

H. R. SCOTT.
CORN-PLANTER.

No. 184,549.

Patented Nov. 21, 1876.

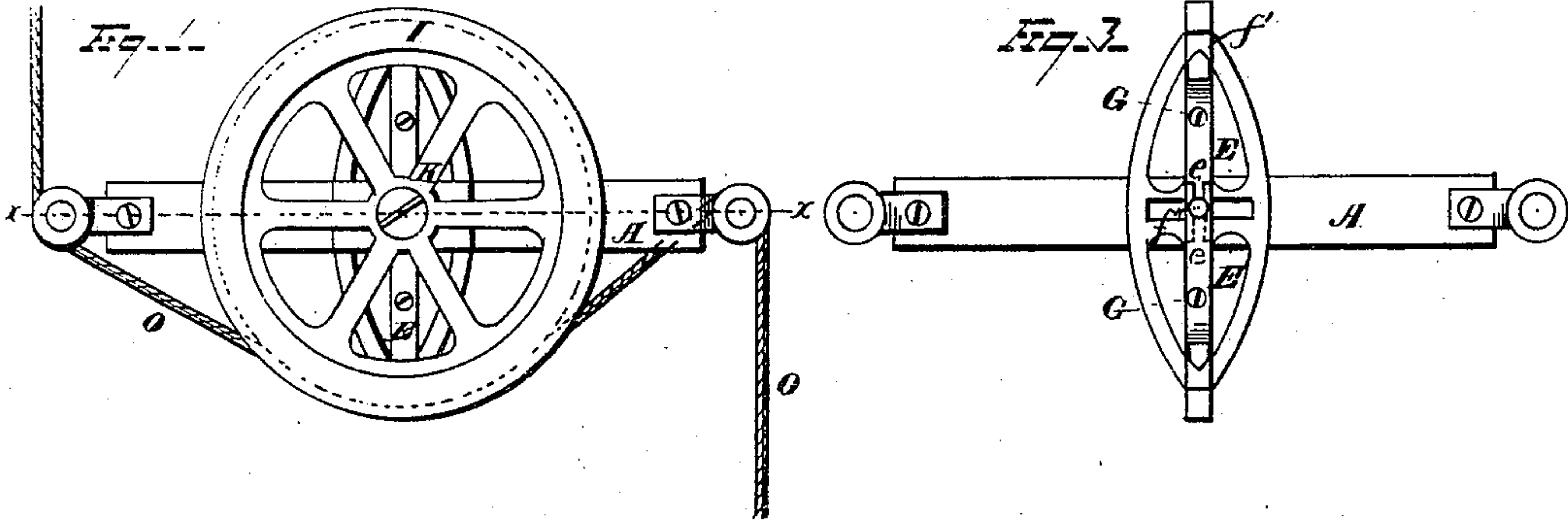


Fig. 2.

