

(No Model.)

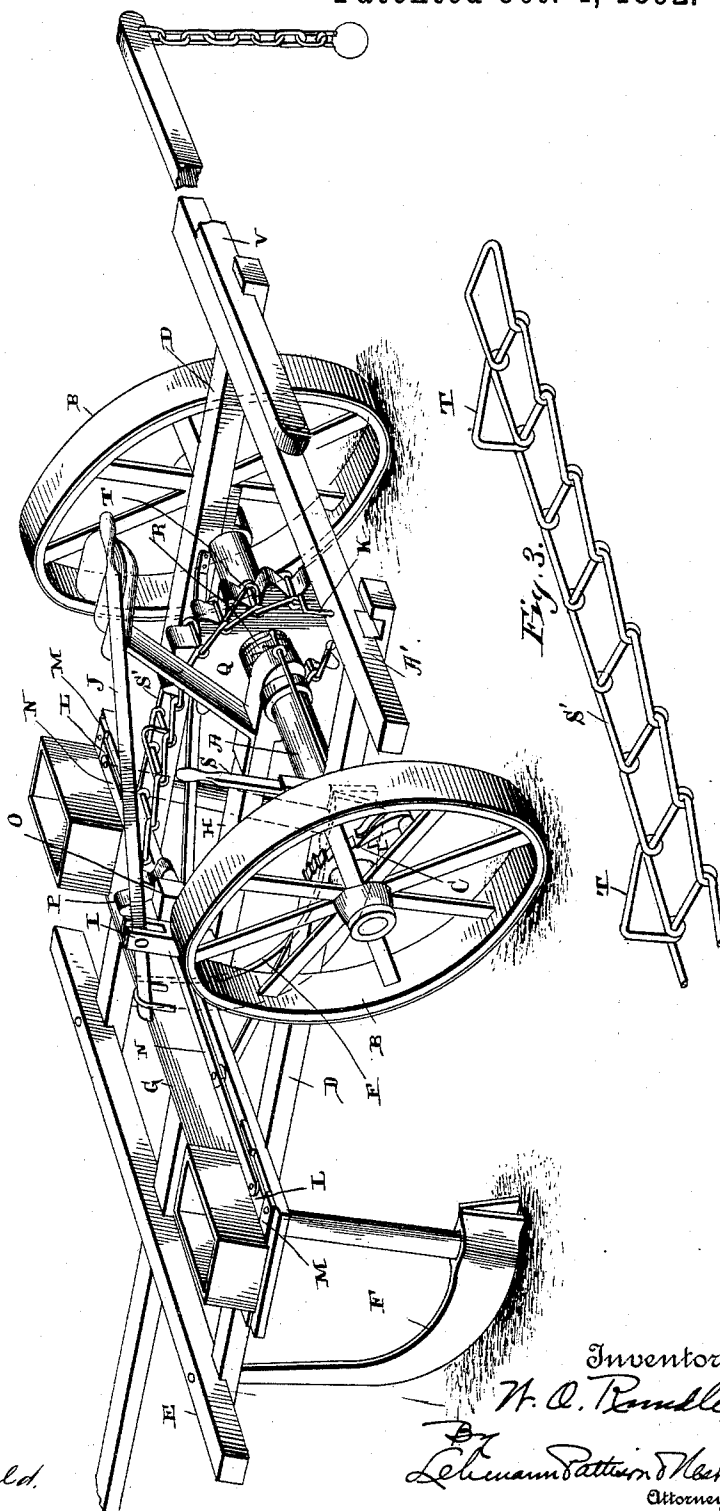
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W. O. RUNDLE.
CORN PLANTER.

No. 483,872.

Patented Oct. 4, 1892.

Fig. 1.



