(No Model.)

W. R. WAGGONER.

ANCHOR FOR CHECK ROW WIRES.

No. 587,538. Patented Aug. 3, 1897.

Fig. 1.

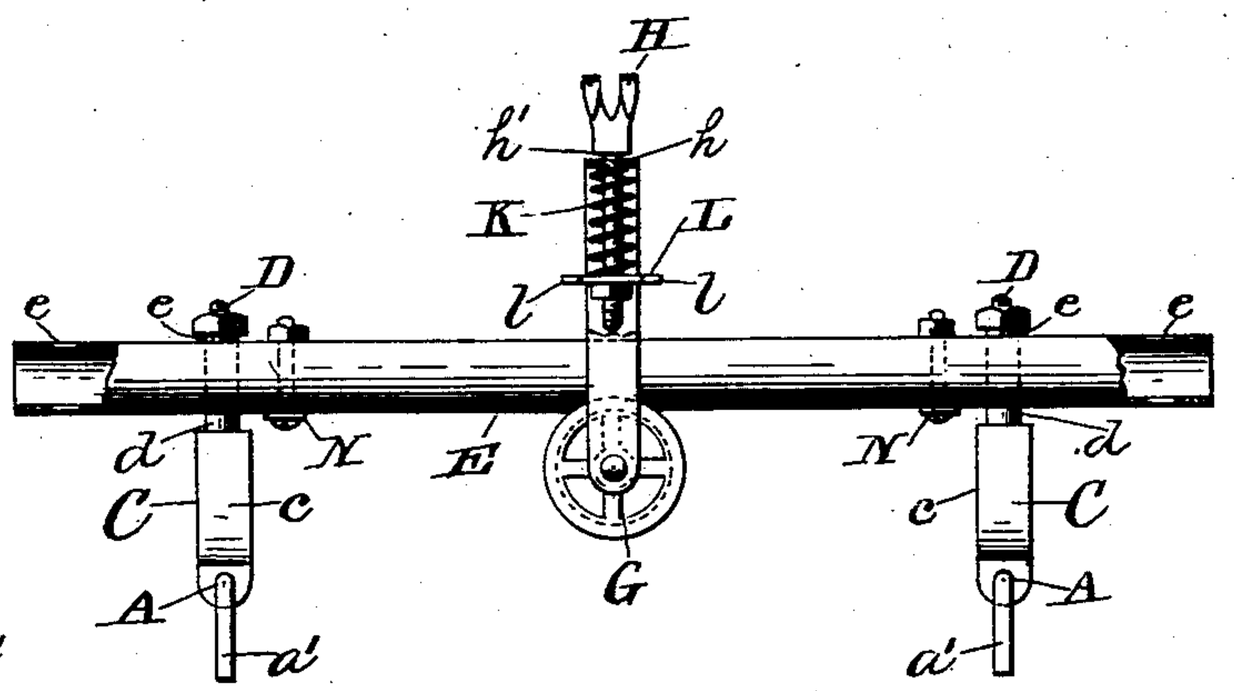


Fig. 2.

