

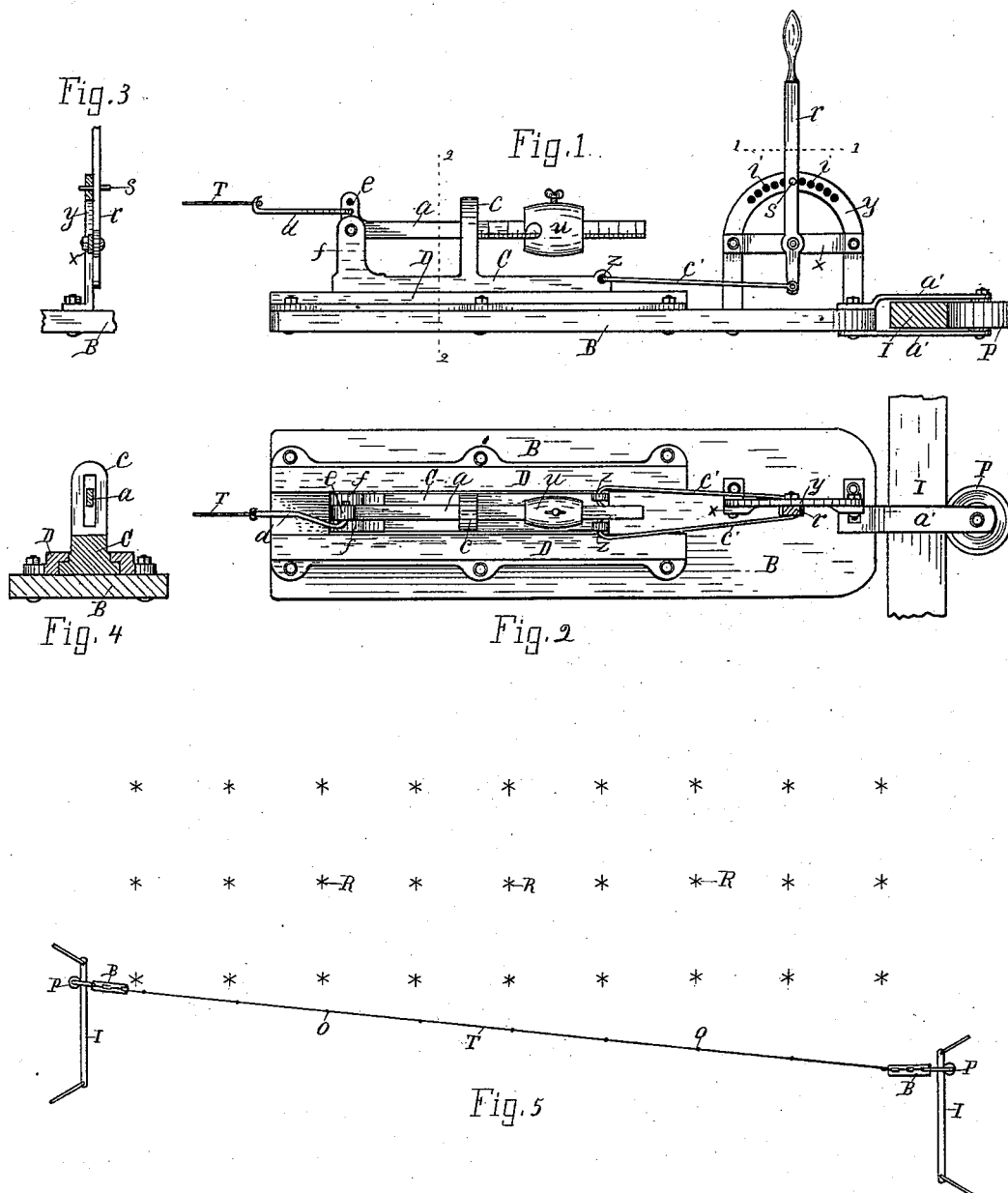
(No Model.)

E. W. RYDER & C. A. ROSEVELT.

CHECK ROWER TENSION DEVICE.

No. 347,832.

Patented Aug. 24, 1886.



Witnesses.

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UNITED STATES PATENT OFFICE.

ENOCH W. RYDER AND CHARLES A. ROSEVELT, OF KEELER, MICHIGAN.

