

No. 644,523.

Patented Feb. 27, 1900.

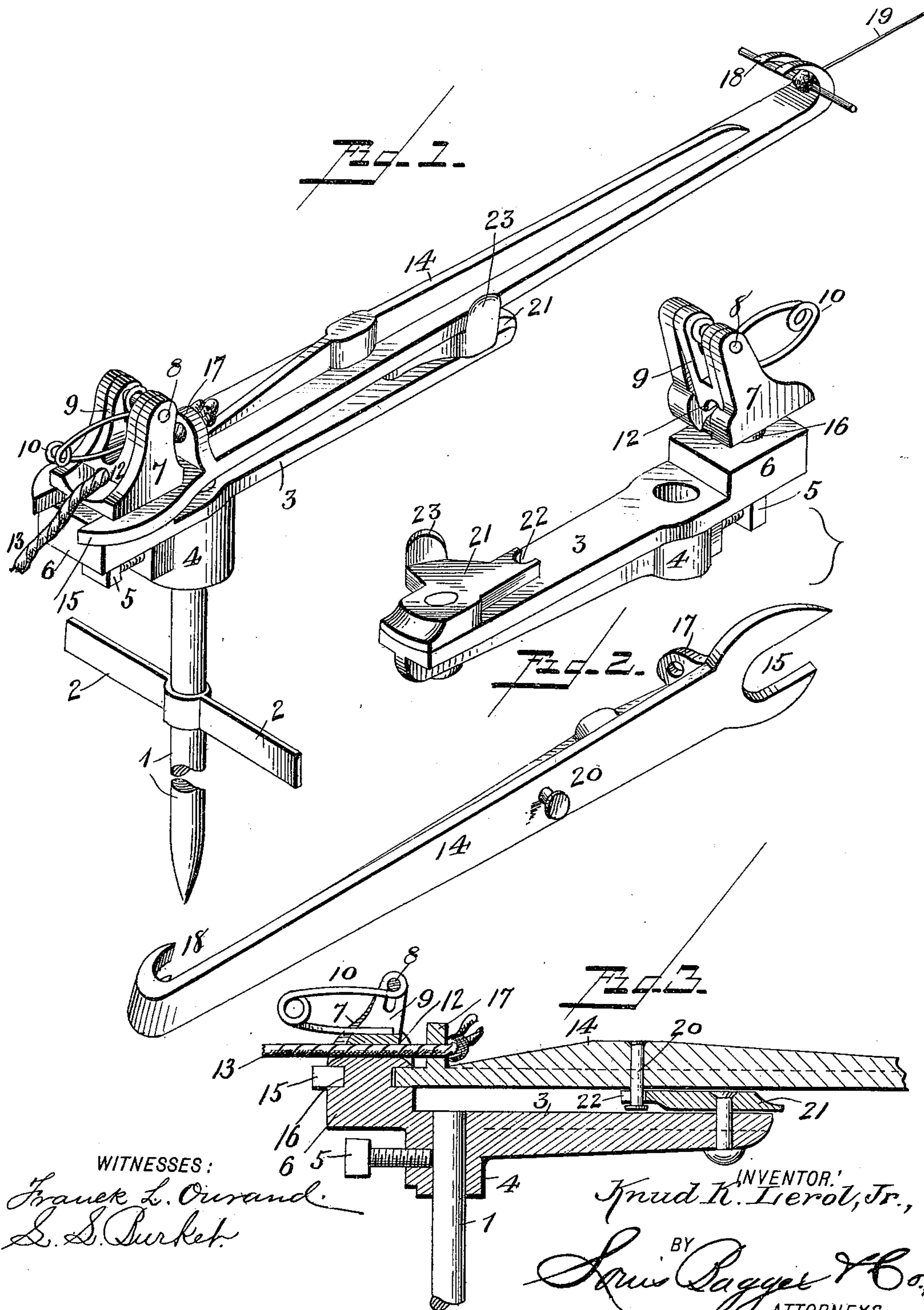
K. K. LEROL, JR.

