

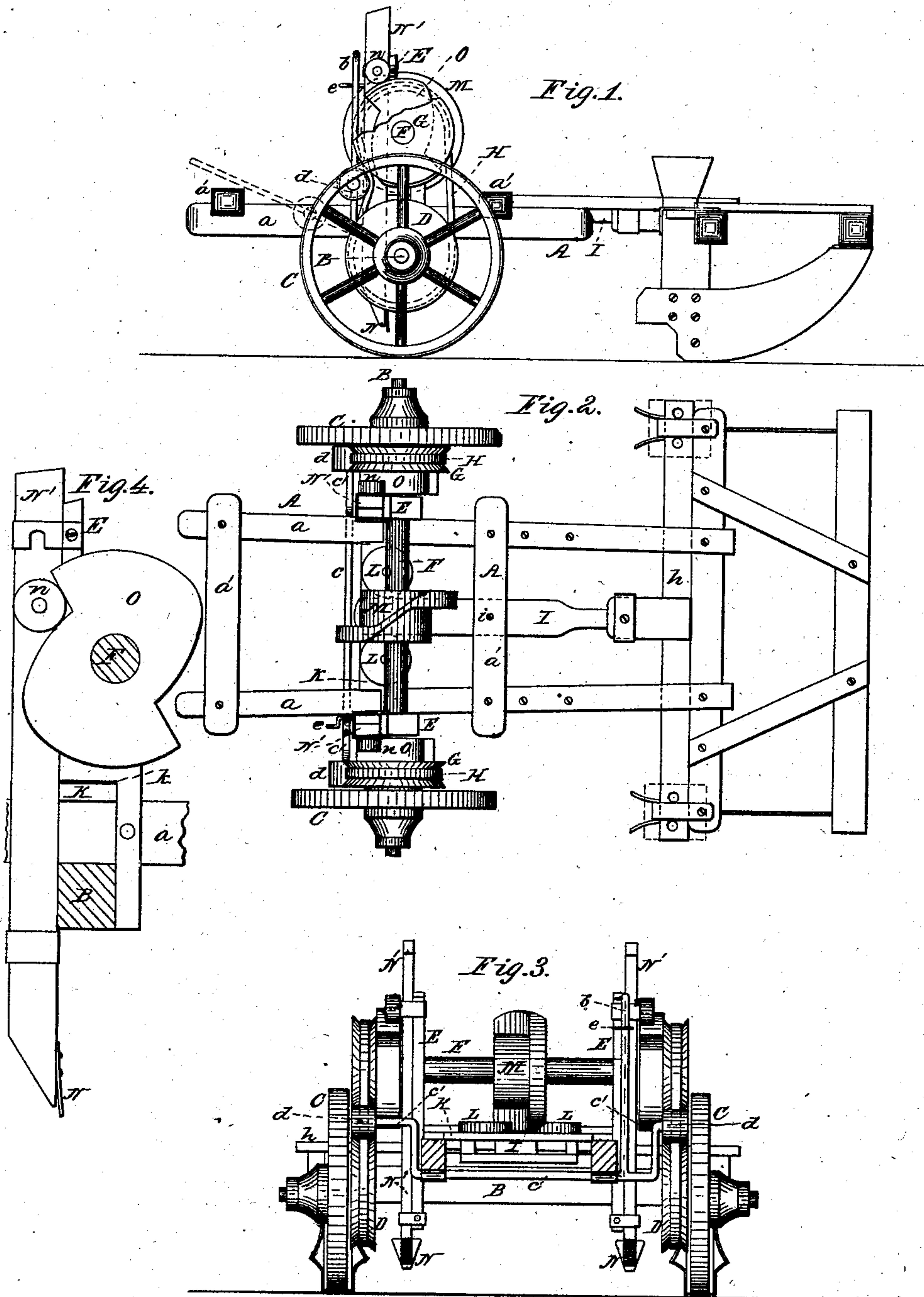
(No Model.)

