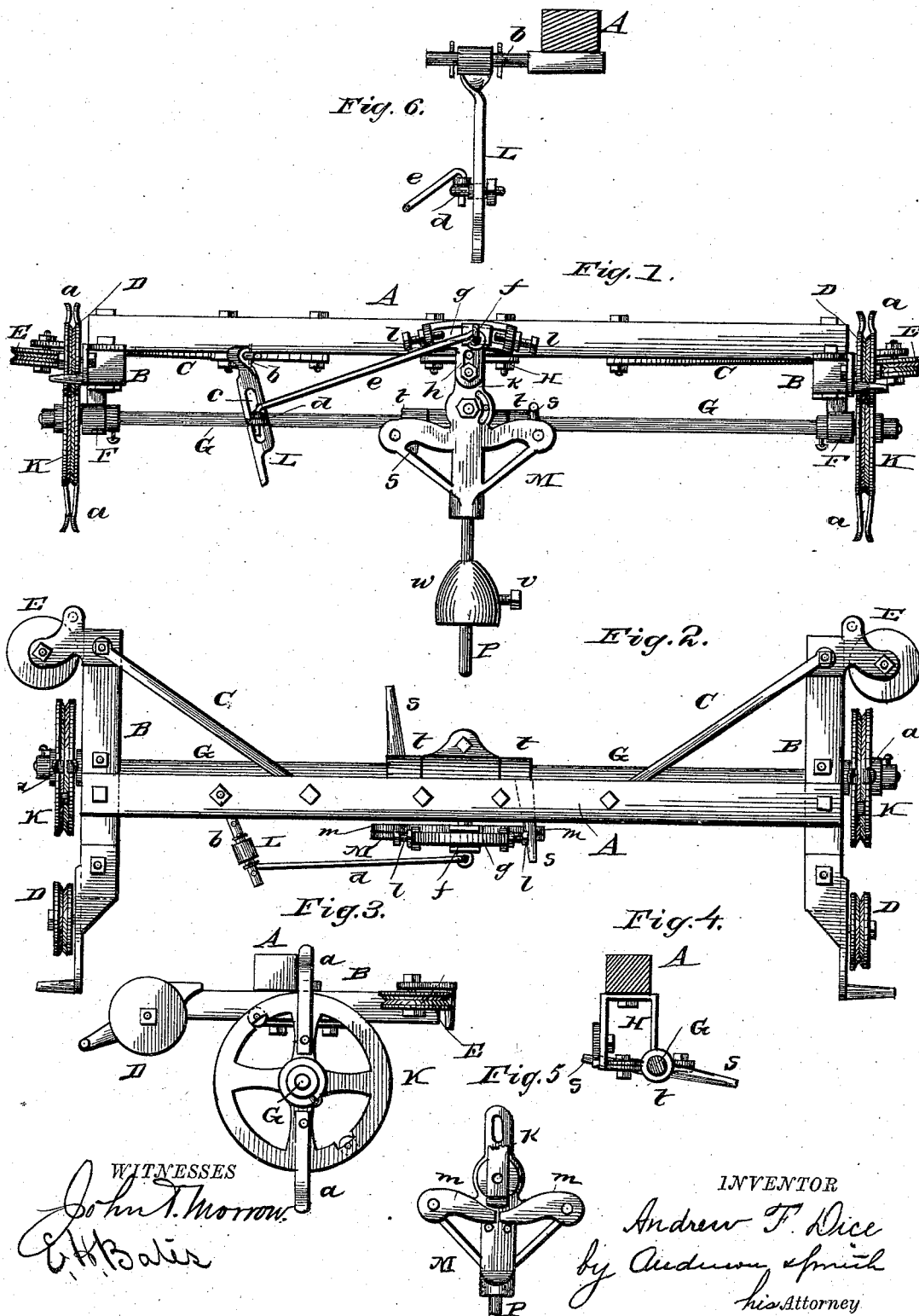


(No Model.)

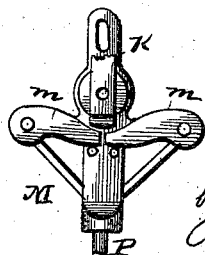
A. F. DICE.  
CHECK ROWER.

No. 305,679.

Patented Sept. 23, 1884.