ANCHOR AND TENSION DEVICE FOR CHECK ROW CORN PLANTERS.

(Application filed Oct. 25, 1899.)

(No Model.)

2 Sheets—Sheet 1.



WITNESSES:

Frank L. Ourand.
L. S. Purket.

INVENTOR.

Knud K. Lerol, Jr.,

BY

Louis Payer & Co.,
ATTORNEYS

No. 644,523.

Patented Feb. 27, 1900.

K. K. LEROL, JR.

ANCHOR AND TENSION DEVICE FOR CHECK ROW CORN PLANTERS.

(Application filed Oct. 25, 1899.)

(No Model.)

2 Sheets—Sheet 2.

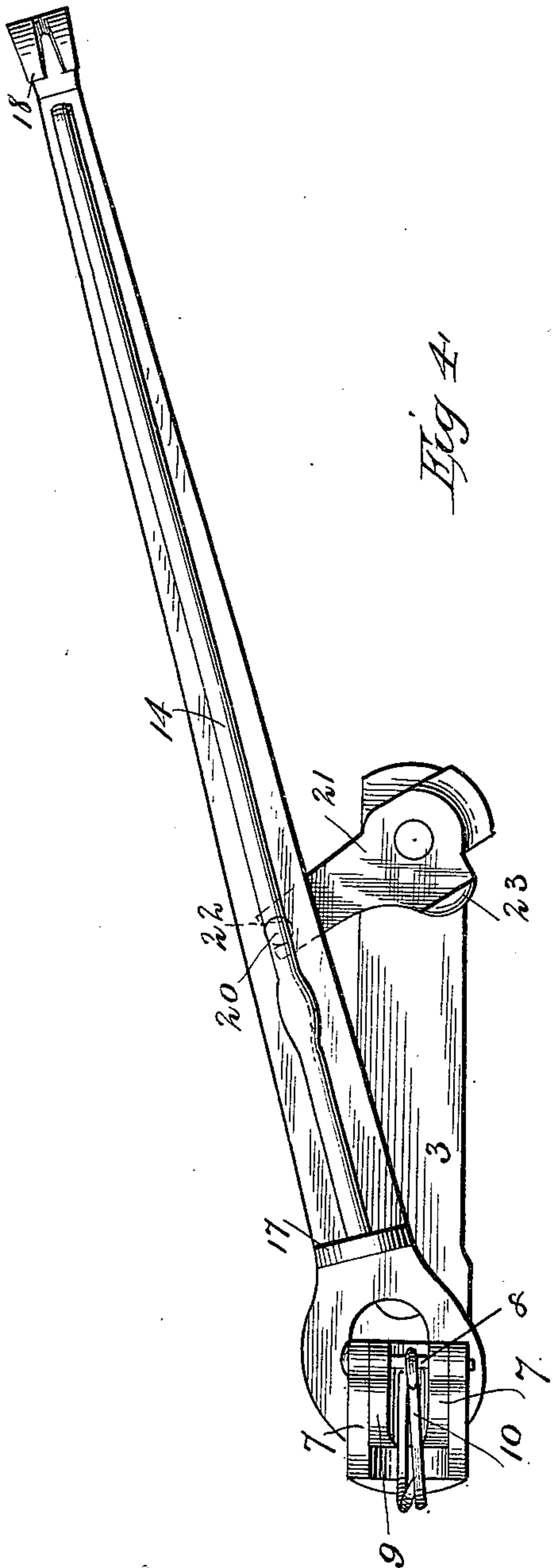


Fig. 4.