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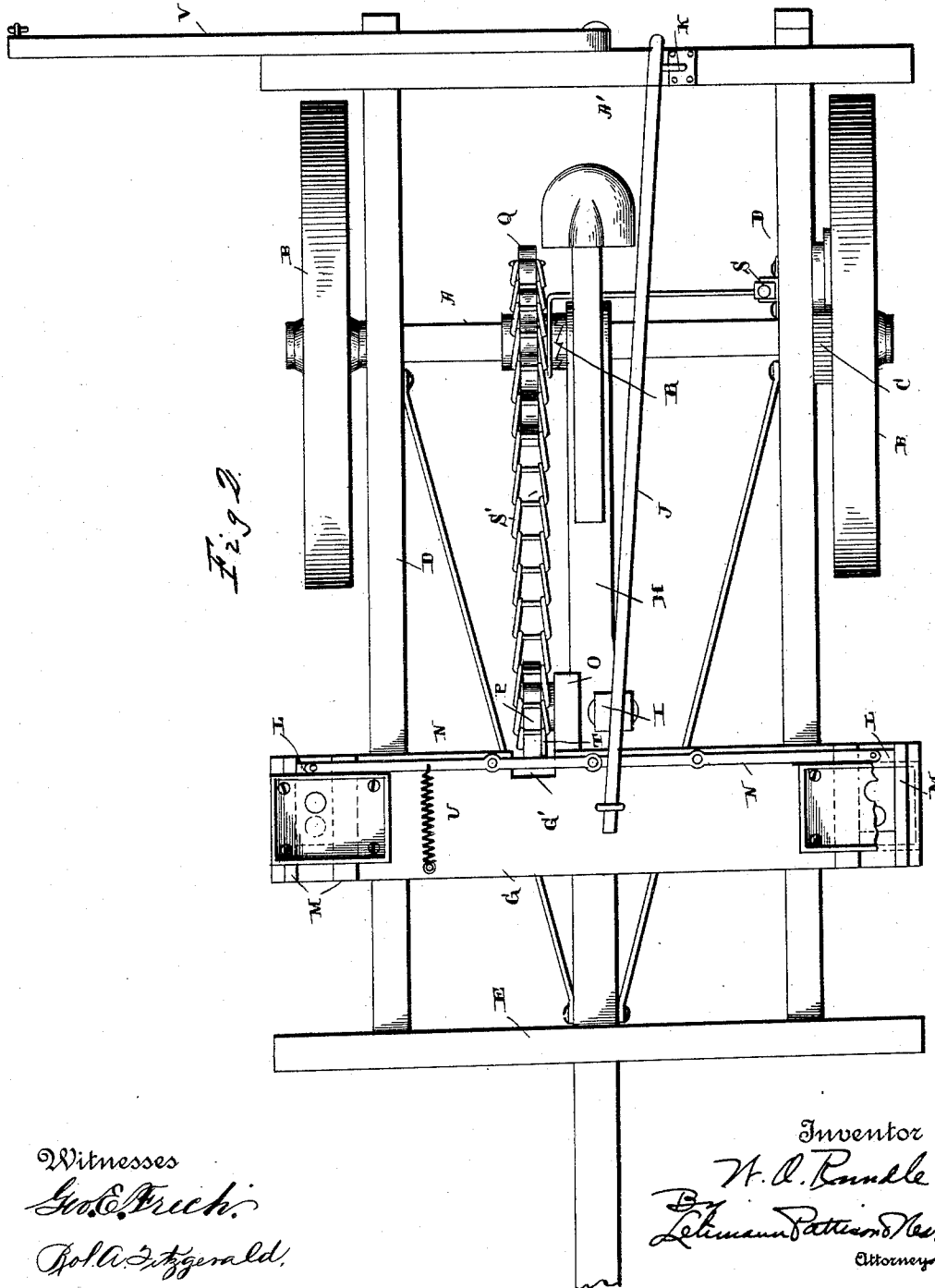
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UNITED STATES PATENT OFFICE.

WILLIAM O. RUNDLE, OF DE SMET, SOUTH DAKOTA.

CORN-PLANTER.

SPECIFICATION forming part of Letters Patent No. 483,872, dated October 4, 1892.

Application filed May 13, 1892. Serial No. 432,896. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM O. RUNDLE, of De Smet, in the county of Kingsbury and State of South Dakota, have invented certain new and useful Improvements in Corn-Planters; and I do hereby 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 pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in corn-planters; and it consists in the novel features of construction and in the combination and arrangement of parts, which will be fully described hereinafter, and more particularly referred to in the claims.

My invention is more particularly directed to providing an improved seed-dropping mechanism which is most simple in operation, and having few parts is not liable to get out of order.

Referring to the accompanying drawings, Figure 1 is a perspective view of my improved planter. Fig. 2 is a rear plan view of the same. Fig. 3 is a detached view of the drive-chain.

A represents the axle, and B the drive-wheels mounted thereon. One of the wheels is made rigid with the axle, and therefore turns therewith, while the other revolves by means of the ratchet mechanism C, whereby the machine may be turned around without operating the seed-dropping mechanism, as will be readily understood.

