2 Sheets—Sheet 1.

J. THOMSON.

CHECK-ROWERS.

No. 184,926. Patented Nov. 28, 1876.

Fig. 1.

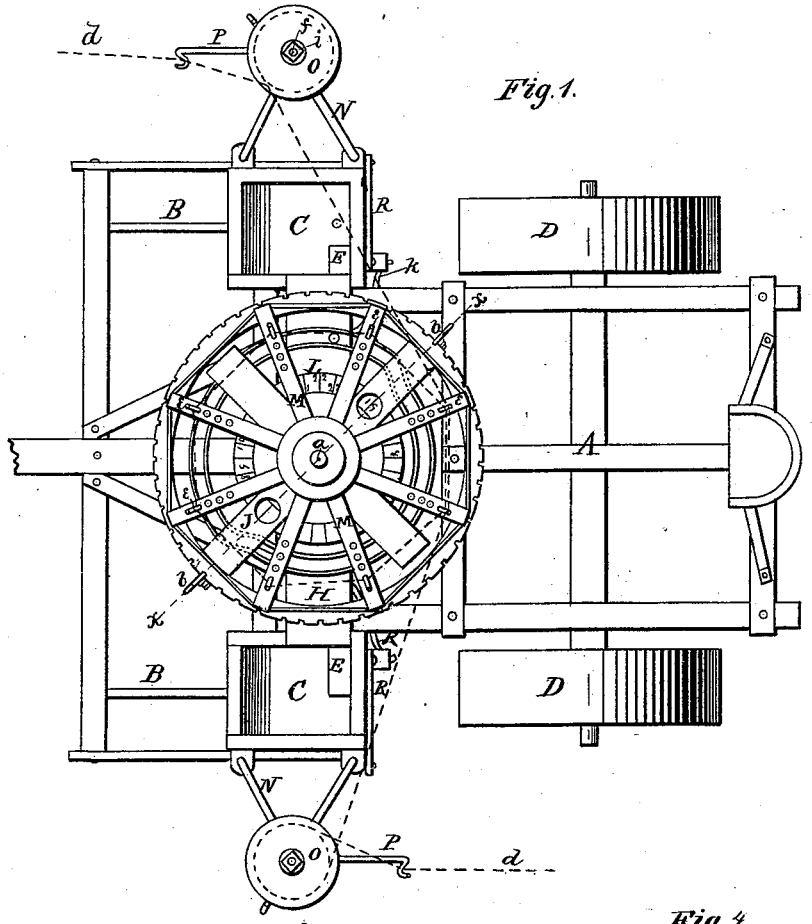


Fig. 3.

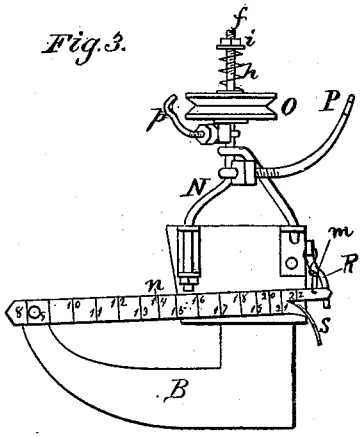
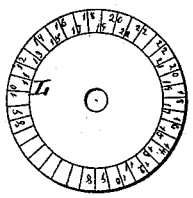


Fig. 4.



WITNESSES.

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Alexander Mason

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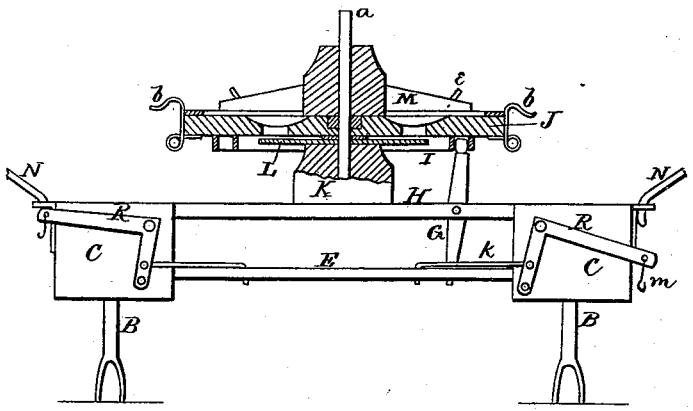
2 Sheets—Sheet 2.

J. THOMSON.

CHECK-ROWERS.

No. 184,926. Patented Nov. 28, 1876.

