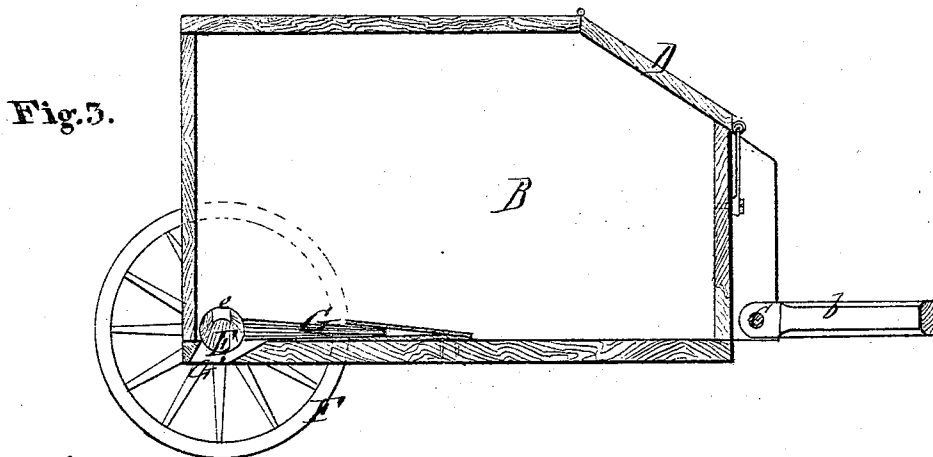
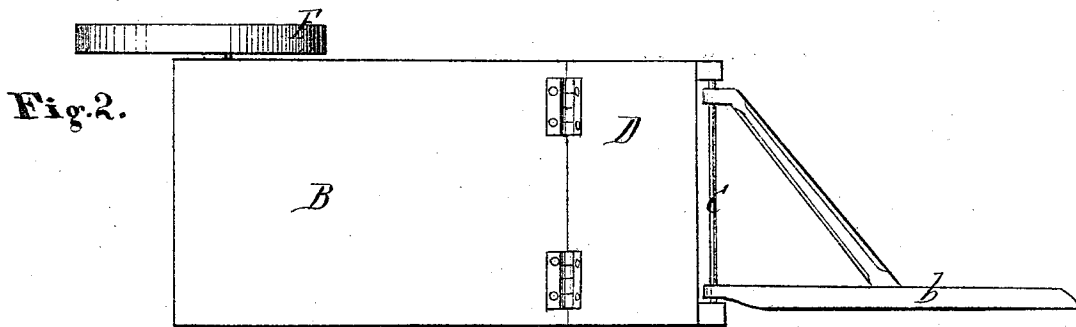
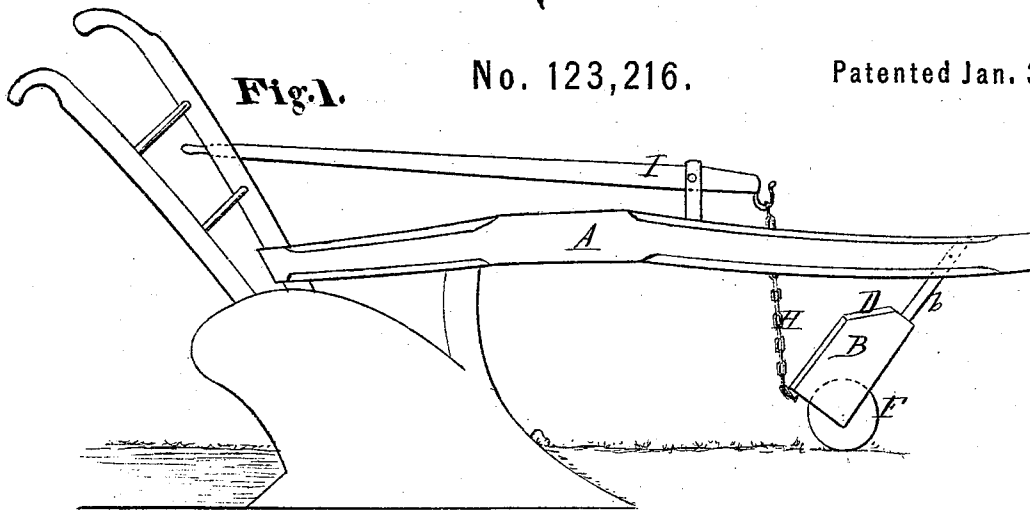


E.F. BALLARD.
Seed Planter.

No. 123,216.

Patented Jan. 30, 1872.



Witnesses.

Chas. Kump
Villette Anderson

Inventor.
E. F. Ballard
Chipman Hornum
Atty

UNITED STATES PATENT OFFICE.

ELI F. BALLARD, OF LINCOLN, NEBRASKA.

IMPROVEMENT IN SEED-PLANTERS.

Specification forming part of Letters Patent No. 123,216, dated January 30, 1872.

To all whom it may concern:

Be it known that I, ELI F. BALLARD, of Lincoln, in the county of Lancaster and State of Nebraska, have invented a new and valuable Improvement in Seed-Planters; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawing making a part of this specification and to the letters and figures of reference marked thereon.

Figure 1 of the drawing is a representation of a side elevation of my invention. Fig. 2 is a top view of the seed-box. Fig. 4 is a vertical section of the same.

This invention has relation to seed-planters; and it consists of a seed-box hung by means of a swiveled arm to the beam of a plow, and provided with a seed-cylinder, wheel for rotating the same, brush for cleaning it, and suitable seed-opening. This box is connected by means of a cord or chain to a lever fulcrumed on the plow-beam, and within ready reach of the plowman's hand, so that the seed-box may be raised or lowered to control the dropping of seed.

In the accompanying drawing illustrating this invention, A represents the plow-beam; B, the seed-box, attached thereto by the arm *b*. C is a transverse pin swiveling said arm;

D, a hinged lid. E indicates a transversely-arranged seed-cylinder, constructed with a seed-cup, *e*, and holding on one end a wheel, F, which rotates the cylinder by rolling on the ground. G indicates a brush to sweep the seed from the cylinder. The cylinder and seed-opening G' are located in the lower angle of the seed-box, which is hung obliquely to the plow-beam. H denotes a chain connecting the seed-box with a lever, I, fulcrumed on the upper side of the beam A, as shown in Fig. 1.

The box is raised by means of said lever so as to free the wheel F from its contact with the ground, and thereby arrest the falling of the seed. After falling the seed may be covered by means of the plow-share following after it.

What I claim as my invention, and desire to secure by Letters Patent, is—

The combination, with the plow-beam A, of the seed-box B, swiveled by the arm *b* and pin C, wheel F, seed-cylinder E, brush G, chain H, and lever I, all arranged substantially as and for the purpose specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

Witnesses:

ELI F. BALLARD.

D. W. BAKER,
S. M. BOYD.