Mounted on the axle and projecting forward therefrom are the frame-arms D, which are connected at their forward ends by the cross-piece E, and secured to the under sides of these arms are the furrow-openers F. To the rear of the said cross-piece is mounted the table G. Projecting forward from the axle, between the arms D, is the arm H, and mounted thereon is the standard I, and fulcrumed in the upper end of this standard is the lever J, which is connected at its outer end to the table G. By depressing the rear end of this lever it will be seen that the arm H will be lowered from the plane of the arms or frame D, and as the former constitutes the tongue or pole to which the horses are at-

tached it will be seen that the depth which the furrow-openers enter the ground is thus regulated. The rear end of the lever may be depressed to a considerable extent and secured in this position by the hook K, projecting from the rear cross-piece A', and by holding the frame thus raised above the pole the furrow-openers will be held above and out of engagement with the ground, and thus it may be transported with ease from one point to another, where it is desired to employ the machine.

Upon the opposite ends of the table are secured seed-boxes, and beneath them are the perforated laterally-moving slides L, which reciprocate between guides M. Pivoted at their outer ends to the said slides are the levers N, which project toward each other, being pivotally connected at their meeting ends, as shown. These levers are fulcrumed to the table about midway between their respective outer ends and their connected inner ends, so that a forward movement of their connected ends will reciprocate the seed-slides. Projecting from the rear edge of the table is the support O, and journaled thereto is the sprocket-wheel P. Loosely mounted on the axle A is the sprocket-wheel Q, which is made to turn therewith by means of the clutch-gear R, the teeth of the same being so disposed as to make the engagement positive when the machine is moving forward, but to slip without turning the wheel when the wheel is moving in the reverse direction. A suitable operating-lever S and connection between the same and the clutch-gear is provided for conveniently operating the latter from the driver's seat.

S' represents a drive-chain, which moves around the sprocket-wheels P and Q, and arranged at intervals on this chain are the wedge-shaped projections or cams T, which extend laterally from the periphery of the same, and as the chain makes its revolutions these stops strike one of the levers N near its point of connection with the adjacent lever, and by this means the levers are turned upon their pivots and the slides reciprocated. This operation will be readily understood, as the said lever N normally projects into the path traveled by the said cams. A slot G' is provided for the passage of the projections T through the table edge.

In order to hold the slides normally in a position to be operated by the said stop, a spring U is provided, which connects with one of the levers N outward from its pivotal point, and thus the inner ends of the levers are held normally inward, where they will be engaged by each stop T as they are brought thereto by the revolution of the chain. As will be seen, the links of the drive-chain are made approximately U-shaped, the ends of each link being twisted around the loop of the next-succeeding link.

In order to form the stops T, one end of the stop-link is made longer than the other, and after being twisted in the usual way around the next adjacent link-loop it is continued forward the length of one link, where it is secured to the end of the said adjacent link. The extended portion forming the stop T is set at an incline, so as to engage the lever N and push it outward, as above described.

In order to space the rows properly and make them parallel, I employ an arm V, which is pivoted at its inner end to the rear edge of the cross-piece A', and which is adapted to turn outward from either side of the machine, the recessed projecting ends of the arms D forming rests therefor in either position. The outer end of this arm V extends to the next-adjacent row, or the last one that has been planted, and depending from this end is a weighted chain or cord, which drags in the furrow of said row, and in this manner the machine is run, enabling the operator to keep it always at the desired distance from the row last planted. The rows are thus kept parallel, with a very exact measurement between them.

Having thus described my invention, I claim—

1. The combination, with an axle, a frame

mounted thereon, sprocket-wheels on the axle and frame, seed-slides on opposite sides of the frame, and pivoted levers for operating said slides, of a drive-chain on said sprocket-wheels formed of U-shaped links, the ends of some of which being extended over the next-adjacent links to form wedge-shaped projections, for the purpose substantially as shown and described.

2. The combination, with an axle, drive-wheels thereon, a sprocket-wheel between the drive-wheels, and a frame pivotally supported on the axle, of a tongue projecting forward from the axle, a standard projecting vertically therefrom, a lever pivoted to said standard and loosely connected at its forward end to said frame, seed-slides and pivoted levers for operating them, a sprocket-wheel journaled to the frame, a drive-chain encircling said sprocket-wheels, and stops on the periphery of the drive-chain, substantially as shown and described.

3. The combination of an axle, drive-wheels thereon, a sprocket-wheel Q, a frame extending forward from the axle, cross-board G', levers pivoted in line near the rear edge of the said board, seed-slides connected to the outer ends of the levers, whereby they are moved transversely across the ends of the said board, seed-boxes arranged over the slides, standard O, sprocket-wheel P, a chain encircling sprockets P and Q, and stops T, projecting from the edge of said chain, substantially as shown and described.

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

WILLIAM O. RUNDLE.

Witnesses:

B. O. DUNLAP,
A. P. LEHMANN.