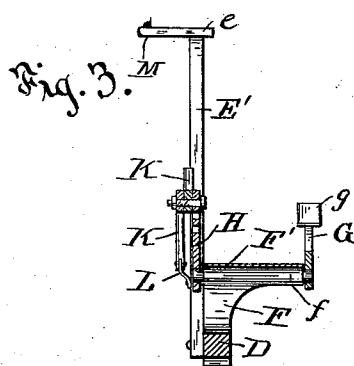
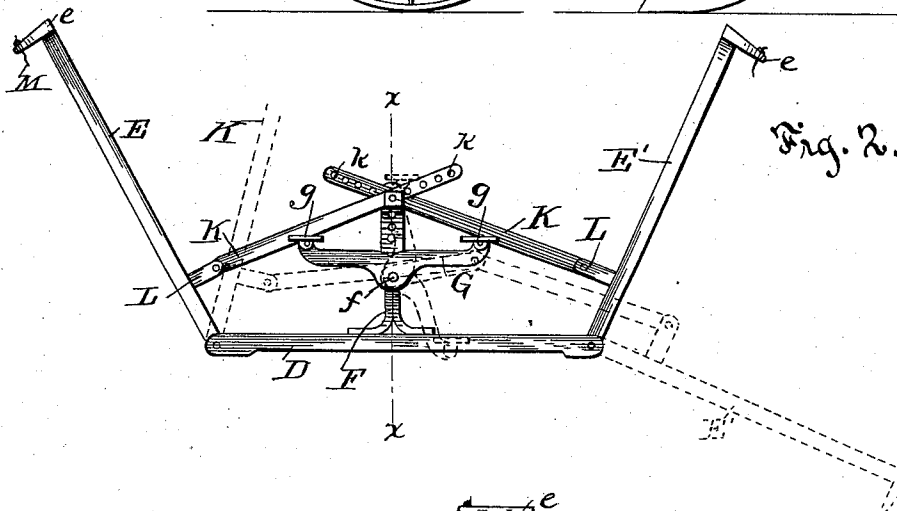
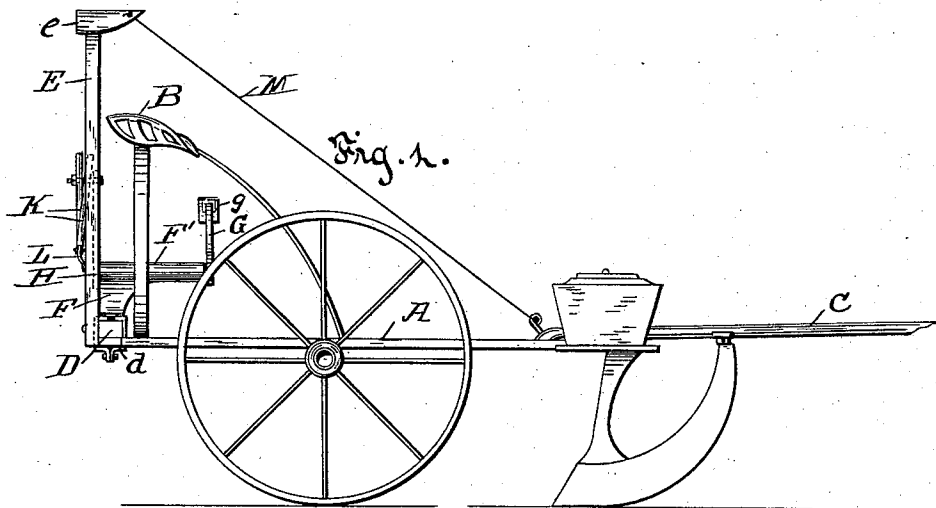


(No Model.)

W. L. MINZEY.
MARKER FOR SEEDERS AND PLANTERS.

No. 576,139.

Patented Feb. 2, 1897.



Witnesses;
John H. Milans.
Chas. W. Parker.

Inventor,
William L. Minzey,
By *L. S. Bacon*
Att'y.

UNITED STATES PATENT OFFICE.

WILLIAM L. MINZEY, OF BELLEVUE, OHIO, ASSIGNOR OF ONE-HALF TO THE OHIO CULTIVATOR COMPANY, OF SAME PLACE.

MARKER FOR SEEDERS AND PLANTERS.

SPECIFICATION forming part of Letters Patent No. 576,139, dated February 2, 1897.

Application filed August 15, 1896. Serial No. 602,901. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM L. MINZEY, a citizen of the United States, residing at Bellevue, in the county of Huron and State of Ohio, have invented certain new and useful Improvements in Markers for Seeders and 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 appertains to make and use the same.

This invention relates to an improvement in "markers" for seeders and planters, and it is embodied in the construction and arrangement of parts hereinafter described, and definitely pointed out in the claims.

Primarily the invention consists in a marker attachment for seeders and planters which is designed for adjustment to varying styles of machines and which may be easily operated at turning-points without the use of the hands of the driver or operator.

The invention, generally stated, is of that class wherein two markers are employed which are connected by toggles, a lever being employed for shifting the toggles to raise the marker on one side and depress that on the opposite side, or to elevate both markers simultaneously when occasion demands, as, for instance, when turning at the end of a row.

The object of the invention is to provide a marker of the class above indicated which can be shifted or adjusted without interfering with the driver or operator while manipulating the machine and which can be readily adjusted to different machines.