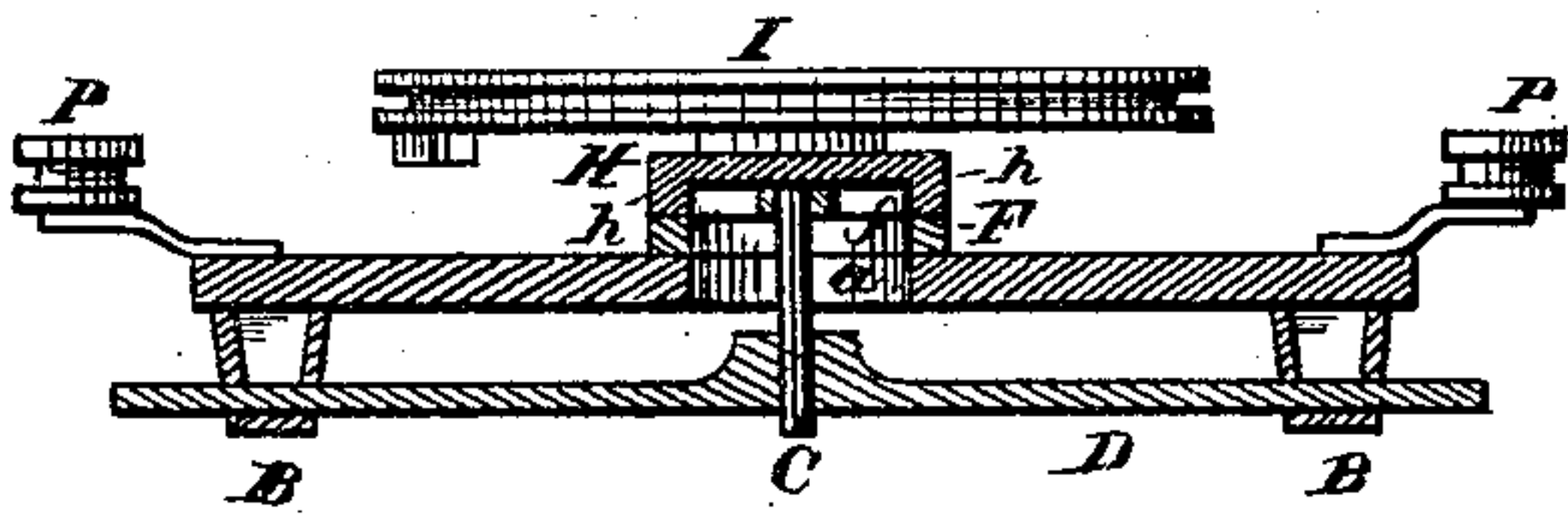


Fig. 4.

