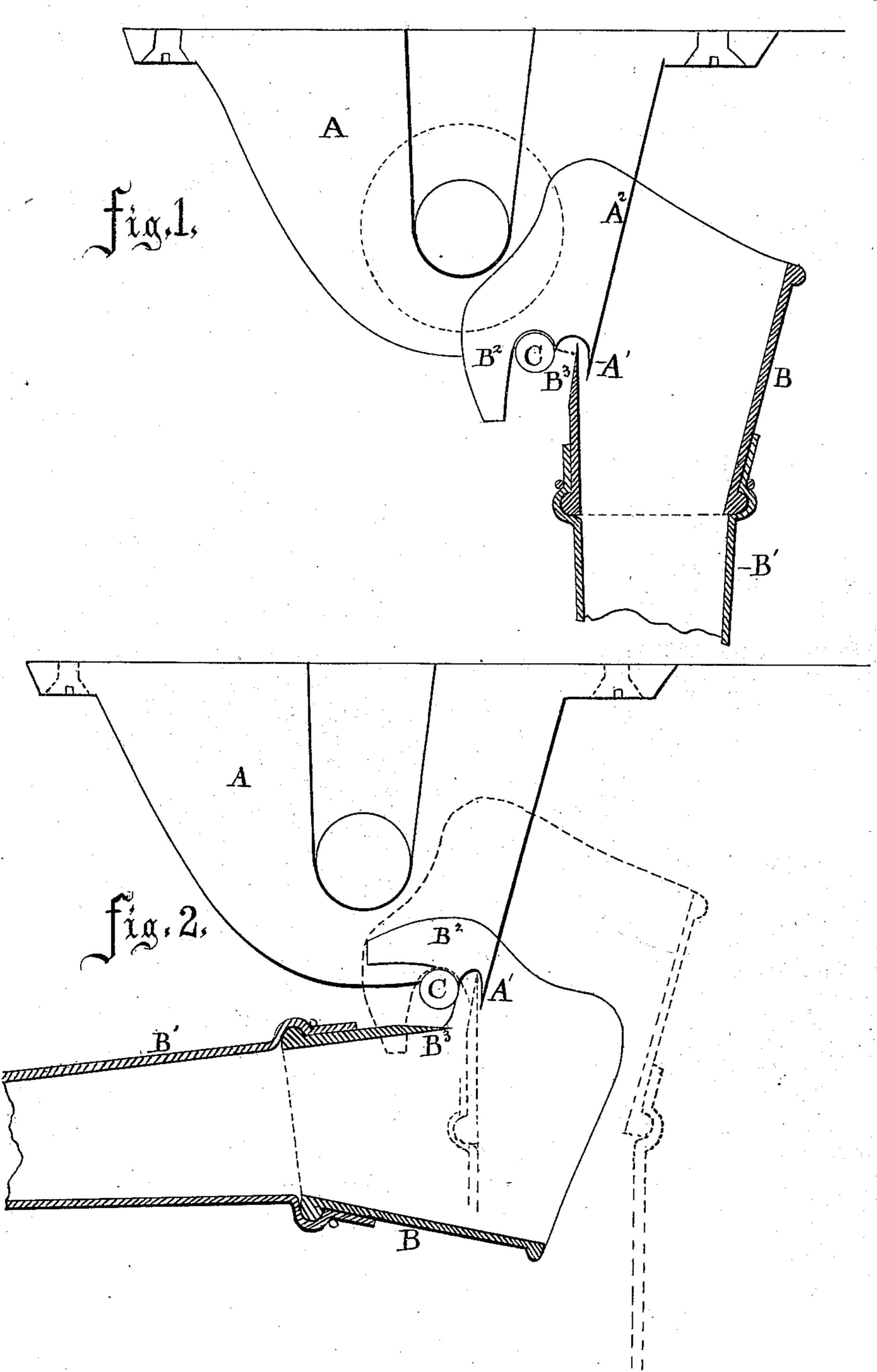
## B. KUHNS & C. SCHOLZ.

## SEED-CUPS FOR GRAIN-DRILLS.

No. 176,965

Patented May 2, 1876.



