W. W. DUNN.

CHECK ROW DEVICES FOR CORN PLANTERS.

No. 177,483. Patented May 16, 1876.

Fig. 1.

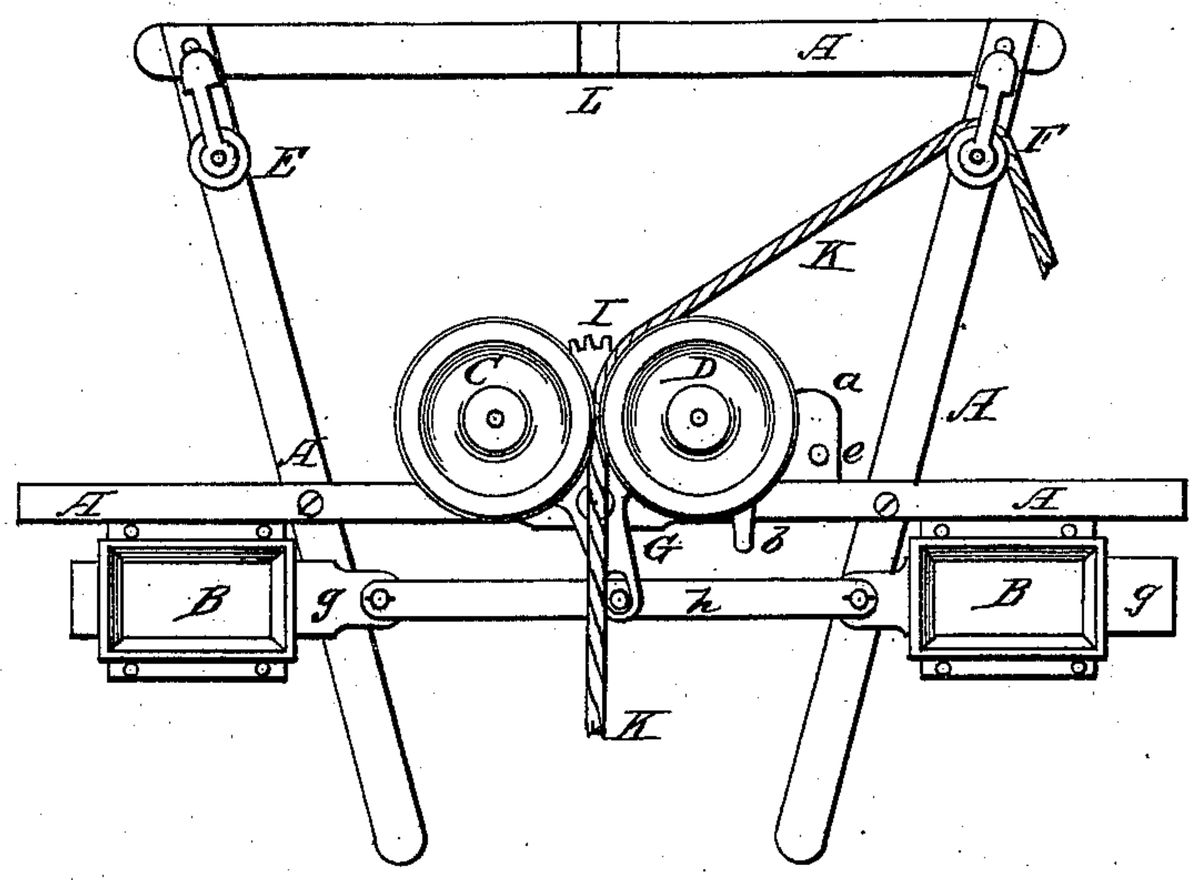


Fig. 2.

