

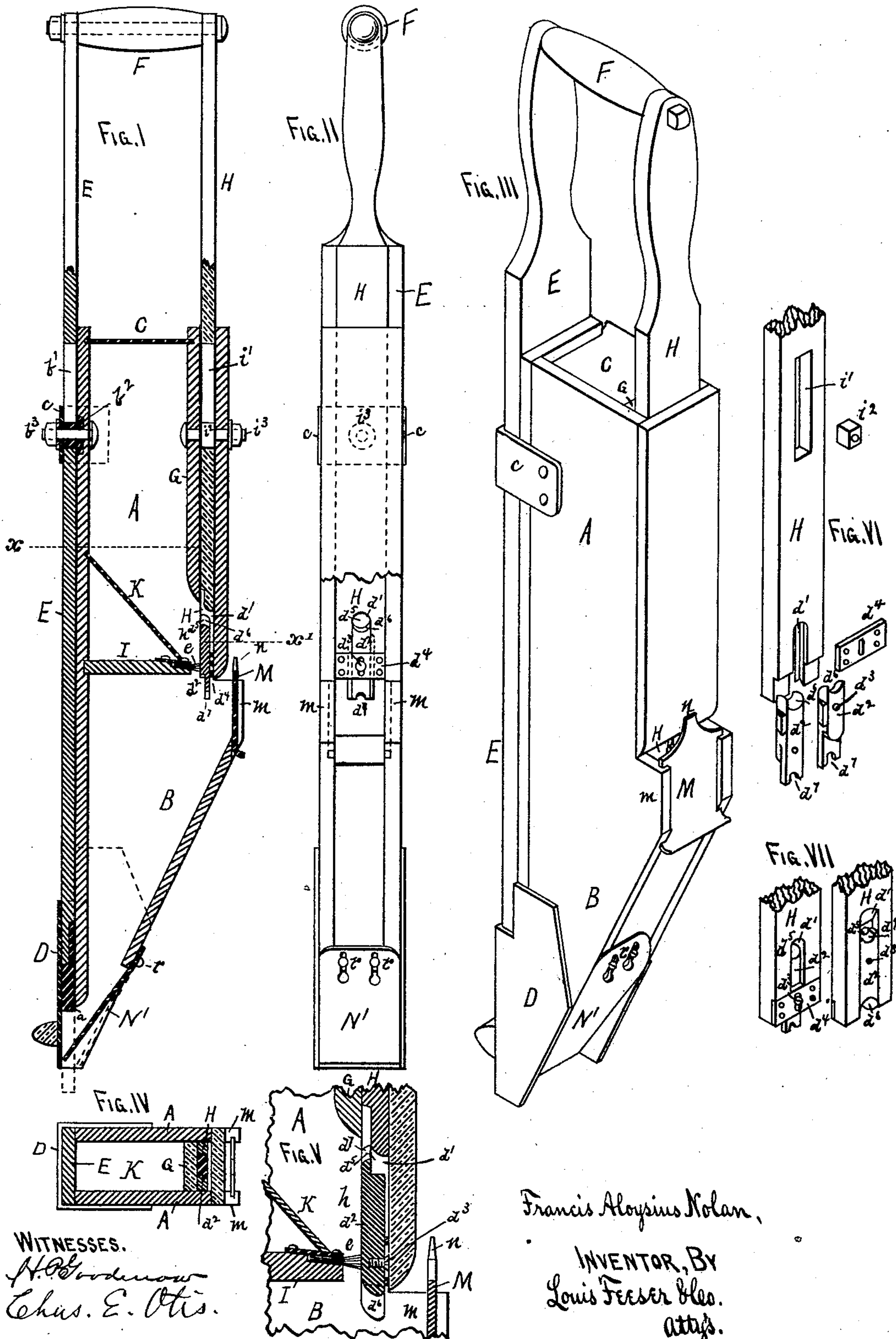
(No Model.)

F. A. NOLAN.

HAND CANE, CORN, AND BEAN PLANTER.

No. 247,098.

Patented Sept. 13, 1881.



UNITED STATES PATENT OFFICE.

FRANCIS A. NOLAN, OF DAYTON, MINNESOTA.

HAND CANE, CORN, AND BEAN PLANTER.

SPECIFICATION forming part of Letters Patent No. 247,098, dated September 13, 1881.

Application filed January 17, 1881. (No model.)

To all whom it may concern:

Be it known that I, FRANCIS ALOYSIUS NOLAN, of Dayton, in the county of Hennepin and State of Minnesota, have invented certain
5 Improvements in Hand Cane, Corn, and Bean Planters, of which the following is a specification.

