

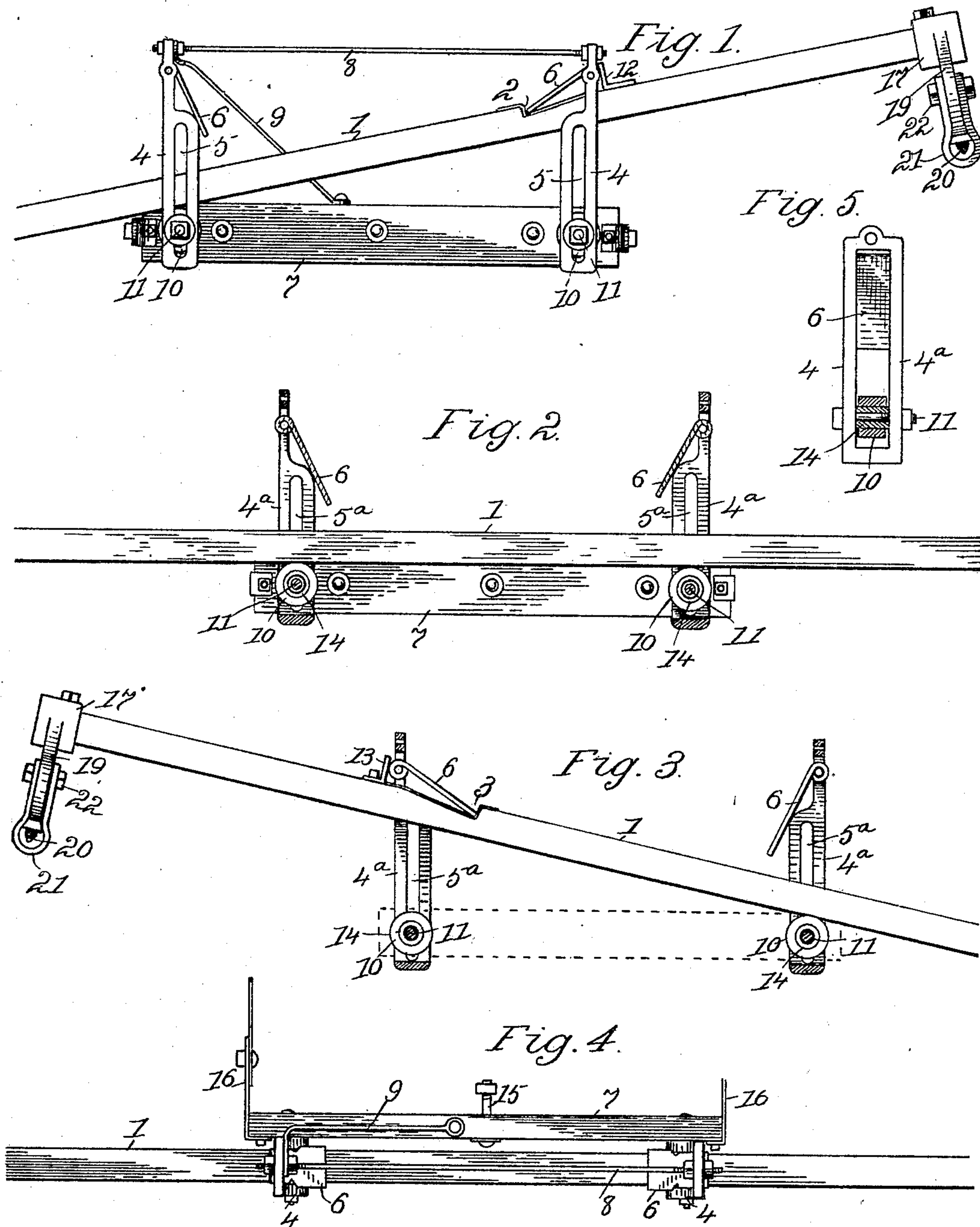
No. 682,394.

Patented Sept. 10, 1901.

T. THORPE.
MARKER FOR CORN PLANTERS.

(Application filed May 31, 1901.)

