A. H. LAW.

Check-Row Attachment for Corn-Planter.

No. 208,020. Patented Sept. 17, 1878.

Fig. 1.

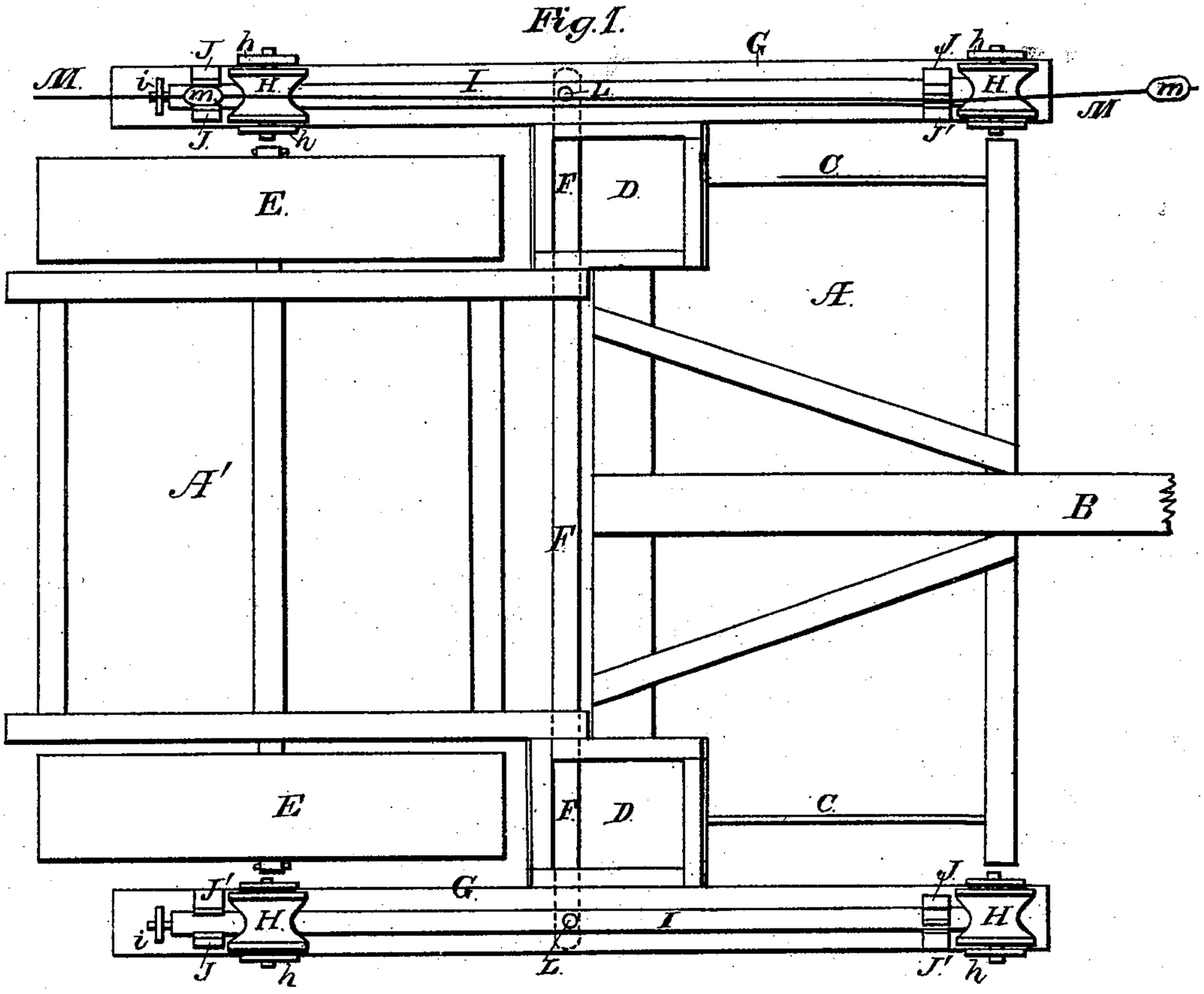


Fig. 2.

