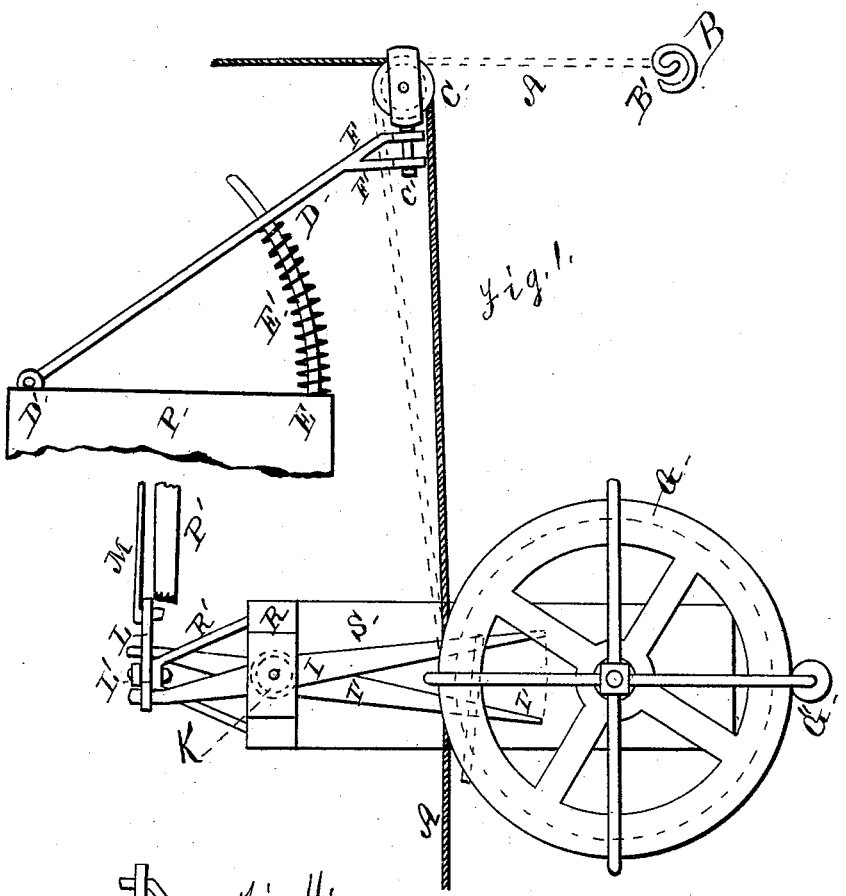
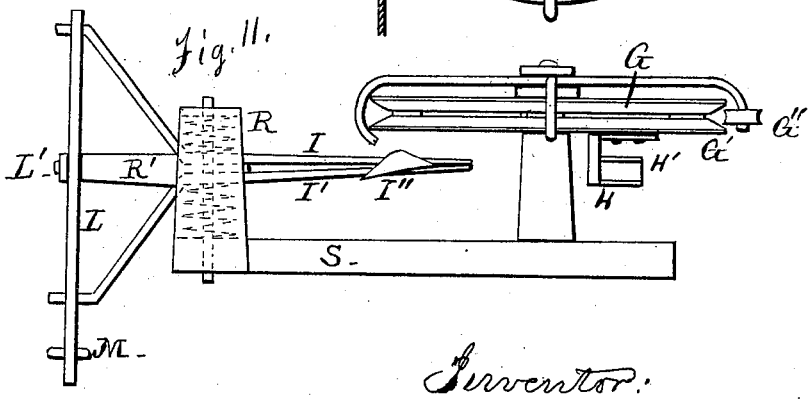
J. C. ELDER.

Check-Row Corn-Planter.

No. 210,306. Patented Nov. 26, 1878.





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UNITED STATES PATENT OFFICE.

JOSEPH C. ELDER, OF CARTHAGE, ILLINOIS.

IMPROVEMENT IN CHECK-ROW CORN-PLANTERS.

