

(No Model.)

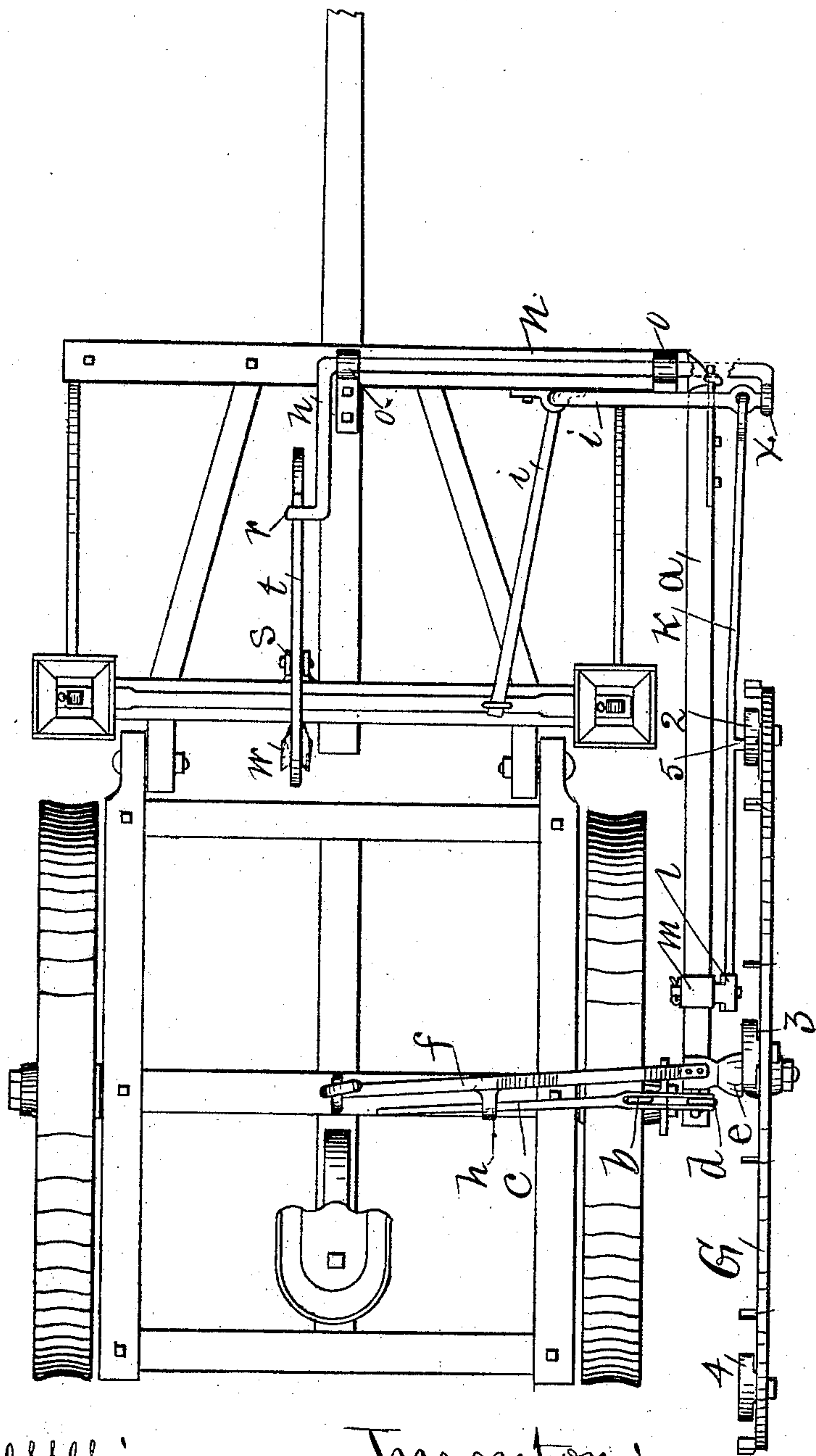
2 Sheets—Sheet 1.

C. A. ANDERSON.
CORN PLANTER AND MARKER.

No. 257,429.

Patented May 2, 1882.

Fig. 1



Witnesses:

H. E. Heers,
Frank V. Heers.

Inventor:

Charles A. Anderson,
By Thomas G. Orwig, atty.

