(No Model.)

F. MILLER.

CHECK ROWER.

No. 287,953. Patented Nov. 6, 1883.

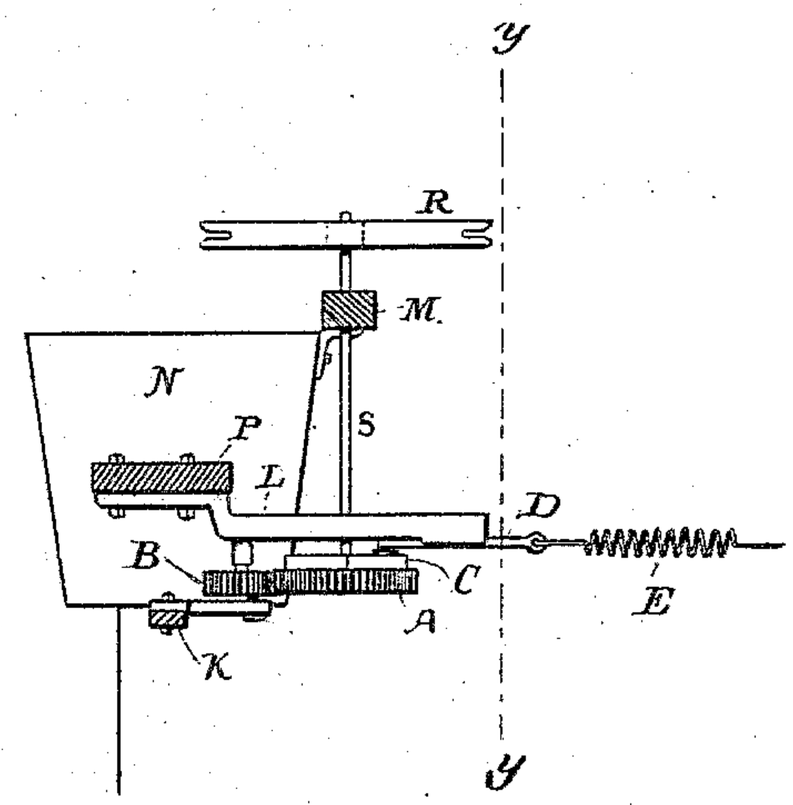

Fig. 1.

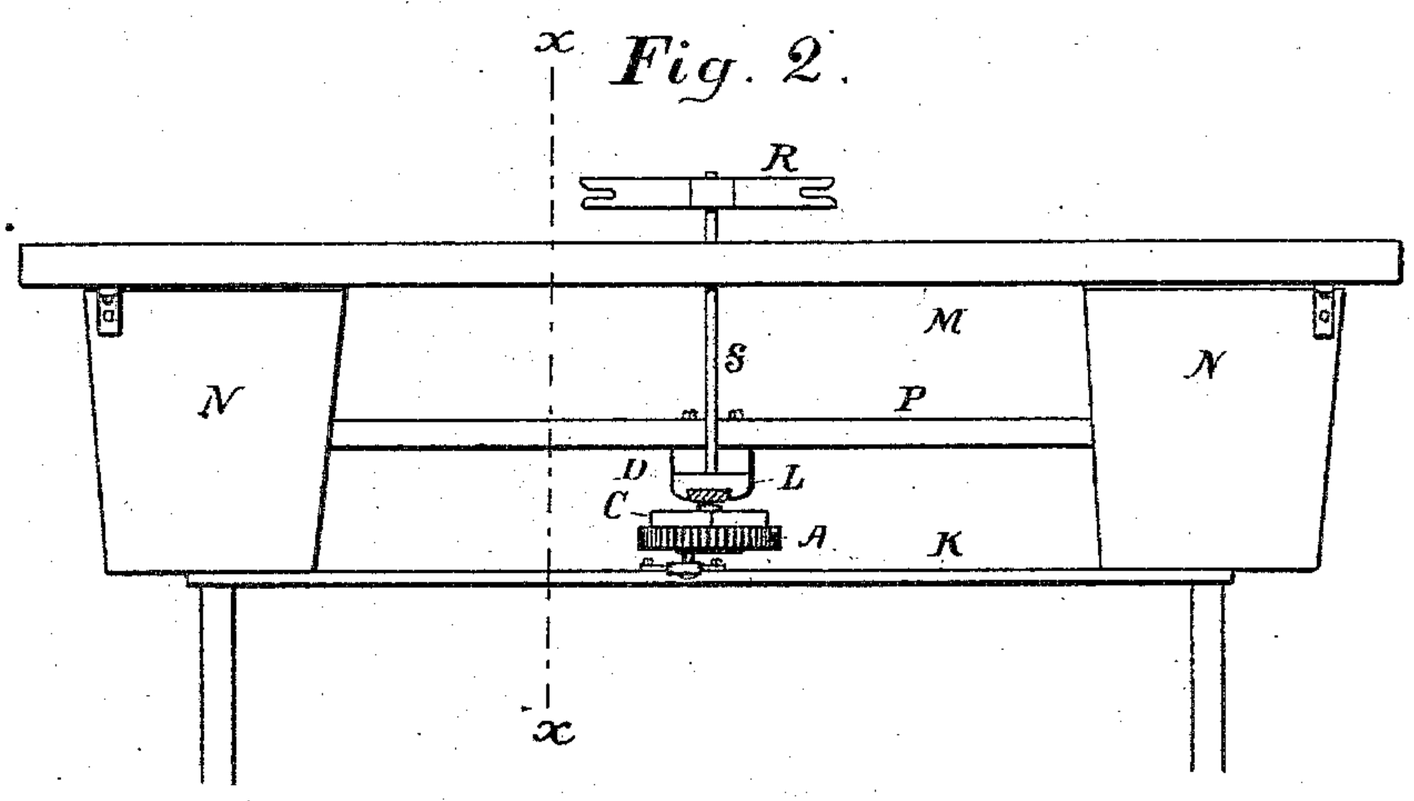

Fig. 2.

