

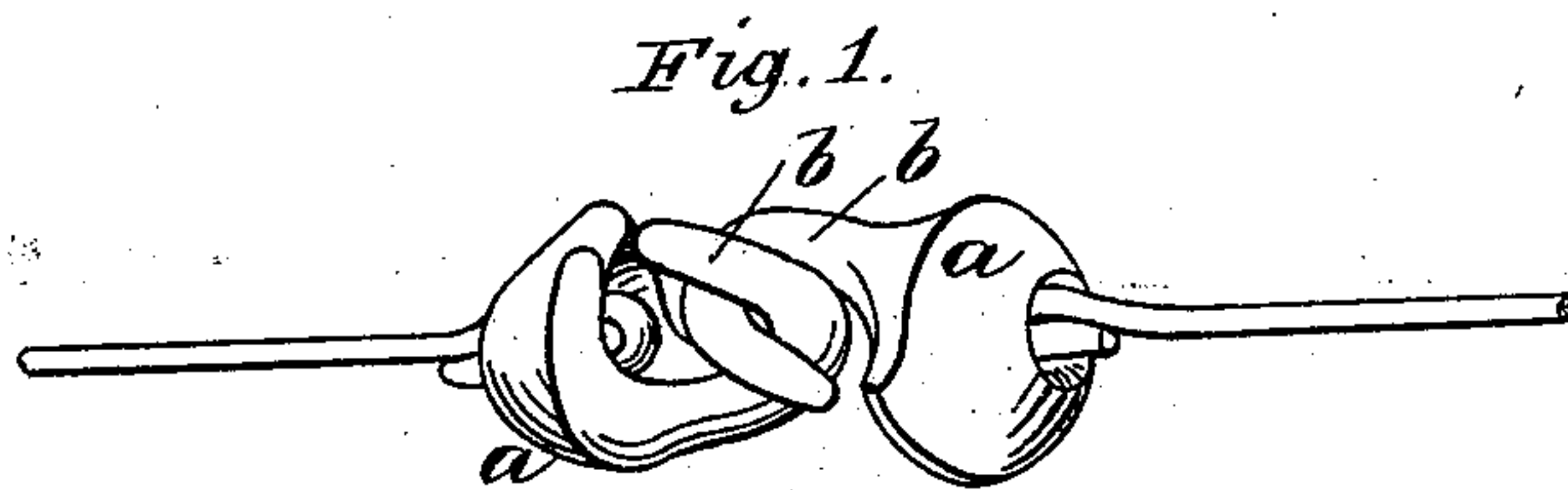
(Model.)

G. D. HAWORTH.

Coupling Hook or Button for Check Row Cords.

No. 236,025.

Patented Dec. 28, 1880..



*Fig. 2.*



*Witnesses:*

*W. B. Masson;*

*A. B. Smith*

*Inventor:*

*Geo. D. Haworth*

*by A. M. Smith & Co.*  
*Atty's*

# UNITED STATES PATENT OFFICE.

GEORGE D. HAWORTH, OF DECATUR, ILLINOIS.

## COUPLING HOOK OR BUTTON FOR CHECK-ROW CORDS.

SPECIFICATION forming part of Letters Patent No. 236,025, dated December 28, 1880.

Application filed September 3, 1880. (Model.)

*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 Coupling Hooks or Buttons 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 perspective view, showing two of the coupling-hooks, forming, when connected as shown, the button, knot, or knob of a cord or wire used in connection with a check-row corn-planter. Fig. 2 is a perspective view of one of the hooks detached.

The present invention consists in casting the parts or hooks forming the buttons or knots of a check-row cord or wire with open hooks, through which they can be coupled together, and with eyes, through which they are secured to the check-row cord or wire, each in a single piece, in form adapted for use as hereinafter explained.

It has been usual heretofore to cast the parts of the knot or button for check-row cords or wires with the eye formed in it and a spur upon it, which, after being annealed or rendered malleable, was bent into the form of an open hook, substantially such as is herein represented, a check-line knot or button formed by this last-named process being shown in Letters Patent granted to me October 8, 1878, No. 208,814. This process was found to be expensive and tedious, and by making a slight modification in the form of the parts I am now enabled to cast the coupling-hooks in the exact form required for use, thereby obviating the necessity for annealing and bending, and thereby materially reducing the cost of manufacture.

In the accompanying drawings, *a* represents a coupling-hook, forming one-half of a knob or button used on check-row cords or wires for uniting the sections thereof and for operating the dropping devices of a corn-planter. These hooks or half-buttons are provided each with

a bell, cone, or cup shaped base, which forms the knot or button for actuating the seed-dropping devices, said base having a central eye or perforation for the reception and retention of the knotted end of the wire or check-row cord, and from one side wall of the open cup a tapering spur, *b*, extends in curved or hook form until its recurved end is in close proximity with the wall of the cup at its opposite side, or nearly so, as shown, just sufficient space being left between said end and side wall to permit two such hooks to pass by each other when brought together at their open ends, in position about at right angles to each other, for coupling or uncoupling them, as desired, but serving effectually to prevent their becoming uncoupled when in position for use. The coupling-hook thus formed is cast in the form shown, which is also the form required for use, and the necessity for making the hook part malleable and afterward bending it into the form required is thus obviated, not only greatly reducing the cost of manufacture of the knots or buttons, but avoiding the weakening of the metal consequent upon such bending of the spur into hook form after the button has been made in the usual manner and by the usual process.

I am aware that coupling hooks or buttons have been made for use upon check-row cords or wires substantially in the form described and shown, but by a different process, as above explained, and I therefore do not here claim such hooks, broadly, and irrespective of the process of manufacture; but

What I do claim is—

A coupling-hook, half-button, or knot for check-row cords or wires, consisting of the perforated cup or base having the open coupling-hook cast thereon in form adapted for use, substantially as and for the purpose set forth.

GEORGE D. HAWORTH.

Witnesses:

W. W. KERR,  
THEO. COLEMAN.