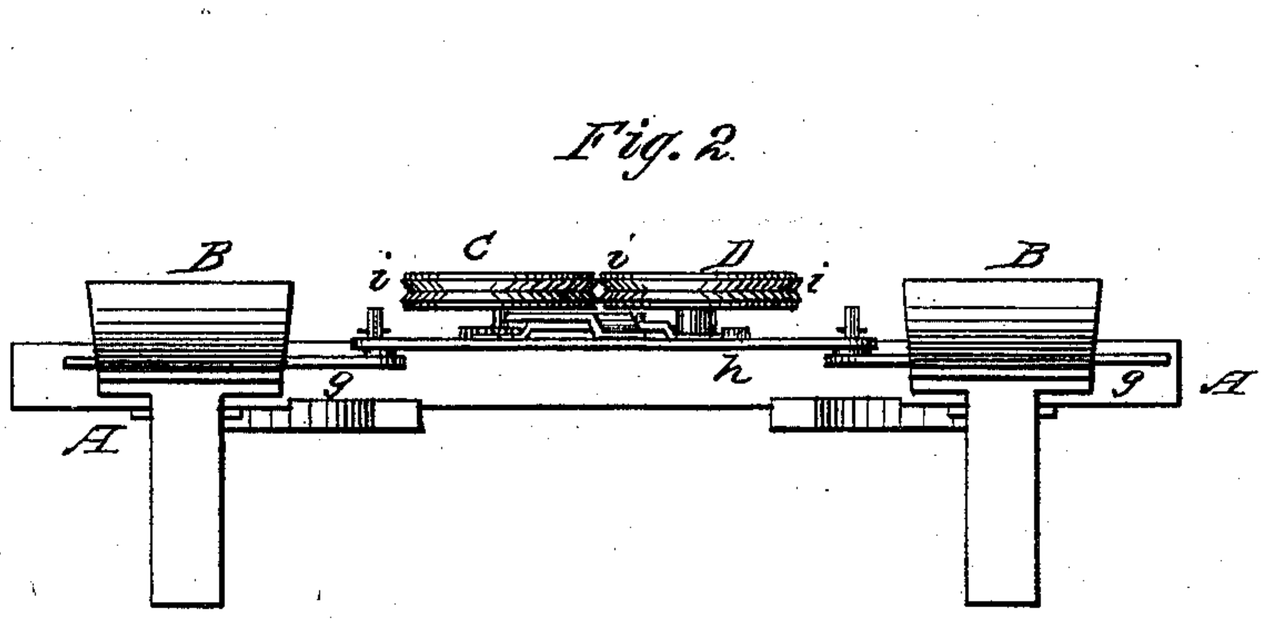
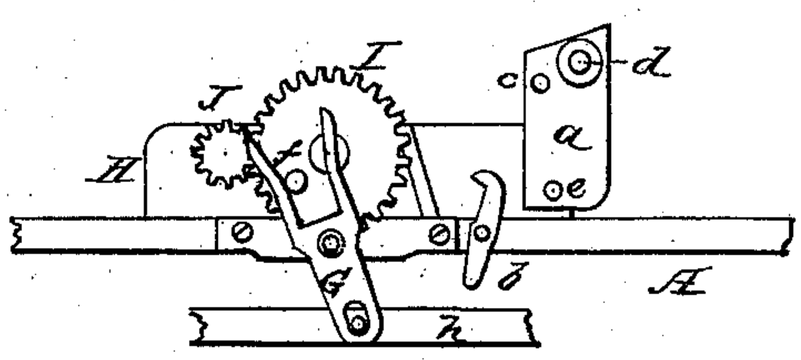


Fig. 3.



WITNESSES:

L. L. Pond.

O. W. Brund.

INVENTOR:

William W. Dunn

UNITED STATES PATENT OFFICE.

WILLIAM W. DUNN, OF PEORIA, ILLINOIS.

IMPROVEMENT IN CHECK-ROW DEVICES FOR CORN-PLANTERS.

Specification forming part of Letters Patent No. **177,483**, dated May 16, 1876; application filed August 18, 1875.

To all whom it may concern:

Be it known that I, WILLIAM W. DUNN, of Peoria, Peoria county, State of Illinois, have invented new and useful Improvements in Check-Row Devices for Corn-Planters, of which the following is a full description, reference being had to the accompanying drawings, in which—

Figure 1 is a top or plan view; Fig. 2, an end view, and Fig. 3 a detail.

On the drawings only the frame-work of the front part of a corn-planter is shown, as the construction of the seeding and covering devices may be varied, according to the several planters now in use.

