

(No Model.)

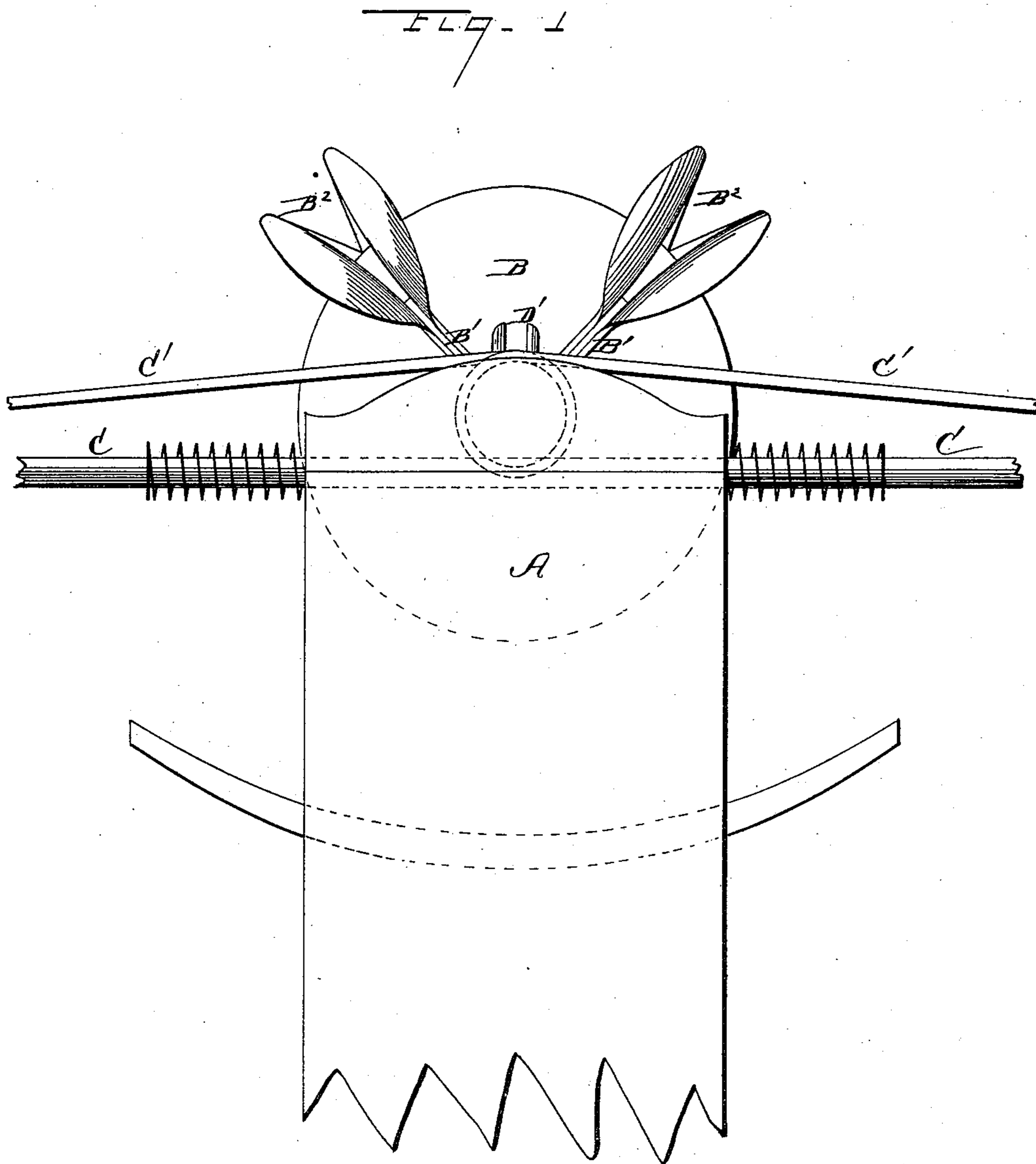
3 Sheets—Sheet 1.

S. S. SPEICHER.

BROADCAST SEEDING MACHINE.

No. 316,198.

Patented Apr. 21, 1885.