In the accompanying drawings I have shown a construction for carrying out my invention, but I desire it understood that changes and alterations can be made without departing from the nature and principle of the invention.

In the said drawings like letters of reference designate corresponding parts in the several views.

Figure 1 is a side elevation of a planter, showing the attachment properly applied, although it is to be understood that the precise location of the marker relative to the frame is immaterial, the same being susceptible of

application at different points, depending largely on the character and construction of the machine. Fig. 2 is a front elevation of the marking attachment detached. Fig. 3 is a section on the line *xx*, Fig. 2.

In the drawings, A designates the frame of the planter, which I have shown simply to illustrate the application of the invention.

B designates the seat, and C the tongue.

On the frame, conveniently at the rear, is secured the base or supporting bar D of the marking attachment, the same consisting of a straight bar of a length to extend to the opposite sides of the machine. The bar D is detachably secured to the rear of the frame A by clips *d* or any other desirable means, which permits of its removal or application to different styles of frame. On the opposite ends of the bar D are pivotally secured the marker-arms E E', carrying the marking-shoe *e* at their ends, which are of any conventional or desired pattern.

Mounted centrally on the bar D is an upright F, having an elongated horizontal bearing F' formed at its upper end, through which a shaft *f* passes and is held. The shaft may be of any convenient or desirable length to suit the machine to which the device is applied. I have shown it in the drawings as of a length sufficient to carry its forward end to a point forward and below the seat, at which point it has rigidly secured therein the lever G, extending at right angles to the shaft and in opposite directions. The ends of the lever G are turned or curved upward and carry at their extremities the foot-rests *g*, which are located in easy reach of the driver when seated. The rear end of the shaft *f* has a crank-arm H rigidly secured thereto and extending upward a distance sufficient to constitute it a long lever-arm, the same being extended in a direction substantially at right angles to that of the lever-arms G.

To the upper end of the crank H are pivotally and adjustably secured the toggle levers or links K, the same having a series of perforations *k* in their ends for the purpose of adjustment or varying the point of connection with the crank to regulate or vary the extent of movement of the arms. The

outer ends of the toggles K are pivotally connected to posts or projections L, carried by and secured to the arms E E' at points substantially midway the center and inner ends of the arms. These posts serve to permit the marker-arms being forced down to the desired point. M designates the usual brace cord or rope connected to the markers and loosely passing through an eye on a standard fixed in the tongue. By the employment of the shaft f it will be noted that by varying its length the device can be located at any desirable point on the planter-frame.

In operation the weight of the markers will be sufficient to maintain them in their proper active position, and the length of the down movement of an arm is such as to carry the opposite arm inwardly beyond the vertical center. The inactive arm thereby assists in maintaining the active arm in marking contact with the ground. As the operator reaches the end of a row or course he presses down on the elevated foot-rest of lever G, forcing the active marker up substantially one-half that of its full movement. The operator with his feet then holds the arms in their elevated position until he has turned, when he then presses the opposite arm into active position. The movement of the arms is thus effected without the driver leaving his seat or shifting the driving-reins.

It will be noted that the long leverage secured by the lever G acting on the relative short lever or crank H enables the operator to make the necessary shifts with but slight exertion.

Having thus described the invention, what is claimed as new, and desired to be secured by Letters Patent, is—

1. In a marking attachment for planters, the combination with the supporting-frame of a planter, of a marker comprising swinging arms located at opposite sides of the machine, a toggle connection between the arms, and means for moving the toggle consisting of a shaft, a crank thereon connected with the toggles, and a lever fixed to the shaft, substantially as described.

2. A marker attachment for seeders and planters consisting of a base-bar, marker-arms pivoted to the opposite ends of the bar, toggles connecting the arms, a lever for actuating the toggles arranged at the inner ends of the links thereof, and means for de-

tachably securing the base-bar to a machine, substantially as described.

3. In a marking attachment for seeders and planters, the combination with a base, of marking-arms pivotally secured to the opposite ends thereof, toggle-levers connecting the arms, a bearing, a shaft journaled therein, a crank on the shaft having its outer end connected to the toggles, and a lever on the shaft extending in opposite directions, and having rests at its ends, substantially as described.

4. In a marking attachment for seeders and planters, the combination with a base-bar, of marker-arms pivotally secured to the opposite ends thereof, projections on the arms, links connected to the projections, a crank-arm connected to the inner ends of the links, and a lever for actuating the crank-arm, substantially as described.

5. In a marking attachment for seeders and planters, the combination with a base-bar, of marker-arms pivotally connected to the opposite ends thereof, a central crank-arm, links connecting the crank with the marker-arms, a shaft on which the crank is mounted, a horizontal bearing for the shaft, and an actuating-lever rigid on the opposite end of the shaft, substantially as described.

6. In a marking attachment for seeders and planters, the combination with a swinging marker-arm, of a shaft, a bearing for the shaft, a connection between the shaft and arm, and a lever fixed on the shaft extending in opposite directions and having rests on its ends, substantially as described.

7. In a marking attachment for seeders and planters, the combination with two oppositely-arranged pivoted marker-arms, a toggle connection between the arms, a shaft intermediate the arms, a crank on the shaft, an adjustable connection between the crank and the toggle, and a foot-lever on the shaft for shifting the arms, substantially as described.

8. In combination with oppositely-arranged pivoted marker-arms, of a crank, links connecting the crank with the arms, and a foot-lever for actuating the crank, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM L. MINZEY.

Witnesses:

B. PRIM,

ALBERT PRIM.