

(No Model.)

A. C. EVANS.

CORN PLANTER.

No. 307,383.

Patented Oct. 28, 1884.

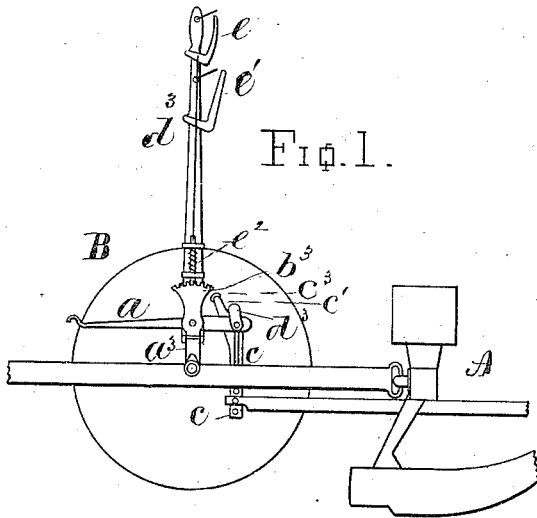


FIG. 1.

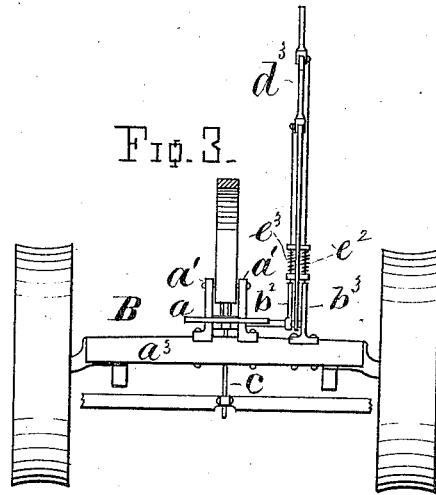


FIG. 3.

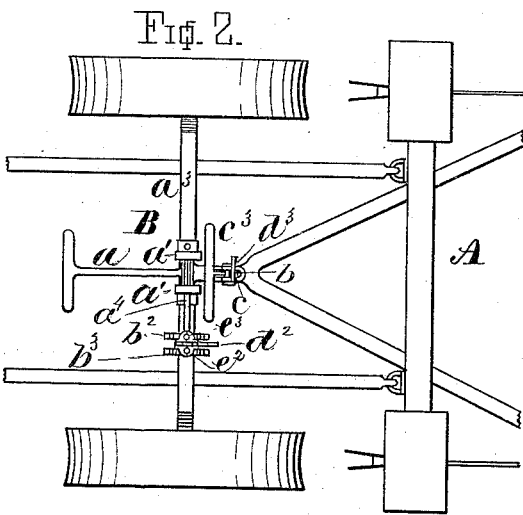


FIG. 2.

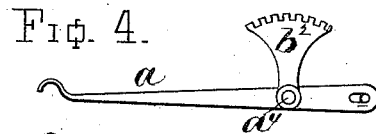


FIG. 4.

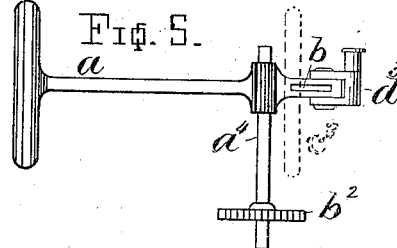


FIG. 5.

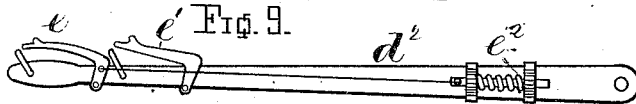


FIG. 9.

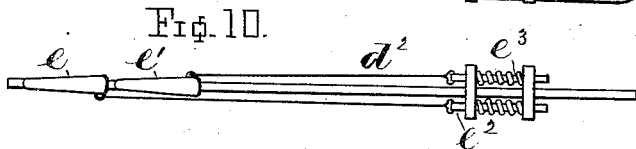


FIG. 10.

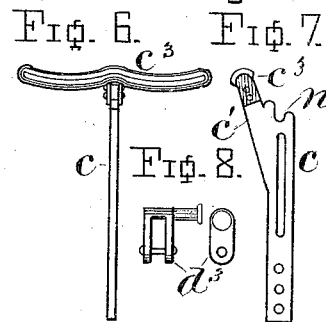


FIG. 6.

FIG. 7.

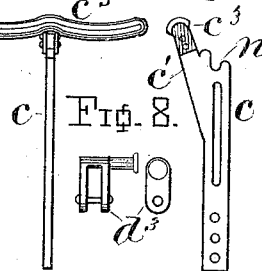


FIG. 8.

