

W. ARMSWORTH & J. H. BROWN.
Check Row Planter Attachment.

No. 201,479.

Patented March 19, 1878.

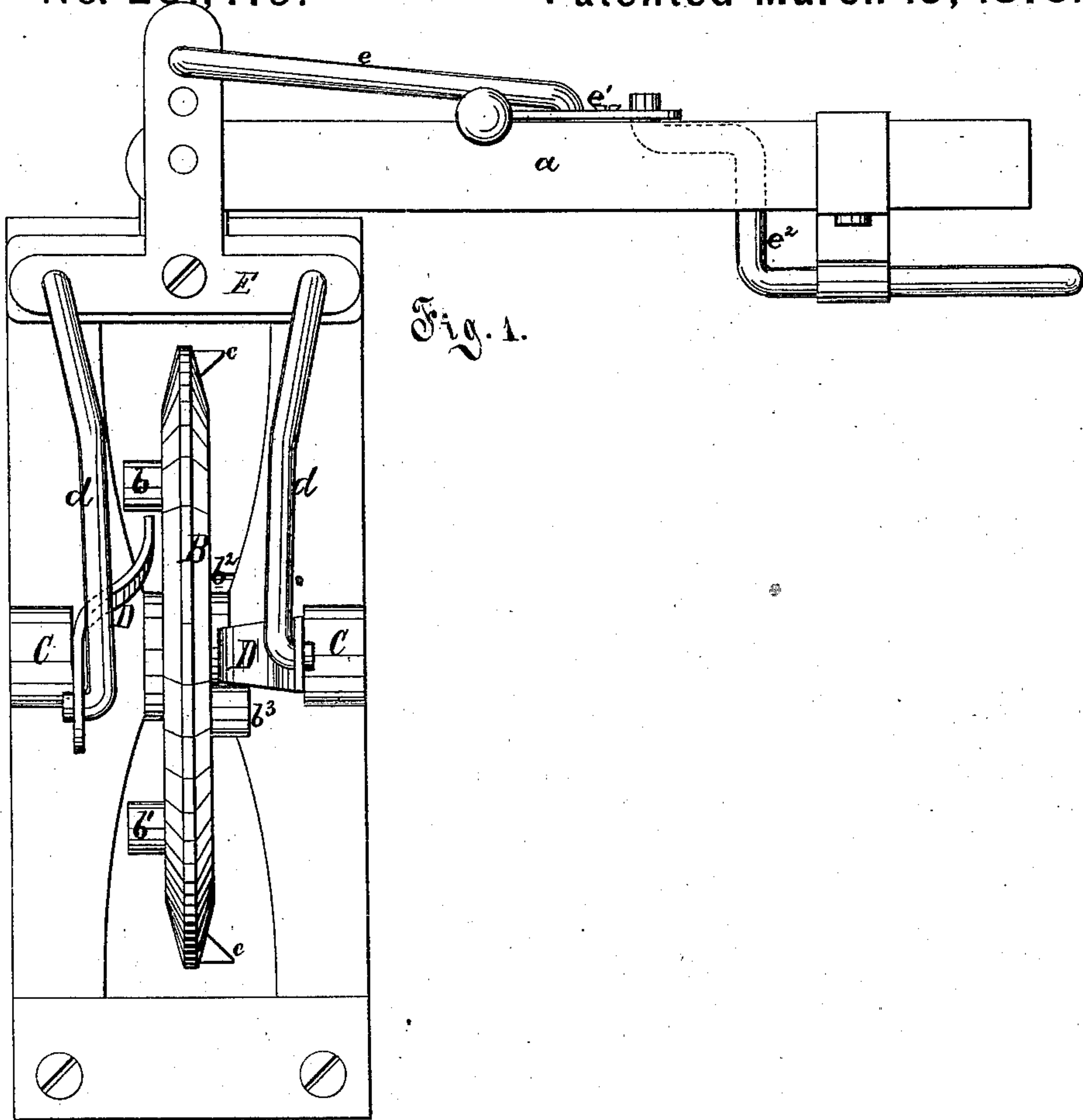


Fig. 1.