WITNESSES

W. Pare'
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(No Model.)

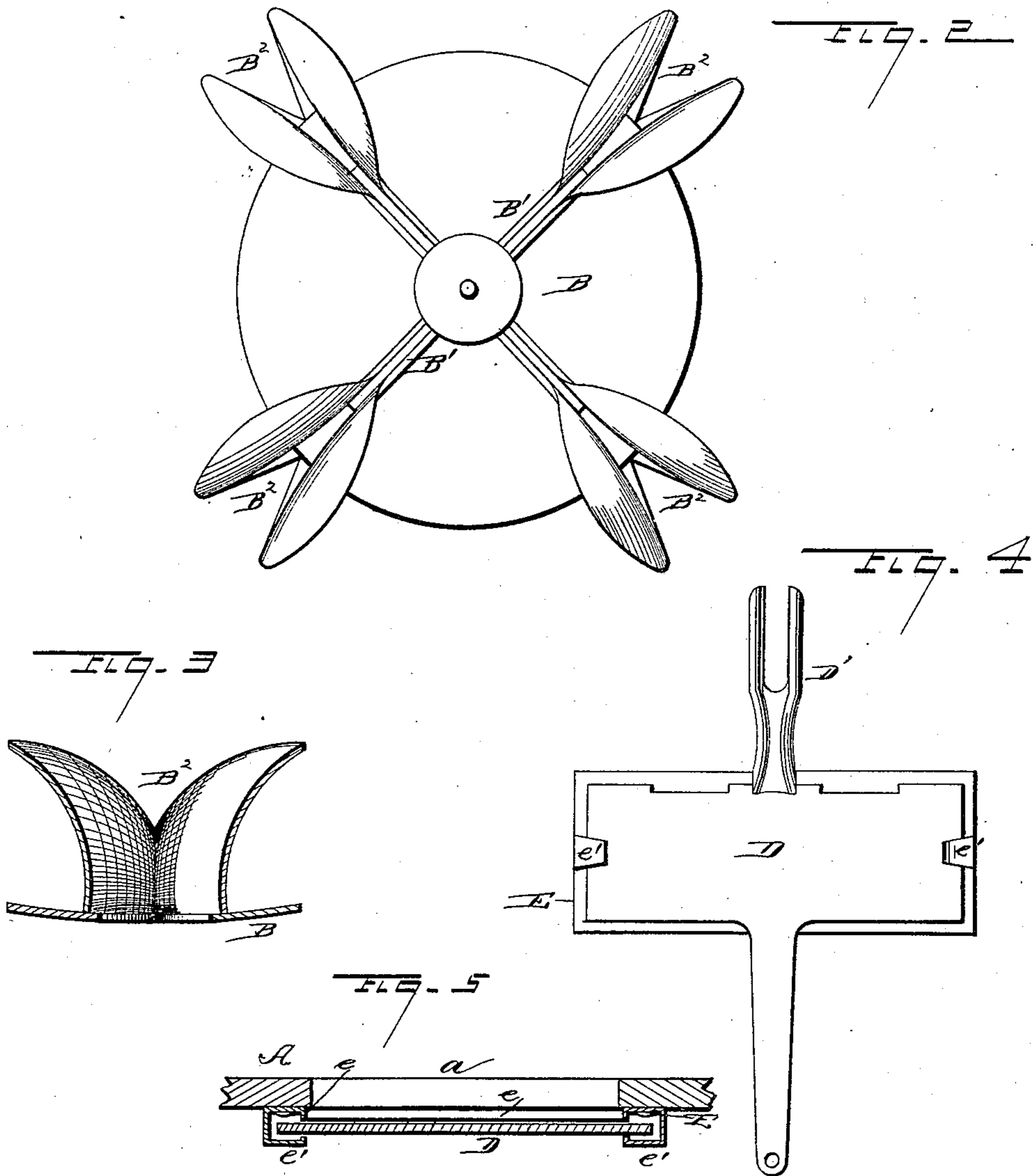
3 Sheets—Sheet 2.

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3 Sheets—Sheet 3.

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FIG. 6.