Specification forming part of Letters Patent No. **210,306**, dated November 26, 1878; application filed April 13, 1878.

To all whom it may concern:

Be it known that I, JOSEPH C. ELDER, of Carthage, Hancock county, Illinois, have invented a new and useful Improvement in Check-Row Corn-Planters, of which the following is a specification:

This device is made substantially as hereinafter set forth, referring to the accompanying drawings, in which—

Figure 1 is a top, and Fig. 2 a side, view of the parts improved.

This invention relates to corn-planters; and consists in improved devices for check-rowing, in connection with a cord reaching across the field.

The cord A, of fiber or wire, is drawn across the field in line with the rows to be planted, and secured at the ends by stakes B. These are made of metal, with peculiar bent heads B′, presenting a broad bearing on each side of the stake, to facilitate driving it into the ground with the foot and drawing it out by hand, as well as readily connecting the cord at any point, &c.

The cord is plain, without projections. It is received onto the planter, as it is drawn along, by means of the pulley-wheel C. This is mounted on a swinging arm, D, pivoted at D′, so as to be supported and swing laterally. This arm moves on a guide-arm, E, passing through it, and having a spring, E′, to hold it out with tension, which enables it to give back and draw, so as to keep a degree of tension on the cord through irregularities of speed and direction. It also assists in drawing the cord to the proper degree of tension for staking. One of these arrangements is used on each side of the machine, to receive the cord and pay it off on the opposite side. The pulley-wheel C on each is attached by a pivot-holder, C′, which passes through bearings F F′, so as to be held firmly and turn freely on the axis of the pivot. These are arranged so that the machine can run out to the end of the row, the stake B drawn up, the team and planter turned around, the stake driven in again, and the machine run back without changing the cord in its bearings.

The cord A passes around wheel G loop-like, so as to turn it in passing backward over the machine. This wheel has a sharp groove, G′, into which the cord presses to turn the wheel forcibly. The wheel is formed of a top and bottom part, held together by bolts. These have packing between, to regulate their distance apart and the distance around which the cord measures in each revolution. By this means the hold on the cord is increased and the distance between hills changed. The wheel has guard-bars and rollers G″, to keep the cord in its groove, and to press onto it to cause it to turn the wheel G.

The wheel bears a projection, H, having a top and bottom plate, H′, projecting to each side, connected by a central web. Two lever-arms, I I′, are arranged so that this web will strike one of their ends as the wheel turns and move it to the other side. These are pivoted at K, and their other ends are bent, one up and the other down, and pivoted in the ends of a vertical lever, L, pivoted to a projecting part at its center L′. This acts so that when one lever, I or I′, is pushed to one side by the projection H on the wheel G, the other lever is forced to the other side. Lever I′ bears a raised slide, I″, with depressed ends, so both levers may be nearly on a line when apart; but the one not caught by part H will be forced up or down to avoid striking that as they pass. Each revolution of the wheel thus changes the position of levers I I′, and moves the bottom end of lever L from side to side to operate the dropping mechanism, with which it is connected by rod M.

I do not wish to claim in this patent the feature of dropping once only to each revolution of the measuring-rope wheel, which is included in a separate application, made before the issue of this patent.

I claim—

1. An operator for a planter having two levers, I I′, arranged to move together in opposite directions, combined with slide I″, and measuring-wheel G, having driving projection H, arranged substantially as set forth.

2. In an operator for a planter, the measuring-wheel G, with a projection, H, combined with two connected levers, I I′, arranged to

move together in opposite directions, and the slide I″, to prevent their interference, substantially as set forth.

3. An operator for a planter having the pulley C, to receive the cord A, in combination with its carrier, having a spring, so as to regulate the tension of the cord when the planter is in action, substantially as set forth.

4. An operator for a planter having the cord A and stake B, with its upper portion bent spirally around the vertical portion in a horizontal plane to form a flat head, projecting to all sides, substantially as set forth.

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Witnesses:
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