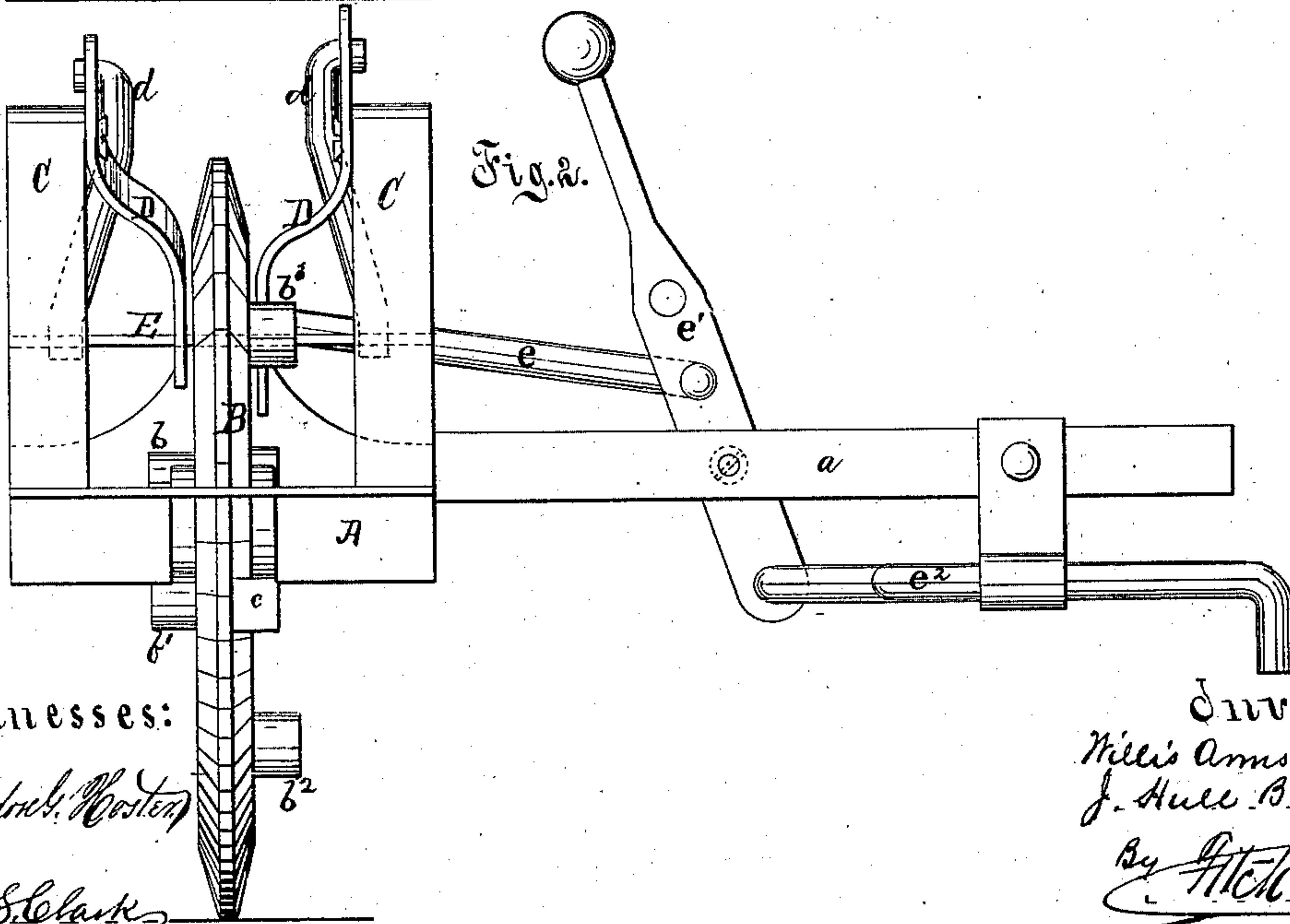


Fig. 2.