Attest.

F. State
M. M. Converse

Inventor
Austin C. Evans
R. C. Converse
Atty.

UNITED STATES PATENT OFFICE.

AUSTIN C. EVANS, OF SPRINGFIELD, OHIO.

CORN-PLANTER.

SPECIFICATION forming part of Letters Patent No. 307,383, dated October 28, 1884.

Application filed September 13, 1883. (No model.)

To all whom it may concern:

Be it known that I, AUSTIN C. EVANS, a citizen of the United States of America, residing at Springfield, in the county of Clark and State of Ohio, have invented certain new and useful Improvements in Corn-Planters, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to improvements in corn-planters.

My invention relates to improvements in the raising and lowering devices in corn-planters; and it consists in certain improvements upon the corn-planter patented to A. C. Evans, July 1, 1879, No. 217,083, also that patented to the same person, dated July 24, 1883, No. 281,756, certain parts of the devices being simplified and some being dispensed with.

Figure 1 is a side elevation of a corn-planter with my improvements applied thereto. Fig. 2 is a plan view of the same. Fig. 3 is a rear view of the same. Figs. 4 to 10 are details.

A is the front and B the rear section of a corn-planter.

a is the foot-lever for elevating the front section. This lever is seen in the detail views, Figs. 4 and 5, and it is pivoted in the two upright standards *a'* on the middle of the axle *a''*, and extends forward and has a vertical longitudinal slot, *b*, in it, through which extends the vertical slotted bar *c*, connecting the foot-lever with the rear or convergent end of the V-shaped bars of the front section.

On the front end of the foot-lever *a*, and straddling the same, is pivoted the dog *d*, as seen in Figs. 1 and 5. This dog is used to lock the end of the foot-lever at the top of bar *c*, and is turned back and engages with notch *n* in the top of *c*. (See Figs. 7 and 8.) Bar *c* has an arm, *c'*, extending, at a slight angle from the perpendicular, rearward and upward above the vertical portion, and this arm is surmounted by the foot pieces or rests *c''*, which extend laterally therefrom, as seen in dotted lines, Fig. 5, and in the rear view of the same, Fig. 6. The object of these foot-pieces attached to the upper end of bar *c* is to enable the operator to press the runners into the ground, through the connection of bar *c* with the front section, (by bearing down with his feet upon the foot-pieces *c''*,) irrespective of the use of either foot or hand lever—that is to say, independently of either. It will be ob-

served here that the bell-crank levers and foot-rests, which in the patent referred to were pivoted in the standards, and were used to force the runners into the ground by their connection with the foot-lever, (used for elevating the latter also,) are dispensed with in this device, and in their stead the foot-rests *c''* are directly attached, as described, to the top of the vertical slotted bar *c*, by which means a less number of levers are used and the operator can more readily control the several movements required.

Instead of pivoting the locking-dog *d* to an arm of the hand-lever, as in the Patent No. 281,756, it is pivoted upon the front end of the foot-lever *a*, straddling it, and can be thrown up into notch *n*, seen in the top of bar *c*, so as to lock the two sections of the planter together rigidly, both when the runners are raised and when in the ground. Foot-lever *a* is attached to its pivotal shaft in the same manner as described in my former patent—*i. e.*, with a square hole in the lever, and that portion of the shaft extending through it being also square; but the shaft *a'* in this device is extended toward the right of the machine some distance beyond the standards, and has its extreme end pivoted in a segment or rack on the axle similar to the segment seen attached upon the shaft near its end. This latter segment, *b'*, is cast in one piece with shaft *a'*. Between the two segments is pivoted upon shaft *a'* a hand-lever, *d'*, which is provided with the latch-bolts *e'* and *e''* on either side of the same, which engage with the teeth of the two segments. Latch-levers *e* and *e'*—one below the other—operate the latch-bolts, and are provided with loops for retaining the latch-bolts when disengaged, which takes place when the foot-lever *a* is operated without the aid of the hand-lever in raising the runners out of the ground, and also when the operator forces the runners into the ground by means of the foot-rests *c''*.

When it is desired to use the hand-lever in conjunction with the foot-lever to elevate the front section, the outside latch-bolt, *e'*, is disengaged from the fixed segment *b'*, and the inside latch-bolt, *e''*, being left engaged, the lever is thrown backward, thus throwing up the front end of the foot-lever or aiding the latter movement.

