L. L. HAWORTH.
Check-Row Planter.

No. 197,271. Patented Nov. 20, 1877.

Fig. 1.

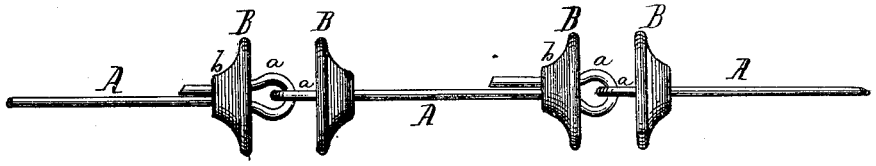


Fig. 2.

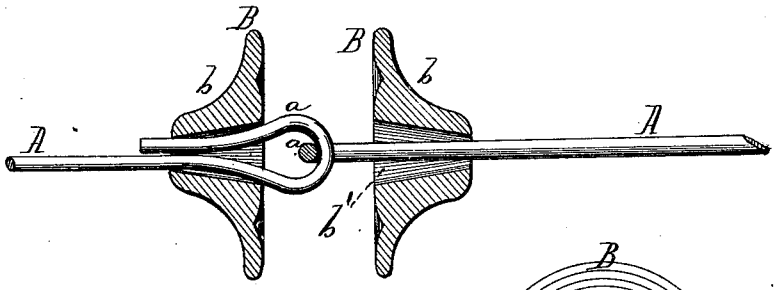


Fig. 4.

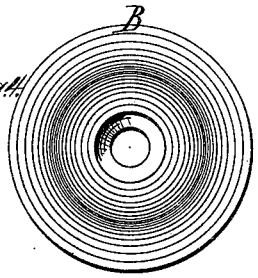
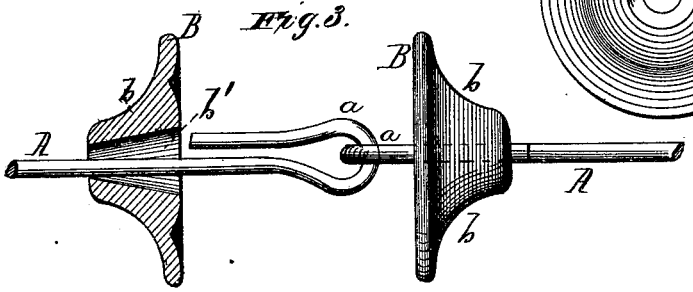


Fig. 3.



Witnesses.
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UNITED STATES PATENT OFFICE.

LYSANDER L. HAWORTH, OF DECATUR, ILLINOIS.

IMPROVEMENT IN CHECK-ROW PLANTERS.

Specification forming part of Letters Patent No. **197,271**, dated November 20, 1877.; application filed October 25, 1877.

To all whom it may concern:

Be it known that I, LYSANDER L. HAWORTH, of Decatur, county of Macon, State of Illinois, have invented certain new and useful Improvements in Joints and Knots of Wires for Check-Row Corn-Planters, of which the following is a full, clear, and exact description, reference being had to the accompanying drawing, making part of this specification, in which—

Figure 1 is a side elevation of the improved check-row cord or wire. Fig. 2 represents a section through one of the knots or joints, enlarged. Fig. 3 is a similar view, partly in section, showing one of the buttons withdrawn for the purpose of connecting or disconnecting the wires; and Fig. 4 is a face view of one of the buttons, also enlarged.

Similar letters of reference denote corresponding parts wherever used.

The invention relates to the manner of uniting the sections or lengths of wire forming the check-row cord or wire by the aid of the buttons forming the knots or stops in said wire; and consists in providing the ends of the lengths or sections of wire with loops for joining the sections, and with collars or buttons adapted to be slipped over said looped ends, for preventing them from being drawn out and detached by the tension or strain on the wire, said buttons forming the knots or stops on the check-row cord or wire, as hereinafter explained.

In the accompanying drawing, A A represent the sections or pieces of wire cut into lengths conforming to the distance apart at which it is desired to plant the rows or hills of corn, said sections or lengths having their ends bent into loop form, as shown at *a*, for adapting the lengths to be readily joined or disconnected at will. At each end of the lengths of wire A A is a button or collar, B, perforated centrally, and adapted to slide on the wire, and to be moved over the recurved end, forming the loop *a*, fitting snugly thereon, as shown in Fig. 2, for clasping said end of the wire to the main body or portion thereof, and preventing the loop from being drawn out or straightened, and thus released, under the strain or tension to which the wire is subjected when in use. These buttons form the knots or stops on the wire for actuating the seed-planting devices, or for indicating where the seed is to be deposited, as the case may be. They may be varied in form, but, by preference, their outer faces or sides at *b* are made tapering or bell-shaped, as adapting them to more readily escape from the fork, arm, or lever of the planter after having acted thereon in any usual manner. By preference, also, the central perforation will be made tapering, as shown at *b'*, as adapting the button to be more readily slipped upon the loop, and, at the same time, insuring its firm grasp upon and retention of said loop.

By the construction of the check-row wire as described, I am not only able to use a lighter wire than could be used where the loops or joints are not fastened as described, but, the sections being made of uniform length, if from any cause a length or section should become broken, it can be instantly replaced by a new one without disturbing the relation of the knots to the field which is being planted.

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

1. The sections of wire provided with the looped ends, and adjustable or sliding buttons for securing said ends and forming the knots or stops on the check-row cord or wire, substantially as described.

2. The combination, in a check-row cord or wire, of the sections or lengths A of wire, provided with the looped ends *a* and the sliding buttons B, substantially as and for the purpose described.

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Witnesses:

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