WITNESSES  
*John T. Morrow.*  
*C. H. Bates*



INVENTOR  
*Andrew F. Dice*  
*by Andrew Smith*  
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# UNITED STATES PATENT OFFICE.

ANDREW F. DICE, OF JOLIET, ILLINOIS.

## CHECK-ROWER.

SPECIFICATION forming part of Letters Patent No. 305,679, dated September 23, 1884.

Application filed January 29, 1884. (No model.)

*To all whom it may concern:*

Be it known that I, ANDREW F. DICE, a citizen of the United States, residing at Joliet, in the county of Will and State of Illinois, have invented certain new and useful Improvements in Check-Rowers; and I do 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, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

Figure 1 of the drawings is a representation of a front view of my device. Fig. 2 is a plan view of the same. Figs. 3, 4, 5, and 6 are detail views.

This invention has relation to check-rowers for seed-planters; and it consists in the construction and novel arrangement of devices hereinafter set forth, and pointed out in the claims appended.

In the accompanying drawings, the letter A designates the transverse bar of the frame, having the end pieces or arms, B, which are braced to the main bar by means of the irons C. Each arm B carries at one end a guide-pulley, D, and at the other end a guide-pulley, E, for the field-cord. Each arm B also carries a bearing, F, underneath for the transverse shaft G, which extends under the main bar A, and through a center bearing or hanger, H, extending downward from said bar.

On each end of the shaft G is rigidly secured the large grooved wheel K, under which the field-cord passes, engaging its under portion. This grooved wheel is provided with radially-extended arms *a*, arranged in pairs at diametrically-opposite portions of its diameter, and serves to engage the knots or obstructions of the field-cord as the planter moves over the field.

L represents a short lever-arm, which is pivoted to a bearing of the main bar at *b*, and is designed to engage the seed-slide. This arm is slotted at *c* to receive an adjustable eyebolt, *d*, to which is attached a connecting-rod, *e*, which extends to a slide-bearing, *f*,

which is seated in an arc-slot, *g*, in the upper adjustable section, *h*, of a pivoted swinging regulator, M. The section *h* is slotted, and is secured to the arm *k* of the regulator M by means of a bolt and nut. Suitable adjustable stop-screws, *l*, are provided to project into the ends of the arc-slot *g*, as shown in the drawings. The regulator is pivoted to the central hanger, H, which depends from the main bar, and below the pivot are cam-shaped arms or wings *m*, extending laterally, as shown in the drawings.

On the stem P of the swinging regulator is a weight, *w*, which is adjustable, and is secured in position, after adjustment, by the set-screw *v*.

On the shaft G, at each side of the central hanger, H, is secured a head, *t*, carrying a projecting arm, *s*. These arms, which extend at right angles and in opposite directions from the shaft G, are of sufficient length to engage the respective lateral wings of the swinging regulator as the shaft revolves. As the planter moves over the field, the shaft is caused to revolve by the field-cord, which engages the grooved wheel at the end thereof, and as the arms *s* are set in the shaft in such position that when the wheels K are turned to bring their knot-engaging arms *a* into vertical position the shaft-arm *s* will be horizontal, and one of said arms, *s'*, will be engaged with one of the wings of the swinging regulator M. This position will be maintained until the arms *a* of the grooved wheel engage a knot or obstruction of the field-cord, when the shaft will be turned, vibrating the regulator and throwing the lever-arm L and the seed-slide to which it is connected.

Having described this invention, what I claim, and desire to secure by Letters Patent, is—

1. The swinging regulator having an adjustable weight and adjustable slotted upper section and lateral wings, in connection with the transverse rotating shaft of a check-rower and wheels at its ends, and the oppositely-projecting arms near its center adapted to engage the arms of the regulator, substantially as specified.

2. The swinging regulator M, having the

adjustable slotted upper section, the slide  
therein connected to the lower arm, which en-  
gages the end slide, and adjustable limiting-  
screws projecting into the ends of the slot,  
5 substantially as shown and described.

3. In a check-rower, the combination, with  
the cord-wheels, of the transverse shaft hav-  
ing the pairs of part engaging arms project-  
ing therefrom, the projecting arms on said  
10 shaft near its center, and a swinging regulator

having lateral wings adapted to be engaged by  
said projecting arms, substantially as speci-  
fied.

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

ANDREW F. DICE.

Witnesses:

L. S. BAKER,

S. O. SIMONDS.