G. D. HAWORTH.

Pulley for Check-Row Cords.

No. 197,550. Patented Nov. 27, 1877.

Fig. 1.

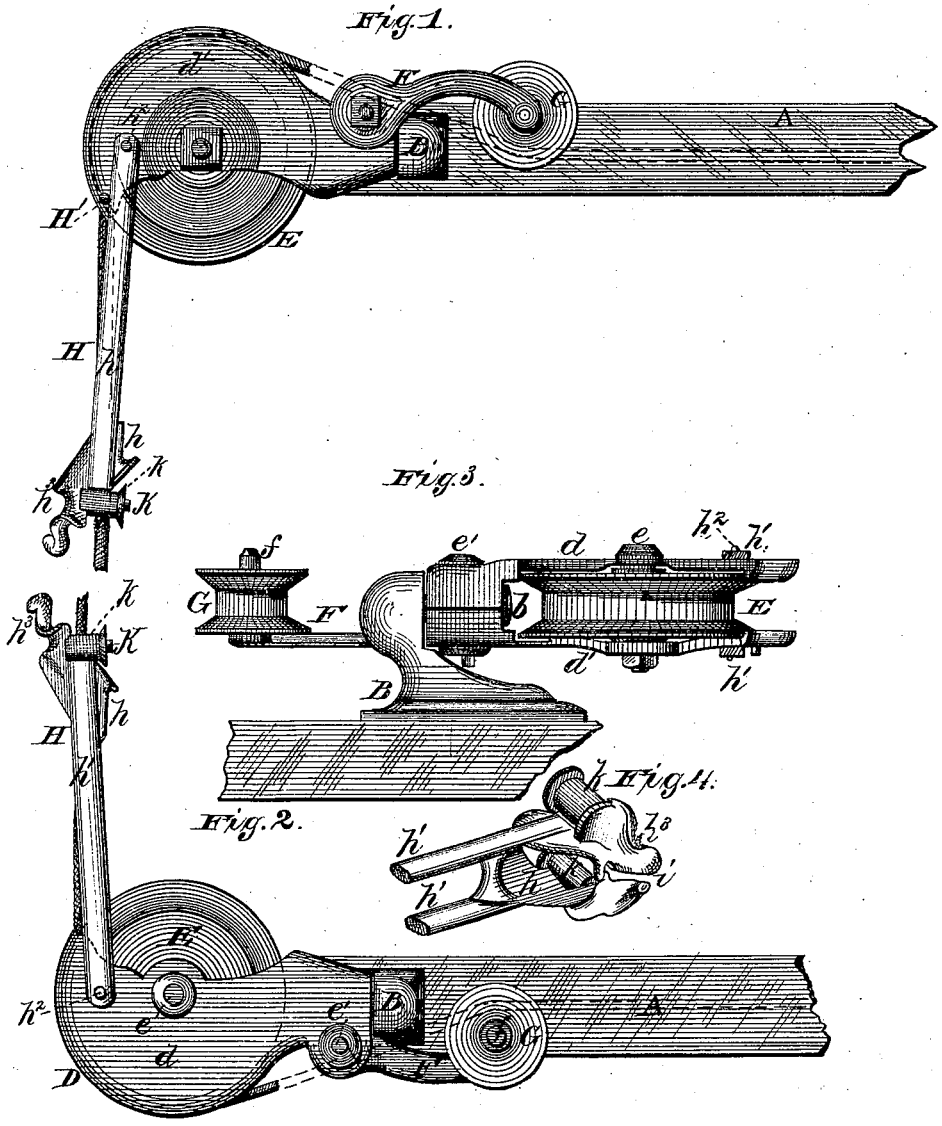

Fig. 3.

Fig. 2.

Fig. 4.

WITNESSES

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GEORGE D. HAWORTH, OF DECATUR, ILLINOIS.

IMPROVEMENT IN PULLEYS FOR CHECK-ROW CORDS.

Specification forming part of Letters Patent No. **197,550**, dated November 27, 1877; application filed August 25, 1877.