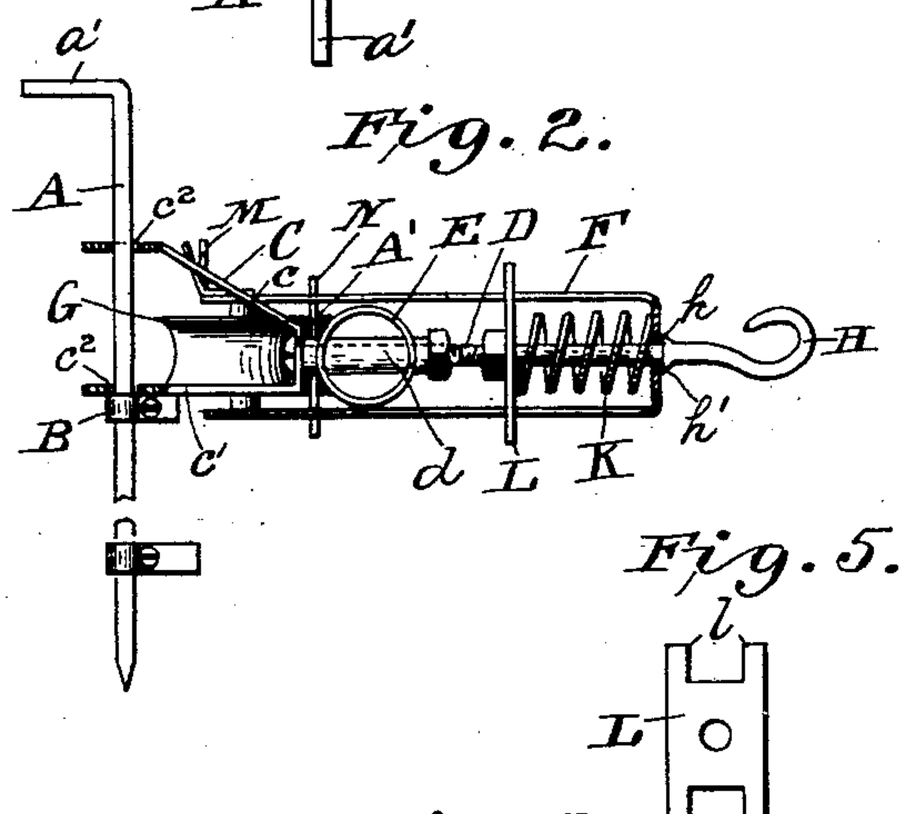


Fig. 4.

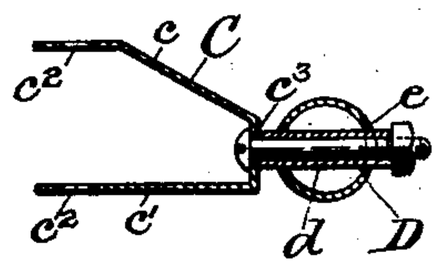
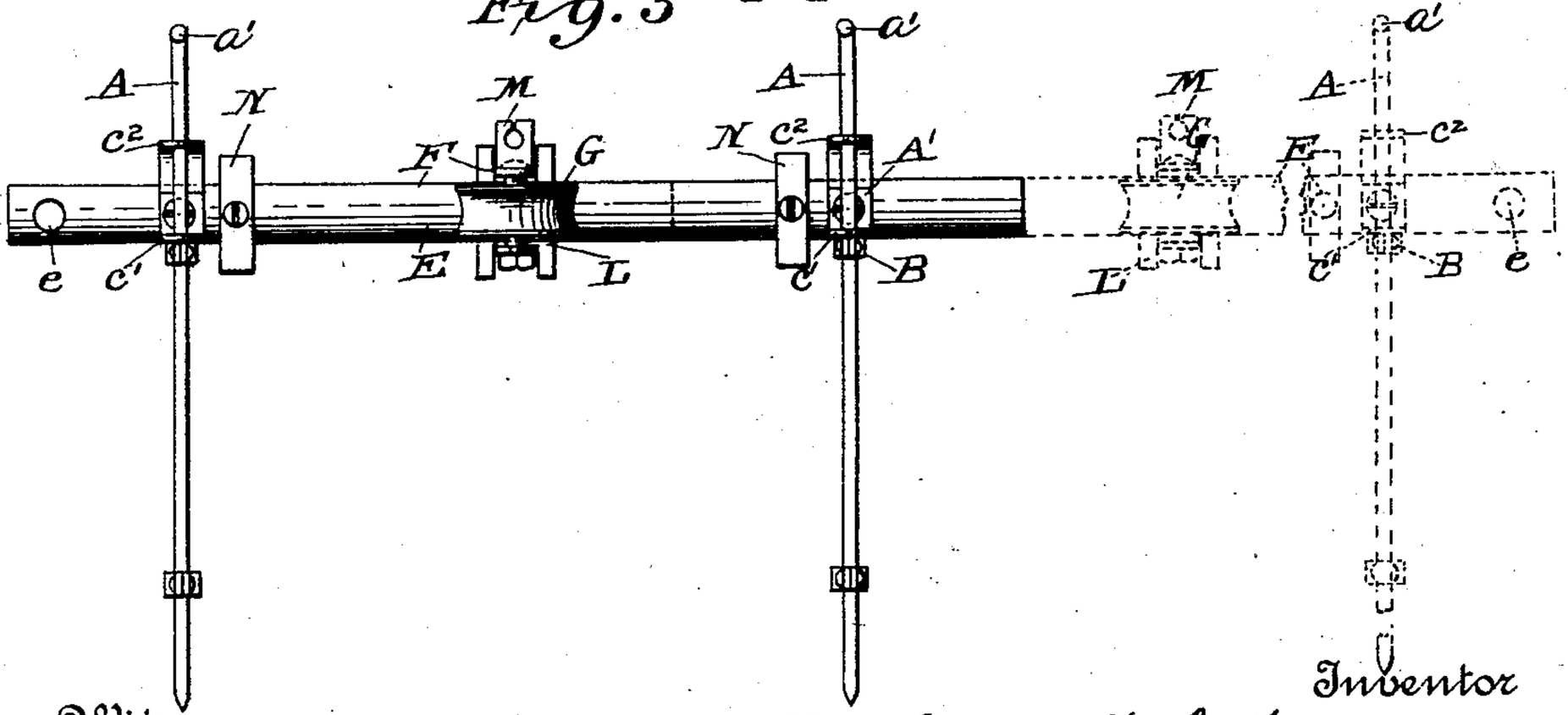


