

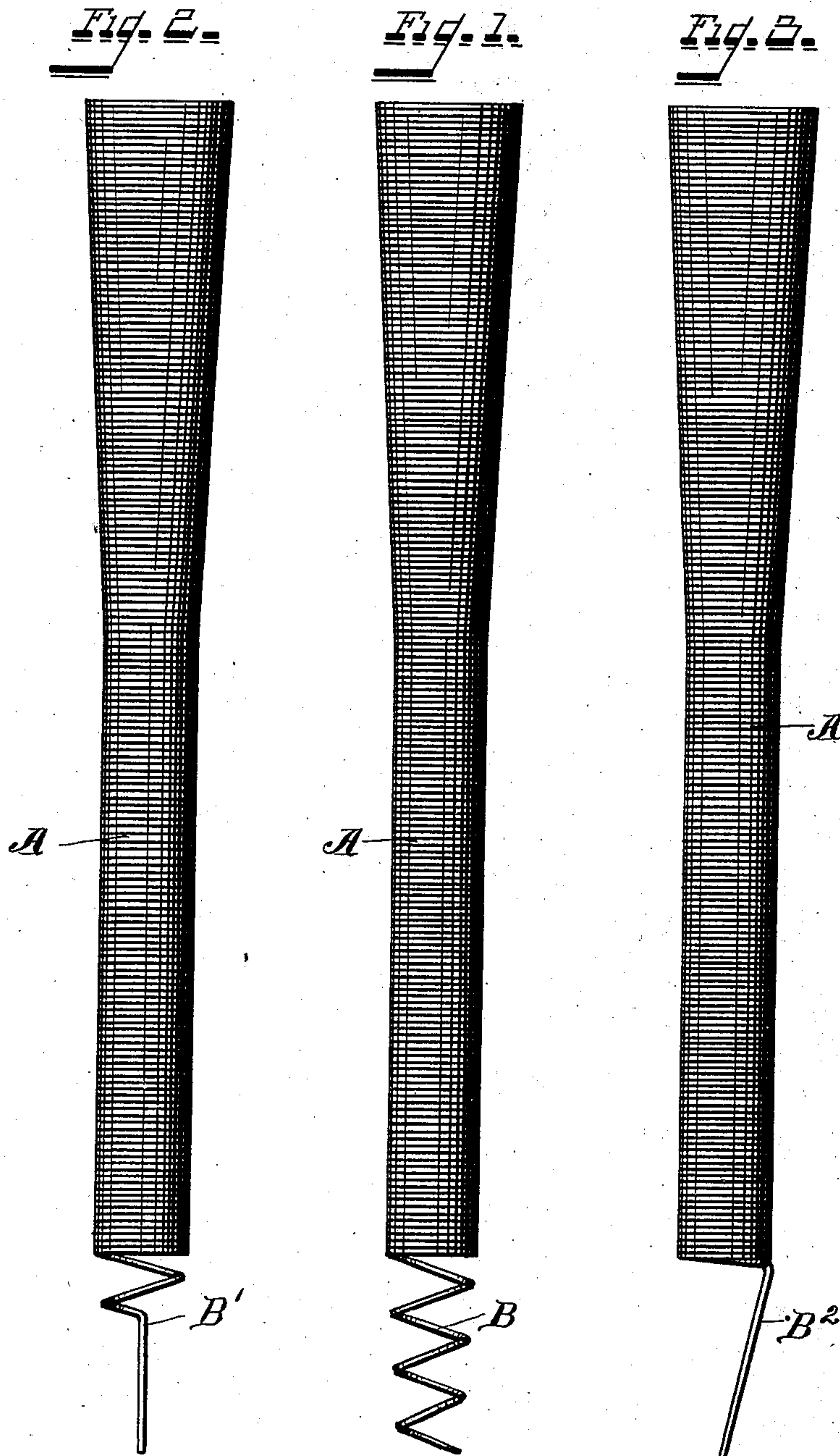
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Patented June 10, 1902.

J. W. POINDEXTER.
SEED TUBE FOR GRAIN DRILLS.

(Application filed Nov. 6, 1901.)

(No Model.)