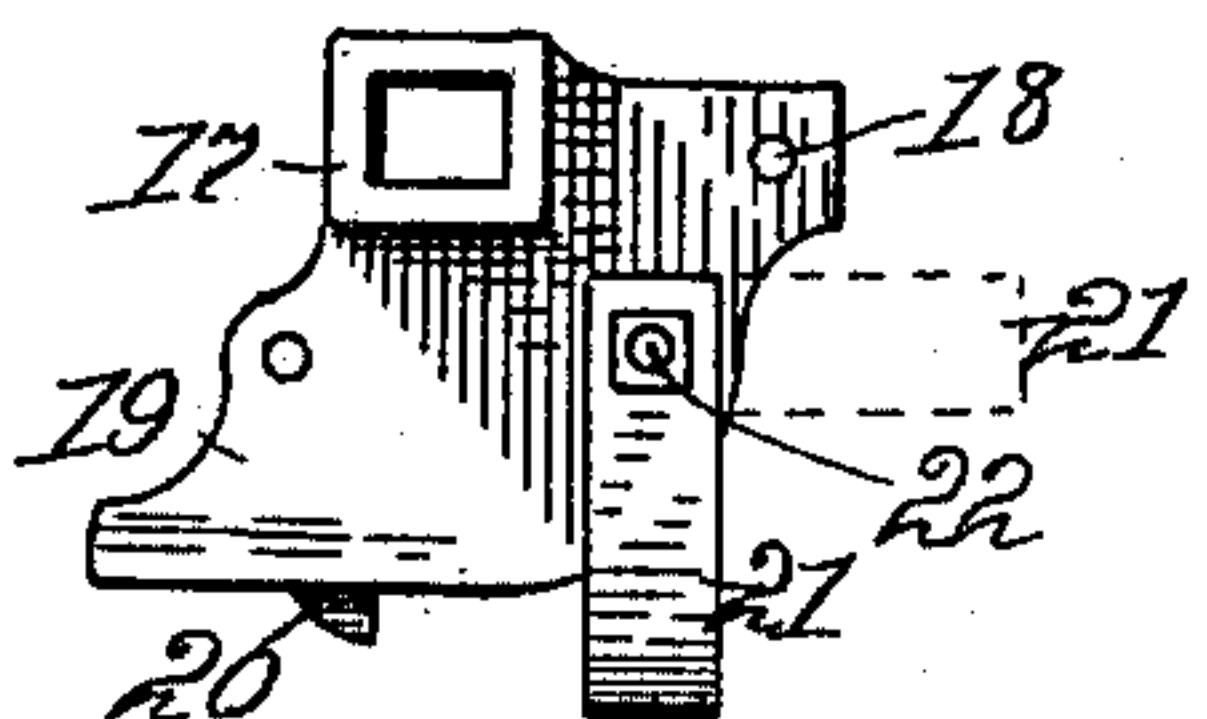
(No Model.)



Witnesses.

Eva Graham.
Nora Graham

Fig. 6.



Inventor,

Thomas Thorpe.

by A. P. Graham
his attorney

UNITED STATES PATENT OFFICE.

THOMAS THORPE, OF DECATUR, ILLINOIS.

MARKER FOR CORN-PLANTERS.

SPECIFICATION forming part of Letters Patent No. 682,394, dated September 10, 1901.

Application filed May 31, 1901. Serial No. 62,463. (No model.)

To all whom it may concern:

Be it known that I, THOMAS THORPE, of the city of Decatur, county of Macon, and State of Illinois, have invented certain new and useful Improvements in Markers for Corn-Planters, of which the following is a specification.

This invention relates to longitudinally-shiftable marker-bars having on each end a marker; and its principal object is to provide simple and effective means for locking the bars in operative positions and supporting them out of contact with the ground while turning around or traveling from one place to another.

A secondary object of the invention is to improve the markers used on the marker-bars.

The invention is exemplified in the structure hereinafter described, and it is defined in the appended claims.

In the drawings forming part of this specification, Figure 1 is a rear elevation of a marker-bar support, showing the marker-bar therein and representing the conditions that exist when the marker on the left end of the bar is in operative contact with the ground. Fig. 2 is a vertical section through the slotted standards that form bearings for the marker-bar, showing the marker-bar balanced in its supports in a manner to hold both markers out of contact with the soil. Fig. 3 is a vertical section through the supports of the marker-bar, showing the conditions that exist when the marker on the right end of the bar is in use. Fig. 4 is a plan of the marker-bar supports and the central part of the marker-bar, the bar being balanced as shown in Fig. 2. Fig. 5 is a side elevation of one of the slotted standards through which the marker-bar operates. Fig. 6 is a side elevation of the particular form of marker that I prefer to use on the marker-bar.

The marker-bar 1 has notches 2 and 3 in its upper surface, such notches being placed one to each side of the center of the bar. Adjacent to the notches and nearer the ends of the bar are upwardly-presented stops 13. Markers, as 19, are attached one to each end of the marker-bar.