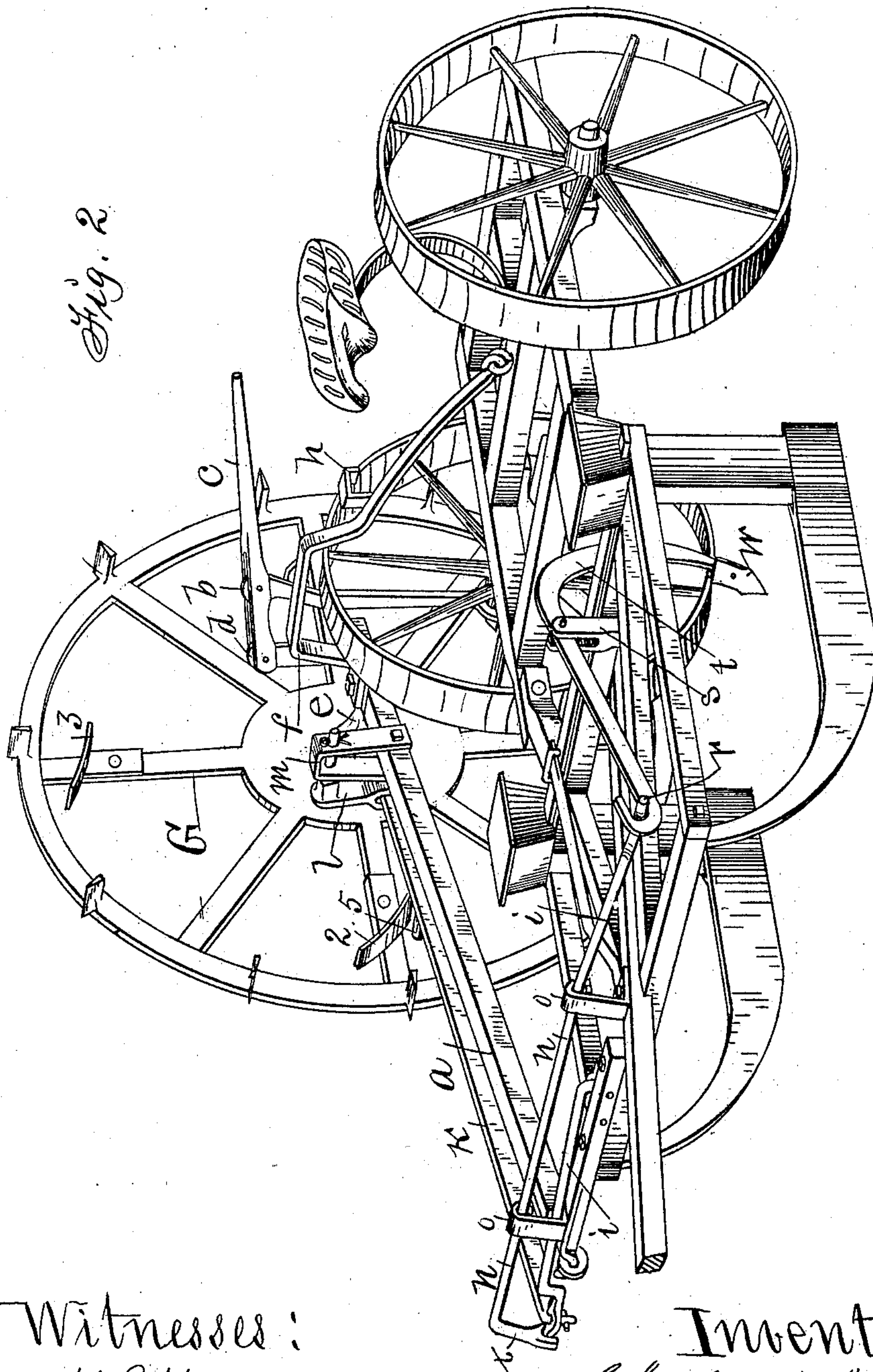
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UNITED STATES PATENT OFFICE.

CHARLES A. ANDERSON, OF MINERAL RIDGE, ASSIGNOR OF ONE-HALF TO
CHARLES NELSON, OF KINGSTON, IOWA.

CORN PLANTER AND MARKER.

SPECIFICATION forming part of Letters Patent No. 257,429, dated May 2, 1882.

Application filed September 30, 1881. (No model.)

To all whom it may concern:

Be it known that I, CHARLES A. ANDERSON, of Mineral Ridge, in the county of Boone and State of Iowa, have invented an Improved
5 Corn Planter and Marker, of which the following is a specification.

My invention is an improvement of Patent No. 174,179, issued to me February 29, 1876; and my object is to accomplish the results contemplated by constructing my operating mechanism in the form of an attachment that can
10 be readily applied to the carriages of corn-planters of various styles of manufacture.

It consists in hinging a beam to the front
15 end of one of the runners and combining it with the axle of the rear carriage by means of a hinged prop or fulcrum and an adjustable lever, in such a manner that an auxiliary traveling wheel can be mounted at the side of the car-
20 riage, to be raised and lowered at pleasure and to actuate the seed-dropping and marking mechanism when desired, as hereinafter fully set forth.

