

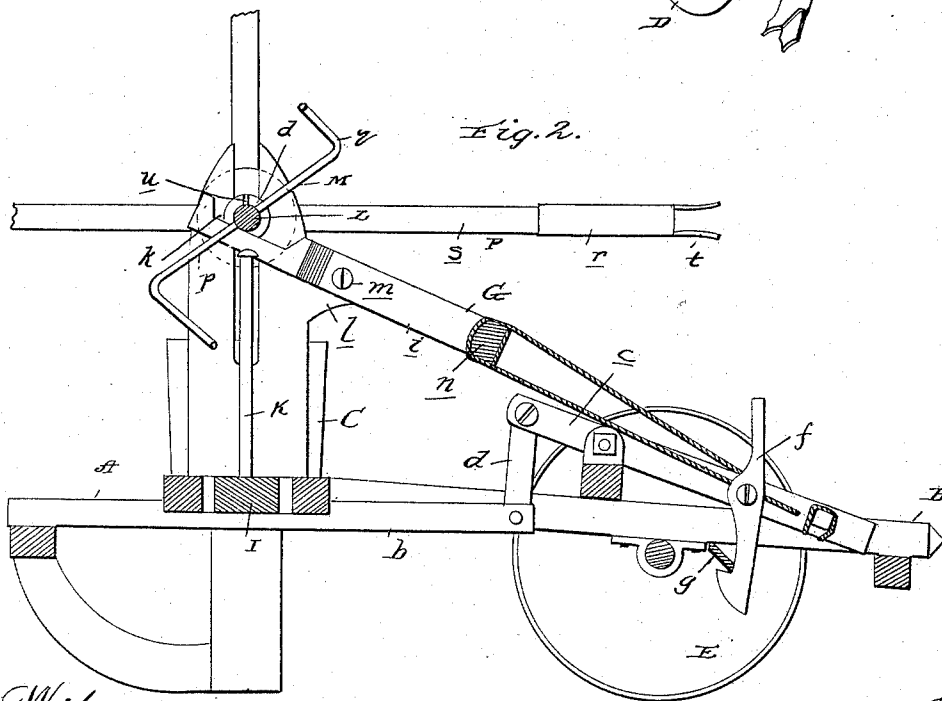
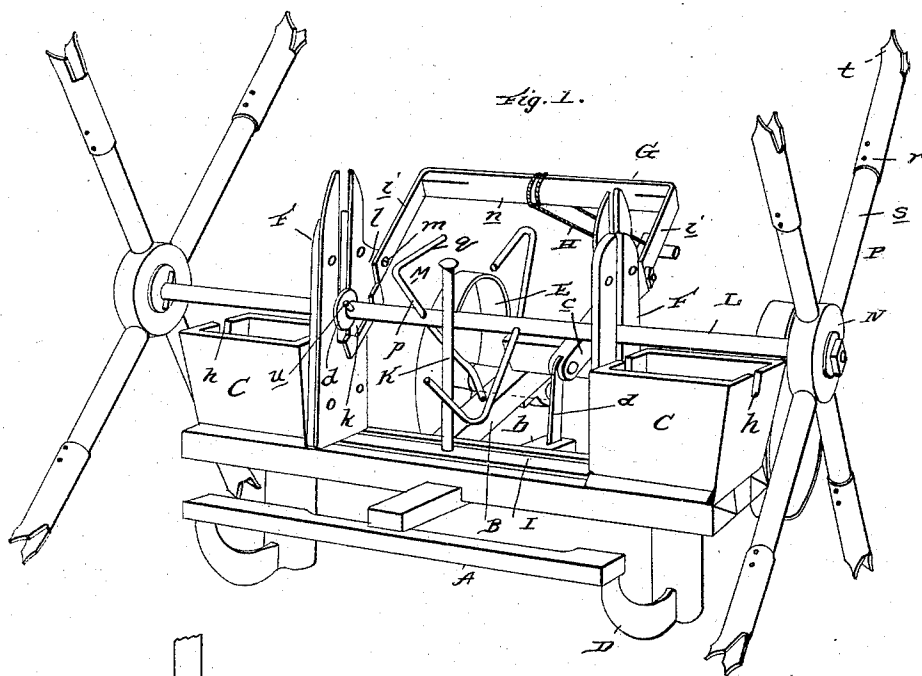
(No Model.)

