

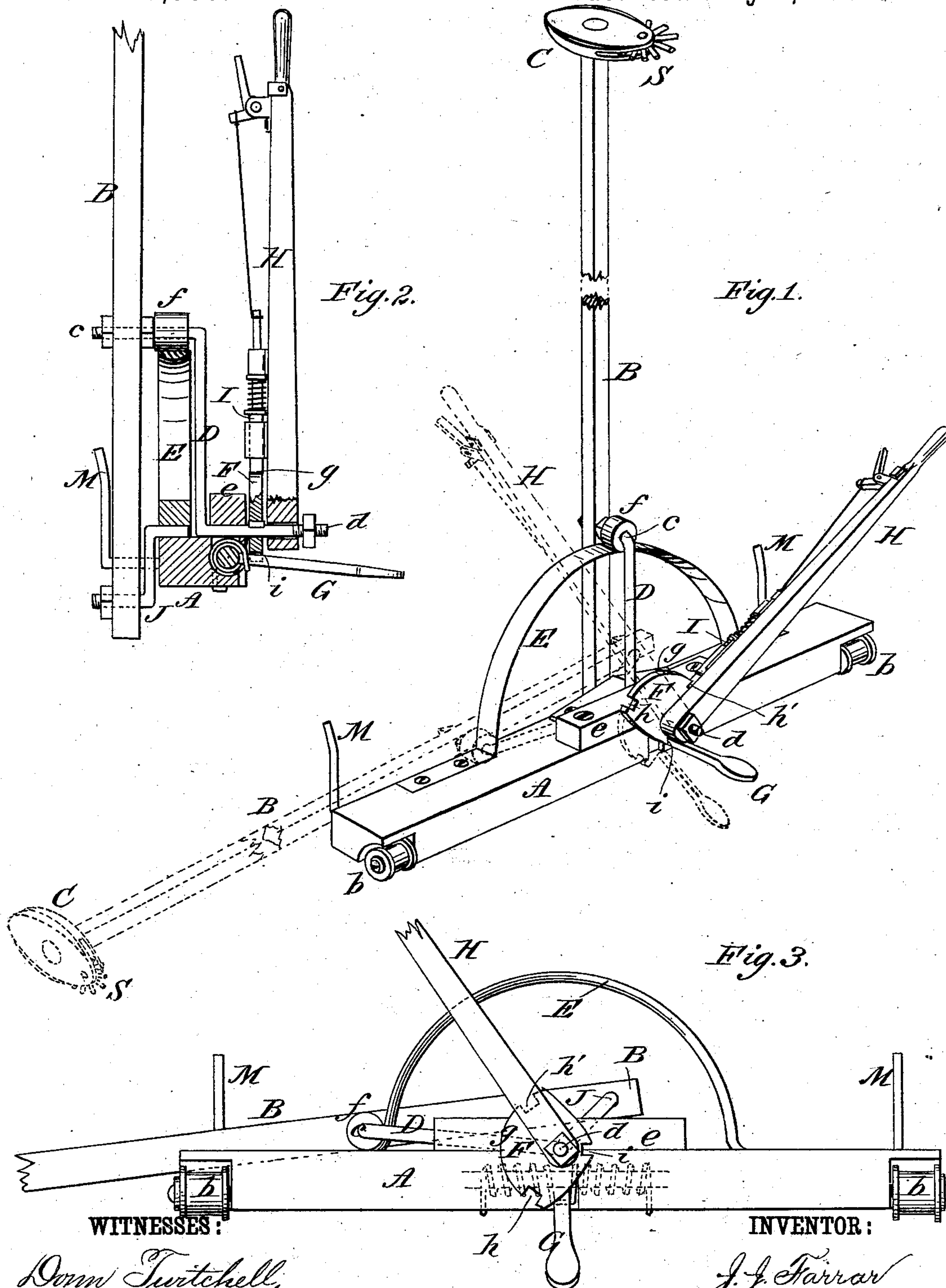
(No Model.)

J. J. FARRAR.

HAND LEVER AND DEVICE FOR THE MARKING GUIDES OF PLANTERS.

No. 260,553.

Patented July 4, 1882.



WITNESSES:

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JOHN J. FARRAR, OF AURELIA, IOWA.

HAND-LEVER AND DEVICE FOR THE MARKING-GUIDES OF PLANTERS.

SPECIFICATION forming part of Letters Patent No. 260,553, dated July 4, 1882.

Application filed February 11, 1882. (No model.)

To all whom it may concern:

Be it known that I, JOHN J. FARRAR, of Aurelia, in the county of Cherokee and State of Iowa, have invented a new and useful Improvement in Hand-Levers and Devices for the Marking-Guides of Planters, of which the following is full, clear, and exact description.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a view in perspective of the marking-guide of a corn-planter applied to a cross-beam on the machine, and constructed and combined with a hand-lever and other devices for controlling it, in accordance with the invention, said view showing by full and dotted lines the marking-guide stick and levers by which it is controlled in different positions. Fig. 2 is a vertical transverse section of the same, and Fig. 3 an elevation thereof at right angles to Fig. 2.

The invention relates to marking-guides which are used to mark the ground for the purpose of directing the driving course of the machine in going to and fro across the field; and to this end the invention consists in certain novel constructions and combinations of devices, as hereinafter fully described.

A indicates a back cross-piece of either a hand drop or drill machine, but which in the case of a check-row machine is extended on both sides of the machine far enough to allow a pulley, *b*, at either end of it to be in line with the outside roller in front, to allow of the ordinary check-row wire being run under said pulley.