Witnesses.
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UNITED STATES PATENT OFFICE.

JOHN W. POINDEXTER, OF CYNTHIANA, KENTUCKY.

SEED-TUBE FOR GRAIN-DRILLS.

SPECIFICATION forming part of Letters Patent No. 702,114, dated June 10, 1902.

Application filed November 6, 1901. Serial No. 81,307. (No model.)

To all whom it may concern:

Be it known that I, JOHN W. POINDEXTER, a citizen of the United States, residing at Cynthiana, in the county of Harrison and State of Kentucky, have invented certain new and useful Improvements in Seed-Tubes for Grain-Drills, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

My invention relates to seed-tubes for grain-drills of that class which are composed of coiled wire; and it has for its object the production of a tube which shall be self-cleaning and cheap in construction, as well as efficient in action.

The novelty of my invention will be hereinafter more fully set forth, and specifically pointed out in the claims.

In the accompanying drawings, Figure 1 is a side elevation of a grain-drill tube embodying my invention in its preferred form. Fig. 2 is a corresponding view of a modification. Fig. 3 is a corresponding view of a still further modification.

The same letters of reference are used to indicate identical parts in all the figures.

A represents a closely-coiled-wire tube of the usual or any suitable construction, preferably of the shape shown, and having at its lower end an open spiral B, formed integral with the rest of the tube A.

The purpose for which the open spiral B is formed on the lower end of the tube A is threefold. First, it prevents the lower end of the tube from becoming stopped up with mud or earth while working in the field if the ground is slightly soft or wet, which is a very great advantage over tubes now in use, for they frequently become clogged or stopped up, thereby preventing seed from being sown in the ground. In my construction if a piece of mud or earth lodges in the lower end of the open part of the tube the grain can still pass out through the sides thereof and the movement of the tube within the boot of the grain-drill will soon dislodge the obstruction and it will fall out, thereby leaving the tube free and open. The second purpose for forming the open spiral B on the end of the tube A is to make a self-cleaning drill out of the machine to which it is applied. Frequently

in using drills in the field, and more especially in damp or sticky soil, the shoe or boot becomes stopped up by the soil working up into the opening through which the seed has to pass, thereby rendering that shoe useless until cleaned. In my construction of tube when the shoe becomes stopped up it is only necessary to raise the shoes until the lower end of the tube passes out through the opening in the shoe and removes the obstruction. Formerly if this was done it was at the risk of plugging up the lower end of the seed-tube, as will be readily understood. The third purpose for forming the open spiral on the lower end of the tube is to supply a guide for the seed-tube in case the shoe should drop into a hole in the field, as is frequently the case, and on account of the self-cleaning properties of my tube it can be made longer than ordinary tubes, and so accomplish the result as stated above—namely, preventing the tube from swinging out away from the shoe in case the latter should drop into a hole, and thereby saving time and labor to replace the tube within the shoe. A still further advantage of the open spiral is that if the shoe should drop away from the end of the tube and in coming back should strike the end of the tube the spiral B will act as a spring to throw the tube either into the boot or entirely away therefrom, and so prevent any danger of breaking the seed-cup from the sudden jar of having the boot strike the lower end of the tube, as frequently happens with tubes now in use.

While I prefer to make the open spiral B as shown in Fig. 1, still it is obvious that substantially the same result will be accomplished by using the shape as shown at B', Fig. 2, or that shown at B², Fig. 3, which are modifications of my present invention, or any other shape that will accomplish the same result in substantially the same manner.

Having thus fully described my invention, I claim—

1. In a grain-drill seed-tube of the character described, the combination with a closely-coiled-wire tube, of a downwardly-projecting cleansing portion secured to its lower end, substantially as described.

2. In a grain-drill seed-tube of the character described, the combination with a closely-

coiled-wire tube, of a downwardly-projecting
cleansing and guiding portion secured to its
lower end, substantially as described.

5 3. In a grain-drill seed-tube of the charac-
ter described, the combination with a closely-
coiled-wire upper portion, of an openly-coiled-
wire lower portion made integral with the up-

per portion and adapted to clean itself and
the boot and also to form a guide for itself
in the boot, substantially as described.

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Witnesses:

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