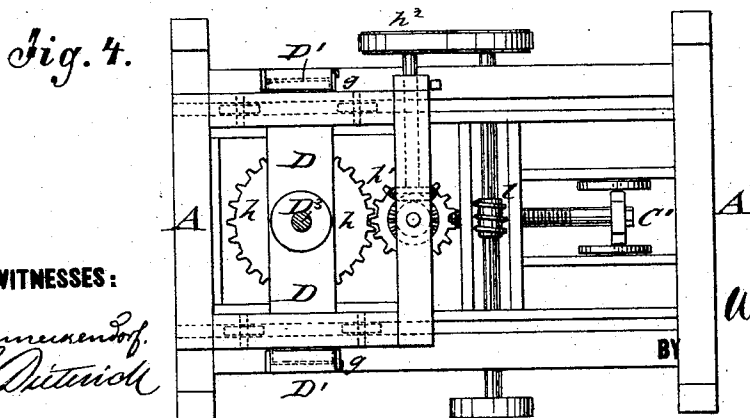
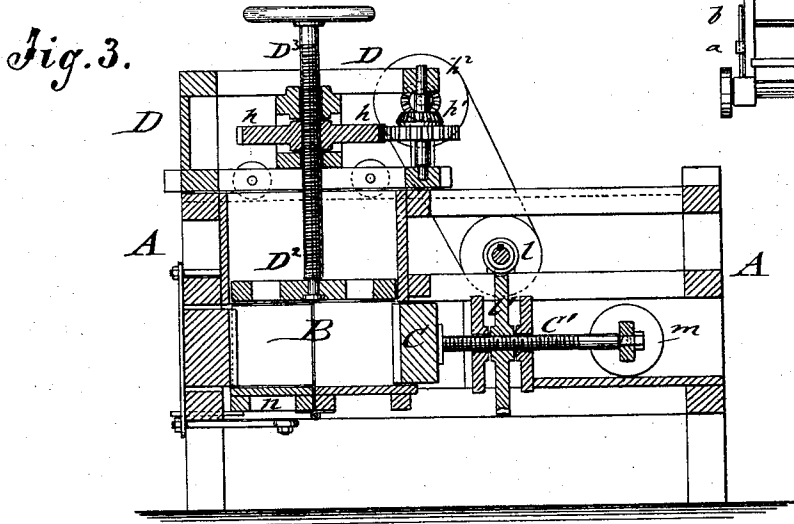
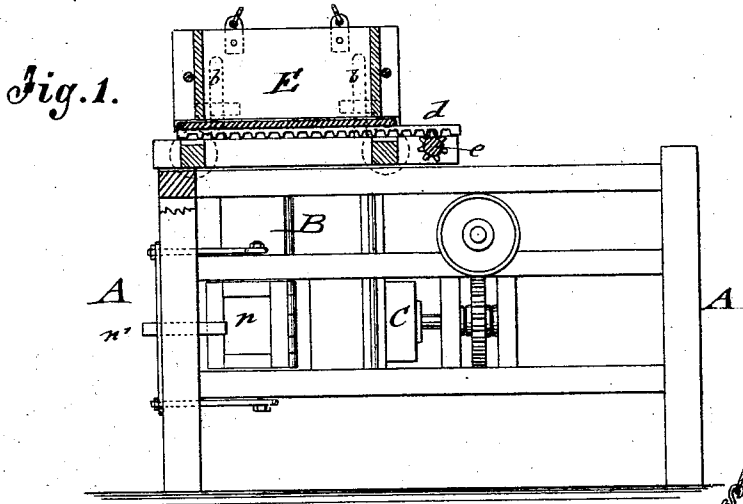


W. KOEHL.
Cotton-Presses.

No. 157,205.

Patented Nov. 24, 1874.



WITNESSES:

A Rembrandt.
G. Dietrich

INVENTOR:

William Koehl
Munff
ATTORNEYS.

UNITED STATES PATENT OFFICE.

WILLIAM KOEHL, OF HUNTSVILLE, TEXAS.

IMPROVEMENT IN COTTON-PRESSES.

Specification forming part of Letters Patent No. **157,205**, dated November 24, 1874; application filed October 3, 1874.

To all whom it may concern:

Be it known that I, WILLIAM KOEHL, of Huntsville, in the county of Walker and State of Texas, have invented a new and Improved Cotton-Press, of which the following is a specification:

In the accompanying drawing, Figure 1 represents a side elevation of my improved cotton-press, showing the carriage for conveying the cotton from the gin to the press in longitudinal section. Fig. 2 is an end view of the carriage. Fig. 3 is a vertical longitudinal section of the press with condensing-follower in position, and Fig. 4 is a top view of the same.