B is the guide-stick, which should be of more than usual length, and carries the marker C on its outer end.

D is a crank of considerable throw, having its wrist *c* fastened to the guide-stick, and its bearing end *d* arranged to run in a box, *e*, mounted on the cross-piece A. The length of movement of which the crank D is made capable, and with it the guide-stick, is about half a circle or a little more.

Upon the wrist *c* of the crank D is a roller, *f*, which, during the movement or reversal of the guide-stick, travels on a bowed guide, E, to assist in holding the crank D in proper position and prevent it from twisting, also taking

the strain from the box *e* when the guide-stick B is raised into an upright position. The bearing end *d* of said crank has secured on its extremity outside of the box *e* a metal plate, F, which may be of approximately quadrant shape, having one of its edges, *g*, concentric or curved from the axis of the shaft as a center, and so that a line drawn from its axis to a central point in said curved edge is parallel to or coincides with the crank D. This plate F has two notches, *h h'*, near either end of its curved edge *g*, and a third notch, *i*, on the opposite side of its axis and coincident with the crank.

G is a spring-catch extended so as to be capable of operation by the foot of the driver, and arranged so that when the guide-stick B is in an upright position, and the crank D and plate F correspond, the spring-catch G will engage with the notch *i* of the plate F and hold the guide-stick and marker in their elevated position when turning the machine or moving it to and from the field. The other notches, *h h'*, in the plate F are so arranged that lines drawn through them to the notch *i* will be at right angles with each other, or thereabout. This is to provide for the hand-lever H, by which the marking-guide is controlled, and which carries a spring catch or bolt, I, that engages with either notch *h h'*, being always within reach of the driver.

The hand-lever H is loose on the shaft or bearing-end portion *d* of the crank D, and only engages with the marking-guide through the catch I and either notch *h h'* in the plate F, so that when the marking-guide is down on the ground the lever H is within reach of the driver, and is on the same side of the machine that said guide is. The spring-catch I has mechanism connected with it extending up to near the outer end of the lever H, whereby it may be controlled by the same hand which holds said lever H. When the machine has to be turned around, the lever H, having its catch I engaged with one of the notches *h* or *h'*, is worked back about the quarter of a circle, or until the guide-stick B stands in an upright position, as shown by full lines in Fig. 1. The spring-catch G then engages with the notch *i* of the plate F to hold the marking-guide in the position to which it has been adjusted, and the marking-guide remains in this position until the machine is turned around, and, if the machine is a check-

row sower, until the wire is staked. After this the catch I is released from its engagement with the one notch, *h* or *h'*, and drawn back loose till the catch I comes opposite and enters the other one of said notches. The foot is then pressed upon the spring-catch lever G to free it from the notch *i*, and the marking-guide is lowered to the other side by the lever H, which is left within the same easy reach of the driver as it was when occupying a position on the other side of the machine.

J is a short crank, having its shaft or bearing portion in the same axial line as that of the longer crank, D, and connected at its wrist end with the inner end of the guide-stick B. This short crank, J, serves to raise the inner end of the guide-stick above its center of motion, and so that when said stick is down the marker C will be adjusted below the cross-piece A of the machine. The length of this crank J will vary with different machines.

The pulleys *b* in the front and under sides of the ends of the cross-piece A should have flanges on their ends to guide or keep in place the check-row wire as it is run under them and under the guide-stick. Said pulleys will have no tendency to bind the wire, as in turning the machine they move toward the wire, and consequently slack it, allowing it to drop to the ground.

The front or outer end of the marker C is provided with a many-armed projecting wheel, S, to help the marker to surmount any obstacles which it may meet, the guide-stick and marker always being free to rise. When the guide-stick B is thrown over to either side it is braced and supported by entering within either one of two elbow-supports, M M, arranged at the ends of the cross-piece A. Said supports M M also relieve the crank or cranks connected with the guide-stick of strain.

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

45 1. The combination, with the guide-stick B

of the marker, of the crank D, secured at its wrist to said stick, and having its shaft or bearing end *d* in a box mounted on the frame or back cross-piece of the machine for supporting or carrying the marking-guide, substantially as specified. 50

2. In combination with the marking-guide B C, the crank D, by which it is carried, and the plate F, fast on the shaft of said crank, the spring catch or lever G, arranged for control by the foot of the driver, and engaging with a notch, *i*, in the plate F, for holding the marking-guide in a raised position when turning the machine or when moving it to and from the field, substantially as specified. 60

3. The bowed guide or support E, in combination with the marking-guide B C and crank D, carrying the guide-stick and provided with a roller, *f*, for travel on or over the bowed guide, essentially as and for the purposes herein set forth. 65

4. The combination, with the stick B of the marking-guide, and crank D, by which it is carried, of the crank J, having its axis coincident with that of the crank D, and connected at its wrist with the inner end of the stick B, to provide for the support of said end of the stick and depression of the marker end thereof, substantially as described. 70

5. The combination, with the marker C on the outer end of the guide-stick B, of the many-armed wheel S, journaled in the said marker, substantially as and for the purpose set forth. 75

6. The combination, with the cross-piece A and guide-stick B, fitted to swing to opposite ends of said cross-piece, and cranks D J, carrying and controlling said stick, of the elbow-supports M M, arranged to support the stick B of the marking-guide when swung over to opposite sides of the machine, essentially as and for the purposes herein described. 80

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Witnesses:

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