2 Sheets—Sheet 1.

G. J. CLINE.
ATTACHMENT FOR CORN PLANTERS.

No. 476,036.

Patented May 31, 1892.



Witnesses:
C. Raeder
W. F. Matthews.

Inventor
George Cline
by James Sheehy
Attorney

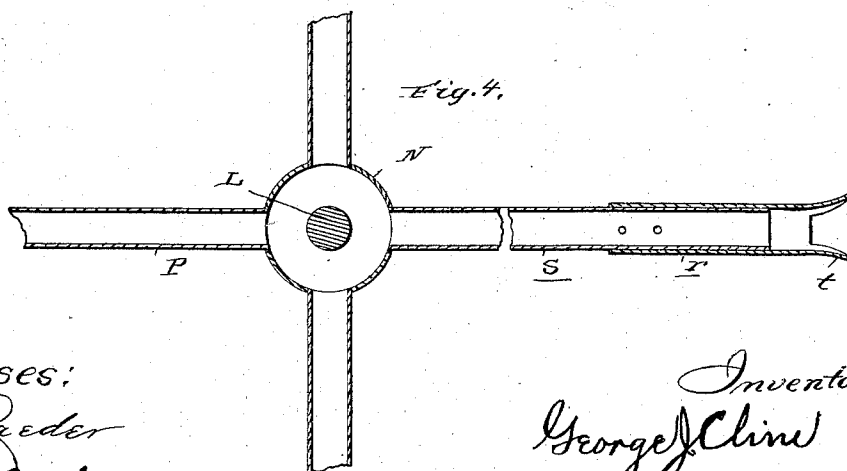
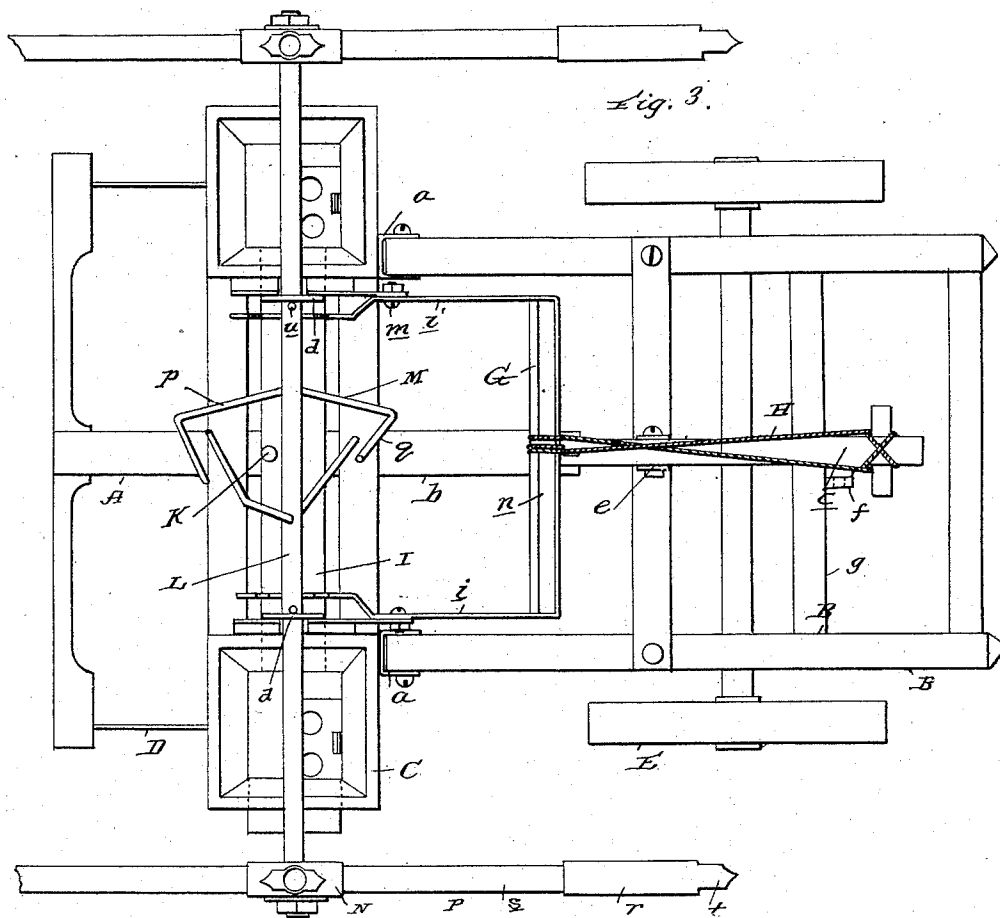
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UNITED STATES PATENT OFFICE.

