(No Model.)

R. FARIES.

ANCHOR FOR CHECK ROW WIRES.

No. 343,305. Patented June 8, 1886.

Fig. 1.

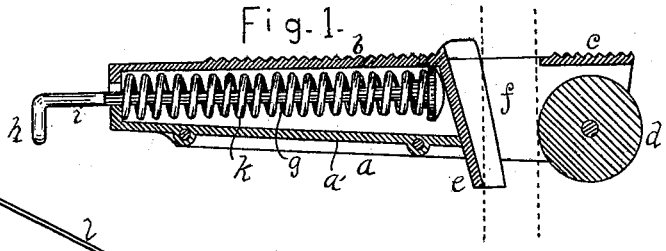


Fig. 2.

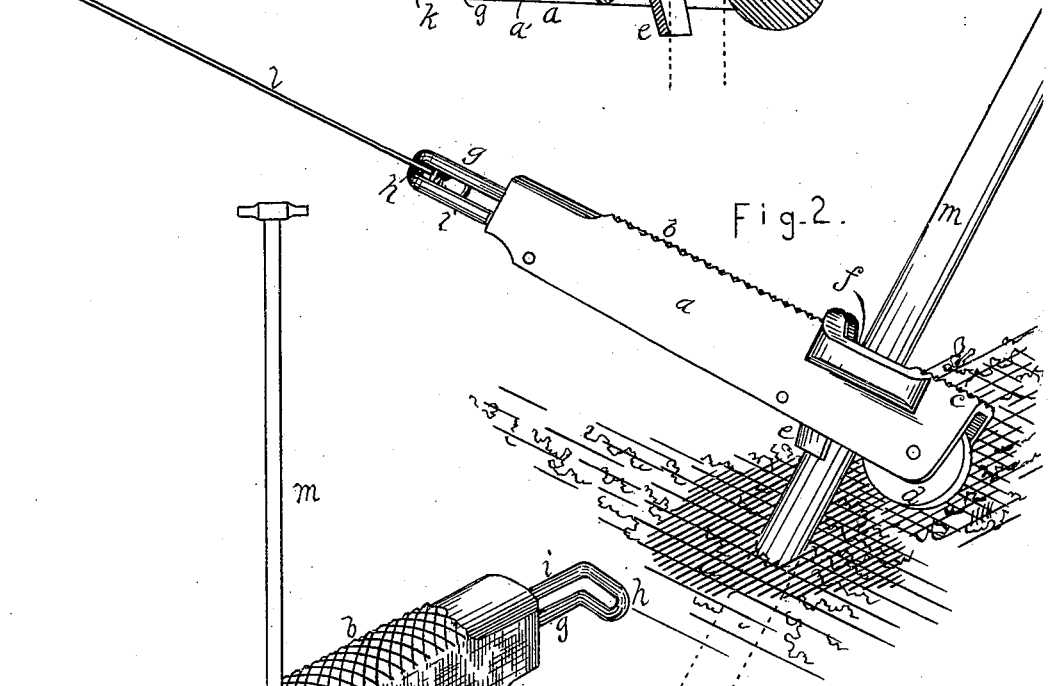


Fig. 3.

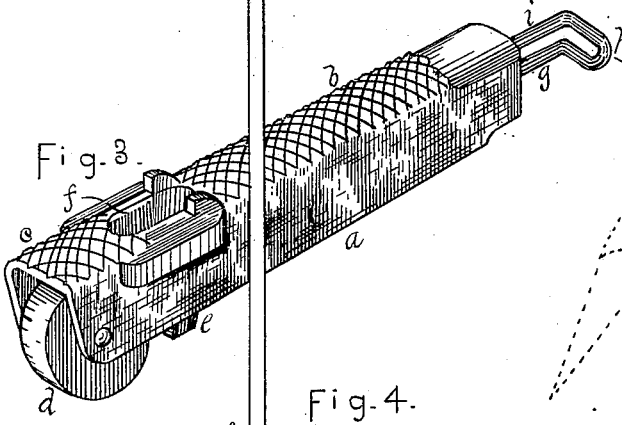
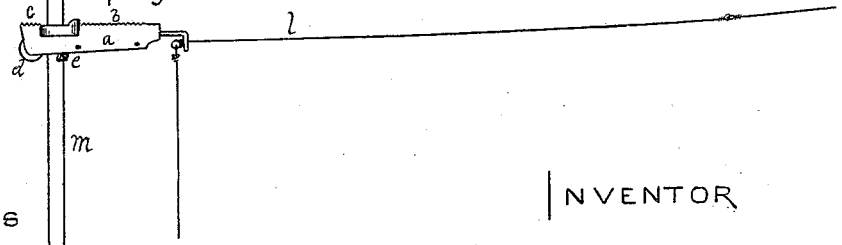


Fig. 4.



WITNESSES

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ANCHOR FOR CHECK-ROW WIRES.

SPECIFICATION forming part of Letters Patent No. 343,305, dated June 8, 1886.

Application filed February 1, 1886. Serial No. 190,469. (No model.)

To all whom it may concern:

Be it known that I, ROBERT FARIES, a resident of the city of Decatur, county of Macon, and State of Illinois, have invented certain new and useful Improvements in Anchors for Check-Row Wires, of which the following is a specification.

My invention relates to anchors consisting in stakes to be thrust into the ground and devices to which the wire may be attached, adapted to slide on the stakes. In such anchors the stakes are most conveniently forced into the ground by foot-pressure, and heretofore they have been provided with immovable tread-shoulders for that purpose. The tread-shoulders add to the cost of the stakes, and their immobility makes them objectionable, for the reason that when the ground is soft they may not permit the insertion of the stakes to a depth sufficient to insure perfect stability, and when the ground is hard they may stand high enough to interfere with the perfect operation of the sliding devices that connect the wire with the stakes.