This invention has reference to that class of
10 planters operated by hand, and in which the seed or grain is fed in regulated quantities from the seed-receptacle into the ground, plungers being employed to effect the feeding and depositing of the seed or grain in the soil; and it consists in the construction and the combination of parts hereinafter described, and then
15 sought to be specifically defined by the claims. I accomplish these results by the use of the mechanism illustrated by the accompanying drawings, in which—

20 Figure I is a sectional side elevation. Fig. II is a front elevation with a portion of the front broken out to show the arrangement of the feed-slide. Fig. III is a perspective view of the planter. Fig. IV is a plan view in section on the line $x x'$ of Fig. I. Fig. V is an enlarged sectional view of the feed-slide, &c.;
25 Figs. VI and VII, perspective views of the feed-slide, &c., detached, illustrating the manner of its arrangement.

30 A is a box or receptacle provided with an inclined bottom, B, and sliding cover C, in the ordinary manner.

Dis a sheet-metal "nose," arranged to inclose
35 three sides of the lower part of the inclined bottom B, and with a space between its rear part and the back of the receptacle A, to serve as a guide for a plunger, E, which is provided with a metal foot, a , and runs upward above the top C and ends in a handle, F. Near the
40 top of the receptacle A this plunger is provided with a slot, b' , through which a stationary metal stop, b^2 , secured in the back of the receptacle A, passes to regulate the throw of the plunger. A sheet-metal strap, c , is bent
45 around the plunger E, and a portion of each side of the box A, and secured thereto and provided with a bolt, b^3 , passing through the strap c , metal stop b^2 , and box A, thus holding them all rigidly together, and at the same time
50 forming a guide for the upper part of the plunger.

G is a perpendicular partition running across

the interior of the box A, leaving a narrow space between it and the front of the casing A, in which a second plunger, H, connected to
55 the opposite end of the handle F from the plunger E is arranged to slide up and down, and provided with a slot, i' , stationary metal stop i^2 , and bolt i^3 , similar to the slot b' and stop b^2 of the plunger E, by which the throw is
60 regulated, both plungers thus acting together by one movement.

I is a horizontal partition running across the box A and reaching nearly to the front, and provided with a brush, e , on its front edge and
65 an inclined piece, K, above it, said incline forming the bottom of the seed-receptacle and causing the seed to be all run toward the front. The partition G does not reach quite down to the partition I, but a space, h , is left for the
70 escape of the seed. The lower part of the plunger H is provided with a long open slot, d' , in which a slide, d^2 , is arranged to be adjusted higher or lower by a screw, d^3 , set through a metal plate, d^4 , on the face of the lower part
75 of the plunger, by which the hole d^5 , through which the seed escapes, may be regulated to adapt it to different kinds of seed. The slide d^2 is formed with a large curved notch, d^6 , in one end and a smaller curved notch, d^7 , in the
80 other, so that by removing the screw d^3 the slide may be turned end for end and either notch used, the smaller notch d^7 being for small seeds—such as sorghum, sugar-cane, &c.—while the larger notch d^6 is for corn, beans,
85 &c. The upper part of the inclined bottom B projects beyond the face of the front of the receptacle A at m , and is provided with a slide, M, forming a shield or guard to the feed-slide d^2 , which by its removal affords access to the
90 slide to adjust or change it, one end, n , being formed into a screw-driver, by which to operate the screw d^3 , or a square or octagon hole will be cut through it when a bolt is substituted for the screw.

95 N' is a flat spring-plate secured by its top to the lower part of the front of the inclined bottom B by screws r , setting through slots in the spring-plate, so that it may be adjusted higher or lower to regulate the pressure of its
100 lower end upon the back of the nose D or plunger E, to adapt it to different kinds of soil or to compensate for wear to the spring-plate.

To operate the planter the slide d^2 is set

higher or lower to adapt it to the kind of grain and number of kernels it is desired to plant in each hill, and the seed placed in the receptacle A. The plate K, forming a hopper-bottom to the receptacle, causes the seed to press with some degree of force upon the lower part of the plunger H, and thus fills the space d^5 with seed. The plungers E H are then run down by the handle F, which causes the brush e to cut off the seed except what is in the space d^5 , and this seed then falls down into the angular corner between the lower ends of the spring-plate N' and plunger E. The plungers and the whole planter are then lifted up, which raises the plungers and allows the space d^5 to again fill with seed, and the seed that has fallen down before to run into the corner between the nose-plate D and spring-plate N', so that when the planter is set over the spot where it is desired to plant a "hill" the first kernels dropped into the angular nose will be forced into the ground and another hill of kernels dropped, and so on.

I am aware that, separately considered, in hand-planters, an inclined bottom to the seed-receptacle, connected plungers, notched slides,

and reversible slides are not new; also, that it is not new to have a plunger slotted and guided by stops held in the slots, and I hereby enter a disclaimer to the said several enumerated features, separately considered.

What I claim as new is—

1. The receptacles A and B, each provided with inclined bottoms, in combination with the connected plungers E and H and brush e , the plunger H having the slot d' , and provided with the adjustable and reversible notched slide d^2 , whereby the several parts will operate as set forth, for the purpose specified.

2. The combination of receptacles A and B, the latter having the offsets m , and the sliding detachable guard M, as and for the purposes set forth.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

FRANCIS ALOYSIUS NOLAN.

Witnesses:

C. N. WOODWARD,
LOUIS FEESER.