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Benj: Scholz
Cha! Scholz
Per Blanchard & Singleton

N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

## UNITED STATES PATENT OFFICE.

BENJAMIN KUHNS AND CHARLES SCHOLZ, OF DAYTON, OHIO, ASSIGNORS TO THE FARMERS' FRIEND MANUFACTURING COMPANY, OF SAME PLACE.

## IMPROVEMENT IN SEED-CUPS FOR GRAIN-DRILLS.

Specification forming part of Letters Patent No. 176,965, dated May 2, 1876; application filed December 30, 1875.

To all whom it may concern:

Be it known that we, BENJAMIN KUHNS and CHARLES SCHOLZ, of Dayton, in the county of Montgomery and State of Ohio, have invented certain new and useful Improvements in Seed-Cups for Grain-Drills; and we do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings and to the letters of reference marked thereon, which form a part of this specification—

Figure 1 being a sectional elevation of our improved cup and attachment, showing the cup in position, the feed-wheel in dotted lines, the flexible grain-conductor attached to the cup, and the projecting lip or plate for preventing the detachment of said conductor when in operation. Fig. 2 is a sectional elevation, showing the parts above described, the position of the flexible conductor when in use being shown in dotted lines, and the position in which it has to be placed, in order that it may be detached from the cup, in full

lines.

Corresponding letters refer to like parts in both figures.

This invention relates to seed cups for grain-drills; and it consists in an attachment thereto which is designed to prevent the detachment of the flexible grain-conductor therefrom when in use.

It is well known that grain conductors, when hooked upon the cup in the ordinary way, are liable to be detached, in consequence of the rising of the hoe, which would have the effect to unhook the conductor from the cup, so that, when the hoe should fall to its normal position, the grain would not be conducted thereto, but would be scattered promiscuously upon the ground.

The object of this invention is to prevent the unhooking of the grain conductor from the grain-cup when the same is in a position to be used; and, to effect this, we construct the cup as hereinafter described.

A in the drawing represents the seed-cup, which may be of any desired form of construction that will admit of there being attached to it a projection or plate, A¹, which is placed at the lower portion of the same and underneath the feed-orifice A², as shown in Fig. 1 of the drawings. The upper end of the grain-conductor B is made of metal, and of substantially the form shown, in order that it may be hooked upon projections C C, attached to the cup A. This metallic portion is made to extend downward from the point of attachment for a sufficient distance to enable it to receive and hold the flexible portion B¹, which conducts the grain to the hoe.

It will be seen that the portion B of the conductor is provided with hooks B<sup>2</sup> B<sup>2</sup>, which, as above stated, engage the projections C C upon the cup A, and, in order that the attachment may be made, it is necessary that it should be turned into the position shown in full lines in Fig. 2, when the hooked portions B<sup>2</sup> will pass over the projections C, when, by turning it to the position shown in dotted lines, the upper beveled portion B<sup>3</sup> of the conductor B will pass behind the lip or projection A<sup>1</sup> and into a groove formed behind the same, as shown in Fig. 1, which will have the effect to prevent the unhooking or disengaging of the conductor when in use by the rising of the hoe, or from any other cause, as it can only be disengaged by turning it into the position in which it was placed when it was attached to the cup.

It is not our intention to limit our invention to the form of the parts shown, as it is apparent that it may be changed without departing from the object of our invention.

Having thus described our invention, what we claim, and desire to secure by Letters Patent. is—

1. A seed-cup for grain-drills, having upon it projections C C and a projecting lip or plate, A<sup>1</sup>, arranged substantially as described, whereby it is made to engage with the conductor, and prevent the same from being detached from the cup when in use, as set forth.

2. The combination and arrangement of the

cup A, provided with a lip or plate, A<sup>1</sup>, and projections C C, with a grain conductor, provided with hooks for attaching it to said cup and a projecting portion for engaging the lip or plate, substantially as and for the purpose set forth.

In testimony that we claim the foregoing as

our own invention, we affix our signatures in presence of two witnesses.

BENJAMIN KUHNS. CHARLES SCHOLZ.

Witnesses:

GEO. M. YOUNG, CHARLES J. MCKEE.