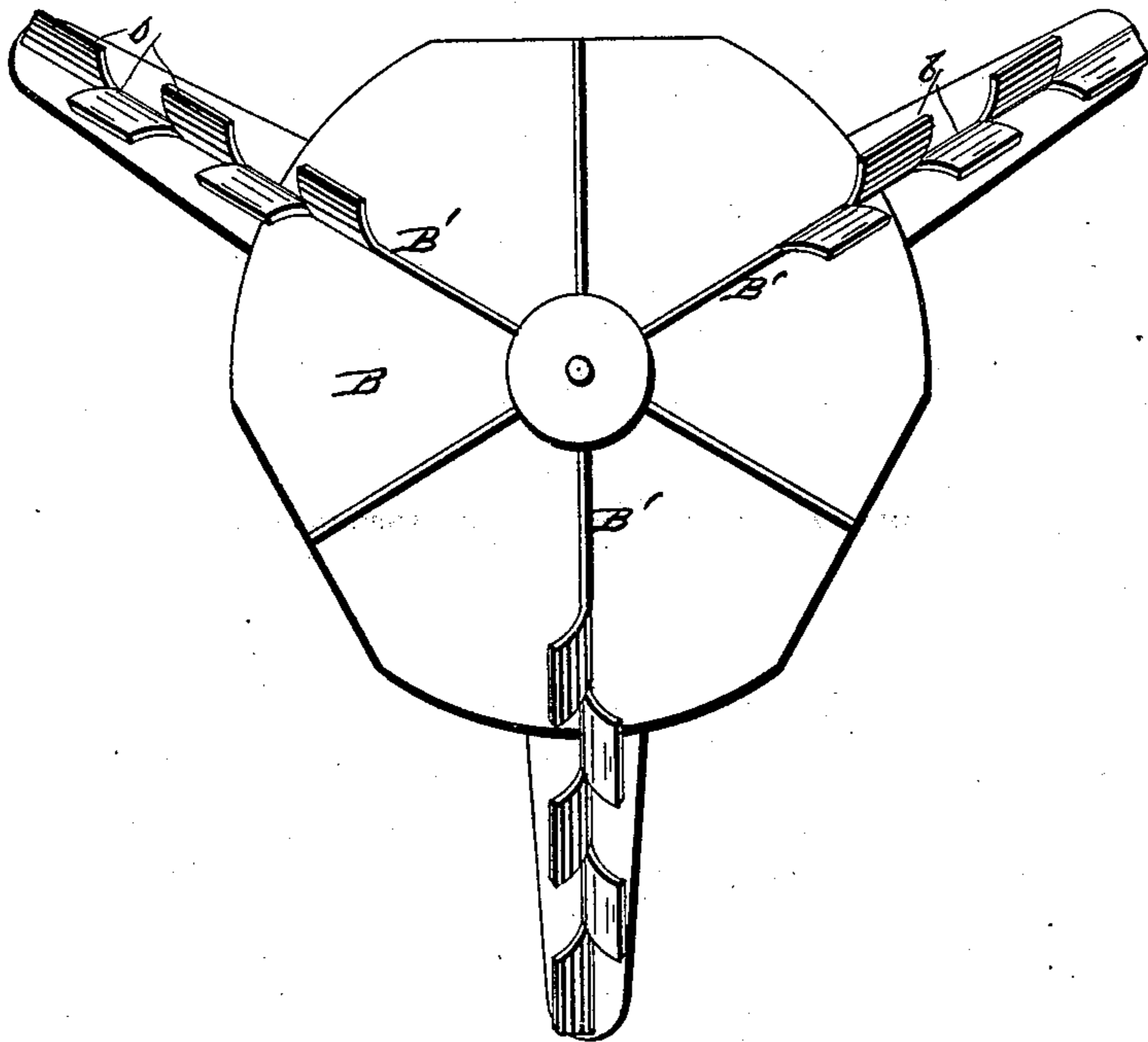


FIG. 7.