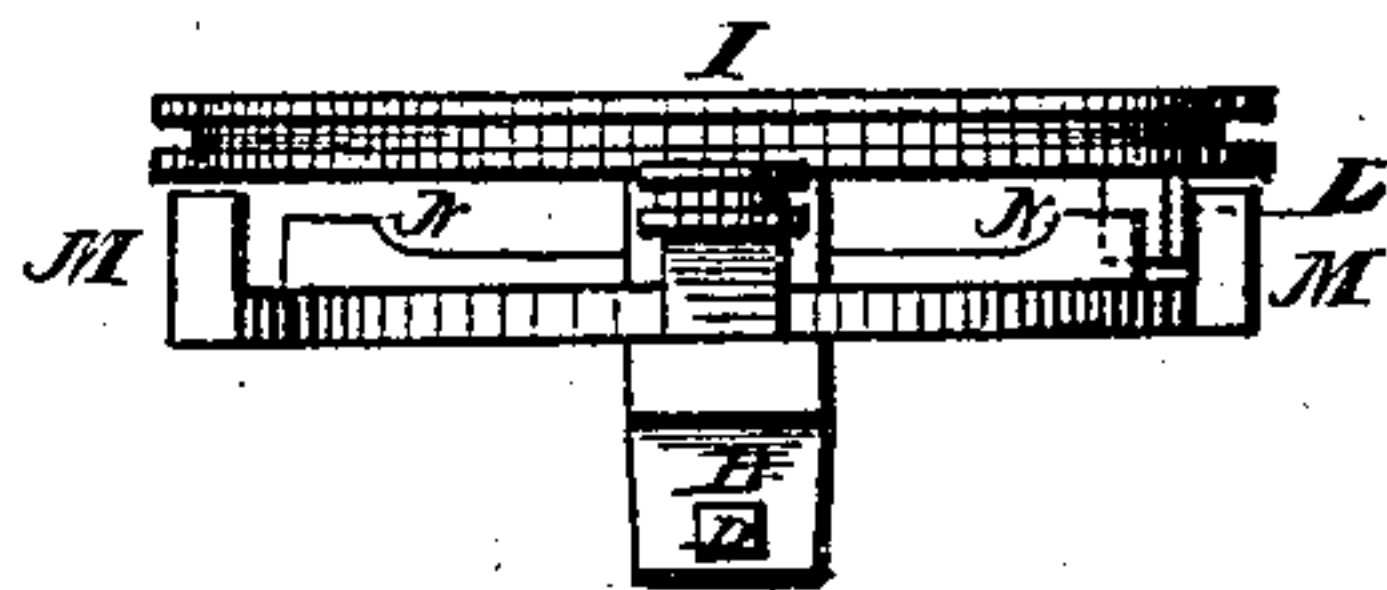
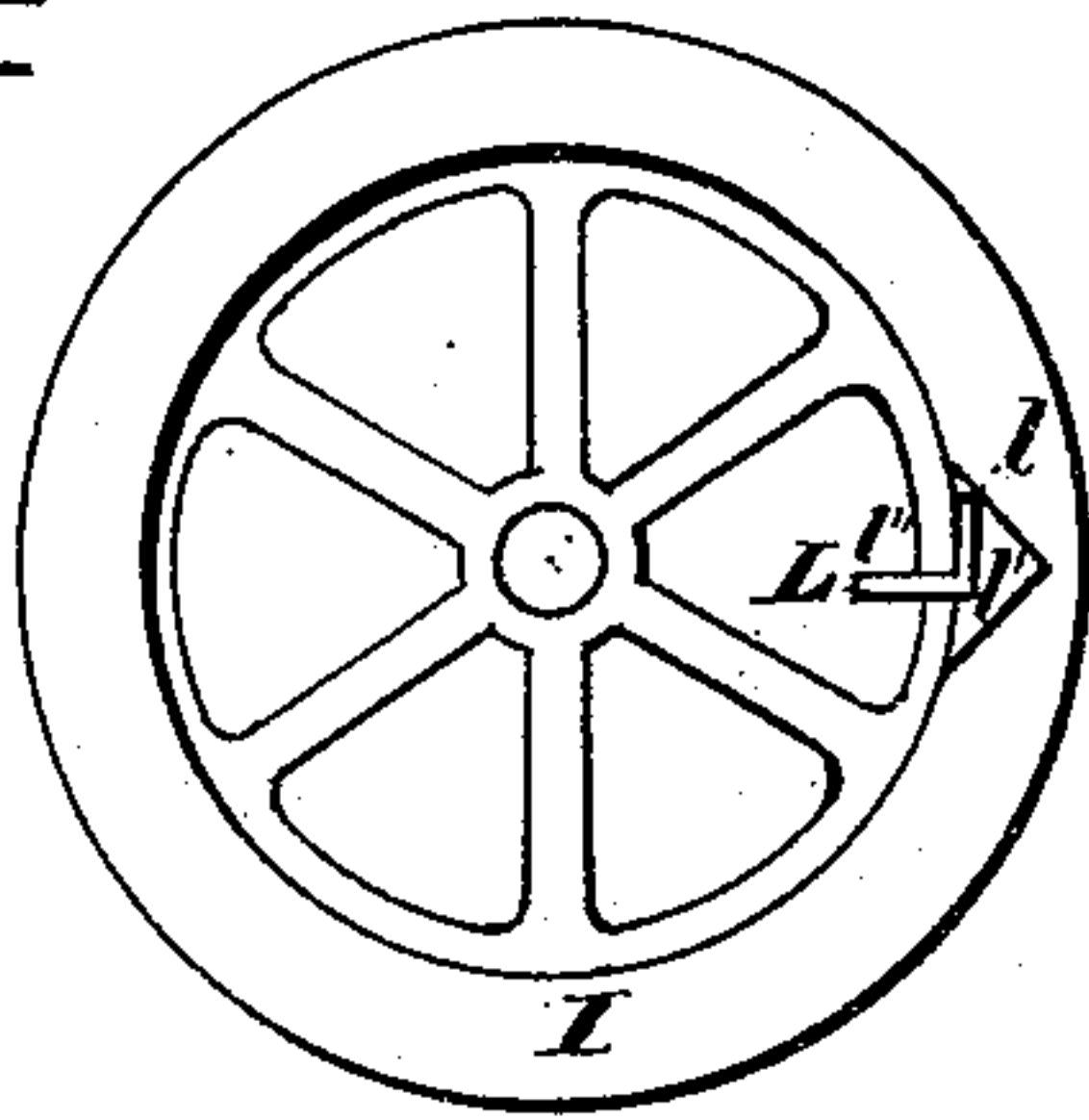


Fig. 5.



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UNITED STATES PATENT OFFICE.

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IMPROVEMENT IN CORN-PLANTERS.

Specification forming part of Letters Patent No. 184,549, dated November 21, 1876; application filed April 7, 1876.

To all whom it may concern:

Be it known that I, HENRY R. SCOTT, of Gibson, in the county of Ford and State of Illinois, have invented certain new and useful Improvements in 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 had to the accompanying drawings, which form part of this specification.

My invention relates to that class or subdivision of corn-planters called "check-row attachment," and is designed to produce uniformity in the rows of corn, with equal and constant distance intervening.

The subject-matter of my invention will appear from the claims.

In the drawings I represent only so much as is necessary to explain and illustrate my invention, in which Figure 1 is a plan view of my improvement; Fig. 2, a cross-section through line *x x*, Fig. 1; Fig. 3, a detached plan; Fig. 4, an end elevation, and Fig. 5 a detail reverse plan view of the main friction-wheel.

