

(No Model.)

L. HARPIN.

CHECK ROW ATTACHMENT FOR PLANTERS.

No. 472,996.

Patented Apr. 19, 1892.

Fig. 1.

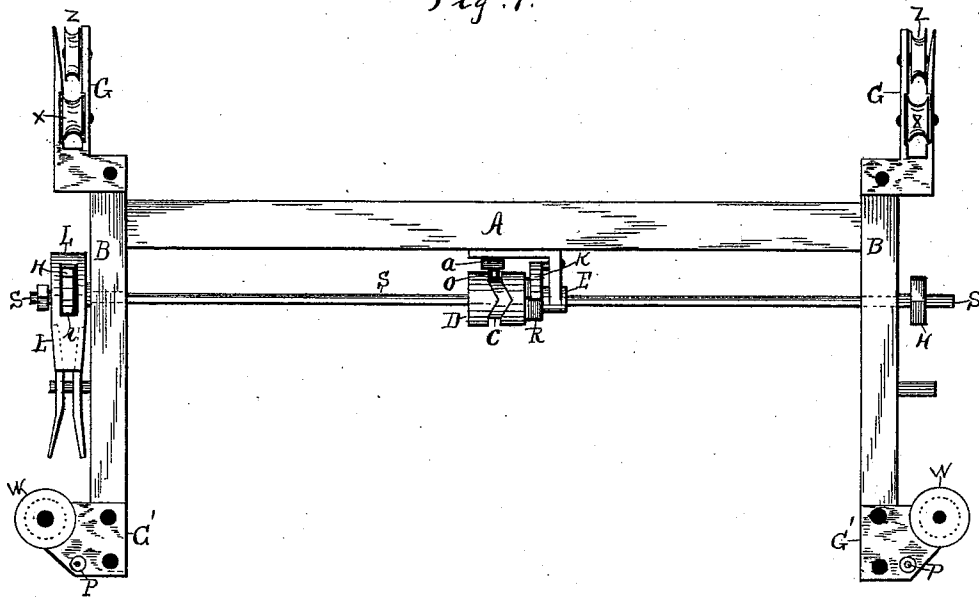


Fig. 2.

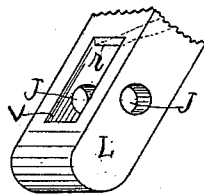
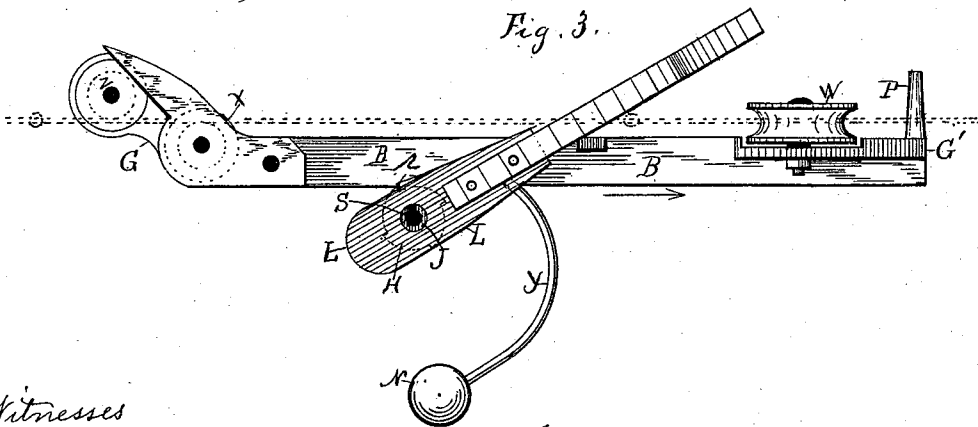


Fig. 3.



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CHECK-ROW ATTACHMENT FOR PLANTERS.

SPECIFICATION forming part of Letters Patent No. 472,996, dated April 19, 1892.

Application filed December 11, 1891. Serial No. 414,653. (No model.)

