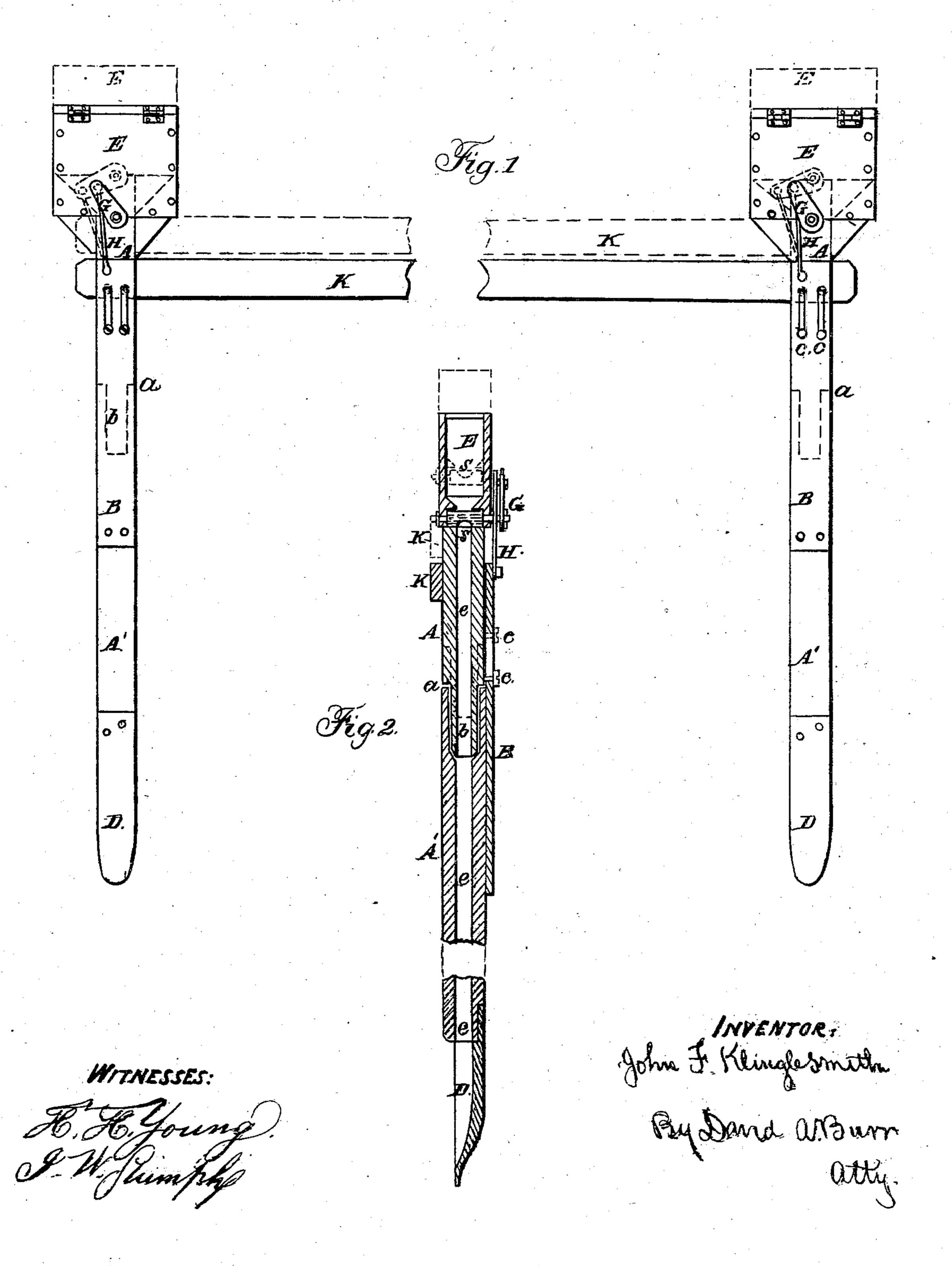
## J. F. KLINGLESMITH.

Hand Planter.

No. 80,746.

Patented Aug. 4, 1868.



# Anited States Patent Pffice.

### JOHN F. KLINGLESMITH, OF HARDIN COUNTY, KENTUCKY.

Letters Patent No. 80,746, dated August 4, 1868.

#### IMPROVEMENT IN HAND CORN-PLANTER.

The Schedule referred to in these Xetters Patent and making part of the same.

#### TO ALL WHOM IT MAY CONCERN:

Be it known that I, John F. Klinglesmith, of the county of Hardin, and State of Kentucky, have invented a new and useful Improvement in Construction of Hand Corn-Planters; and I do hereby declare the following to be a full and exact description thereof, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 is an elevation of my improved corn-planter, and Figure 2 a central vertical section in line x x of fig. 1.

