A. C. EVANS.

CORN-PLANTER.

No. 183,912. Patented Oct. 31, 1876.

Fig. 1.

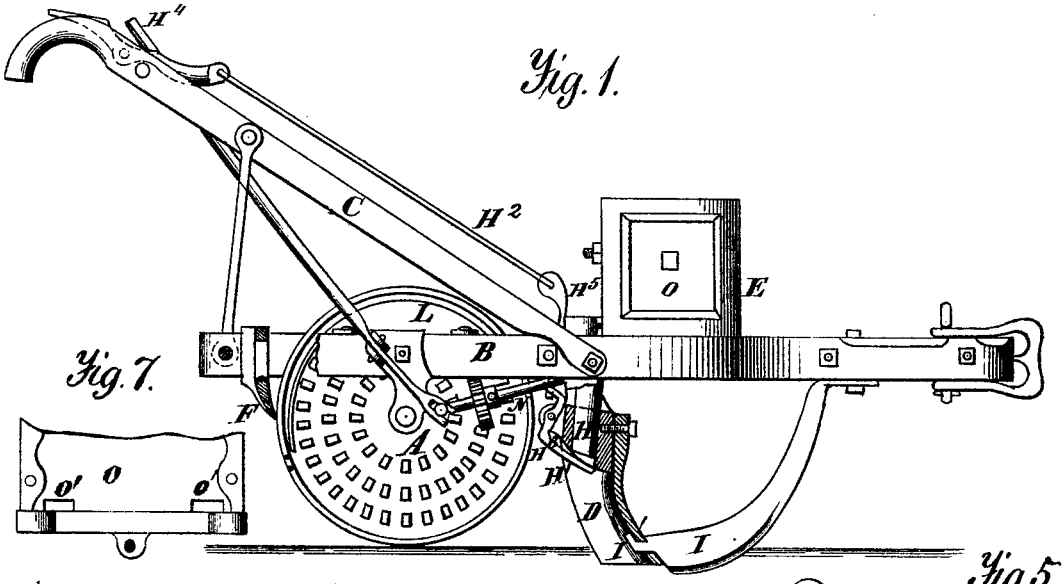


Fig. 7.

Fig. 6.

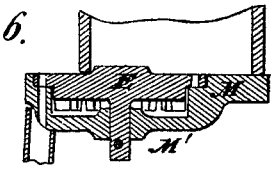


Fig. 5.

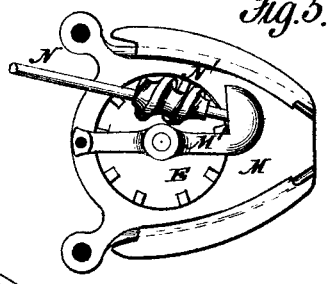


Fig. 2.

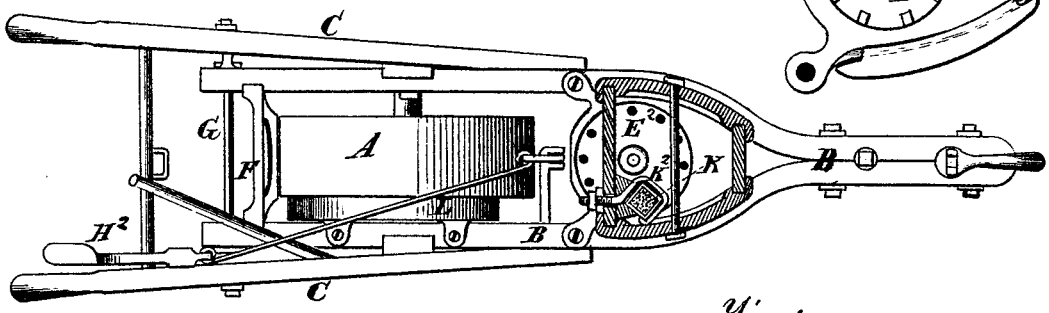


Fig. 4.

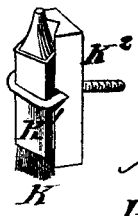
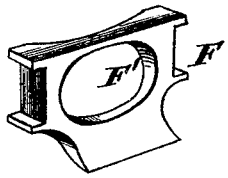


Fig. 3.



Witnesses.

A. Ruppert

Geo. J. Lits

A. C. Evans

Inventor.

D. P. Holloway & Co

Attys

UNITED STATES PATENT OFFICE.

AUSTIN C. EVANS, OF DELPHOS, OHIO.

IMPROVEMENT IN CORN-PLANTERS.

Specification forming part of Letters Patent No. **183,912**, dated October 31, 1876; application filed August 19, 1875.