GEORGE J. CLINE, OF GOSHEN, INDIANA.

ATTACHMENT FOR CORN-PLANTERS.

SPECIFICATION forming part of Letters Patent No. 476,036, dated May 31, 1892.

Application filed February 11, 1892. Serial No. 421,081. (No model.)

To all whom it may concern:

Be it known that I, GEORGE J. CLINE, a citizen of the United States, residing at Goshen, in the county of Elkhart and State of Indiana, have invented certain new and useful Improvements in Attachments for Corn-Planters; and I do 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.

This invention relates to a device which I shall denominate a "walking" check-row marker or corn-dropper; and among other things it has for its object to provide an attachment which may be used in connection with any planter for dropping the grain at regular intervals.

A further object of the invention is to so construct the attachment as to render it capable of adjustment so that the corn or grain may be dropped nearer together or farther apart, as may be desired.

The invention has for a further object the employment of devices in connection with a planter-frame whereby said attachment may be thrown in and out of gear for operation at the will of the attendant or driver, the devices being so adapted that when the machine is being transported from place to place the attachment will remain out of operation.

Other objects and advantages will appear from the following description and claims, when taken in connection with the annexed drawings, in which—

Figure 1 is a perspective view of a corn-planter with my improvements applied and illustrated in an operative position. Fig. 2 is a longitudinal vertical sectional view with parts broken away and illustrating my improved locking device as raised out of an operative position. Fig. 3 is a plan view of the machine bearing my improved attachment; and Fig. 4 is a vertical sectional view through one of the hubs, showing parts of the spokes broken away.

Referring by letter to said drawings, A indicates the front section, and B the rear section, of the planter-frame, which are hinged together, as shown at *a*. The forward section is provided with the usual seed-boxes C and furrow-openers D, while the rear section is mount-

ed upon the supporting-wheels E. The forward section has a longitudinally-disposed beam *b*, and the rear section carries a lever *c*, which is fulcrumed on a cross-bar of said rear section, as shown at *e*, and is connected with the rear end of said beam *b* by means of a link *d*, whereby the forward section may be moved vertically or rocked with respect to the rear section, and this lever *c* has a pivoted depending latch or catch *f*, which is designed to engage with a cross-strip *g* or other suitable device fixed to the rear section, as shown, whereby when the free end of the lever *c* has been depressed it may be locked in such a position for a purpose which will presently appear. Rising vertically from the forward section of the main frame, and preferably on the inner or adjacent sides of the seed-boxes C, are two forked or bifurcated standards F, which may be of metal or other suitable material, the slots or forks of said standards coinciding with grooves *h* in the upper opposite edges of the side walls of the seed-boxes.

G indicates a yoke or frame. This frame has the free end of its side branches *i* recessed, as shown at *k*, so as to furnish a bearing for the shaft or axle of the dropper attachment, as shown, and these branches are pivoted in lugs *l* of the forked uprights or standards F, as shown at *m*, the pivotal connection being about midway of their length, and the bearings should be of such a character as to permit a free vertical movement of the attachment in the forked standards or uprights.