Witnesses:

Theodore W. Weston

P. S. Clark

Inventors

Wm. Armsworth
J. H. Brown

By *Wm. H. H. H.*
attys.

UNITED STATES PATENT OFFICE.

WILLIS ARMSWORTH AND JAMES HULL BROWN, OF MONTICELLO, ILLINOIS.

IMPROVEMENT IN CHECK-ROW-PLANTER ATTACHMENTS.

Specification forming part of Letters Patent No. **201,479**, dated March 19, 1878; application filed September 19, 1877.

To all whom it may concern:

Be it known that we, WILLIS ARMSWORTH and J. HULL BROWN, of Monticello, Piatt county, State of Illinois, are the inventors of an Improved Check-Row-Planter Attachment, of which the following is a full, clear, and exact description, reference being had to the accompanying drawing, forming part of this specification, in which—

Figure 1 is a plan of the attachment embodying our invention, and Fig. 2 is an end elevation of the same.

Our invention relates to the devices necessarily employed in check-row planters to operate the slide of the drill-box, and also to check or indicate the point in the row where the grain or seed has been deposited; and our invention consists in the combination of devices hereinafter described, and more particularly recited in the claim.

A is a frame, which, by means of a bar, *a*, to which it is hinged or pivoted, is secured to the planter-tongue upon either side. It may, by a suitable arrangement of the parts, be arranged to be at the rear of the planter. In this frame, on a centrally-located axle, is the wheel B. Upon this wheel the frame A rests and travels. Rising from the frame are the two uprights C, to the upper ends of which are pivoted the levers D, on the inside of said supports. The long arm of each of these levers engages successively one or more rollers on pins fixed in the side of the wheel B, on either side thereof, while the short arms of said levers, by means of the rods *d*, are connected to the extremities of the double bell-crank lever E, which is pivoted on the frame A. A rod, *e*, connects the long arm of this bell-crank lever to a weighted lever, *e*¹, pivoted on the bar *a*, while the opposite arm of this lever *e*¹ is pivoted to the rod *e*², which operates the slide of the drill-box. Upon one side of the wheel B are, as before stated, the rollers *b* *b*¹, on pins fixed in the wheel. Upon the other side of the wheel are similarly arranged the rollers *b*² *b*³, the same being set intermediate to the rollers *b* *b*¹ on the other side.

The attachment thus arranged is adapted to operate a drill, the revolution of the wheel B bringing the rollers *b* *b*¹ *b*² *b*³ alternately in contact or engagement with the long arms of the levers D, and, by their movement in passing under the said arms of the levers, causing the said levers to rock alternately on their pivots. This movement of the levers D, it is evident, causes the intermittent rocking of the double bell-crank lever E, which thus, through the rod *e* and lever *e*¹, gives the desired reciprocating motion to the slide-rod *e*².

In the rim of the wheel B are set the checks or markers *c*, diametrically opposite to each other. When it is desired to check or mark the rows of grain, the rollers *b*³ and *b*² may be removed from the wheel B, and *b*¹ transferred to the opposite side of the wheel. The rollers and checks *c* will thus correspond in position on the wheel, each roller having an adjacent marker. By the revolution of the wheel B each movement of the slide, by the engagement of either of the rollers *b* or *b*¹ with their respective lever D, and the consequent dropping of the grain, will be checked by one of the checks *c*.

The distance between rows in check-row planting may be regulated by the employment of different sizes of the wheel B, one of larger diameter being used for wide rows, and one of less for narrow rows.

What we claim as our invention, and desire to secure by Letters Patent, is—

In combination, the frame A, rod *a*, wheel B, with its rollers *b* *b*¹ *b*² *b*³, (one or more,) and its checks *c*, (one or more,) levers D on uprights C, rods *d*, double bell-crank lever E, rod *e*, weighted lever *e*¹, and slide-rod *e*², as described, and to operate for the purpose specified.

WILLIS ARMSWORTH.
JAMES HULL BROWN.

Witnesses:

JAMES A. HUSTON,
JOHN R. HUSTON.