By reference to the figures it will be seen

- that by leaving the outside latch-bolt, e^2 , on lever d^2 engaged with the fixed segment b^3 , and disengaging the inside latch-bolt, e^3 , the hand-lever d^2 will remain stationary, and the raising and lowering of the runners can be done by means of the foot-lever and the foot-pieces c^3 without the aid of the hand-lever by throwing the dog d^3 into the notch n on the bar c .
- 10 The position of the latch-levers e and e' , which operate the latch-bolts, is shown in the enlarged views, Figs. 9 and 10. Latch-lever e is pivoted above latch-lever e' , and both are on the same side of the hand-lever.
- 15 This arrangement is less liable to confuse the operator, when operating either one separately, than when they are placed opposite to each other on either edge or side of the lever, as has heretofore been done.
- 20 When dog d^3 is engaged with the notch n , the sections A and B are rigidly connected, and they may be locked in adjustment by the engagement of latch-bolt e^2 with the fixed segment b^3 , so that the relation of the dog to the hand-lever in this device is quite different from what is shown in my former patent, No. 281,756, before referred to, as in that the dog is directly connected with the hand-lever. It is obvious that a bar differing from the bar
- 30 c for connecting the sections could be used with foot-pieces attached. I therefore do not confine myself to the specific construction of the connecting-bar c for attaching foot-pieces thereto.
- 35 I am aware that a hand-lever and a foot-lever in a corn-planter have been rigidly connected together, so that by releasing the latch-bolt of the former the foot-lever could be operated in forcing the runners into the ground, as the hand-lever being thus disengaged it is allowed to move back and forth; but I make no claim to this combination, as the operator is in danger of being knocked in the head by the hand-lever thus uncontrolled.
- 40 I am also aware that hand-levers disconnected from foot-levers have been used for the same purpose; but I believe the device herein described is novel, and therefore
- I claim as my invention—
- 50 1. In an agricultural implement, the combination, with the runner-shifting foot-lever of a corn-planter, of an adjustable auxiliary hand-lever, and means for engaging said hand-lever to the foot-lever at one or the other of a series of points, according to the position of the latter in its throw, substantially as described.
- 55 2. The combination, in an agricultural implement, of a shaft, a foot-lever connected to said shaft, and an adjustable hand-lever adapted to be connected to the foot-lever at will at any one of a series of points, according to the position of the latter in its throw, substantially as described.
- 60 3. In an agricultural implement, the combination of a shaft, a foot-lever connected to

said shaft, an adjustable hand-lever and means for connecting it to the foot-lever, and means for locking the said hand-lever to the stationary part of the planter-frame to prevent the movement of either lever, substantially as described.

4. In an agricultural implement, the combination, with the slotted vertical bar c and its connections on the front section, A, of the foot-pieces c^3 , whereby the runners may be forced into the ground irrespective of either the foot-lever or the hand-lever.

5. In an agricultural implement, the combination, with the vertical slotted bar having the notch on the top end, of the foot-lever having the dog pivoted upon the front end of the same, for the purpose set forth.

6. In a corn-planter having the converging V-shaped bars extending rearward from its front section, and flexibly connected at their convergent ends with the raising and lowering devices of the rear section by a vertical slotted bar, the combination, with the latter and the front section, of means for pressing the runners into the ground independently of the aid of either the hand-lever or the foot-lever.

7. In a corn-planter, the combination, with the vertical slotted bar connecting the sections and provided with a notch in its top end, of the foot-lever having the dog pivoted at the front end of the same, the standards and fixed segment upon the axle, the shaft pivoted therein, having a segment thereon, and the hand-lever pivoted upon said shaft between said segments, having the two latch-bolts—one on either side—engaging the teeth of said segments, with the latch-levers for operating said latch-bolts pivoted one above the other on the same side of the hand-lever.

8. In an agricultural implement, the combination, with the pivotal shaft having the segment or rack thereon, and the fixed segment in which the end of said shaft is pivoted, of the hand-lever pivoted upon said shaft between the segments, having a latch-bolt on either side of the same, adapted to engage the teeth of the segments either in raising or lowering the front section of the planter, for the purpose set forth.

9. In a corn-planter having a hand adjusting-lever, and a bar connecting the front and rear sections to allow of the adjustment of the planter to the ground, the combination, with the bar connecting the sections, of suitable foot pieces or rests to allow the operator to force the runners into the ground, and a foot-treadle connected with said bar for raising the runners out of the ground without moving the hand-lever.

In testimony whereof I affix my signature in presence of two witnesses.

AUSTIN C. EVANS.

Witnesses:

THOMAS STRONG,
B. C. CONVERSE.