

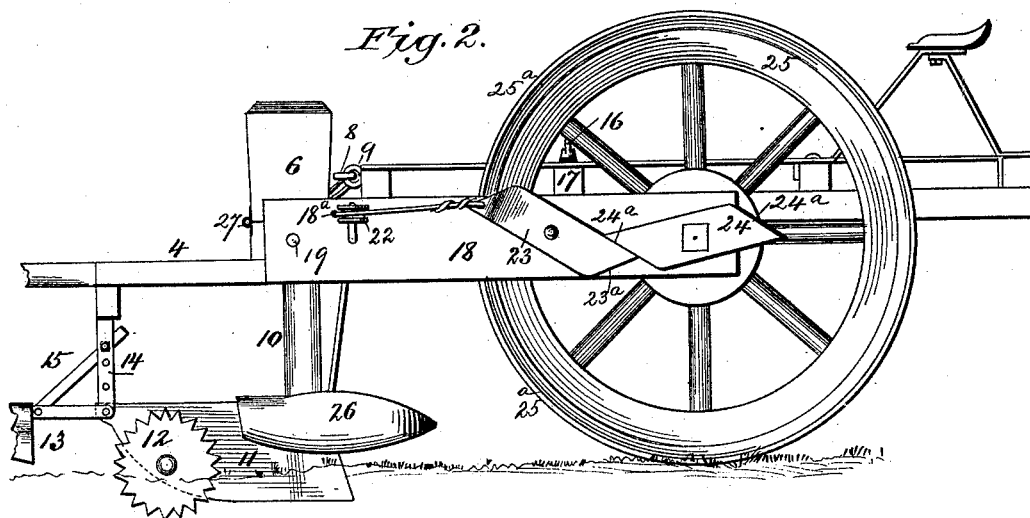
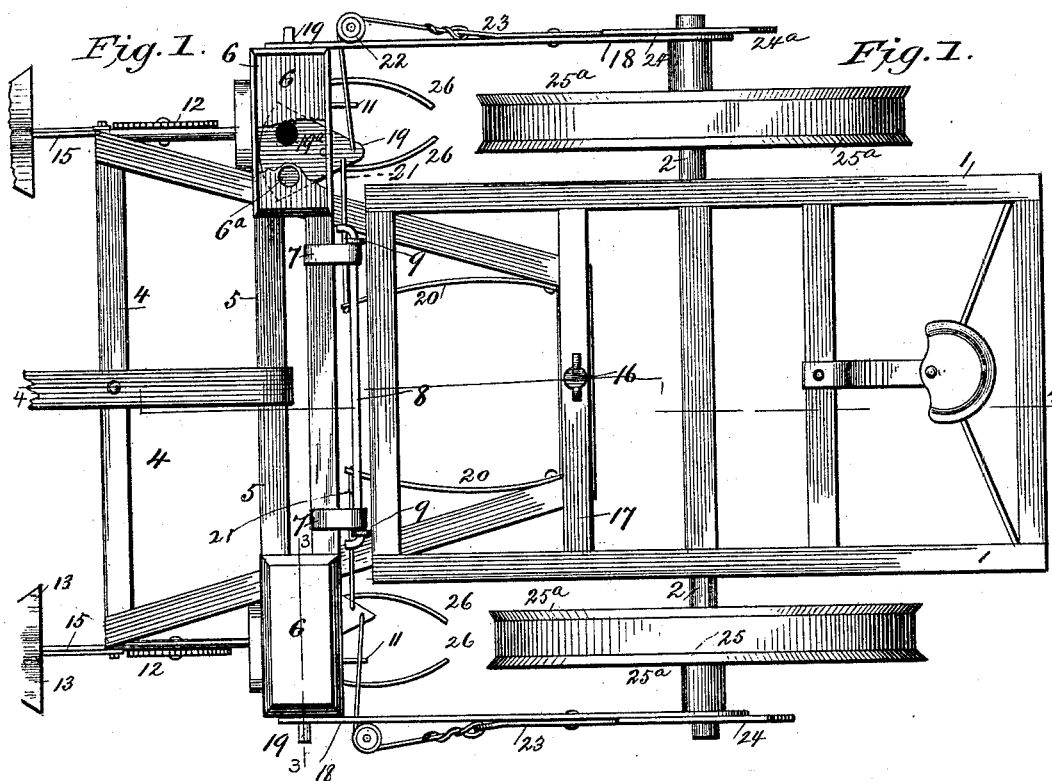
(No Model.)

2 Sheets—Sheet 1.

A. WENZEL.  
CORN PLANTER.

No. 419,807.

Patented Jan. 21, 1890.