CHECK-ROWER TENSION DEVICE.

SPECIFICATION forming part of Letters Patent No. 347,832, dated August 24, 1886.

Application filed May 27, 1886. Serial No. 203,378. (No model.)

To all whom it may concern:

Be it known that we, ENOCH W. RYDER and CHARLES A. ROSEVELT, citizens of the United States, residing at Keeler, county of Van Buren, State of Michigan, have invented a new and useful Check-Rower Tension Device, of which the following is a specification.

This invention relates to tension devices having a weighted lever for producing a given tension on the guide-line.

It has for its object a certain combination of parts designed to strengthen the device and facilitate its operation.

In the drawings forming a part of this specification, Figure 1 is a side elevation; Fig. 2, a plan view; Fig. 3, end view of parts in Fig. 1, looking from a point at the right; Fig. 4, a cross section on line 2 2 in Fig. 1, and Fig. 5 is a plan illustrating the use of the device.

Referring to the letters marked on the drawings, C is a sliding carriage carrying a weighted lever, *a*, fulcrumed at the top of the end standard, *f*, said lever *a* being passed through the vertical slot of the standard *c* of said carriage. The upper end of this slot limits the upward play of the lever *a*. U is a movable weight on the lever *a*. With the shoulder *e* of lever *a*, above its fulcrum, is pivotally connected a hook-bar, *d*, with the free end of which the guide line T, Fig. 5, is connected. Guides to the sliding carriage are shown at D secured to the bed-support B. To the frame *y*, extending upward from the bed B of the device, is fulcrumed a lock-lever, *r*. The lower end of this lever is jointedly connected with the end of the sliding carriage C by bail *e'*. The pin *s* passes through a hole in the lock-bar *r*, and through one of the series of holes *i i*, to lock the lever at desired point. This lever in Fig. 2 is in section on line 1 1 in Fig. 1.

In the use of check-rowers, anchors I are commonly employed on each side of the field, Fig. 5, and also line-carriages *a'*, the wheel P of which rolls on the back edge of the anchor I. With these line-carriages and anchors our tension is used by being connected with the line-carriage and with the guide-line, as shown.

The object of the tension device is to always produce an equal strain on the guide-line T, thereby causing the hills R R to be in line with each other at right and oblique angles to the direction in which the check-rower is being driven, as well as in line in said direction—that is, in true and substantially accu-

rate line. As the knots *o*, which are of equal distance apart on the guide-line T, trip the check-rower, causing it to plant a hill, R, beneath each knot, it is necessary, in order to have the hills accurate, as above stated, that the same tension be given the guide-line for each row.

Of course it will be understood that the check-rower (not here shown) is used in the ordinary manner, and with the ordinary guide-line bearing trip knots *o*—that is, the check-rower at the right in Fig. 5, with the guide-line thrown over the "trip," would be driven across the field to the left, and the left end of the guide-line would be swung downward, as in Fig. 5, laterally in a field, so that the tension-carriage would be at the lower end of the anchor when the transit across the field was completed.

In the operation of the tension device the weight is set and secured on the lever *a* at a point in accordance with the desired tension on the guide-line T. Then the lever *r* is swung to the right until the lever *a* swings up and contacts with the upper end of the slot in standard *c*, in which position the lever *r* is locked, as before stated, by pin *s* or other suitable means.

Of course, in lieu of a weight, a spring can be employed in connection with the tension-lever, in a manner that said lever will play against a yielding resistance.

Having thus described our invention, what we claim as new is—

A tension device for the guide-lines of check-rowers, consisting of a bed-frame, a sliding carriage, a weighted tension-lever fulcrumed to the sliding carriage, a stop to limit the play of the tension-lever, the end of said lever shouldered above its fulcrum for connection with the end of the guide-line, a lever-frame connecting the bed-frame and supporting a fulcrumed lock-lever, and a bail jointedly connecting the lock-lever and sliding carriage, said tension device being adapted to form a laterally-movable connection with anchors at the end of the rows, all substantially as set forth.

In testimony of the foregoing we have hereto subscribed our names in presence of two witnesses.

ENOCH W. RYDER.
CHARLES A. ROSEVELT.

Witnesses:

CHAS. D. SWEETLAND,
E. C. SOUTHARD.