 1 is secured the plate 3, having shallow transverse grooves 4 with perforations 5 extend-

ing through the plate 3 at the points where grooves 4 cross grooves, or ducts 2.

The body 1 is formed integral with the end flanges 6 and side rims 7. The end flanges 6 extend upward in straight relationship with the body 1, but some distance therefrom, whereas the rims 7 are curved and terminate at a point adjacent to the plate 3, leaving a space between the sides of said plate and a rim 7 to receive and guide a vertically arranged lug 8 projecting from and preferably integral with the rim 7 and body 1. Extending laterally from each corner of the plates is a bracket or ear 9, which is formed to partly engage one of the columns 10 of the press and to slide up and down thereon.

In practice, a series of plates are arranged in the press, the four brackets, or ears, 9 of each plate sliding on columns 10 in the guiding of the plate in the press. An oil seed cake 11 with its cloth covering 12 or, as it is called, the cake of cooked meats, is placed between two adjacent plates in a press, the lower lugs 8 of the upper plate entering the space between plate 3 and rim 7 of the lower plate, as clearly indicated in Fig. 3 as the plates are brought together in the pressing operation. It is manifest that as the pressure is brought to bear upon the plates in the press, the cake 11 will be held as in an open ended box and will be pressed evenly and completely. The interlocking of the two plates insures the riding of the plates more freely on the columns 10 of the press and adds greatly to the strength and durability of the plates.

Having thus described the nature and objects of my invention, what I claim is:

1. In a press plate, a body, a flange formed at each end of the plate, curved side flanges for the plate, said side flanges bent inwardly toward the body to constitute one member of an interlocking device between consecutive press plates and vertical lugs projecting from the bottom of the side flanges to constitute the other member of said interlocking device.

2. In a press, a series of superposed plates, each provided on the sides with curved flanges and lower lugs, said flanges and lugs

constituting a means for interlocking the plates during the pressing operation.

3. A press plate having a central body, side flanges and end rims surrounding said
5 body and integral therewith, corner brackets projecting laterally from the side flanges, lower lugs projecting vertically from said

flanges, and a cake supporting plate secured to the body and extending toward, but not meeting the side flanges.

In testimony whereof I have signed my
10 name to this specification.

NELSON B. HENRY.