WITNESSES:  
*Fred G. Dietrich*  
*Jed H. Stearns.*

INVENTOR  
*Adam Wenzel*  
BY *Mann & Co.*  
ATTORNEY

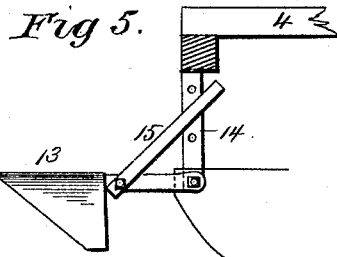
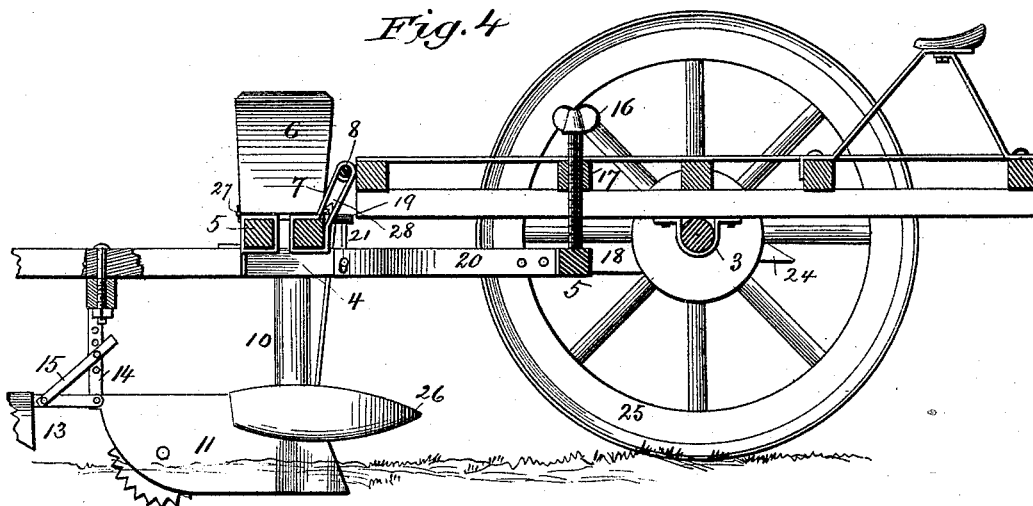
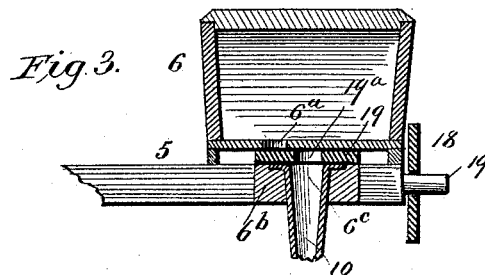
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WITNESSES:  
*Fred G. Deterich*  
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# UNITED STATES PATENT OFFICE.

ADAM WENZEL, OF DAKOTA CITY, NEBRASKA.

## CORN-PLANTER.

SPECIFICATION forming part of Letters Patent No. 419,807, dated January 21, 1890.

Application filed October 3, 1889. Serial No. 325,923. (No model.)

*To all whom it may concern:*

Be it known that I, ADAM WENZEL, of Dakota City, in the county of Dakota and State of Nebraska, have invented a new and useful Improvement in Corn-Planters, of which the following is a specification.

My invention consists in a new and improved corn-planter, which will be hereinafter fully described and claimed.

Referring to the accompanying drawings, Figure 1 is a top plan view of my improved corn-planter. Fig. 2 is a side view thereof. Fig. 3 is a section on line 3 3, Fig. 1. Fig. 4 is a longitudinal section on the line 4 4, Fig. 1; and Fig. 5 is a detail view of one of the fenders.

The same numerals of reference indicate corresponding parts in all the figures.

Referring to the several parts by their designating-numerals, 1 indicates the rectangular body-frame of my corn-planter, beneath the center of which the axle 2 is mounted in bearings 3.

4 indicates the forward frame, upon the ends of the cross-bars 5 of which the feed-boxes 6 are secured. The rear part of the frame 4 extends under the front part of the body-frame 1, and the two frames are hinged together by brackets or hinges 7, which are secured to the rear central cross-bar 5 of the forward frame and pass around a rod 8, which is secured in eyes 9 to the front end of the body-frame. The corn from each feed-box 6 passes down through a metal chute 10, which is secured to the rear open end of a shoe 11, the narrow curved front end of which opens the furrow. To the front of each shoe is secured by a central pivot-bolt a revolving cutter-disk 12, the edge of which is formed with a series of sharp teeth to adapt it to readily cut cornstalks or any similar substances that it may come in contact with.

13 13 indicate fenders, which are secured to the lower ends of supporting-rods 14 14. The upper ends of these rods are secured to the front corners of the forward frame 4, and they are then secured to the front ends or points of the shoes 11, thus bracing and steadying the shoes and also the chutes 10, while below this point the rods 14 are hinged, and these lower hinged ends, which carry the

fenders, are connected by adjustable braces 15 to the front ends of the frame 4.

A set-screw 16 works through a threaded aperture in the cross-beam 17 of the body-frame and bears with its lower end upon the rear cross-beam of the forward frame 4, and it will be seen that by raising and lowering this screw the shoes 11 11 can be raised or lowered to regulate the depth at which the corn is to be planted.