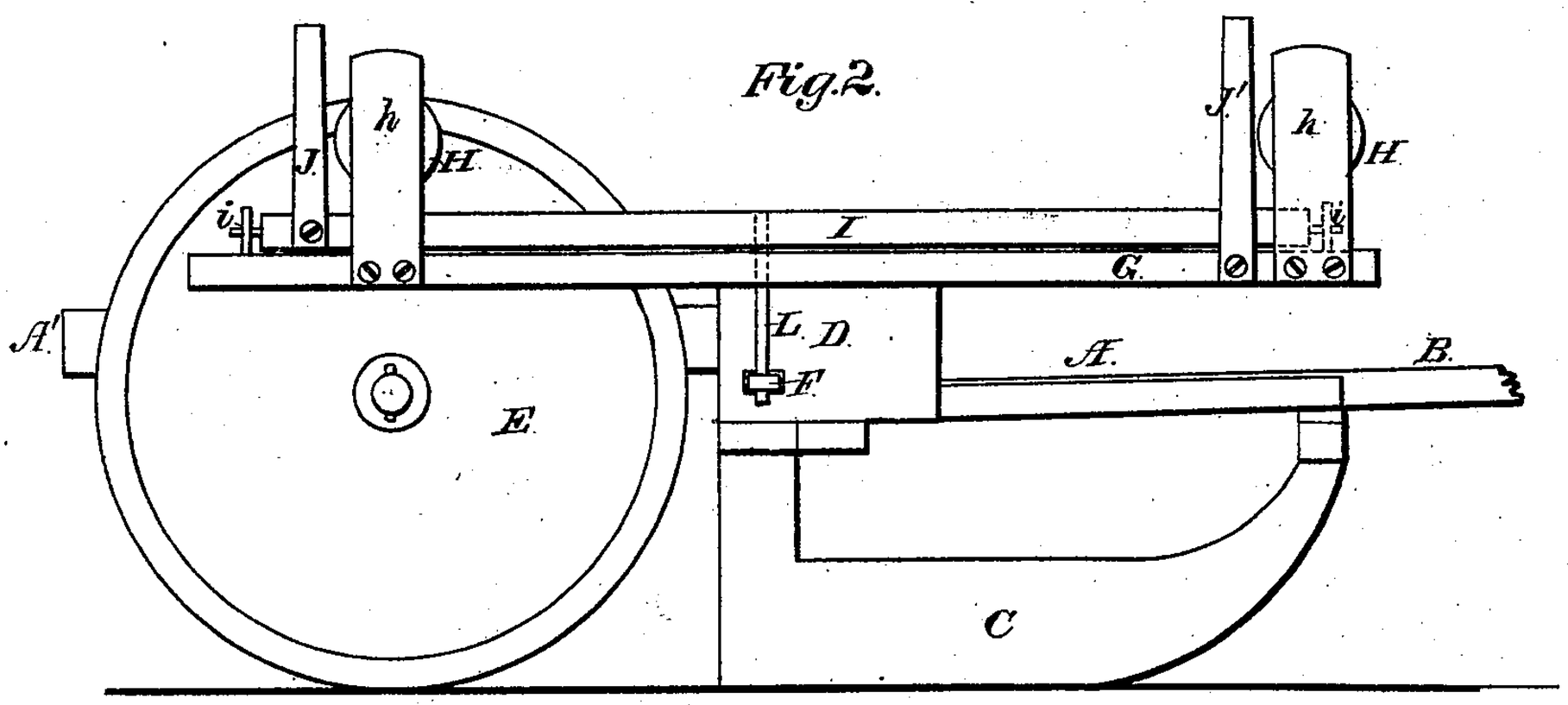
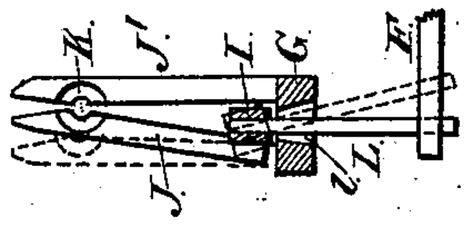


Fig. 3.



Attest:
F. P. Brock,
D. G. Stuart

Inventor
Abram H. Law
per A. M. Dallam
Attorney.

UNITED STATES PATENT OFFICE.

ABRAM H. LAW, OF ALEDO, ILLINOIS, ASSIGNOR OF ONE-HALF HIS RIGHT TO JAMES A. SHERRIFF, OF SAME PLACE.

IMPROVEMENT IN CHECK-ROW ATTACHMENTS FOR CORN-PLANTERS.

Specification forming part of Letters Patent No. **208,020**, dated September 17, 1878; application filed August 14, 1878.

To all whom it may concern:

Be it known that I, ABRAM H. LAW, of Aledo, in the county of Mercer and State of Illinois, have invented certain new and useful Improvements in Check-Row Attachments for Corn-Planters; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

My invention relates to corn-planters, more particularly to that class of implements known as "check-row corn-planters," in which the mechanism for operating the seed-slides in the hoppers is actuated by means of a knotted cord or wire stretched across the field.

The invention consists in certain new and improved devices and combinations of devices whereby a reciprocating movement is imparted to the sliding bar which operates the seed-slides through the passage of the knotted cord or wire, in the manner hereinafter more fully set forth.