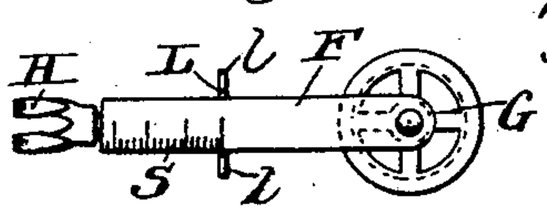
Fig. 5.

Fig. 3



Witnesses
Jas. H. Blackwood
W. P. Doolittle

Fig. 6.



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UNITED STATES PATENT OFFICE.

WILLIAM R. WAGGONER, OF ART, INDIANA.

ANCHOR FOR CHECK-ROW WIRES.

SPECIFICATION forming part of Letters Patent No. 587,538, dated August 3, 1897.

Application filed February 24, 1897. Serial No. 624,814. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM R. WAGGONER, a citizen of the United States, residing at Art, in the county of Clay and State of Indiana, have invented certain new and useful Improvements in Anchors for Check-Row Wires; 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.

My invention relates to anchors for check-row wires, and more particularly to anchors of the character exemplified in the device set forth in my Patent No. 576,010, dated January 26, 1897.

The objects of my invention are to provide means whereby the anchor may be adjusted to mark and plant rows of different widths, to limit the movement of the roller by suitable stops so as to prevent the entanglement of the roller with other parts of the anchor during a change of position thereof, and to provide means for adjusting the tension of the check-row wire to an exact and known degree of strength, and to generally improve the construction and add to the efficiency of such a device.

My invention is illustrated in the accompanying drawings, in which—

Figure 1 is a plan view of the anchor; Fig. 2, a side view; Fig. 3, a front view, and Fig. 4 a detail section through one end. Figs. 5 and 6 are also detail views.

Referring to the drawings, A are the stakes, preferably made of iron, which support the anchor and are adapted to be driven into the ground, having their ends pointed for this purpose. To aid in pressing or driving the stakes or rods into the soil, foot-pieces *a* are placed on the stakes and clamped thereto by screws passing through the parts embracing the stake. At its upper end the stake A terminates in a right-angled extension *a'*, which forms a grip or handle to enable one to more readily pull the stake from the ground or to otherwise manipulate it.