A is the connecting bar or support running transversely to the length of the machine, and connecting the hoppers or planter-boxes B B. It is slotted centrally and longitudinally at *a*, in which freely works the pivot C, which reciprocates the sliding seed-bar D. This latter runs parallel to and below the connecting-bar A, and is provided with seed cups or openings, which register with corresponding ones in the hoppers B B, so as to drop the corn at each respective register. The pivot C is operated by the inner extremities of the shaker-arms E E, provided with the open slots *e e*, in which engages the pivot C after it has passed up from the seed-bar through both the slot *a* and the slot *f* in the main plate F. This latter is secured to the cross-bar A, and is of an angular elliptical outline, with centrally-crossing partitions or divisions *f' f''*. The shaker-arms are pivoted in the longitudinal central division-plate *f'*, respectively, on either side of the cross-bar A, and of suitable distance therefrom, as may be desired, to give length of stroke to the sliding bar D.

It will be observed that the pivots G G of the shaker-arms are adjustable lengthwise,

with the shakers in slotted guides, so that the length of their throw may be agreeably changed, and also that the arms may be adjusted to take up wear.

Parallel to and above the transverse division-plate *f''* is a supporting-plate, H, on which rests the friction-wheel I. It is constructed with depending projections *h h*, which bear its main body up from off the face-surface of the main plate F, and thus allows of the free reciprocation of the shaker-arms in the space thence formed. This supporting-plate H is further provided with a slot located centrally with reference to the operating parts, in which works the spindle K, about which the friction-wheel revolves. The friction-wheel and spindle may be provided with washers and nuts, so as to insure, as ordinary, the easy and safe operation of same. The lower or ground periphery of this wheel carries the right angular trip L, loosely pivoted at its inner extremity *l*, and working in a depression, *l'*, in the flange of the wheel. This depressed opening *l'* serves, with its sides, to act as a guide and a stop to the rotation or revolution of the trip L, only permitting same to have a forward and return movement or reciprocating semicircular action. The frame of the main plate F is provided at its longitudinal extremes with the projecting lugs or bosses M M, which serve to retain the trip L against the shoulders N N of the shaker-arms until the latter have been moved sufficient distance to throw the seed-bar.

The same operation, only in a reverse direction, is repeated as the wheel, having completed a semi-revolution, brings the trip against the opposite shaker-arm, and the seed-bar is thrown back to extreme of its opposite stroke. It is apparent that the lever-pressure against the shaker-arms is terminated as soon as the trip rides past and free of the boss M.

The friction-wheel is of a grooved periphery, in which works the rope O, which operates the machine. This rope is plain, without knots, and is anchored, one end, respectively, at either end of the field to be planted. It is then brought around the friction-pulleys P P, situated at extremities of the cross-bar A and around the main wheel I. The pulleys are raised sufficiently above said cross-bar as to

bring the centers of the guides of the pulleys in even plane with same of the main wheel.

The operation of all the foregoing-described mechanism is easily understood, and is substantially as follows: The line being suitably stretched across the field, and anchored after its engagement with my corn-planter, the latter is moved forward. Upon each semi-revolution of the main wheel, as effected by the friction-rope, the seed-bar registers with the grain-hopper so as to drop the corn. This dropping must be regular and uniform on account of the action of the main wheel, which latter is varied to any circumference desired, the distance between any two consecutive hills being equal exactly to the diameter of the wheel. Thus any regularity of row may be attained by easy change of the wheel, as above indicated.

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

1. The combination, with a friction-wheel

and sliding seed-bar, of oscillating shaker-arms, and a trip pivoted to the friction-wheel, substantially as and for the purpose specified.

2. In a corn-planter check-row attachment, the main plate having end lugs M, in combination with the shaker-arms E E and trip L on friction-wheel, substantially as and for the purpose specified.

3. In a check-row attachment, the main plate F, having slotted division-bars *f f'*, and provided with pivoted shaker-arms longitudinally adjustable thereon, in combination with the slotted cross-bar and the reciprocating seed-slide, substantially as and for the purpose described.

In testimony that I claim the foregoing I have hereunto set my hand this 1st day of April, 1876.

HENRY R. SCOTT.

Witnesses:

THOS. F. SCOTT,

A. W. STEVENSON.