Fig. 2.



WITNESSES

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UNITED STATES PATENT OFFICE.

JOHN THOMSON, OF ALEDO, ILLINOIS.

IMPROVEMENT IN CHECK-ROWERS.

Specification forming part of Letters Patent No. **184,926**, dated November 28, 1876; application filed March 20, 1876.

To all whom it may concern:

Be it known that I, JOHN THOMSON, of Aledo, in the county of Mercer, and in the State of Illinois, have invented certain new and useful Improvements in Check-Rowers; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

The nature of my invention consists in the construction and arrangement of a check-rower, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawings, in which—

Figure 1 is a plan view of my machine. Fig. 1 is a plan view of my machine. Fig. 2 is a section of the same through the line *x x*, Fig. 1. Figs. 3 and 4 are detached views of parts thereof.

A represents the frame of my check-rower, with runners B B, corn-boxes C C, and covering-wheels D D, all constructed in any of the known and usual ways. E is the slide, operating in the corn-boxes C for dropping the corn, this slide being moved by a lever, G, pivoted in a bar or platform, H, connecting the two corn-boxes on a level with the top thereof. The upper end of the lever G works in an eccentric wheel formed of two rims, I I, secured to the under side of two bars, J J, fastened together, crossing each other in the center, and pivoted on a vertical spindle, *a*, that projects from a foot or support, K, secured on the bar or platform H. Under this eccentric wheel on the support K is secured a dial, L, numbered both right and left, as shown. On top of the eccentric wheel I J is another wheel, M, the rim of which is notched to correspond with the graduations on the dial L, and is held to the eccentric wheel by means of spring-catches *b b*. In the spokes of the wheel M are adjustable pins *e e*, for holding the rope *d*. On the outer side of each corn-box C is attached a frame, N, carrying at its upper end a pulley, O, on a vertical spindle, *f*, and above said pulley, on the spindle, is a spiral spring, *h*, the tension of which is regulated by a nut, *i*. To the pulley-frame N is secured an arm, P, forming a guide for the rope *d*. The dropping-slide E is by a rod or hook, *k*, connected with an L-shaped lever, R, pivoted on the back of the corn-box. The outer end of this lever is by a short chain, *m*, connected with the drag-claw S, pivoted at its front end, and provided on its outer side with a graduated scale, *n*. The eccentric wheel I J moves the dropping-lever G, and holds it in position until the next stroke. The pins *e* in the wheel M are movable, so as to enable the operator to change the distance between the hills, the spokes of the wheel being perforated so as to change the pins to the desired distance. The dial L is numbered or graduated both right and left, as the wheel can be operated either right or left. When the rope is put on so as to turn the wheel to the left or against the sun, use the rear side of the dial, and when turning with the sun use the front side of the dial. The drag-claw indicators answer the double purpose of indicators and index-board. The hook P and spring *h* over the pulley O produce tension, to prevent the rope from coming on to the wheel too slack. This is very essential, especially with new rope. The tension-hooks P are arranged so that they can be unscrewed and turned in position to give the desired zigzag position to the rope. The tension can also be intensified by screwing down the nut *i* over the spring *h* on the pulley.

In using the machine the rope is laid down in the usual way and the machine turned into position for planting. The rope is then placed in the hook P, and in another hook, *p*, next to the pulley O, and from thence around said pulley, around the pins *e* in the wheel M, around the other pulley O, and staked down at the end of the row. The machine is then driven to the other end of the row, the rope laid off, and the machine turned around. The rope is then put on again in the same manner, and the operator will look for a mark of the indicator, see what figure on the index agrees with mark made by the indicators; then move the clutch-springs *b* outward and move the eccentric wheel around so as to see the figure on the dial indicated on the index through the hole *x* in the arm of the eccentric wheel.

By repeating this process exactly the machine will produce correct cross-rows.

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

1. The combination of the eccentric wheel I J, the horizontal wheel M, notched on its periphery, movable pins *e e*, spring-catches *b b*, and the dial L, all constructed substantially as and for the purposes herein set forth.

2. The combination, in a check-rower, of the pulley O, spring *h*, regulating-nut *i*, and hooks P *p*, all constructed substantially as and for the purposes herein set forth.

3. The dial L, having right and left graduations, in combination with the wheels J and M, substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 7th day of February, 1876.

JOHN THOMSON.

Witnesses:
ALEX. MCARTHUR,
C. L. EVERT.