C is a stay or hanger composed of an upper inclined arm *c* and a lower horizontal straight arm *c'*, the latter resting on and supported by a movable clamping-support B, placed at any desired point on the stake, and which may be adjusted to set the stays at various heights. The stake passes through the holes c^2 in the ends of the arms and is free to turn therein. The slanting arm *c* of the stay tends to resist the force exerted on the straight arm *c'*, which has a tendency to pull the stake directly outward and loosen it from the soil. At its loop end opposite to where the stake enters the stay is provided with a hole c^3, through which passes a screw D, surrounded by a short section of tin pipe or other suitable casing *d*, held between the head of the screw and a nut on the end thereof.

E is a cylindrical track-rod, preferably constructed of pipe in order to obtain both light weight and strength. At each end this pipe is provided with two or more longitudinally-arranged holes *e*, through either one of which is adapted to be passed, according to the width of the row to be planted, the screw D with its casing, which is adapted to turn freely in said aperture. A pivotal connection is thus formed between the rod E and the stays and stakes C and A, respectively.

Embracing the rod E is a clevis-shaped hanger or pulley-frame F, having at one end a pulley or roller G, rotatably mounted on a pin, rivet, section of pipe, or similar means joining the two arms of the pulley-frame. The pulley is adapted to be moved on and travel along the rod E. At the opposite end of the pulley-frame is a claw-hook H, curved downward and then upward, as shown, and passing through a hole *h* in the frame, in which it turns freely, and provided with a shoulder *h'*, normally bearing against the frame. The portion of the hook within the frame for a short distance from its end is screw-threaded to receive a nut. Between this nut and the end of the pulley-frame and around the hook is placed a coiled spring K, the tension of which may be regulated by the pressure of said nut.

A washer-plate L, having shoulders *l* resting on and adapted to slide along the arms of the pulley-frame F, is placed between the nut and spring and adapted to register with a scale S, marked on the arms of the pulley-frame, by which the tension of the check-row wire secured to the hook may be adjusted with exactness to any desired degree of strength. At the inner end of one of the arms of the

frame is fastened a right-angled plate M, in which is a slot and hole for the engagement of the wire should the same be found too long to be secured at its end to the hook.

N N are stops secured to the track-rod near each end thereof for the purpose of limiting the movement of the pulley or roller and preventing the same striking against and catching in the stays.

In operation the stays and stakes are first set the distance apart required for the width of rows to be marked and planted by inserting the stay-supporting screws and their casings in any of the series of holes provided for the purpose and securing them therein by screwing up the nuts, and the stakes are then forced into the ground. The check-row wire is then fastened to the hook by a suitable button and the tension of the spring adjusted to the requisite strength, according to the scale on the pulley-frame. A row and its return is then marked or planted, whereupon one of the stakes is removed from the ground and, with its stay and the rod, revolved by means of the pivotal connections over the other stake and reset in the ground, when the device is ready for further marking. When the rod is being turned over, the pulley will roll down against the stop N, and will be prevented thereby from becoming entangled with the stay or stake.

Although the holes in the series at each end of the track-rod as shown in the drawings are only two in number, yet it is obvious that this number may be increased without departing from the principle of my invention.

Having thus described my invention, what I claim is—

1. In an anchor for check-row wires, the combination with a rod and means thereon to engage the check-row wire, of adjustable supports for said rod, and a series of holes or sockets for said supports at each end of said rod, whereby the distance between the supports may be changed, substantially as described.

2. In an anchor for check-row wires, in combination with supporting-stakes, stays on said stakes, a track-rod, a longitudinal series of apertures in said rod near each end, pivots connecting said stays and track-rod and passing through corresponding apertures in the respective ends of said rod, substantially as described.

3. In combination with a track-rod, supporting-stakes, stays pivotally connecting said stakes and rod for the purpose described, a pulley on said rod, and a stop secured to said rod at each end thereof to limit the movement of said pulley, whereby contact of the pulley with the stays and supports when the same are pivotally adjusted, is prevented, substantially as described.

4. In combination with a check-row wire and its fastening means, supporting-stakes, stays, each provided with a lower horizontal arm and an upper slanting arm, said arms secured at their ends to a stake, and a track-rod supported by said stays at the junction of said arms, substantially as and for the purpose described.

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

WILLIAM R. WAGGONER.

Witnesses:
OLIVER JAMES,
GRANT NEES.