(No Model.)

W. A. ESTERLY & E. W. POE.

HAND CORN PLANTER.

No. 348,387. Patented Aug. 31, 1886.

Fig: 1.

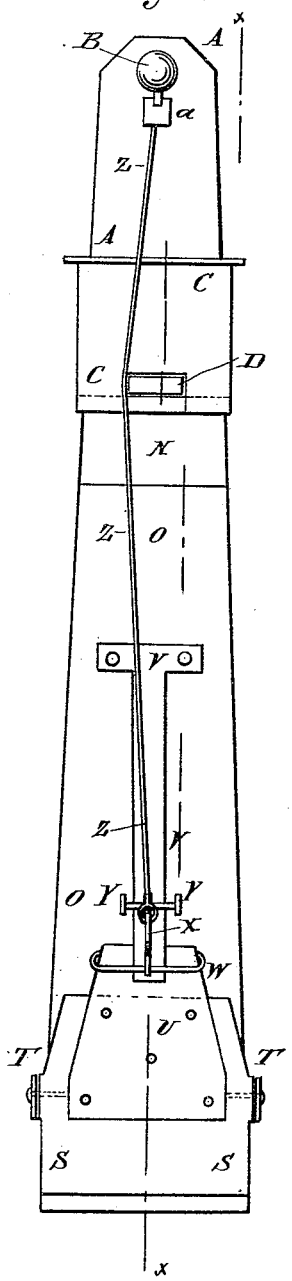


Fig: 2.

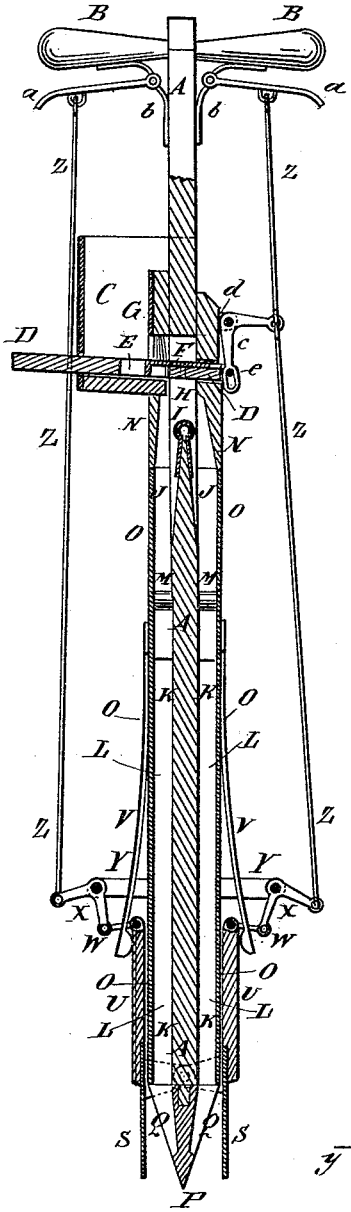


Fig: 3.

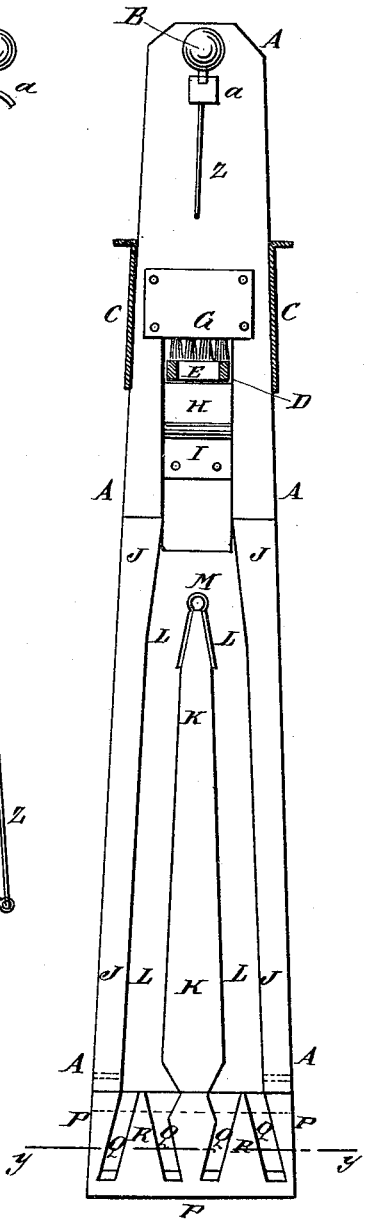
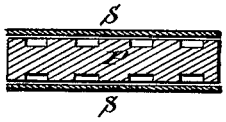


Fig: 4.



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WILLIAM A. ESTERLY AND EBENEZER W. POE, OF BOWLING GREEN, OHIO.

HAND CORN-PLANTER.

SPECIFICATION forming part of Letters Patent No. 348,387, dated August 31, 1886.

Application filed February 19, 1886. Serial No. 192,543. (No model.)

To all whom it may concern:

Be it known that we, WILLIAM A. ESTERLY and EBENEZER W. POE, both of Bowling Green, Wood county, Ohio, have invented a new and useful Improvement in Hand Corn-Planters, of which the following is a full, clear, and exact description.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a side elevation of our improved corn-planter. Fig. 2 is a sectional front elevation of the same, taken through the line *x x*, Fig. 1. Fig. 3 is a side elevation of the same, the seed-box and seed-dropping slide being shown in section, and the side plate and its attachments being removed. Fig. 4 is a sectional plan view of the same, taken through the line *y y*, Fig. 3.

