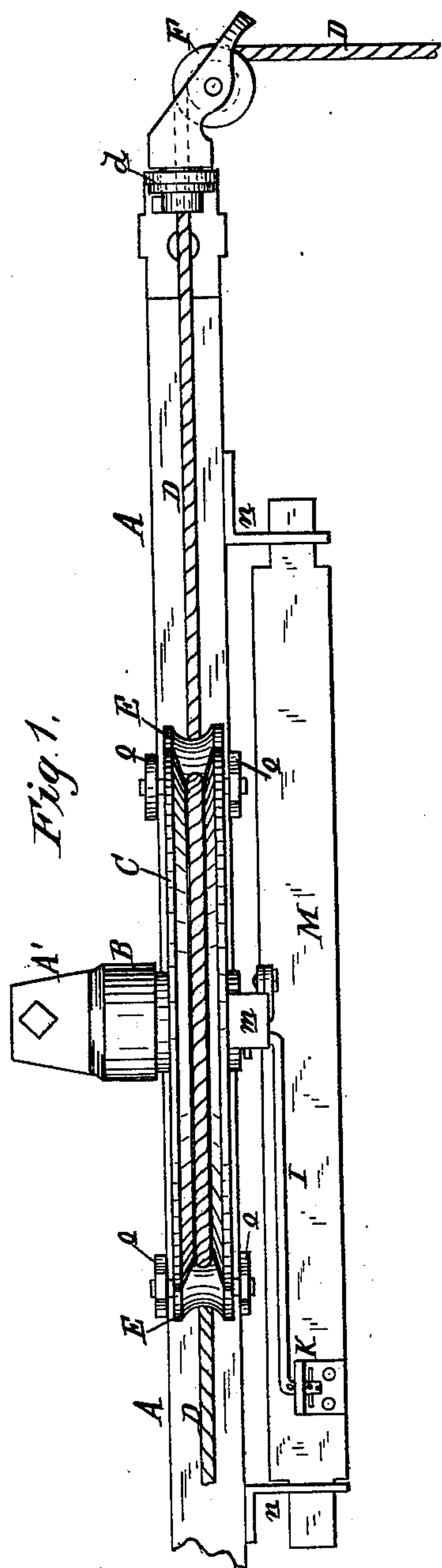


J. M. SHACKELFORD.
Check Rower Attachment.

No. 231,242.

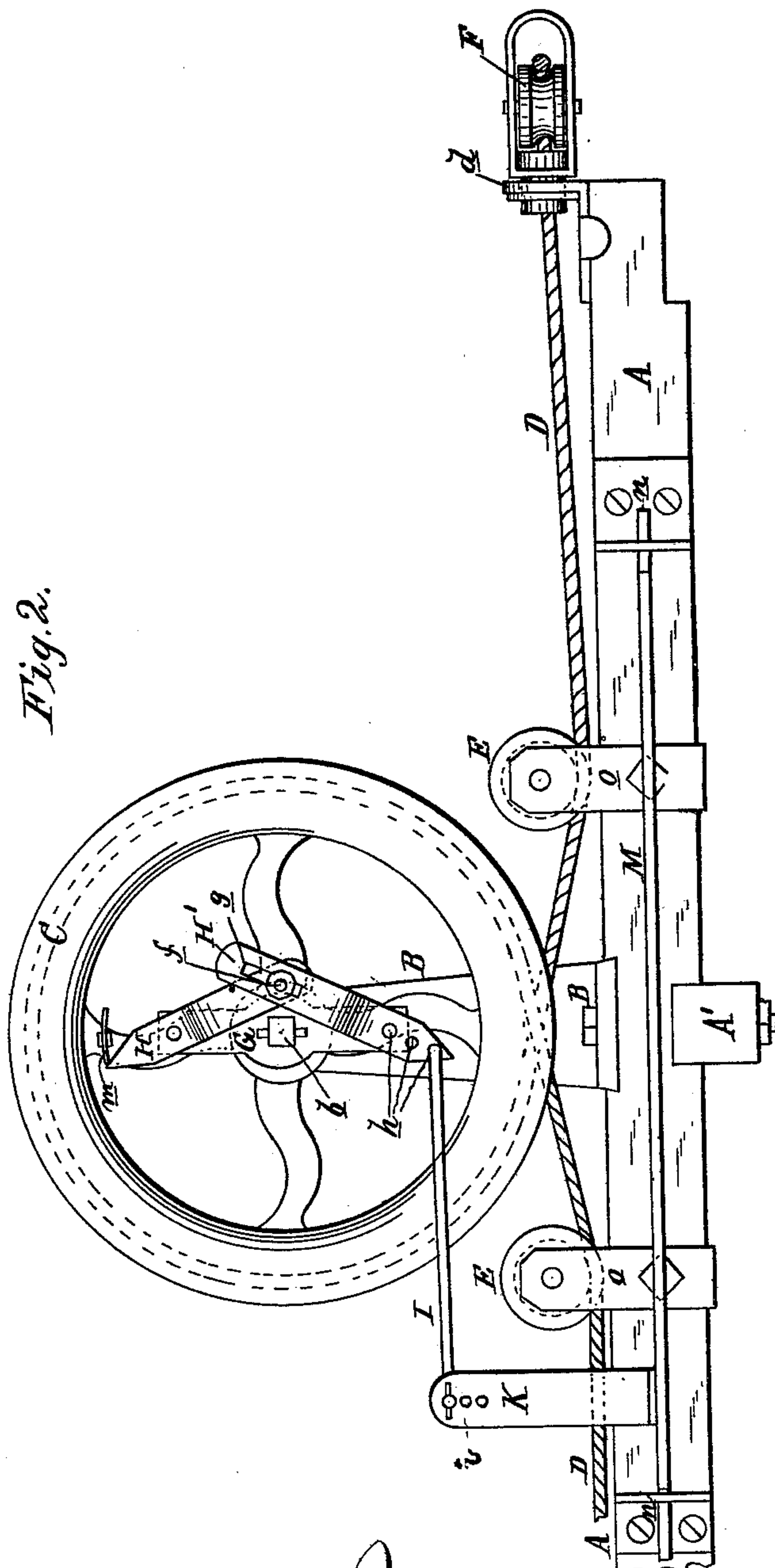
Patented Aug. 17, 1880.