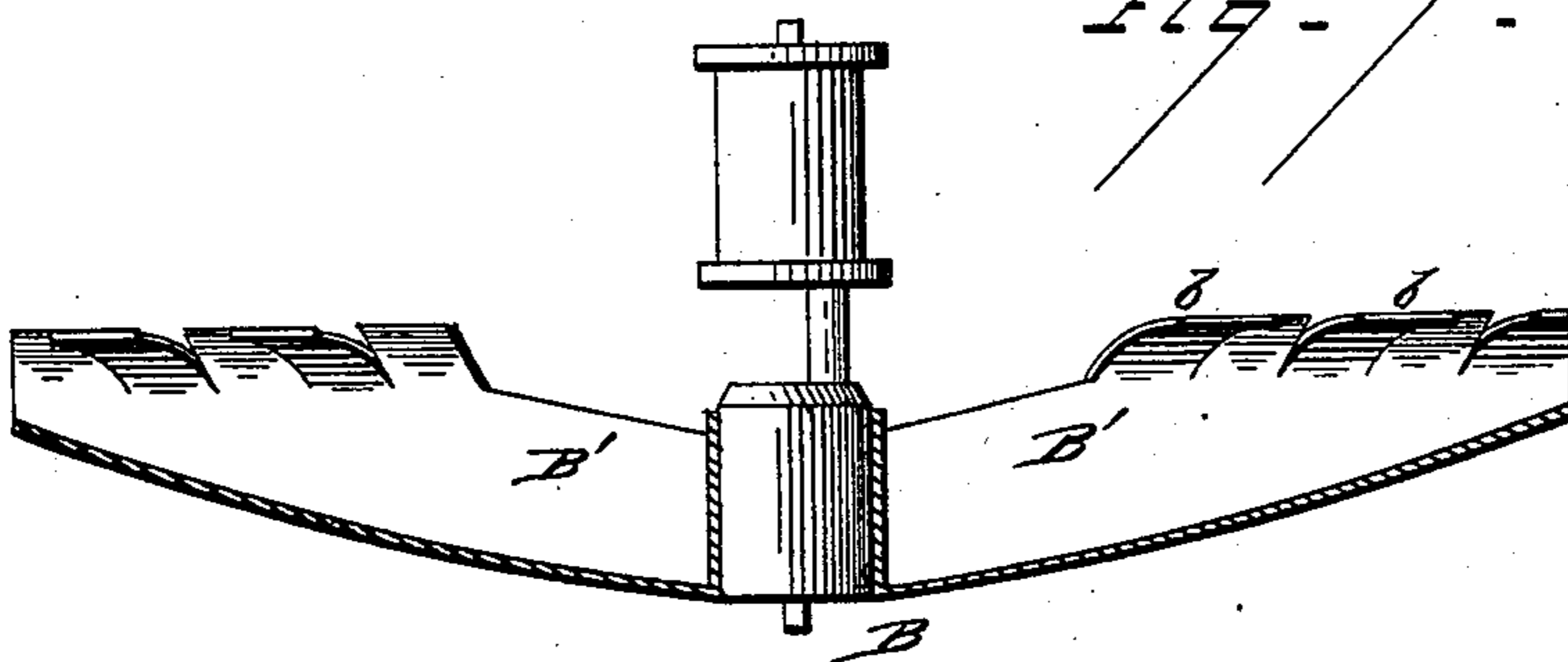
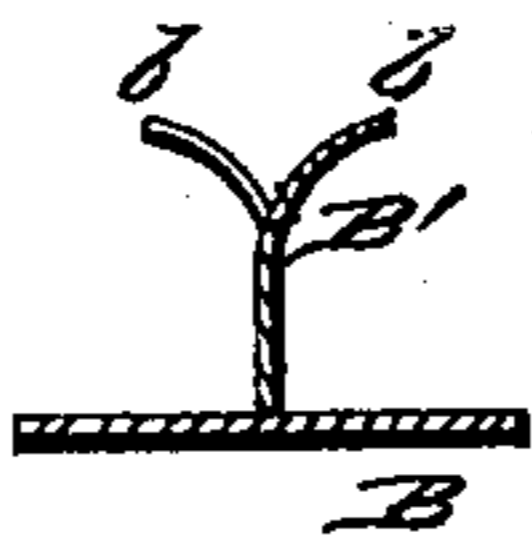


FIG. 8.