Figure 1 of my drawings is a top or plan view,
25 and Fig. 2 a perspective view, showing my invention combined with a corn-planter. Together they illustrate the construction, application, and operation of my complete invention.

30 *a* is a beam linked or hinged to the front end of one of the runners by means of a hook and eye, or in any suitable way so that it can be readily attached and detached.

b is a post pivoted to the end of the carriage-axle, to extend upward aside of the carriage-wheel. *c* is a hand-lever pivoted to the
35 top end of the post or pivoted fulcrum *b*, so that its long arm extends inward toward the driver's seat, and its short arm is connected
40 with the rear end of the beam *a* by means of a link, *d*.

e is a stub-axle fixed to the rear end of the hinged beam *a*. It has an extension, *f*, that
45 bends upward over the carriage-wheel, and is linked to the central portion of the carriage-frame by means of a hook and eye, or other suitable fastening device that will form a flexible connection and allow the removal of my attachment whenever desired.

50 *G* is an auxiliary wheel of enlarged circum-

ference, mounted on the stub-axle *e*, projecting from the flexibly-connected beam *a*. It has a series of cutters extending laterally from its periphery, to enter the ground as the wheel revolves and to prevent it from slipping.

55 *h* is a hook extending rearward from the brace or stub-axle extension *f*, that is designed to engage the hand-lever *c* when it is depressed to elevate the rear end of the hinged beam *a* and the wheel *G* to make the wheel inopera-
60 tive, whenever desired, by simply suspending it so it cannot engage the ground.

i i represent an elbow-crank pivoted to the cross-bar of the front carriage. One branch
65 of this crank is connected with the seed-slide by means of a loop or in any suitable way, and the other branch extends laterally to a point near the front end of the hinged beam *a*.

k is a pitman, connected at its front end with the elbow-crank arm *i* by means of a hook
70 and eye, and flexibly connected at its rear end with the beam *a* by means of a crank, *l*, that is pivoted to a bearing, *m*, that projects upward from the beam *a*.

n n is a rock-shaft, fixed to the front cross-
75 piece of the front carriage by means of suitable bearings, *o o*. It has a bend and lateral extension, *r*, that engages the front end of a marking device that is pivoted to the front carriage by means of a bearing, *s*, and consists of a
80 curved standard or beam, *t*, and a marker, *w*, attached to its lower end, to be automatically operated to make marks in line with the points where the seeds are dropped and planted, as
85 required to guide the driver in forming check-rows.

1 (not shown) 2 3 4 are plates, attached to the spokes of the auxiliary wheel *G* by means of set-screws in such a manner that they can
90 be adjusted relative to a pin or branch, 5, projecting outwardly and horizontally from the pitman *k*. These plates are inclined in reverse ways to perform the functions of cams and to engage the pin 5, and thereby impart a recip-
95 rocating motion to the pitman as the complete machine is advanced and the wheel *G* revolved. The pitman *k* thus actuated operates the bell-crank *i i*, and thereby imparts a reciprocating motion to the seed-slide at regular intervals of
100 time to drop seeds at regular intervals of space.

The backward movement of the same pitman *k* by means of the bell-crank *i* rocks the shaft *n*, and through the medium of the arm *x* and beam *t* lowers the marker *w* to scrape the ground and make a mark therein at the same instant seeds are dropped, and the forward motion of the same pitman causes a reverse action of the parts and lifts the marker *w*; and by this coaction of the parts specified marks are made in line with every other row that extends across the field at right angles to the advancing machine, to serve as a guide in directing the driver to govern the machine so as to produce straight rows.

By means of my attachment for corn-planters, planting and marking may be automatically and simultaneously performed and a field planted in check-rows without previous marking by one person, who can ride on the driver's seat and govern the machine as it is advanced to and fro across the field by means of horses attached thereto.

I claim—

1. The seed-dropping attachment for corn-planters, composed of the hinged beam *a*, the pivoted fulcrum *b*, the lever *c*, link *d*, stub-axle *e*, hinged stay *f*, having a hook, *h*, the auxiliary wheel *G*, having cam-plates 1 2 3 4, the bell-crank *i*, and the pitman *k*, having a pin, 5, substantially as shown and described, to be operated as set forth.

2. In a corn-planter, the combination, with the hinged beam *a*, cam-wheel *G*, axle and stay *e f*, pitman *k*, and bell-crank *i*, of the rock-shaft *n*, having arm *x* and extension *r*, the beam *t*, and marker *w*, all constructed and adapted to operate substantially as described.

CHARLES A. ANDERSON.

Witnesses:

D. D. MIRACLE,
J. S. KANNAR.