The object of this invention is to provide an improved device for check-row planting, so as to dispense with the carrying of the second attendant, commonly used in check-row planting; and its nature consists in providing a planter with friction-wheels, between which a smooth rope passes, in combination with gear-wheels and a lever for actuating the seeding devices, and in the several parts and combination of parts hereinafter set forth or claimed as new.

In the drawing, A indicates the frame-work of the front part of a corn-planter, which is to be mounted on suitable furrow-openers; B, the seed-hoppers; C D, the friction-wheels; E F, the anti-friction-wheels; G, the forked lever; H, a metal bracket, or other suitable device for supporting the friction-wheels and their gearing; I, the gear-wheel; J, the pinion; K, the rope; L, the point of attaching the tongue or draft-pole; *a*, the swinging arm supporting the friction-wheel D; *b*, the latch or catch for holding it in position when closed; *c*, the pin with which the latch *b* engages; *d*, the shaft of the wheel D; *e*, the pivot; *f*, the actuating-pin on the gear-wheel I; *g*, the seed-slides; *h*, the connecting-bar for operating the seed-slides *g*; *i*, the rubber bands on the friction-wheels C D.

The frame A may be made of any convenient form, as may also the seeding devices, which, however, should be made double, or to operate from either side by a half motion. The bracket H is attached to the frame A, and is made of sufficient strength to support the friction-wheels C D with their gearing. The wheel C has its shaft firmly attached to this bracket H, and is provided on the under side with a collar, to which the pinion J is attached. This pinion J engages with the spur or gear wheel I, and, as shown, the teeth are gaged, so that the pin *f* will move the forked lever each three and a half feet of travel. This distance may be changed, either by enlarging the spur-wheel I or reducing the pinion J.

The wheel D has its shaft or pivot firmly attached to the swinging arm *a*, and moves with it, so that when the swinging arm is thrown out, in the position shown at Fig. 3, the wheels C D will be spread apart, so that the rope may be either taken out or put in. When the rope is in position the wheel is brought back and locked by the latch *b*. The wheels C D are provided with V-shaped rubber bands *i*, to increase the friction on the rope and insure certainty of action without injurious pressure on the rope. These wheels C D, as shown, are grooved; but by using gages or gage-plates the grooves may be omitted.

As shown, the rope K is passed over the pulley F, which passes the front section of the rope to the side of the team. When the end of the row is reached the rope is passed from the pulley F over to the pulley E. When it is not desired to pass the rope to the side of the team any suitable take-up may be applied to the end of the draft-pole, in which case the rope will pass between the horses, and will not require shifting from side to side at the ends of the rows.

In ordinary practice the rope K will be staked or fastened at each side of the field; but it is obvious that the machine will work as well without as with the front end fastened.

In operation, as the machine is drawn forward, the rope passes between the wheels C D with sufficient friction to revolve them, and to operate their gearing. The pinion J turns the wheel I, bringing the pin *f* in contact, first with one and then with the other of the forks of the lever G, which is pivoted to the frame-work, thereby driving the bar *h* and the seeding devices *g*, so as to plant at each three feet and a half of rope, or other distance, as the machine may be gaged.

The pressure of the rubber upon the rope causes the rope to act as a brake, or causes

the wheels to stop when the machine stops, without spinning the rope through after the stoppage.

I do not limit myself to a swinging arm for supporting and carrying the wheel D, as it is obvious that a sliding board or base can be used in substantially the same way for the same purpose.

It is evident that the wheels E F could be attached to the frame A by means of a bracket having its forward end open, instead of solid, as shown. This would facilitate the putting of the rope K in place over the wheels, as it could be slipped in at the open end.

I am aware that ropes have heretofore been used as check-row attachments for corn-planters; and do not therefore claim, broadly, the use or application of a rope for this purpose; but

What I do claim as new, and desire to secure by Letters Patent, is as follows:

1. In a corn-planter, the wheels C and D, having V-shaped rubber bands or peripheries *i*, in combination with the rope K and forked pivoted lever G, substantially as and for the purpose specified.

2. The swinging supporting-arm *a*, pivoted to the frame of the planter, in combination with latch *b*, wheels C D, and rope K, substantially as and for the purpose set forth.

WILLIAM W. DUNN.

Witnesses:
L. L. BOND,
O. W. BOND.