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UNITED STATES PATENT OFFICE.

SAMUEL S. SPEICHER, OF NORTH MANCHESTER, INDIANA.

BROADCAST SEEDING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 316,198, dated April 21, 1885.

Application filed May 14, 1884. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL S. SPEICHER, a citizen of the United States, residing at North Manchester, in the county of Wabash and State of Indiana, have invented certain new and useful Improvements in Broadcast Seeding-Machines, of which the following is a specification, to wit:

This invention relates to broadcast seeding-machines; and it consists in a distributing-wheel of peculiar shape, adapted to spread the seed in a better manner, and also in the peculiar construction of the valve-frame, substantially as will be hereinafter more fully set forth and claimed.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the accompanying drawings, in which—

Figure 1 is a plan view of a broadcast-machine having my improvements attached. Fig. 2 is a detail view of the distributing-wheel; Fig. 3, a cross-section of one of its wings; Fig. 4, a bottom view of the cut-off valve. Fig. 5 is a cross-section of the same, and Figs. 6, 7, and 8 are a plan view and sections of a modification of the distributing-wheel.

A represents the seed-box, which is of the usual or any desired form, and provided with a distributing-wheel, B, with radial wings journaled in its forward end, and operated by a bow, C, and cord C', in the manner usual in this class of machines.

The wheel B is provided with two or more radial arms or wings, B', which at their forward ends are curved and broadened to form a spoon-shaped end, B², as fully seen in Figs. 2 and 3.

The seed dropping on the wheel B is by centrifugal force carried out to its edge and caught in the concave portion of the curved wing B', which not only holds it till it has acquired the requisite force for being properly thrown, but also holds it down and throws it in a more direct line than the wings ordinarily used.

The wheel herein shown is supplied with four pairs of wings; but I do not desire to confine myself to this form, but may make the wheel with a greater or less number, as I may

desire. Neither is it necessary that the wings should be arranged in pairs, as only two wings may be used if found desirable, which will of course be curved in opposite directions, in order to operate on a reverse motion of the wheel, as will be readily understood. The peculiar concave or spoon form of the wings distributes the seed over a greater surface of ground, and they will be given more or less curve, as may be found desirable.

A modification of this wing is shown in Figs. 6 and 7. In this form the wing B' is made of a single strip of sheet metal radiating from the hub of the wheel and having its upper edge slit downward at short intervals, and the tongues b so formed bent laterally and alternately in opposite directions. This wing is much cheaper in construction though not quite as effective as the one just described, and is substantially of the same form and operates in the same way.

The valve or cut-off D is provided with a fork, D', which is given an oscillating motion by the cranked shaft of the distributing-wheel, as usual.

The opening a in the seed-box, through which the seed is fed out, is on its lower side provided with a metal frame, E, having a flange, e, cast around its inner edge, against which the slide D works. The ends of the frame are also formed with malleable lugs or hooks e', which pass under the valve and hold it always in place, as in Fig. 5. This form of guard E not only serves to keep the valve always in place, but prevents any seed from getting caught between the valve and bottom of the seed-box.

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

1. In a broadcast-seeder, a distributing-wheel provided with arms having their ends concaved both vertically and horizontally, substantially as shown and described.

2. In a broadcast-seeder, a distributing-wheel provided with radial arms having their ends concaved upon each side, whereby they are enabled to operate the same in reverse directions, substantially as shown and described.

3. In a broadcast-seeder, a distributing-wheel having its arms or wings formed with

spoon-shaped ends, substantially as shown and described.

4. In a broadcast-seeder, a seed-box having its opening *a* provided with a cast frame having a flange, *e*, and malleable lugs *e'*, substantially as and for the purpose set forth.

5. In a broadcast-seeder, the combination of a distributing-wheel, B, having its wings formed with concave or spoon shaped ends,

with a seed-box provided with a bow, a cord, 10 and oscillating valve, substantially as shown and described, and for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

SAMUEL S. SPEICHER.

Witnesses:

ALEX. HESS,

JOHN SPEICHER.