Similar letters indicate corresponding parts in each figure.

My invention relates to that form of hand-planters having the hollow staff divided into two sections, the lower end of the upper section being made to slide down into the upper end of the lower section, and consists in combining a crank, on the end of a cylinder, in the bottom of the seed-hopper, with the lower section of the staff, by means of a connecting-rod or link, so that by lifting the upper section the gravity of the lower section will cause the cylinder to make a semi-revolution, and carry a seed-receptacle formed on its periphery, from an upright position in the bottom of the hopper to an inverted position over the hollow of the staff, to discharge the seed thus carried from the hopper into the same.

In the accompanying drawings—

A A' represent the staff of my improved planter, divided at a, a projecting tube, b, from the upper section A, being made to fit down into a corresponding recess in the upper end of the lower section A', as illustrated

in fig. 2, and by dotted lines, fig. 1.

A plate, B, is secured to the front face of the lower section A', and projects upwardly over the face of the upper section. This plate is slotted near its upper end, and screws, c c, are inserted through these slots into said upper section, forming guides, allowing a free vertical play of the sections to the extent of the length of said slots, but preventing any lateral play.

A tubular cavity, e, fig. 2, extends from end to end of the staff A A', down to an open metallic point or share, D, of such length as to allow the seed to distribute itself, after passing from the mouth d, fig. 2, of the staff, before reaching the ground, and so hollowed out as that, when forced into the ground, it will deposit the

grain at a proper depth.

Upon the upper end of the tubular staff is placed a suitable hopper, E.

The bottom of said hopper is closed by a cylinder, F, fig. 2, provided with suitable bearings at each end thereof, permitting its free revolution.

A seed-receptacle, S, large enough to hold the requisite number of kernels of corn or of other seed to be

planted in each hill, is formed in the periphery of the cylinder F.

Its front journal is extended outwardly to receive a crank-arm, G, which is properly secured thereto, and to whose outer end is pivoted a link, H, which is also pivoted below to the plate B, projecting from the lower section A' of the staff.

By this combination of the crank G, and its actuating-link H with said cylinder, and with the lower section A' of the staff, when the two sections are closed together, as shown in the positive lines of the drawing, the said receptacle S, in the bottom of the hopper, will be thrown into an inverted position over the cavity e of the staff, but when, by lifting the upper section, it is drawn out from the lower section, which is kept down by its weight, the crank is made to turn, it will cause the cylinder F to revolve until the seed-receptacle S shall attain an upright position in the bottom of the hopper, and receive a charge of seed, as illustrated by red lines in the drawings, to be discharged into the cavity of the staff, and dropped through the same when it shall be next pressed into the ground.

My planter may be operated singly, but I prefer to combine two staffs together by a cross-bar, K, of a length equal to the distance required between the rows of corn, as shown in the drawings.

The improved corn-planter thus constructed is cheaply made, is simple, and effective.

In operation, the farmer having the hoppers E filled with grain, will carry the planter by its cross-bar K. While so doing, the receptacles S, in the cylinder F, will remain in their upright position in the bottom of the hoppers; but, by pressing the shares D of the planter into the ground, the two sections, A A', thereof, will be forced together, and will cause the links H to turn the cranks G, and with them the cylinders F, so as to reverse the positions of the receptacles S S, and drop the kernels of grain therefrom to the ground, within the shares D, before they are lifted from their place.

So soon as the planter is lifted again, the upper sections A will be drawn away from the lower sections A', and by causing a reverse movement of the cylinders F, by means of their cranks, G, will place the receptacles

SS into upright positions to be again filled.

Thus the alternate lifting and pressing down of the planter causes an automatic delivery of the proper amount of seed, through the tubes or shafts of the apparatus, at each spot upon which they are placed.

Having thus fully described my improved hand corn-planter, I claim therein as new, and desire to secure

by Letters Patent-

A rocking-cylinder, F, and seed-receptacles S therein, placed in the bottom of a hopper, E, over a delivery-tube in a divided shaft, A A', when combined by means of a crank, G, and pivoted connecting-link H, with a slotted guide-plate, B, secured in the lower section A' of said shaft A A', the whole being constructed, arranged, and made to operate substantially in the manner and for the purpose herein set forth.

The foregoing specification of my improved corn-planter signed by me, this 11th day of March, 1868.

JOHN F. KLINGLESMITH.

#### Witnesses:

M. H. COFER, C. W. QUIGGINS.