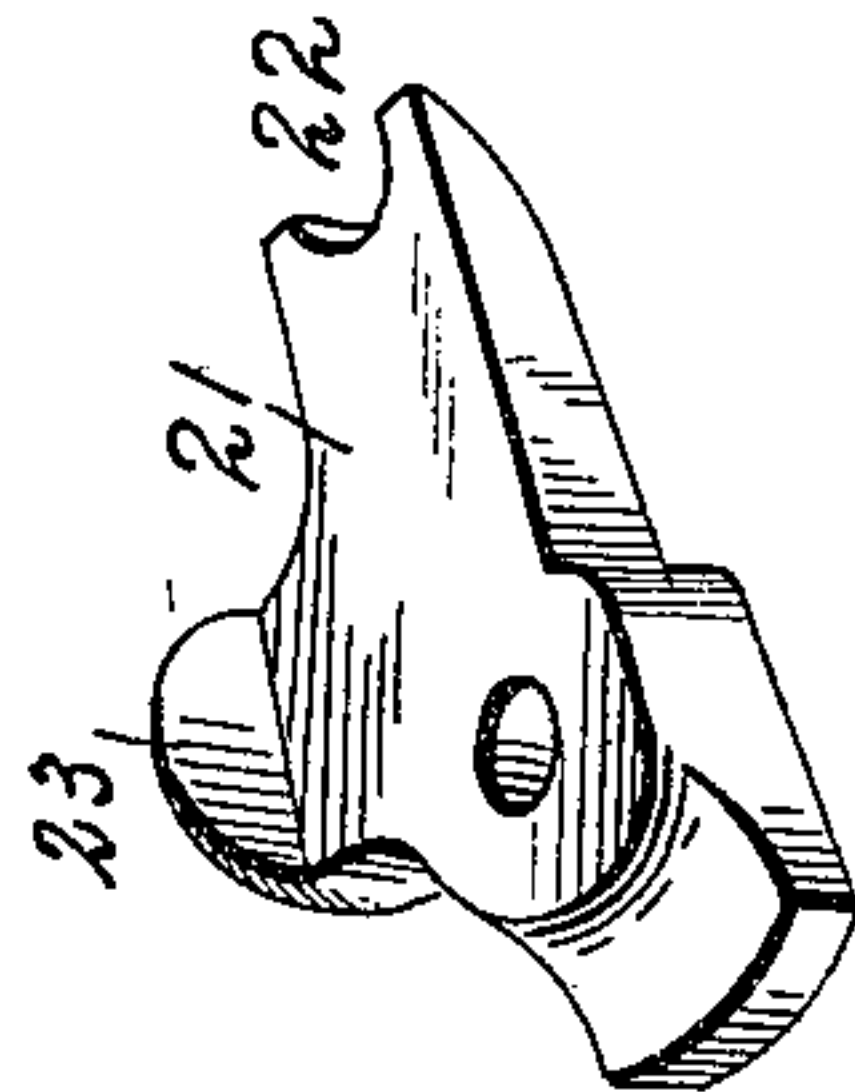


Fig. 5.

Witnesses:
F. L. Ourand
E. P. Bunker

Inventor:
Knud K. Lerol, Jr.
By Louis Daggert & Co.,
Attorneys.

UNITED STATES PATENT OFFICE.

KNUD K. LEROL, JR., OF NEWBURG, MINNESOTA.

ANCHOR AND TENSION DEVICE FOR CHECK-ROW CORN-PLANTERS.

SPECIFICATION forming part of Letters Patent No. 644,523, dated February 27, 1900.

Application filed October 25, 1899. Serial No. 734,719. (No model.)

To all whom it may concern:

Be it known that I, KNUD K. LEROL, Jr., a citizen of the United States, residing at Newburg, in the county of Fillmore and State of Minnesota, have invented new and useful Improvements in Anchor and Tension Devices for Check-Row Corn-Planters, of which the following is a specification.

My invention relates to anchor and tension devices for check-row corn-planters of that class or description for which Letters Patent were granted to me February 14, 1899, No. 619,585.

The object of the invention is to provide an improved construction of such devices which shall possess superior advantages with respect to efficiency in use.

The invention consists in the novel construction and combination of parts hereinafter fully described and claimed.