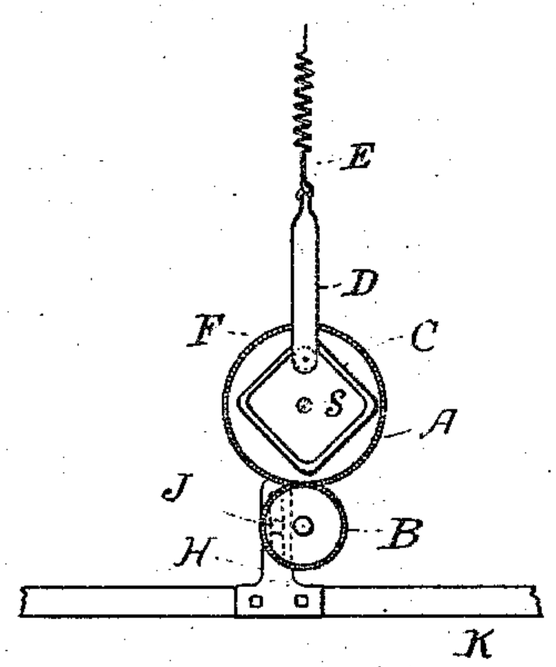

Fig. 3.

Witnesses;

H. W. Wells.

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UNITED STATES PATENT OFFICE.

FRANK MILLER, OF PEORIA, ILLINOIS.

CHECK-ROWER.

SPECIFICATION forming part of Letters Patent No. 287,953, dated November 6, 1883.

Application filed March 27, 1883. (No model.)

To all whom it may concern:

Be it known that I, FRANK MILLER, of Peoria, in the county of Peoria and State of Illinois, have invented an Improved Check-Rower; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the annexed drawings, making a part of this specification, in which like letters of reference refer to like parts, and in which—

Figure 1 represents a sectional plan through *x x;* Fig. 2, sectional side elevation through *y y;* Fig. 3, view from beneath of the mechanism separated from most of the parts of the corn-planter.

My check-rower is of that kind in which a four-armed wheel is intermittently rotated by protuberances on a wire or cord coming in contact with said arms.

My improvement relates more particularly to a means for preventing said four-armed wheel from being rotated at any one movement more than a quarter-circle.

In the drawings, R represents the four-armed wheel; S, its vertical shaft; M, a beam for holding the upper bearings of said shaft, and also as support for the wire-directing wheels. The plate L, bolted to the under side of the cross-beam P, furnishes the lower bearing of the shaft S. The gear-wheel A, fast on the lower end of the shaft S, has cast or otherwise secured to its upper side a shallow square box, C. The gear-wheel B is just half the diameter of said gear A, and has its axis depending from the plate L. The crank-pin J, set in said gear-wheel B, can slide freely in the slot of the arm H, bolted to the feed slide-bar K. The tongue-piece D has at the side of one end a friction-wheel, F, and is provided with a dovetail groove in the under side of the plate L, in which it can slide. The friction-wheel F projects into the said box C, and is pulled against the sides of the same by means of the spring E, attached to the outer end of the tongue-piece D.

In using this machine, at every quarter-turn of the four-armed wheel R the box C turns also with the wheel A, and the side of said box C in contact with the friction-wheel F pulls the tongue-piece D toward the shaft S until said side has turned to a perpendicular position relative to said tongue-piece D. Then, as the box C turns a little more, the pull of the spring E forces said box to complete at once the rest of its quarter-turn, and the wheel F coming to a stop in the next corner of the box C, the whole machinery is held stationary. Each quarter-turn of the wheel A gives a half-turn to the wheel B, and the crank-pin J of the same communicates to the feed slide-bar K, through the rigid slotted arm H, its alternating rectilinear motion.

What I claim as my invention is as follows:

1. In a check-rower, the tongue-piece D, having friction-wheel F and supporting-groove, in combination with a spring, E, the square box C, gear-wheel A, fast thereto, gear-wheel B, having crank-pin J and slotted arm H, substantially as and for the purpose specified.

2. In a check-rower, the four-armed wheel R, shaft S, and plate L, having dovetail groove D′, in combination with the square box C, tongue-piece D, having friction-wheel F, gear-wheel A on said shaft S, gear-wheel B, having crank-pin J, and the slotted arm H, rigidly fastened to the slide-bar K, substantially as and for the purpose set forth.

3. The shaft S of a check-rower, adapted to rotate intermittently, and the hollow square box C thereon, in combination with the friction-wheel F, tongue-piece D, having groove D′, and a spring, E, substantially as and for the purpose set forth.

4. In combination with the shaft S of a check-rower, adapted to rotate intermittently, a square hollow box, C, fast thereon, and a friction-wheel, F, having means for pressing it radially from the center of said shaft against the inner sides of said box, substantially as and for the purpose specified.

5. The shaft S of a check-rower, adapted to rotate intermittently, a polygonal hollow box fast thereon, in combination with a friction-wheel, F, having means whereby it is pressed radially against the inner sides of said box, substantially as and for the purpose described.

In testimony that I claim the foregoing invention I have hereunto set my hand this 13th day of March, 1883.

FRANK MILLER.

Witnesses:
H. W. WELLS,
C. L. WATSON.