H indicates a chain or rope connecting the rear end of the lever *c* with the rear transverse portion *n* of the yoke or frame G. By this construction it will be seen that by depressing the free end of the lever *c* the forward end of the forward section A of the frame will be depressed and the rear end thereof elevated through the medium of the connecting-link *b*, and simultaneously with this movement the yoke G will be swung on its pivotal bearing so as to raise the free ends or recessed branches thereof, and thereby lift the dropper in the forked branches of the uprights F, so as to elevate the same from contact with the ground. This movement will throw the attachment out of operation, as the shovel-points or outer ends of the spokes will

not be permitted to strike the ground, while to bring the attachment into operation it is simply necessary to release the latch *f* and let free the yoke or frame G, which by the natural weight of the dropper attachment will seat itself in the forked uprights and come into a position for dropping the corn. The seed-slide I, which passes from the respective seed-boxes, carries at a suitable point in its length a vertical stud or bolt K for contacting with the triggers of the dropper and imparting a reciprocating motion to said slide.

L indicates the shaft or axle of my improved dropping attachment. This axle may be of metal or other suitable material, carrying triggers M, fixed at the point in its length to contact with the stud or bolt K of the seed-slide. These triggers radiate from the shaft or axle by branches *p* at suitable intervals and are so disposed that one of said branches will cross the plane of the stud or bolt K at every quarter-revolution of the dropper or walking attachment, although there may be more or less triggers employed, and the outer ends of these triggers are bent alternately oblique, as shown at *q*, and it is these oblique branches of the triggers that strike the stud or bolt K and impart a reciprocating motion to the slide.

N indicates a hollow hub, there being one provided at each end of the shaft L and fixed so as to rotate therewith.

P indicates the spokes, which are also hollow, being preferably composed of a pipe and formed in telescopic sections. The outer sections *r* of the spoke, which are designed to be adjustably secured upon the inner sections *s* by means of bolts or other suitable fastening devices, carry at their outer ends shovel or spear-like points *t* to insure penetration of the ground and the consequent rotation or walking of the attachment.

For the purpose of properly sustaining the attachments and preventing undue lateral movement of the same in the forked standards I have provided the shaft or axle with pins or lugs *u* and washers *v*, which assume a position on the inner side of said standards, as shown.

In operation the attachment is placed upon

a planter by simply dropping the axle or shaft on the bearing ends of the yoke or frame G and into the forks of the standards or uprights F until said axle bears in or above the notches H of the seed-boxes. The planter then being drawn by the draft-animals, the points *t* of the spokes will strike the ground and entering the same sufficiently will cause the wheel to walk, as it were, and impart a rotary motion to the shaft or axle A, which motion, through the medium of the triggers M, contacting with the stud or bolt K, will impart a reciprocating motion to the seed-slides, dropping the seed from the boxes. When a sufficient quantity has been dropped or it is desired to transport the machine, the free end of the lever *c* is simply depressed until the catch *f* engages with the strip or bar *g*, when through the medium of the rope H the yoke will be oscillated on its bearings and the attachment raised in the forks of the standards, when the spokes will remain idle by reason of the fact that they cannot strike the ground.

Having described my invention, what I claim is—

1. In a corn-planter attachment, a rotatable shaft having hollow hubs at opposite ends and hollow spokes secured to said hubs and formed in telescopic sections, the outer ends of the outer sections having shovels or penetrating points, substantially as specified.

2. The combination, with a corn-planter, of the forked standards rising therefrom, the yoke or frame pivoted to the standards and having its side branches crossing said forks, a lever pivoted to the main frame, a rope or the like connecting the lever with the yoke, suitable means for locking the lever, and a dropper attachment arranged in the slots of the standards and upon the yoke, whereby said attachment may be raised and lowered, substantially as specified.

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

GEORGE J. CLINE.

Witnesses:

GEO. W. RICH,
GEO. W. RULE.