

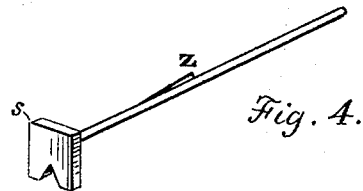
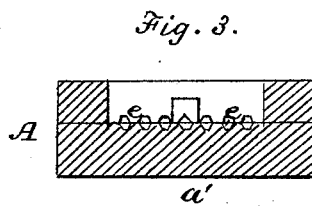
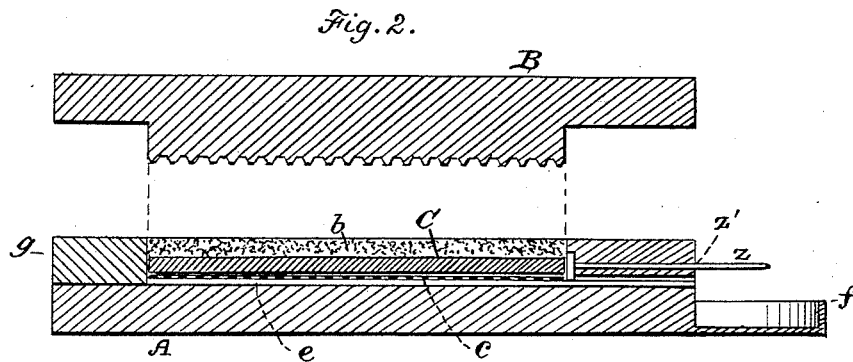
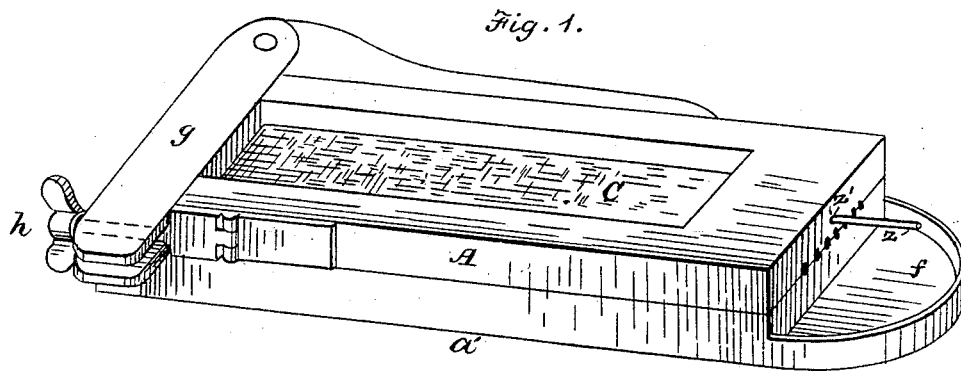
(No Model.)

J. DAVIS.

PRESS BOX FOR EXTRACTING OIL FROM SEED.

No. 327,664.

Patented Oct. 6, 1885.



Witnesses:  
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# UNITED STATES PATENT OFFICE.

JOHN DAVIS, OF CHARLESTON, SOUTH CAROLINA.

## PRESS-BOX FOR EXTRACTING OIL FROM SEED.

SPECIFICATION forming part of Letters Patent No. 327,664, dated October 6, 1885.

Application filed August 27, 1885. Serial No. 175,444. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN DAVIS, a citizen of the United States, residing at Charleston, in the county of Charleston and State of South Carolina, have invented a new and useful Improvement in Press-Boxes for Extracting Oil from Seed, of which the following is a specification.

My invention relates to improvements in press-boxes, in which the box to receive the seed from which the oil is to be expressed shall be made of metal of any proper kind; and the objects of my invention are, first, to provide a box which shall contain in its bottom longitudinal grooves for the reception of the oil when expressed from the seed, and a perforated metal plate placed upon the same, which shall constitute the floor of the box; and I further provide a mat of cork-wood of equal thickness through its length and breadth and of similar longitudinal and latitudinal shape and size with the perforated metal plate, and a metal top, having a bottom-piece, with a corrugated or smooth surface, as may be desired, of similar dimensions of length, width, and depth, with the same proportions of the interior of box.

In the process of operation it is my intention that my press box shall constitute a component part of a hydraulic or steam press; that the top shall be fixed in a proper manner in the press over and above the main body of the box and at a proper relative distance from the same, and that it shall remain fixed in its position; that the body of the box, being stationary in the press, shall be opened, filled, and discharged while in said position; and, in operating, that the box shall receive pressure from below, concentrated, with equally-distributed force, upon its bottom, and with force requisite for forcing the body of the same against the top with the desired result attained.

In filling the box it is my design that the seed shall be placed upon the cork-wood mat, resting upon the perforated metal plate; and I further provide a stem having on its surface a self-adjusting spring, which is properly inserted through the interior of the close end of the box, which serves the purpose of forcing from the bottom of the box the cake, consisting of the matted kernels or meat of the seed, when it is desired, after operating, to cleanse and dry the box.

I attain the above-described objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 represents a perspective view of my oil-seed press-box, the upper part being removed. Fig. 2 is a vertical longitudinal central section of the device. Fig. 3 is a transverse sectional view of box, showing the interior of rear end of the same. Fig. 4 is a detailed view of the stem for removing the cake and cork-wood mat from box.

The press-box A, being placed in the press for operating, and the pressure being applied to the bottom *a'*, the seed, described by the letters *b b b*, are forced up against the metal top B, and as a result of said pressure oil is expressed from the same and flows through the cork-wood mat C and perforated metal plate *e* into the longitudinal grooves *e e e e e*, being held in reserve or from escaping by the projecting pan *f*. When the process of extracting the oil is thus accomplished the panel *g* is ungeared at *h*, and the box being thus opened the cake is taken from the same by propelling the stem *z*, and the box is refilled.

When it is desired to remove the cork mat C from the box A, the stem *z* is propelled forward through its orifice *z'* against the rear end of the same, with the desired result attained.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In combination with metal press-box A, provided with longitudinal grooves *e*, perforated plate *e*, cork mat C, and a metal top, B, substantially as shown, and for the purposes described.

2. In combination with a press-box containing a mat of cork-wood, a stem *z*, provided with a head, S, said stem passing through the aperture or orifice *z'*, substantially as shown, and for the purpose described.

3. In combination with a top, B, a press-box, A, provided with grooves *e* and pan *f*, cork-wood mat C, perforated plate *e*, and stem *z*, having head S, the parts being constructed substantially as shown, for the purposes set forth.

Witnesses:

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