WITNESSES:

Henry N. Miller
C. Sedgwick

Fig. 2.



INVENTOR:

J. M. Shackelford
BY *Mum & Co.*
ATTORNEYS.

UNITED STATES PATENT OFFICE.

JOEL M. SHACKELFORD, OF DECATUR, ILLINOIS.

CHECK-ROWER ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 231,242, dated August 17, 1880.

Application filed January 6, 1880.

To all whom it may concern:

Be it known that I, JOEL M. SHACKELFORD, of Decatur, in the county of Macon and State of Illinois, have invented a new and Improved Check-Rower Attachment, of which the following is a specification.

Figure 1 is a plan, showing the device. Fig. 2 is a front elevation of the same.

Similar letters of reference indicate corresponding parts.

The object of this invention is to furnish an improved device to be attached to a corn-planter for the purpose of planting or dropping corn at regular intervals.

A beam is fixed rigidly across the front of the corn-planter in front of the boxes, and has secured to it grooved rollers or pulleys for the support and guidance of the working-rope, and fixed centrally upon the beam is a standard supporting a grooved driving-wheel, around which the rope makes a turn as the planter is moved along. The rope being fastened at each end to a stake driven in the ground causes the driving-wheel to revolve and operate the improved device.

The invention consists of a plate secured vertically on the face of the standard, and carrying slotted pointed levers, which are operated by a stud on the face of the driving-wheel, which levers are connected by an adjustable rod with the drop-bar of the planter, and by the attachments motion is communicated from the driving-wheel to the drop-bar and sliding bar.

In the drawings, A represents the beam to be secured upon the planter. B is the standard, firmly fixed or secured upon the tongue of the planter and the central part of the beam A. From this standard B a spindle or shaft, *b*, projects, upon which revolves the grooved driving-wheel C, around which passes the rope D, that actuates the device.

E E are the small grooved sheaves, fixed in suitable standards *o o* upon the central portion of the beam A, under which sheaves the rope D passes; and F F are the caster-pulleys over which the rope D passes, said caster-pulleys being swiveled in lugs *d d*, that are fixed on the ends of the beam A.

Fixed immovably upon the spindle *b* is the plate G, to each end of which is pivoted a le-

ver, H H', respectively, whose outer and free ends are beveled on each edge to a point. The inner end of the lever H is provided with a stud, which plays in a slot made in the inner end of the lever H', so that the inner ends of these levers H H' are held movably together, and the motion of each is imparted to the other.

The lever H' has several holes, *h*, made in its pointed ends, and in one of these holes *h* is fixed one end of the connecting-rod I, whose other end connects with the bar K, by which is operated the dropping slide of the planter, the holes *h h* in the lever H' and the holes *i i* in the bar K respectively affording so many adjusting-points for the said connecting-rod I, whereby the position of the bar K is determined and the extent of the movement, also, which it shall give to the sliding bar M of the corn boxes or hoppers, which sliding bar M moves back and forth in the slotted lugs *n*, which project from the face of the beam A.

As the wheel C revolves in the forward movement of the planter the stud *m* strikes alternately the pointed ends of the levers H H', causing thereby a lateral reciprocating movement of the connecting-rod I and the bar K, which motion is communicated to the sliding bar M of the planter, and thereby the amount of corn dropped in a given time and the amount dropped at each movement of the said drop-bar is regulated.

This machine is very simple and durable, and will work on any planter. It makes a full drop every time and makes rows of equal distances apart, and stretching the rope does not cause the widening of the distance between the rows.

I am aware that levers and pulleys somewhat resembling mine have been used on check-rowers; hence I do not broadly claim them; but I know of no levers that are arranged and operated in the same manner as mine, nor of any check-rowers provided with swiveled caster-pulleys like those herein shown and described, the advantage of which caster-pulleys is that they hold the rope along the wood beam in such a manner that it cannot get out of place when the planter is at work, as they accommodate themselves to the tendency or direction of the rope at whatever an-

gle it may pull as the rope passes through the hollow shanks of the caster-pulleys.

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

1. In a check-rower, the combination, with the driving-wheel C, of the plate G, levers H H', studs *f* and *m*, substantially as shown and described, for giving motion to the sliding bar.
- 10 2. In a check-rower, in combination with the

beam A, standard B, and grooved driving-wheel C, the stud *b*, plate G, pointed levers H H', stud *m*, connecting-rod I, bar K, and sliding bar M, substantially as herein shown and described.

JOEL MURPHY SHACKELFORD.

Witnesses:

JAMES M. SCOTT,
JOSHUA BARRICK.