In the accompanying drawings, Figure 1 is a plan view of a corn-planter provided with my improved check-row devices. Fig. 2 is a side elevation of the same; and Fig. 3, a detached sectional view, showing the operating devices.

Referring to the parts by letters, A represents the forward and A′ the rear frames of an ordinary two-horse corn-planter, the rear frame being hinged to the forward frame, A, in the usual manner. B is the draft-pole, C the runners or furrow-openers, and D D the seed-hoppers, all said parts being attached to and forming part of the forward frame, A.

E E are the supporting-wheels, which also serve to cover the corn after it is dropped, said wheels being journaled to the rear frame, A′. A driver's seat (not shown) is also secured to the rear frame, in the usual manner.

In this class of machines it is customary to provide a seat, located between the hoppers D D, for the accommodation of the operator, who moves the sliding bar which actuates the seed-slides by means of a hand-lever.

In my improved machine the necessity for this operator is obviated, the necessary motion being given to the sliding bar by means of the knotted cord and mechanism which constitutes my invention, and which I will now proceed to describe.

To the sides of the machine, outside of the hoppers and wheels, bars G G are secured, one on each side, said bars being arranged parallel to each other and in the line of progression of the machine. Near the ends of these bars upwardly-projecting brackets *h h* are secured, between which guide-pulleys H are journaled.

I I are oscillating bars, arranged above the bars G G, having their ends pivoted or journaled in suitable bearings *i*, secured to said bars G. To the ends of the bars I, at points adjacent to the pulleys H, uprights J J are secured, one to one side of the bar I, and the other at the opposite end of the bar, to its other side.

J′ J′ are similar uprights, rigidly secured to the bars G at points immediately opposite the uprights J. These uprights J J′ have beveled grooves K, of semicircular form, formed on their inner adjacent sides, as clearly shown by Fig. 3 of the drawing.

L L represent rods, which are secured to the central portions of the bars I I, and project downward through slots *l*, formed laterally through the bars G G, the lower ends of said bars also passing through the ends of the sliding bar F, to which they are secured.

M represents the knotted wire or cord, which, when the machine is in use, is stretched across the field to be planted, the knots *m* being located at proper distances apart, corresponding with the distance between the rows of plants.

The operation of the device is as follows: The wire or cord M being first stretched across the field, and its ends anchored or secured in any well-known manner, it is passed over the pulleys H, and through between the grooves K of the uprights J J′ on one side of the machine, as shown by Fig. 1 of the drawings, the knots on the cord being of greater diameter or size than the grooves K.

As the machine is drawn across the field the knots on the cords, in passing between the

uprights J J′, first force the forward upright J to one side, or apart from the corresponding upright J′, as shown by dotted lines in Fig. 3, thereby oscillating the bar I in one direction, and through its rod L imparting a reciprocating motion to the sliding bar F, actuating the seed-slides, and dropping the corn at the required points. The knots, in passing between the rear uprights, J J′, in a similar way, cause the bar I to oscillate in the opposite direction, and to move the sliding bar back to its former position, each knot thus imparting a reciprocating motion to the sliding bar F, and causing the seed-slides to drop the corn at stated intervals apart.

When the machine reaches the end of the field, and is turned around to proceed in the opposite direction, the cord or rope is transferred to the other side, the stakes or anchors being properly placed, and then the machine is ready to proceed and operate as before described.

While it is convenient and desirable to have said operating devices on both sides of the machine, yet, as will be obvious, only one set of pulleys and oscillating bar is essential in the operation of check-row planting, as described, and it may be attached to the corn-planter in such a way as to be transferable from one side of the machine to the other when a two-row planter is used, though in single-row planters it might be centrally arranged, and even in double-row planters, by the use of suitable guiding-pulleys for the cord or rope. The device might also be centrally arranged, so that only one would be required for operating the machine. I do not therefore limit myself to the use of two of the check-row attachments herein described, one arranged on each side of the corn-planter; but

I claim as my invention—

1. A check-row attachment for corn-planters, consisting of the laterally-oscillating bar I, connected with the sliding bar, and operating to impart a reciprocating motion thereto by means of a knotted wire or rope, in manner and for the purpose substantially as specified.

2. The fixed bar G, having uprights J′, in combination with the oscillating bar I, having the corresponding uprights J, for imparting a reciprocating motion to the sliding bar F, substantially as and for the purpose specified.

3. The combination of a the fixed bar G, oscillating bar I, uprights J J′, and guide-pulleys H, operating substantially as and for the purpose specified.

4. The combination of a sliding bar, F, rod L, oscillating bar I, fixed bar G, uprights J J′, and pulleys H, all operating substantially as and for the purpose specified.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

ABRAM H. LAW.

Witnesses:
J. MACK LOVE,
JOHN HAUGHEY.