Similar letters of reference indicate corresponding parts.

My invention relates to an improved cotton-press, which is mainly devised for use on smaller cotton-plantations for baling smaller crops in a very convenient and rapid manner, with considerable economy in power and hands.

The invention consists of a cotton-press into which the cotton is transferred in certain quantities by a traveling carriage with removable bottom, to be then condensed by a vertically-moving follower turning in a movable frame on the top part of the press, and finally compressed by a horizontally-moving follower, the bale being tied and taken out of the bale-box by means of hinged side and bottom doors.

In the drawing, A represents the frame of my improved cotton-press, which is of suitable dimensions and strength for the size of bale to be produced therewith. At one side of the frame A is the condensing and bale box B, while at the other side the compressing-follower C is guided in horizontal direction, and at the top part a track is arranged for the movable condensing-follower frame D, and the cotton-conveying carriage E. The cotton is ginned at any suitable place, the gin being preferably provided with a condenser for feeding the cotton in layers to the carriage E, whose body is made movable by guide-bands *a* on vertical standards *b* of the supporting-truck E', to be suspended by cords and hook from a scale for determining the quantity to be placed in a bale. When the required weight of cotton is reached the carriage-box gets seated on the truck E', and is detached from the scale, to be then moved by its truck on rails on suitable guide-

boards to the track on the top of press-frame A. The bottom of carriage-box E slides in guide-recesses of the same by means of a central rack, *d*, operated by a crank-shaft, *e*, with intermeshing pinion *f*. When the carriage E is in exact position above the press-box B, with which it coincides in size, the bottom is withdrawn, and the entire body of cotton therein conveyed instantly into the condensing-box by the attendant jumping on the same, or by other suitable pressure. This transfer of cotton by the movable carriage from the gin to the press-box is repeated until the exact quantity to be baled is placed therein. The top follower-frame is then moved from the end part of the press-frame A over the press-box B, and firmly locked by suitable latch-pieces *g* to the side standards D¹ of frame A. The condensing-follower D² is swiveled to the end of a vertical screw-bolt, D³, with top hand-wheel, and readily raised or lowered by a gear-wheel, *h*, with central screw-thread, that is rotated by intermediate gear and bevel-wheels *h'*, and pulley *h''*, from the driving-shaft; or, if no steam or water power is available, by horse or hand power. The condensing-follower D² is lowered in the condensing-box until seated on the projecting ribs of the side wall of press-box and the compressing-follower C. The power is then transferred, by a sliding worm-wheel, *l*, to a gear-wheel, *l'*, with interior thread, that acts on the horizontal screw-bolt C' of follower C, so as to feed it in forward direction and guide it by means of rear rollers *m* on a horizontal casing, for the even and regular compression of the cotton below the top follower. The shorter sides and bottom of the compressing or bale box are provided with hinged doors *n*, which are secured rigidly during the pressing by strong keys *n'* applied through the end wall. The pressed bale is then, in the usual manner, covered and tied by the bands by raising the top follower and opening the hinged doors, and the complete bale finally dropped through the bottom opening. The doors are then closed, the compressing-follower is withdrawn, and the same operation of filling, condensing, and compressing repeated, the whole operation requiring only one or two men to attend thereto, being accomplished in a very convenient and quick manner, without causing the workmen

to suffer from the injurious dust-particles and other inconveniences of cotton-presses.

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

1. The improved cotton-press, composed of main frame A, with press-box B, cotton-conveying carriage E, with sliding bottom, movable top follower-frame D, with vertical condensing follower D², and lower horizontally-operating compressing-follower C, all being constructed and operated substantially as shown and described.

2. The movable cotton-conveying carriage E, provided with sliding detachable bottom, in combination with press box B for transfer-

ring the entire contents to the press-box, as set forth.

3. The movable top frame D, having condensing-follower D² operated by vertical screw-bolt D³ and suitable gearing, in combination with press-box, after being locked into position, for the purpose of condensing the cotton for final compression, as described.

4. The combination of the followers C D², screw-shafts C' D³, and their operating gears, and the connecting pulley-and-belt mechanism, all constructed and arranged as shown and described.

Witnesses:

WM. KOEHL.

E. L. ANGER,

W. B. ROME.