The bearings for the marker-bar comprise a pair of standards, as 4, which are slotted vertically from side to side to provide space

for the marker-bar. In the drawings the front members of the forked standards are designated by 4^a. Each of the standards is also slotted vertically from front to back to give vertical adjustment to the rollers 10, on which the marker-bar rides. Strut-collars 14 fit between the principal members 4 and 4^a of the standards. The rollers 10 are slightly shorter than the collars and they journal thereon, and the bolts 11 bind the sides of the standards against the ends of the strut-collars and hold the rollers in any desired position. The bolts 11 extend through the slots 5 and 5^a, and the standards may be raised or lowered with relation to the bolts, so as to bring the upper ends of the standards nearer to or farther from the rollers. Detents 6 are pivoted one in the upper end of each of the standards. They swing downward and toward each other, and they are short enough to be out of contact with the marker-bar when said bar is resting on both rollers in a horizontal position, as shown in Fig. 2. The detents do not assume vertical positions when at rest, but incline one toward the other at their lower ends.

The standards are secured to a planter-frame, preferably at the rear end thereof, and they are located one on each side of the longitudinal center of the planter at equal distances therefrom. The marker-bar is extended through the sidewise slots of the standards, markers are attached to the ends of the bar, and the device is ready for operation. When the marker on the left end of the bar is in use, the stop 12 bears against the right-hand standard, and the detent 6 on such standard engages the notch 2 of the bar. The stop 12 prevents the bar from moving farther to the left. The detent prevents the bar from moving to the right. Neither the stop nor the detent interferes with the vertical movement of the bar, and so the marker in contact with the ground rides along at a uniform distance from the center of the planter, rising and falling to accommodate the slight undulations it encounters, and making a mark in the soil to guide the driver on his return trip. When the end of the field is reached, the driver presses the right end of the marker-bar downward and gives it a slight push to the right at the instant the bar is lowered out of con-

tact with the detent. The pressure and the thrust are advisably imparted by the foot of the driver; but in whatever way they are imparted the result is to cause the marker-bar to travel to the right until the weight of the markers is balanced on the rollers and the bar is at rest in a horizontal position, with both markers out of contact with the ground. The planter is then turned around into position for a return trip, and the marker-bar is pushed to the right until the right-hand marker is in contact with the soil and the left end of the marker-bar is locked against horizontal motion, as shown in Fig. 3. On reaching the opposite end of the field the bar is forced to the left to balance it while turning around, and so the operation continues indefinitely.

The standards may be attached to or built on the planter-frame in any desirable manner; but in making provision for attaching to old planters I prefer to attach the standards to a cross-bar 7 and connect the cross-bar to the planter-frame by means of bolts, as 15, straps, as 16, or in any other manner that the construction of the planter-frames may make convenient. The standards may be tied together at their upper ends by a rod 8 and braced from the cross-bar by a rod 9.

The marker that I prefer to use consists of a shoe, as 19, having a socket 17 to fit onto the end of the marker-bar, a tooth 20 on the bottom of the runner, and a swingable loop 21, that may be extended below the lower edge of the runner or be swung up out of the way, as shown in dotted lines in Fig. 6. The hole 18 provides for connection with a stay-rope for those who desire to aid the standards in their work of drawing the markers forward. The loop 21 is bound fast to the shoe of the marker by a bolt 22, and it may be swung around when the bolt is loosened. When the soil is soft and in good condition,

the loop may be turned up, as shown in broken lines in Fig. 6, thus leaving the runner to make the guiding impression, and when the condition of the soil requires a deeper or plainer mark the loop may be turned into the position shown in solid lines and secured in such position by firmly tightening the bolt.

I claim—

1. In a marker for planters, the combination of a pair of vertically-slotted standards one on each side of the longitudinal center of the planter, a marker-bar tiltable and longitudinally movable in the slots of the standards and detents in the upper ends of the standards to engage uptilted ends of the bar, substantially as described.

2. In a marker for planters, the combination of a pair of vertically-slotted standards one on each side of the longitudinal center of the planter, a marker-bar longitudinally movable and vertically tiltable in the slots of the standards, such bar having notches in and stops on its upper surface, and detents pivoted in the upper ends of the standards with their lower ends presented downward and toward each other and terminating above the bar when the bar rests in a horizontal position in the slots, substantially as described.

3. In a marker for planters, the combination of a runner-shoe attachable to a marker-bar, a loop embracing the shoe and extending below the same when in operative position and a binding-bolt to clamp the loop to the shoe; whereby the loop may be swung to an inoperative position, substantially as described.

In testimony whereof I sign my name in the presence of two subscribing witnesses.

THOMAS THORPE.

Witnesses:

WM. S. GRAHAM,
L. P. GRAHAM.