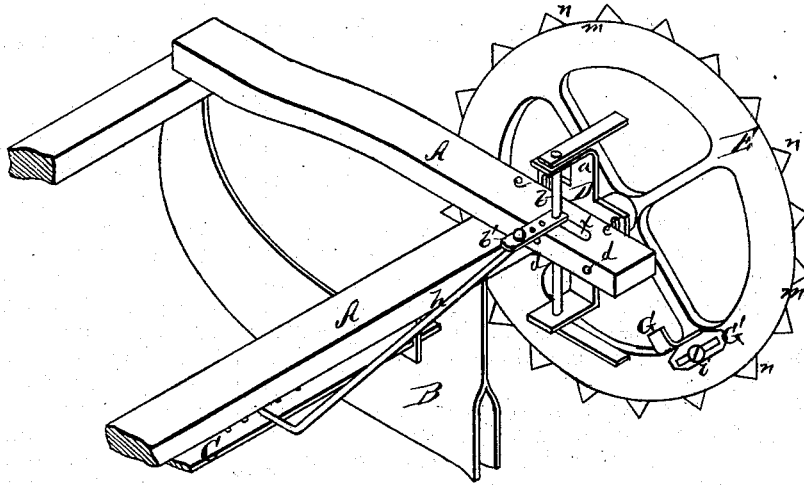


W. W. S. KIME.  
Corn-Planter Attachment.

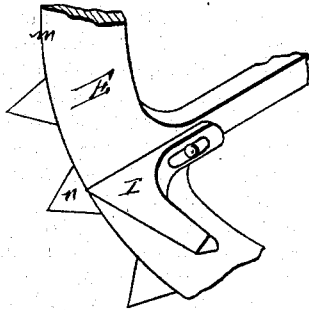
No. 198,629.

Patented Dec. 25, 1877.

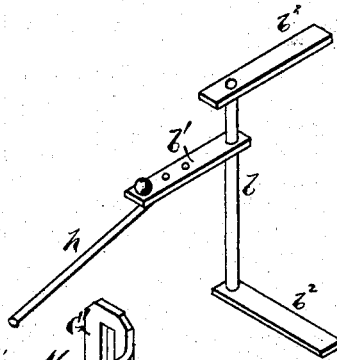
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



*Fig. 4.*



Witnesses:

*W. C. J. & Co. Carter,*  
*C. F. Ernst*

Inventor

*W. W. S. Kime*

Per

*D. H. Alexander & Elliott,*

Attorneys.

# UNITED STATES PATENT OFFICE.

WARREN W. S. KIME, OF VICTOR, IOWA.

## IMPROVEMENT IN CORN-PLANTER ATTACHMENTS.

Specification forming part of Letters Patent No. **198,629**, dated December 25, 1877; application filed November 20, 1877.

*To all whom it may concern:*

Be it known that I, WARREN W. S. KIME, of Victor, in the State of Iowa, have invented certain new and useful Improvements in Corn-Planter Attachments; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form part of this specification.

The nature of my invention consists in the construction and arrangement of an attachment for corn-planters, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawings, in which—

Figure 1 is a perspective view of a part of a seed-dropper, showing my improvements; and Figs. 2, 3, and 4 are detail views of parts thereof.

A represents a portion of the frame, and B the runners, of any ordinary corn-planter. C is the reciprocating dropping-slide of the same.

On one side of the machine is secured a casting, D, from at or near the center of which projects a spindle to receive the wheel E. The casting D has its ends turned or extending inward, as seen at *a a*, and in these a shaft, *b*, has its bearings. These parts may be so arranged that the shaft *b* shall pass through a slot, *x*, in one of the beams of the frame A, or they may be so arranged that said shaft will run along the side of such beam, the object in either case being to allow said shaft to be adjusted up or down, or to the right or left, as required.

The casting D is secured to the frame A by means of bolts *d d*, passing through slots *e e* in the casting, whereby said casting may be adjusted up or down, and also on a curve to the right or left, and carrying the shaft *b* with it. The shaft *b* is provided with an arm, *b<sup>1</sup>*, which has a series of holes for the adjustable attach-

ment of a rod, *h*, which connects the same with the dropping-slide C. The shaft *b* is further, at its ends, provided with cranks *b<sup>2</sup> b<sup>2</sup>*, standing at right angles to each other, and these cranks are operated by an L-shaped arm, G, attached to the inner side of the wheel E. The arm G projects from a slotted plate, G', which is fastened by a screw or bolt, *i*, to the wheel, and can thus be adjusted as required for the proper working of the device.

For each revolution of the wheel E the arm G, striking first one crank and then the other, gives the slide C a movement first to one side and then to the other, so as to drop two hills for each revolution of the wheel.

The wheel E is cast with its rim forming a sharp or knife edge, *m*, which is notched to form teeth *n*, whereby the wheel will better take hold in the ground, and also clean itself as it passes out of the ground. On the outer side of the wheel E are secured two markers, I I, which are adjustable radially out and in. This is of great importance, because in different kinds of soil the markers should be placed differently, or, in other words, should enter the ground more or less, to give the proper marks.

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

1. The adjustable casting D, carrying the wheel-spindle, and also the shaft *b*, in combination with the perforated arm *b<sup>1</sup>*, adjustable connecting-rod *h*, and slide C, substantially as and for the purposes herein set forth.

2. The combination of the adjustable casting D, shaft *b*, connected to the slide C, the cranks *b<sup>2</sup> b<sup>2</sup>*, and the adjustable arm G, attached to the wheel E, as and for the purposes set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

W. W. S. KIME.

Witnesses:

JNO. B. KESSER,  
N. F. KIME.