To overcome the above-mentioned objection, and to provide means whereby the device that connects the wire with the stake may act as a tread-shoulder, a traveler, and a tension-regulator, are the objects of my invention.

In the drawings accompanying and forming a part of this specification, Figure 1 is a longitudinal section of the combined tread-shoulder, traveler, and tension-regulator, the position of the anchor-stake with reference thereto being indicated by dotted lines. Fig. 2 is a perspective view of my complete device in position for operation. Fig. 3 is an isometrical perspective view of the combined tread-shoulder, traveler, and tension-regulator; and Fig. 4 is a side view of the complete device.

The "tread-shoulder," as the combined tread-shoulder, traveler, and tension-regulator will hereinafter be termed for the sake of brevity, consists in a casing, as *a a'*, having an opening, as *f*, to admit the anchor-stake, a draw-bar, as *g*, with which the check-row wire is connected, and a spring, as *k*, to hold bar *g* in the relative position shown and to regulate the tension of the wire. To form a convenient connection for the wire, bar *g* extends outwardly from casing *a*, forms an approximate right angle, as at *h*, and, reversing its direction, returns to the casing, as at *i*. A wheel, as *d*, is pivoted in the short end of casing *a*, and a bearing, as *e*, is located on the opposite side of opening *f*, below the center of the wheel. The upper surface of casing *a* is preferably roughened, as at *b* and *c*, in order to provide a more secure foothold. The anchor-stake *m* is round and straight, and is sharpened at one end and provided with a handle at the other. The check-row wire *l* is connected with the tread-shoulder by slightly drawing out extension *g h i* and passing the wire between the end of *i* and the surface of casing *a*. When there is tension on the check-row wire, a knot will press firmly against bend *h*, and when there is no tension on the wire the end of *i* will press against casing *a* with sufficient force to prevent the wire from becoming accidentally detached.

In Fig. 1 it is seen that the anchor-stake will pass between wheel *d* and bearing *e* when the tread-shoulder forms an approximate right angle with the stake, and it is obvious that, the position of the stake being permanent, an elevation of end *b* will increase the relative space in opening *f*, and that an attempt to depress the said end will have a tendency to decrease the relative space and cause the shoulder to grip the stake. This peculiarity gives the connecting device a compound function, enabling it to be used as a traveler to carry the wire along the stake, and also to be used as a tread-shoulder to force the wire into the ground.

No adjustment is necessary to fit the connecting device for its change of functions, the presence or absence of pressure on part *b* determining whether the operation shall be that of a tread-shoulder or that of a traveler. Putting stake *m* in a vertical position through opening *f* in tread-shoulder *a*, and attaching the check-row wire to draw-bar *g*, as described, a right line drawn through the center of the pivot of wheel *d* and the outer extremity of draw-bar *g* should be approximately horizontal, and the bearing *e* should be some distance below said line, lightly in contact with the anchor-stake. Now, by inclining the stake slightly backward from the planter the outer end of the tread-shoulder will become elevated, and the relative downward pressure caused by the tension and weight of the wire will in-

crease the pressure of the obliquely-arranged bearing-surfaces *e f* on the stake and make the position of the shoulder on the stake temporarily immovable. On the other hand, a slight upward pull on the wire will entirely release the pressure of point *e* and cause the wheel to roll up the stake, impeded only by the slight friction caused by the wheel turning on its pivot and rolling on the stake.

To anchor the stake it is only necessary to place the tread-shoulder at any desired position on the stake, incline the stake backward until it is firmly gripped by the shoulder, as hereinbefore stated, and then apply foot-pressure to surface *b*. The foot-pressure will cause a proportionate increase in the pressure of bearings *e f* on the stake and make the connection of stake and shoulder entirely secure. Should the shoulder not be near the ground when the stake is completely anchored, the foot-pressure may be changed to part *c* and the desired position be readily attained.

As the planter moves from the anchor, the tread-shoulder lies near the ground, in order that the stability of the stake may be affected in the smallest possible degree, and as the planter approaches the anchor after having crossed the field the wire is gradually raised until the front end of the tread-shoulder becomes slightly elevated, when the wheel will travel freely upward along the stake to meet the planter, and compensate as far as possible for the necessary side movement of the same.

The draw-bar *g* swivels freely, and the spring thereon may be used in the customary manner to regulate the tension of the wire.

If desired, the wheel may be omitted and a rigid bearing—as *c*, for instance—be made to co-operate with projection *e;* and it is also possible to use the immovable bearing-surface conjointly with the wheel and projection, as if *c* extended slightly farther over the wheel.

I claim as new and desire to secure by Letters Patent—

1. A tread-shoulder having a point of connection for a check-row wire at one end, a bearing, as *d*, at the other, and an intermediate bearing, as *e*, opposed to bearing *d*, out of line with said bearing and the connecting-point for the check-row wire.

2. An anchor-stake, a tread-shoulder movable on the stake, having a point of connection for a check-row wire at one end, a bearing, as *d*, at the other, and an intermediate bearing, as *e*, opposed to bearing *d*, below said bearing and the connecting-point for the check-row wire.

3. An anchor-stake, a tread-shoulder movable on the stake, having a point of connection for a check-row wire at one end, a wheel, as *d*, at the other, and an intermediate bearing, as *e*, opposed to the wheel, below said wheel and the connecting-point for the check-row wire.

4. An anchor-stake, a tread-shoulder movable on the stake, having at one end a resilient draw-bar adapted to be connected with the check-row wire, a bearing, as *d*, at the other end, and an intermediate bearing, as *e*, opposed to bearing *d*, below said bearing and the connecting-point for the check-row wire.

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

ROBERT FARIES.

Attest:
E. HAMPTON,
C. C. CLARK.