B. NUNAMACKER.

CORN PLANTER.

No. 289,927.

Patented Dec. 11, 1883.



Witnesses:  
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# UNITED STATES PATENT OFFICE.

BY NUNAMACKER, OF DE SOTO, IOWA.

## CORN-PLANTER.

SPECIFICATION forming part of Letters Patent No. 289,927, dated December 11, 1883.

Application filed July 3, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, BY NUNAMACKER, a citizen of the United States of America, residing at De Soto, in the county of Dallas and State of Iowa, have invented certain new and useful Improvements in Corn-Planters; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification, and in which—

Figure 1 is a side elevation; Fig. 2, a top plan view. Fig. 3 is an end view; Fig. 4, a detail.

My invention relates to certain improvements in corn planters and markers; and it consists of certain novel constructions and arrangements of parts, all of which I will now proceed to describe.

Referring to the drawings, similar letters of reference indicate like parts.

A is the frame of the machine, consisting of the side bars, *a*, and cross-bars *a'*.

B is the axle, and C the driving-wheels.

D are pulleys, mounted upon the axle B, and secured to the driving-wheels C, so that said pulleys make the same number of revolutions as the driving-wheels.

E are upright guides, secured to the side bars, *a*.

F is a shaft, having its bearing in the upright guides E.

G are pulleys, mounted upon the shaft F, and connected with the pulleys D by the band H.

*b* is a lever, fastened at one end to the rod *c*, which has its bearings in the side bars, *a*. On each end of the rod *c* are arms *c'*, provided with the rollers *d*.

*e* is a spring-catch, which engages with the top of the lever *b*. When it is desired to operate the pulleys, the lever is raised to a vertical position, as shown in Fig. 1, and the rollers *d* forced against the bands H, and, tightening said bands, operate the pulleys, thus throwing the machine in gear. The le-

ver being released from the spring-catch *e*, the band is loosened and the machine thrown out of gear.

I is a lever, fulcrumed at *i*, and having one end pivoted to the slide-bar *h*, the other end being pivoted to the reciprocating cross-bar K, which works in the slots or guides *k*.

L are friction-rollers, secured to the top of the cross-bar K.

M is a cam-wheel, mounted upon the shaft F. Said cam-wheel, operating against the friction-rollers L, actuates the cross-bar K and lever I, thus operating the seed-planting mechanism.

N are marking-spades, having the shanks N', which work in the upright guides E.

*n* are friction-rollers, secured to the shanks N'.

O are cam-wheels, mounted upon the shaft F, and, operating against the friction-rollers *n*, actuate the markers N. These cam-wheels alternately raise and lower said markers, and are so arranged as to let the markers fall as they come opposite the spot where the seed is dropped, thus marking the exact position of the same.

The operation of my machine is as follows: The machine being thrown in gear, the cam-wheel M, operating against the friction-rollers L, actuates the lever I and seed-valve mechanism, and the cam-wheels O, operating against the rollers *n*, alternately raise and lower the marking-spades, letting the same fall as they come opposite the point where the seed is dropped.

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

1. In a corn-planter, the marking-spades N, having the shanks N', and friction-rollers *n*, in combination with the upright guides E, cam-wheels O, pulleys D and G, and bands H, substantially as and for the purpose shown and described.

2. In a corn-planter, the pulleys D and G, bands H, shaft F, and cam-wheel M, in combination with the cross-bar K, having the friction-rollers L, the lever I, and slide-bar *h*, substantially as shown and described.

3. In a corn-planter, the pulleys D and G,  
bands H, shaft F, cam-wheel M, cross-bar K,  
having the friction-rollers L, and the lever I,  
in combination with the cam-wheels O and  
5 marking-spades N, having the shanks N', and  
rollers n, substantially as and for the purpose  
shown and described.

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

BY NUNAMACKER.

Witnesses:

A. F. CONYERS,

JOHN R. DOUGLAS.