To all whom it may concern:

Be it known that I, AUSTIN C. EVANS, of Delphos, in the county of Van Wirt and State of Ohio, have invented new and useful Improvements in Corn-Planters, of which the following is a specification:

My present invention relates to certain improvements, to be hereinafter designated, upon the machine heretofore patented by me.

In the annexed drawings, making part of this specification, Figure 1 is a side elevation. Fig. 2 is a plan view, partly in section. Fig. 3 is a perspective view of the scraper for cleaning the driving-wheel. Fig. 4 is a perspective view of the brush. Fig. 5 is a plan view of the bottom plate of the hopper and the under side of the feed-wheel. Fig. 6 is a transverse vertical section of the feed-wheel, bridge of bottom plate, and part of the hopper. Fig. 7 is an end elevation of the hopper.

The same letters are employed in all the figures in the designation of identical parts.

The driving-wheel A, frame B, handles C, shovel D, and feed-wheel E are all constructed as in my said former Letters Patent, and therefore need no further description herein.

The driving-wheel is flat across its face, and to prevent the adhesion of earth, which would disturb the regular operation of the feeding mechanism, I attach a scraper, F, to the frame B, immediately in rear of the driving-wheel, and in such relation thereto that its lower and sharpened edge will shave the adhering earth from the cylindrical face of the wheel. The hole F′ will permit the earth adhering to the wheel, and gathering between the wheel and the scraper, to fall out. The scraper is recessed on the ends, to receive the side pieces of the frame, and is held adjustably by the rod G, having a nut on the outer end, by which the side pieces may be made to compress the scraper.

Instead of closing the pipe H by a slide, as in my said former machine, I use a flap-valve, H^1, turning upon a pivot, and actuated by the rod and hand-lever H^2. The cutter I is of the usual form, except that I connect it to the point of the shovel by means of a hook, I′, passing through a slot in the point of the shovel, where it is held by the elasticity of the blade of the cutter. This construction makes the cutter serve also as a brace for the lower end of the shovel.

I also modify the position of the brush K. Instead of using the brush in common use, I employ a square brush, held in a prismatic tube, K^1, clamped to a rectangularly-grooved block, K^2, as shown. This brush stands with one of its angles over the seed-holes, the diagonal axes of the brush being as nearly as possible in line with the row of holes. I have found that a brush of the afore-described construction and arrangement will more perfectly perform its work than those in common use.

The shield L is bolted to the frame B, and covers the opening between the frame and the top of the ground-wheel, for the purpose of preventing the earth adhering to the wheel from falling into the driving-gearing.

The feed-wheel is placed in an annular plate, M, in the bottom of the hopper O. It supports a bridge, M′, which carries the shaft of the feed-wheel, and is cut away on its upper face, so that the cogs on the lower face of the feed-wheel may pass. These cogs engage a worm-wheel on the shaft N, driven by a pinion engaging either series of the concentric cogs on the driving-wheel A. The feed-tube H is placed under one end of the bridge M′ to receive the falling grains. Openings are formed at O′ in the lower corner of the hopper over the feed-wheel, to enable chaff to work out and fall upon the ground.

Instead of having the rod which operates the valve H^1 applied at the front end of the valve, so as to require a long sweeping movement to open the valve, I attach the rod H^2 to a lever, H^3, on the rear end of the valve, and pivoted in the middle, so that a slight movement of the band will open the valve; and as the lever H^4 is pivoted to the handle, the valve may be tripped without taking the hand from the handle, as the location of the pivots of levers H^4 and H^5 enables this movement to be controlled.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. In combination with the driving-wheel and operative mechanism, the shield L, arranged in relation thereto and to the frame, substantially as set forth.

2. In combination with the driving-wheel,

the scraper F, with opening F′, the side pieces of the frame, clamping the recessed ends of the scraper, and clamping-rod G, for adjustably confining the scraper in such relation to the wheel that it will shave the mud from the wheel, and by means of the hole F′ prevent its accumulation, substantially as set forth.

3. In combination with the valve H^1 and its actuating-lever H^3, the lever H^4, pivoted to the handle, the rod H^2, and lever H^5, substantially as set forth.

4. In combination with the seed-wheel E, the sliding plate M, with an opening to receive the seed-wheel, and a bridge to support its shaft, formed to permit it to revolve without interfering with the driving mechanism, substantially as set forth.

5. The openings O′ in the lower rear edge of the hopper, immediately over the feed-wheel, substantially as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

AUSTIN C. EVANS.

Witnesses:
D. P. HOLLOWAY,
B. EDW. J. EILS.