To all whom it may concern:

Be it known that I, GEORGE D. HAWORTH, of Decatur, county of Macon, State of Illinois, have invented certain new and useful Improvements in Pulleys for Check-Row Cords, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a plan view of the pulley-holder, showing my improvements applied. Fig. 2 is a similar view, with the pulley turned for receiving the cord in the opposite direction to that shown in Fig. 1. Fig. 3 is a side elevation of the same; and Fig. 4 is a perspective view of the outer end of the swinging guiding-arm, showing the rollers at the entrance of the same.

Similar letters of reference denote corresponding parts in all the figures.

My invention relates to an improvement upon the pulley-holder described in Letters Patent granted to me January 14, 1873, reissued July 18, 1876, No. 7,234; and consists, first, in the combination, with the semi-revolving pulley-holder, of a swinging guide or arm for directing the cord to the pulley or sheave mounted in said pulley-holder; second, to the combination, with said pulley-holder, of a guiding sheave or pulley mounted upon its inner end for guiding the cord from the main sheave or pulley to the actuating arm or arms of the check-rowing devices; and, lastly, to certain details of construction hereinafter explained.

In the accompanying drawings, A represents the bar which is usually mounted on the front of the corn-planter, and to which the check-rowing attachments are connected; but my invention being confined to the devices for directing the check-row cord or wire to the guiding-pulleys and to the check-rowing attachments, only so much of said bar is shown as is necessary to illustrate my invention.

Upon the outer end of this bar is mounted an upright standard or pivot-block, B, provided with a horizontal pin or pivot, *b*, upon which the pulley block or holder is mounted.

D is the pulley block or holder, made in two parts, *d d'*, which are connected together by means of pins or bolts *e e'*, the bolt *e* also serving as a pin or pivot for the sheave or pulley E, which is mounted in or clasped between the parts *d d'* of said block. The part *d'* of the pulley-block has cast with or otherwise connected to its inner end an arm, F, which extends inward, and is provided on its inner end with a vertical pin or pivot, *f*, upon which is mounted a small guiding sheave or pulley, G, said pulley serving to guide the cord from the main sheave or pulley E to the check-rowing devices.

H is a swinging guide or arm, composed of the head *h* and arms h^1, the arms h^1 being connected to the pulley-holder D by means of pivot-pins h^2, and cast upon or otherwise secured to the outer faces of the parts *d d'*.

The outer ends of arms h^1 are connected by the head *h*, which is made in the form of a short sleeve or eye, through which the check-row cord passes, and by means of which said cord is guided with precision to the pulley E, under the varying angles of the path of the machine, to the line of the check-row cord. This sleeve is provided on one side with a slot, *i*, made in the curved or irregular form shown in Fig. 4, which, while it permits the cord to be placed in the eye or loop by hand, prevents its accidental displacement when the machine is at work.

The expanded ends h^3 are provided with pins K, placed at right angles to the arms h^1 and at the entrance to the loop or eye *h*, and upon these pins are mounted rollers *k k*, between which the cord or wire moves.

The extent of movement of the arm H is regulated by means of a pin, H', on the part *d'* of the pulley-block.

The manner of connecting the cord is as follows: The cord being anchored in the usual manner, it is first placed in the eye or loop *h*, through the slot *i*, and then passed around the pulley E, and thence over the pulley G to the check-rowing devices, and to a similar guiding device upon the opposite end of the bar.

It will be seen that by this construction of guiding device the cord is always held in proper relation to the pulley, and is directed therefrom with the required precision to the check-rowing devices.

Having now described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination, with the pulley-holder, of the laterally-vibrating guide or arm, substantially as and for the purpose described.

2. The laterally-swinging guide or arm H, pivoted to the pulley-holder, and provided with the rollers *k k* at its outer end, substantially as described.

3. The combination, with the pivoted pulley-holder, of a secondary guiding sheave or pulley, G, applied to said pulley-holder, and operating substantially as described.

4. The combination, with the pulley-holder, D, of the pivoted guide or arm H, and the secondary sheave or pulley G, attached to said holder, substantially as and for the purpose set forth.

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Witnesses:
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