The object of this invention is to provide hand corn-planters constructed in such a manner that the seed will be so scattered that the plants will not impede the growth and thrift of each other, and which at the same time shall be simple in construction, convenient in use, and reliable in operation.

The invention consists in the construction and combination of various parts of the hand corn-planter, as will be hereinafter fully described.

A represents the center plate or stock of the planter. To the upper end of the stock A are attached the handles B, by means of which the planter is carried. To one side of the upper part of the stock A is attached the seed-box C, which may be made of sheet metal or other suitable material.

D is the seed-dropping slide, which passes through openings in the stock A, and in the outer side of the seed-box C, and rests and slides upon the upper side of the bottom of the said seed-box. In the slide D is formed an opening, E, to receive seed and carry it out of the seed-box C. The size of the opening E is regulated by a sheet-metal plate, F, the forward end of which is bent downward to enter the opening E. The rear part of the plate F is slotted to receive the screw that fastens the said plate F to the seed-dropping slide D, so that the gage-plate F can be readily adjusted as more or less seed is to be dropped for a hill. The seed-dropping slide D is kept from carrying out any more seed than is contained in the opening E by a brush, G, attached to the stock A, within the lower part of the seed-box C.

As the seed is carried out of the seed-box C by the slide D, it falls from the opening E of the said slide into the opening H in the stock A. The stock A, at the bottom of the opening H, is beveled upon its opposite sides, and the wedge-shaped edge I thus formed is faced with metal to prevent wear, so that as the seed falls from the opening E, it will be divided, part passing down one side of the stock A and part passing down the other side.

To each side of the stock A at its side edges are attached strips J, extending upward from the lower end of the said stock nearly to the divider I, and to the middle part of each side is attached a strip, K, extending upward from the lower end of the stock A nearly as high as the strips J, so as to form channels L to conduct the seed. The upper end of the center strip, K, is beveled upon its opposite edges and the wedge-shaped edge thus formed is faced with metal to prevent wear. The edges M thus serve to divide the seed, and cause a part of the said seed to pass down each of the four channels L.

The opening H is inclosed by plates N, attached to the stock A, and the channels L are inclosed by plates O, attached to the strips J K. The plates N O can be made of any suitable material; but we prefer to make the plates N of wood and the plates O of sheet metal.

The lower end of the stock A or a tenon formed on the said lower end is inserted and secured in a socket in the upper end of the center jaw, P. In the opposite sides of the center jaw, P, are formed pairs of grooves or channels Q, the channels of each pair inclining toward each other and meeting at an angle at the lower end of a channel, L. The wedge-shaped block R between the channels Q of each pair forms a divider to separate the seed passing down the said channel L, and cause it to pass to the ground through two channels, Q, so that the seed can enter the ground through eight channels.

S are the side jaws, upon the side edges of

the upper parts of which are formed lugs T, which are perforated to receive the screws or pins that hinge the said jaws to the side edges of the lower end of the stock A. The upper parts of the jaws S or plates U, attached to the said parts, extend upward along the side plates, O, and are held against the side plates by springs V, the lower ends of which rest against the outer sides of the upper ends of the plates U, and their upper ends are attached to the upper parts of the side plates, O. The springs V thus open the side jaws, S, and hold them open until they are closed in the manner hereinafter described.

With the upper ends of the plates U are connected by bails W or other suitable means the ends of the lower arms of the elbow-levers X, which are pivoted at their angles to brackets Y, attached to the side plates, O. To the ends of the upper arms of the elbow-levers X are pivoted the lower ends of wires Z, the upper ends of which are hinged to the hand-levers *a*. The hand-levers *a* are hinged at their inner ends to brackets *b*, attached to the stock A and handles B, so that they can be readily operated by the hands that hold the said handles to close the side jaws, S, when the said jaws are to be thrust into the ground. The lower edge of the center jaw, P, projects five eighths of an inch (more or less) beyond the lower edges of the side jaws, S, as shown in Fig. 1, so that the planter can be readily forced into the ground.

One of the wires Z is made in two parts, the adjacent ends of which are hinged to the end of the outer arm of the elbow-lever *c*. The elbow-lever *c* is hinged at its angle to supports *d*, attached to the plate N or stock A, and its lower arm is slotted to receive a staple, *e*, or other coupling attached to the end of the seed-dropping slide D, so that the said slide will be operated by the same movement that closes the side jaws, S, to drop the seed into the channels Q between the center jaw, P, and the said side jaws, S, ready to pass out into the ground when the levers *a* are released and the side jaws, S, are opened by the action of the springs V.

We do not claim, broadly, a hand corn-planter provided with a wedge-shaped device for dividing the grain as it passes downward from the hopper, since we are well aware this is not a new feature.

Having thus fully described our invention, we claim as new and desire to secure by Letters Patent—

In a hand corn-planter, the combination, with the stock A, having opening H, dividers I M, and channels *n*, and the hinged side jaws, S, and an operating mechanism, of the center jaw, P, having dividers R and channels Q, substantially as herein shown and described, whereby the seed will be further divided before being discharged into the ground, as set forth.

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