To all whom it may concern:

Be it known that I, LOUIS HARPIN, a citizen of the United States of America, residing at Carrow, in the county of Kankakee and State of Illinois, have invented certain new and useful Improvements in Check-Row Attachments for Corn and Seed Planters, of which the following is a specification, reference being had therein to the accompanying drawings, and the letters of reference thereon, forming a part of this specification, in which—

Figure 1 is a plan view, one oscillating lever being omitted. Fig. 2 is a perspective view of the lower end of one of the oscillating forked levers; and Fig. 3 is an end elevation of the machine.

This invention relates to certain improvements in check-row attachments for corn and seed planters, which improvements are fully set forth and explained in the following specification and claim.

Referring to the drawings, A represents the main cross-beam of the machine, having secured at each end a cross-head B.

S is a shaft boxed at each end to the under side of the cross-heads B, respectively, and has secured on it at each end a ratchet-wheel H, and also has secured on it at about its center the cam-wheel D, having a cam-channel *c* for receiving the wrist-roller *o* of the seed-slide lever *a*, and a ratchet-wheel R, provided with a pawl K for arresting backward rotation of said shaft.

E is a box secured by an arm to beam A, and is for supporting the central part of said shaft.

The principal new feature in this machine is the oscillating forked lever L. This lever is provided near its lower end with the rectangular aperture V (shown particularly in Fig. 2) for the reception of the ratchet-wheel H, which is secured on shaft S, while the lever L has journals J, that are larger than shaft S, on which shaft said lever oscillates freely.

In placing the lever L and ratchet-wheel H in the shaft S the ratchet-wheel H is first placed within the aperture V of said lever, and then they are placed one on each end of said shaft, as shown at the left in Fig. 1, when the ratchet-wheel H is secured on said shaft, and the

lever L is loose thereon, so it can freely oscillate in either direction thereon. The aperture V in said lever L is formed so as to leave the shoulder *r*, (shown particularly in Fig. 2,) which shoulder operates as a pawl against the teeth of the ratchet-wheel H on shaft S, and is permitted so to operate as a pawl by reason of the journals J of said lever being considerably larger than the said shaft on which it is journaled and thus to rotate said shaft forward intermittently as the forked lever is operated in the ordinary manner by means of a wire having knots at intervals, as shown in broken lines in Fig. 3. The lever L after it has been carried rearward and has become disengaged from a knot on the wire that has carried it rearward will be returned to its first position, as shown in Fig. 3, to engage the next tooth of ratchet H by means of a weight N, secured to its forward side by means of an arm *y*, thus causing said lever L to automatically turn forward simply by means of being weighted on its forward side, thus dispensing with springs or other means for said purpose. The advantages of thus weighting the forked lever L are that it saves the use of additional parts, such as springs, lessens friction, and renders the lever more certain to return, and the use of the lever itself instead of an additional part for a pawl to operate the ratchet-wheel H, and its shaft is a great advantage, as it saves cost in construction and renders the lever more certain to operate the said ratchet-wheel and shaft. The guide-wheels W Z X and port P, and the plates or frames G G' are of the ordinary kind for the purpose of guiding and holding the knotted wire in proper place. The whole is designed to be attached to any ordinary corn or seed planter in such manner as to be connected with its seed-slide and operate it in the ordinary manner.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is as follows, to wit:

In a check-row attachment for seed planters, the combination of the shaft S, having the ratchet-wheels H secured thereto, one near each end, the forked oscillating lever L,

having the aperture V formed to have the
shoulder *r* and having the journals J J for
journaling said lever on said shaft in such
manner that the ratchet-wheel H may be
5 within said aperture, said journals J J being
larger in diameter than said shaft, so that
said lever will be loosely journaled thereon
and so that said shoulder *r* may engage said
ratchet-wheel as a pawl, and the weight N, se-
10 cured directly to said lever at its forward side

through the medium of curved arm *y*, sub-
stantially as and for the purpose set forth.

LOUIS HARPIN.

Witnesses:

^{his}
FLANDER × HARPIN,
^{mark}

^{his}
NAPOLEON × GABOIS,
^{mark}