18 18 indicate flat metal side bars, having apertures at their rear ends, through which the outer ends of the axle pass, and having similar apertures at their forward ends, through which short stub-axles 19, at the ends of the cross-bars 5 of the forward frame 4, pass. By means of the adjustable braces 15 the fenders 13 can be raised or lowered when the shoes are adjusted up or down. In operation these fenders 13, in front of the revolving disks 12, operate to break up and remove large clods or lumps of dirt, cornstalk-roots, or other similar obstructions. The revolving disks 12 then cut into the earth where the furrow is to be opened, cutting through cornstalks or the like that they may come in contact with, and the shoe itself opens the furrow.

The bottom of each feed-box 6 is formed with a discharge-opening 6<sup>a</sup>, and a false bottom 6<sup>b</sup> is secured beneath each box 6 on the cross-bars 5, the false bottom being formed with a discharge-opening 6<sup>c</sup> at the top of the chute 10. Each box 6 is hinged over its false bottom by two front hinges 27, and has a catch 28 at its rear edge.

19 indicates the pivoted feed-valve formed with the feed-opening 19<sup>a</sup>. It will be seen that the feed-boxes 6 can be raised and turned back and the valves 19 removed and valves substituted having a larger or smaller feed-opening 19<sup>a</sup>, as may be required.

To the side bars of the front frame 4 are secured by their rear ends curved springs 20 20, to the forward ends of which are secured the inner ends of wires 21, which are then secured to the rear ends of the pivoted valves 19, as shown. The wires then pass out through apertures 18<sup>a</sup> in the side bars 18, and pass around small grooved pulleys 22 on the outer side of the bars 18, the rear end of each wire being secured to the forward end of a trip-

lever 23, which is centrally pivoted on the side of the bars 18, near the rear ends thereof. These flat trip-levers are of the shape shown, having the inclined ends 23<sup>a</sup>. On the 5 extended ends of the axle, at the outer side of the bars 18, are rigidly secured the cams 24 24, having the inclined ends 24<sup>a</sup>. 25 25 indicate the main wheels of the planter, which are formed with the inclined edge flanges 25<sup>a</sup> 25<sup>a</sup>. 10

In operation as the planter travels forward the furrow is opened, as before described, and as the main wheels turn the ends of the cams 24 come in contact with the 15 rear ends of the centrally-pivoted trip-levers 23 and turn the said levers until the ends of the cams clear the ends of the levers. As the levers are thus turned, their forward ends draw back the wires 21, thus turning the 20 valves 19 to one side clear of the discharge-openings 6<sup>a</sup> of the feed-boxes, allowing the corn to drop down through the chutes 10 into the furrows. When the ends of the axle-cams 24 are clear of the trip-levers, the 25 springs 20 slide the valves 19 under the discharge-openings, closing them, and turn the trip-levers back into their former position through the wires 21. It will be seen that the cams 24 will operate to drop the corn 30 twice for each revolution of the main wheels. The corn being thus automatically dropped into the open furrow, the furrow is closed by the metal wings or shields 26 26, which are curved, as shown, so as to gather the dirt over 35 the furrow when it is pressed down by the flanged main wheels 25, the inclined edge flanges 25<sup>a</sup> of which cause them to press the earth in a perfect manner over the furrow.

Having thus described my invention, what I 40 claim, and desire to secure by Letters Patent, is—

1. In a corn-planter, the combination, with frame 4 and the shoes 11, connected to said frame by braces 14, of the fenders 13, provided

with rear extensions pivoted to the front end 45 of the shoes 11, and adjustable connections between said extensions and the braces 14, all arranged substantially as and for the purpose set forth.

2. In a corn-planter, the combination of 50 the body-frame, the forward frame hinged thereto and having the feed-boxes 6 and chutes 10, the shoes 11, the set-screw 16, and the fenders 13, having the hinged supporting-rods 14 and adjustable braces 15, substantially as set forth. 55

3. In a corn-planter, the combination of the hinged feed-boxes 6, having the discharge-openings 6<sup>a</sup>, the false bottom 6<sup>b</sup>, having the discharge-openings 6<sup>a</sup>, the pivoted feed-valves 19, 60 the springs 20, the centrally-pivoted trip-levers 23, the wires 21, secured to the springs 20, the ends of the slide-valves 19, and the forward ends of the trip-levers 23, and the revolving axle having secured upon it the cams 24 24, 65 substantially as set forth.

4. In a corn-planter, the combination of the body-frame, the forward frame hinged thereto and having the end stub-axles 19, the side bars 18, the feed-boxes 6, having the discharge-openings 6<sup>a</sup> and the apertured false 70 bottoms, the pivoted slide-valves 19, the springs 20, the centrally-pivoted trip-levers 23, the wires 21, secured to the springs 20, the ends of the slide-valves 19, and the forward 75 ends of the trip-levers 23, and the revolving axle having the cams 24, substantially as set forth.

5. In a corn-planter, the combination, with the feed-boxes and their chutes, of the fenders, 80 the shoes, and the revolving cutter-disks, and the curved metal covering wings 26 26, substantially as set forth.

ADAM WENZEL.

Witnesses:

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GEO. H. HAASE.