In the accompanying drawings, Figure 1 is a perspective view of an anchor and tension device constructed in accordance with my invention. Fig. 2 is a similar view showing the release-bar detached from the anchor-plate. Fig. 3 is a central longitudinal section of the anchor-plate and tension device in the position shown in Fig. 1. Fig. 4 is a plan view of my anchor and tension device, showing the release-bar swung to one side. Fig. 5 is a perspective view of the pivoted plate.

In the said drawings the reference-numeral 1 designates a stake pointed at one end and provided intermediate the end with wings 2, upon which the operator presses with his foot in driving the stake into the ground.

The numeral 3 designates a horizontal anchor-plate, provided on the lower side with a socket 4, with which the upper end of the stake engages and is held therein by a set-screw 5. Formed integral with the rear end of said plate is an extension 6, provided with a U-shaped clamp 7, to the upper end of which is secured a transverse rod 8, to which is journaled a swinging cam 9. The holes in the cam through which the rod passes are made oblong, so as to permit the cam to have a slight up-and-down movement as well as a swinging one.

The numeral 10 designates a spring secured to said rod and bearing upon the cam. The horizontal portion of the cam is formed with

a groove 12 to receive a tension-rope 13, one end of which is connected with a release-bar, hereinafter described.

The numeral 14 designates the release-bar, formed with a slot 15 at the rear end, which engages with the cylindrical portion 16 of the clamp 7. Near the center said bar is formed with a lug 17, provided with a hole through which the tension-rope 13 passes. The front end of said bar is bifurcated and turned backwardly, forming two hooks 18, with which the end of the check-row wire 19 engages. This wire may be formed with knots at regular intervals to operate the seed-slides of the planter, as usual.

Upon the under side the release-bar is formed or provided with a headed pin 20, which engages with a pivoted plate 21, having a curved recess 22 in its free end. This plate is pivoted to the front end of the anchor-plate and at one side is provided with a lug or flange 23, which rests against one side of the release-bar, so that the latter can swing to one side only.

The operation is as follows: At the beginning of the operation of planting the stakes are driven in the ground at opposite sides of the field on line with the pulley of the planter over which the wire passes. As the planter travels across the field the release-bar engaging with the pivoted plate of the anchor-plate by means of the headed pin will hold the wire taut. When the planter reaches the other side of the field, the stake at that side is shifted to the right or left, as the case may be, so that the planter can run in another track upon the return movement. The wire will now be in an inclined line with respect to the line of travel of the planter. As the planter continues its return movement the strain upon the wire will swing the release-bar sideways, as shown in Fig. 4, so that the plate 21 will turn on its pivot and the pin 20 be thrown out of engagement therewith. As the planter approaches the stake the angle of the wire will gradually increase or be enlarged, causing it to pull upon the release-bar at an angle to the anchor-plate, and thus disconnect the said bar from the plate. The tension-rope will now give or yield, allowing the release-bar to approach the planter. When the planter reaches the stake, the latter is shifted,

as in the case of the other stake, and the release-bar drawn back by means of the tension-rope, so that the pin of said bar can be again engaged with the pivoted plate of the anchor-plate, the cam swinging backward to allow the rope to be readily drawn back and also slightly rising by reason of the oblong holes through which the rod which forms the journal thereof passes. The cam and clamp will exert the proper tension on the rope by means of the spring bearing upon the cam.

Having thus fully described my invention, what I claim is—

In an anchor and tension device for check-row corn-planters, the combination with the

anchor-plate, the clamp at the rear end thereof, the swinging cam and the plate pivoted to the front end of said anchor-plate and formed with a curved recess at the free end, of the release-bar formed with a slot at the rear end, a lug with which a tension-rope is adapted to be connected and a pin adapted to engage with said pin, substantially as described.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

KNUD K. LEROL, JR.

Witnesses:

G. GABRIELSON,
C. W. EASTMAN.