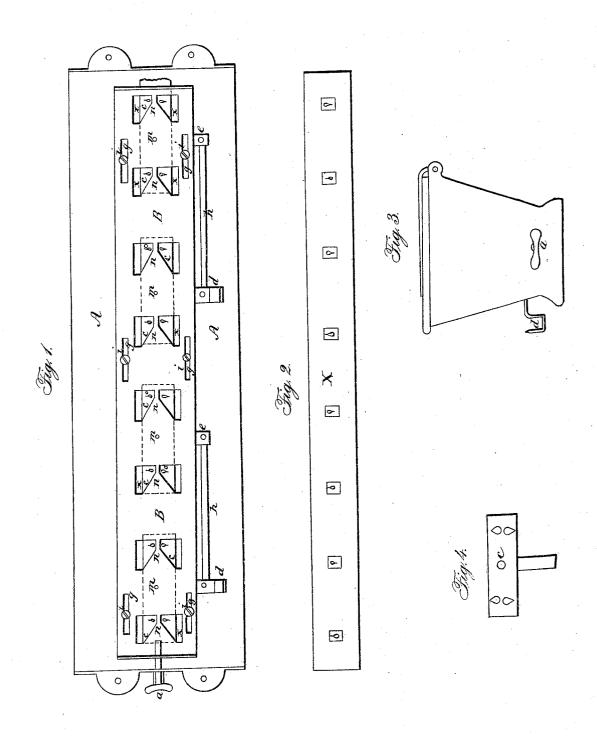
T. A. RISHER. Seed Dropper.

No. 19,872.

Patented Apr. 6, 1858.



United States Patent Office.

T. A. RISHER, OF CIRCLEVILLE, OHIO.

IMPROVEMENT IN SEEDING-MACHINES.

Specification forming part of Letters Patent No. 19,872, dated April 6, 1858.

To all whom it may concern:

Be it known that I, THOMAS A. RISHER, of Circleville, county of Pickaway, and State of Ohio, have invented certain new and useful Improvements in Seeding-Machines; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The nature of my invention consists in the peculiar arrangement and construction of the bottom and slides, as will be hereinafter de-

scribed.

In order that others skilled in the arts may construct and use my invention, I will proceed to describe its construction and operation.

In the accompanying drawings, making a part of this specification, Figure 1 is a bottom view of the machine. Fig. 2 is a view of the inside bottom. Fig. 3 is an end view. Fig. 4 is a view of one of the slides.

In Fig. 1, A is the frame of the machine. X is the inside bottom, and is provided with square apertures for the discharge of seed, as

will be seen by referring to Fig. 2.

B is the outer or lower bottom of the machine, said bottom being adjustable longitudinally, as will be seen, by means of set-serew a. It is also provided with slots g g, through which pass the screws or pins i i, allowing of its adjustment, and at the same time guiding it and keeping it in position.

 $c\ c\ c\ c$ are seed-slides which work on a pivot at $m\ m$, between the bottoms X and B, and are provided with apertures $o\ c$, the shapes of which will be seen in the drawings. These slides are also provided with handles $d\ c$ and c, s id handles being connected together by means of the rods $h\ h$. The connection of the motive power is made to the machine at the handles $d\ c$, the construction of which will be seen in Fig. 3. The construction and arrangement of the slide $c\ c$ and handle $d\ c$ will be seen in

Fig. 4. The apertures in the bottom B are so constructed that that portion of the said bottom which regulates the size of the aperture in the slides $c \ c \ c \ c$ will be in wedge form, the sharp portion of the wedge running toward the slides $c \ c \ c \ c$. The slides $c \ c \ c \ c$, working on a pivot at their centers, have a rocking motion, and having apertures in each end, and these apertures working over the bottom B, the wedge portion of bottom B serves as a cut-off.

In the operation of this machine, power being applied to the handles d d, the slides are set in motion, and working between the two bottoms B and X the seed passes from the upper bottom through its apertures into the apertures in the slides, and as the slides alternate and their apertures pass over the wedgeshaped piece n n of bottom B the seed is discharged on alternate sides of the wedge n n and passes into the discharge-spouts below.

The quantity of seed is regulated by means of the set-screw a, which operates the bottom B backward and forward, either closing or enlarging the apertures in the slides $c \ c \ c \ c$ by means of the wedge form of piece n on bottom B. The entire bottom B is in one piece, and is regulated by means of one screw, a. By means of this arrangement of the bottoms and slides, as constructed, and the set-screw a, I am enabled to form a seeder which is very easily regulated and adjusted.

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

Letters Patent, is-

The peculiar arrangement of the bottom B, as constructed, with the rock-slides c c c c, handles d d and e e, rods h h, set-screw a, and bottom X, all operated in the manner herein set forth, and for the purpose described.

T. A. RISHER.

Witnesses:

C. M. ALEXANDER,

T. H. ALEXANDER.