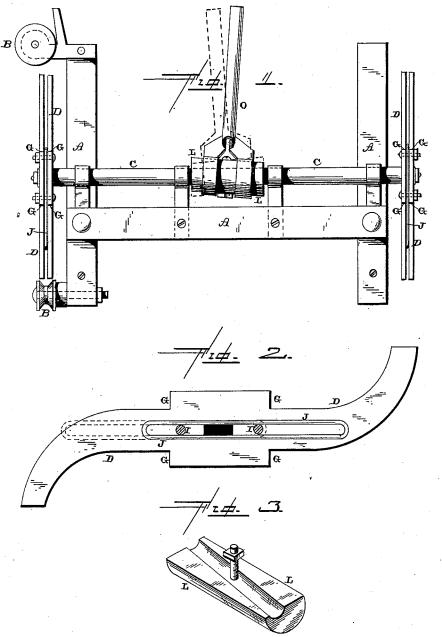
D. REED.

## CHECK ROWER FOR CORN PLANTERS.

No. 345,176.

Patented July 6, 1886.



-Witresses -X. F. Gardner Jus E. Prosperi Dallas Reed, tu J. a. Lehmann, atti.

## UNITED STATES PATENT

DALLAS REED, OF ANITA, IOWA.

## CHECK-ROWER FOR CORN-PLANTERS.

SPECIFICATION forming part of Letters Patent No. 345,176, dated July 6, 1886.

Application filed August 18, 1885. Rerewed June 8, 1886. Serial No. 204,548. (No model.)

To all whom it may concern:

Be it known that I, DALLAS REED, of Anita, in the county of Cass and State of Iowa, have invented certain new and useful Improvements in Check-Rowers for 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 10 had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in check-rowers for corn-planters; and it consists in, first, the combination of the operating-15 shaft provided with shuttles or arms at each end, each arm or shuttle being provided with a sliding loop, to prevent the shuttle or arm from making more than a half-revolution; second, the combination of the operating - shaft 20 with a cylindrical casting, which is bolted thereto, the shaft being made to pass obliquely through the casting, so that as the casting is made to revolve with the shaft it operates the lever which moves the seed-slide, as will be 25 more fully described hereinafter.

The object of my invention is to produce a check-rower for corn-planters in which the arms are provided with sliding loops, which prevent the operating-cord from moving the 30 arms, and through them the shaft, more than a half-revolution, and to operate the lever which moves the seed-slide by the rotation of

the operating-shaft.

Figure 1 is a plan view of a portion of a 35 check-rower for corn-planters which embodies my invention. Fig. 2 is a vertical section of one of the arms or shuttles, showing the loop in different positions. Fig. 3 is a perspective of one-half of the casting which is secured to

42 the operating shaft.

A represents a portion of the frame-work, which may be of any suitable construction, and which is provided with the guiding-rollers B, as shown. The operating-shaft C extends across the frame, and upon each end is secured an arm or shuttle, D, of the shape shown, and which arms or shuttles revolve between the rollers around which the operating-cord passes, as shown. Each one of the 50 shuttles or arms is made double, and thus all parts are separated from each other just far

enough to allow the operating cord or wire to pass freely through between them. The ends of the arms are curved or turned in opposite directions upon each side of the center of the 55 arm or shuttle, and on both edges are formed the shoulders G, against which the stops on the operating-wire catch for the purpose of causing the arms or shuttles to revolve, and thus turn the operating shaft. Placed upon 60 the guiding-bolts I, which are passed through these arms or shuttles, upon each side of the center, is a sliding loop, J, which slides freely back and forth, as shown, when the arm or shuttle is made to revolve. This slide serves 65 the purpose of preventing the operating cord or wire from turning the arm or shuttle more than a half-revolution. Each half-revolution of the arm or shuttle causes the operatingshaft to revolve correspondingly and operates 70 the lever, which moves the seed-slide in one direction only. Bolted to the center of the operating shaft is a cylindrical casting, L, which is made in two parts, and which has an opening for the operating shaft to pass through, ex-75 tending diagonally from one end to the other. The lever O, which operates the seed-slide, has two loops, P, formed upon its inner end, and which loops catch over this casting, upon opposite sides of its center. As the casting is 80 made to revolve by the shaft, one end of the casting is alternately forced forward, while the other one is correspondingly drawn back, and in this manner the lever has the end which is connected to the seed-slide made to move from 85 side to side, so as to force the slide first in one direction and then in the other. The slides J act as levers, to strike against the wire when a half-revolution is completed, and thus force the wires from the shuttles D. These parts 90 J are made to slide endwise, so that they may extend two or three inches beyond the guiding-bolt I on one side and still not bend the wire too much as the turn is made. The operating-wire is provided with the balls which 95 turn the shuttles and move the slides J endwise as the shuttles turn.

Having thus described my invention, I

1. The combination of the arms or shuttles 100 upon the operating-shaft with the slides, which move back and forth upon suitable guides as

the arms or shuttles are made to revolve with the operating cord or wire, substantially as

2. The combination of the operating shaft with the cylindrical casting, which is applied thereto, and which has the opening through it to receive the shaft extending diagonally from end to end, and the operating-lever provided with two rings which extend around the casting, upon opposite sides of its center, substantially as described.

3. The combination of the operating - shaft

having a casting secured to its center, for operating the lever which moves the seed-slide, with arms provided with slides which prevent 15 the arms from being moved more than a half-revolution, substantially as set forth.

In testimony whereof I affix my signature in

presence of two witnesses.

DALLAS REED.

Witnesses:

W. G. KING, G. F. DOTY.