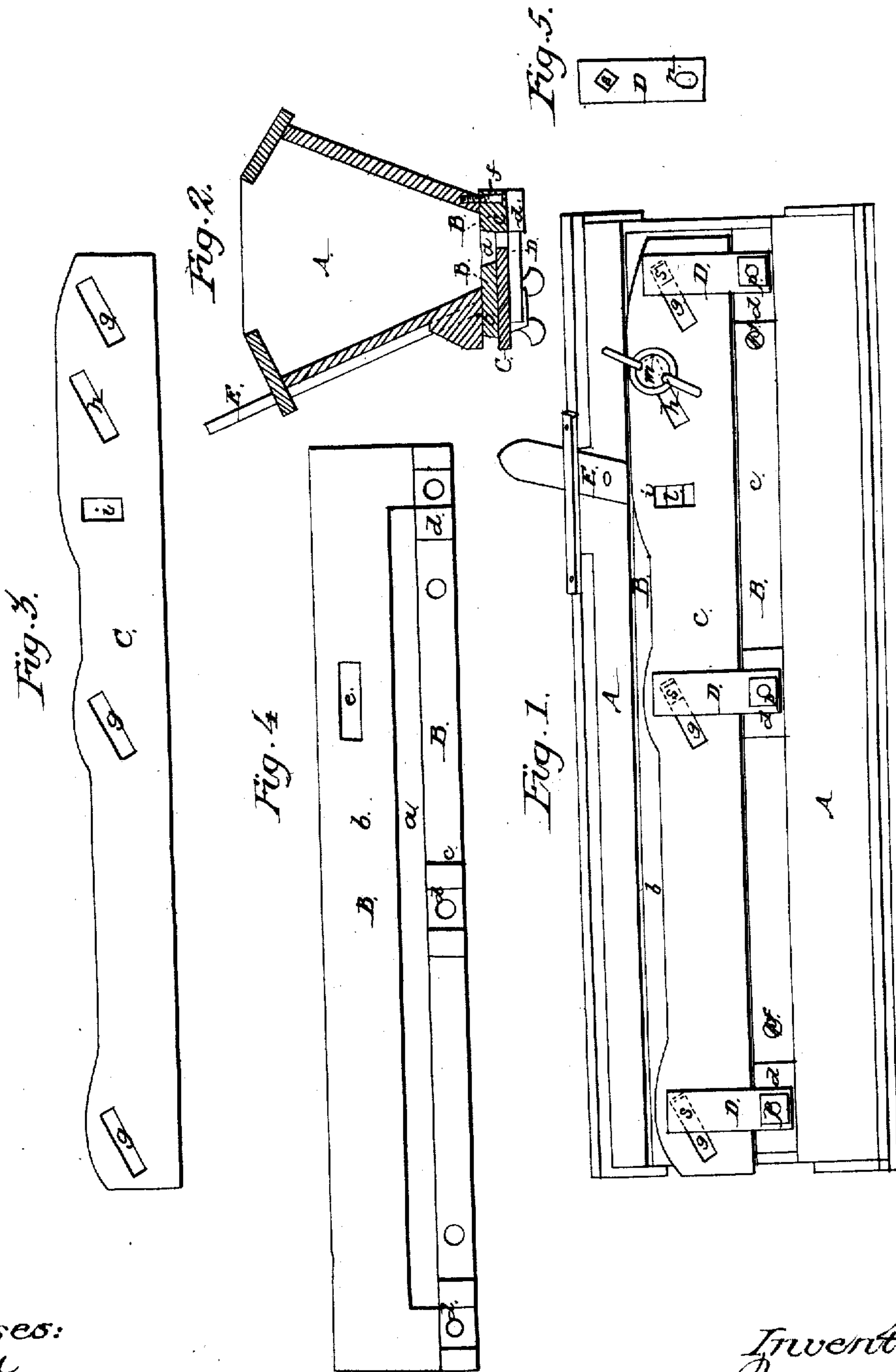


P. SEYMOUR.  
Seed Dropper.

No 35,633.

Patented June 17, 1862.



Witnesses:  
R. F. Casgood  
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# UNITED STATES PATENT OFFICE.

PIERPONT SEYMOUR, OF EAST BLOOMFIELD, NEW YORK.

## IMPROVEMENT IN SEEDING-MACHINES.

Specification forming part of Letters Patent No. **35,633**, dated June 17, 1862.

*To all whom it may concern:*

Be it known that I, PIERPONT SEYMOUR, of East Bloomfield, in the county of Ontario and State of New York, have invented a new and useful Improvement in Seeding-Machines; and do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, making part of this specification—

Figure 1 being a plan of the under side of the seed-box of a seeding-machine provided with my improvement; Fig. 2, a transverse vertical section of the same in its proper position; Figs. 3, 4, and 5, views of parts detached.

Like letters designate corresponding parts in all the figures.

The nature of my invention consists in the improved means and method by which the discharging-aperture in the bottom of the seed-box is adjusted to different and uniform widths, for purposes hereinafter specified.

In the drawings, A represents an oblong seed-box, of any ordinary construction. Under the bottom of this seed-box is secured a metallic plate, B, which may be termed the "fixed jaw," by means of screws *f f* or their equivalents. All the other parts of the device are secured to this fixed jaw, so that by having no immediate or distinct connection with the wood of the seed-box, which is subject to alternate swelling and shrinking, the relation between these parts cannot be disturbed thereby. This feature is a desideratum of importance to secure the desired accuracy and uniformity of sowing seeds. Lengthwise through this jaw is an oblong aperture, *a*, of sufficient width to transmit the largest required size or quantity of seed. Beneath this fixed jaw is secured a movable or adjustable jaw, C, arranged in connection with the fixed jaw, substantially as follows: The jaw C is located beneath a thin portion, *b*, of the jaw B, the portion or side *c* thereof being thicker, so that its lower face is about flush or even with the lower face of the said jaw C, as shown in Fig. 2. The side *c* is the jaw proper, the thin side *b* being employed for closing the bottom of the seed-box, and for mounting and moving the movable jaw C beneath. The jaw C is supported by a number of transverse supporting-bars, D D D, which are firmly secured to the side *c* of the fixed jaw B. To give the attachment strength and firmness of position the bars are usually lo-

cated between raised cheeks or lugs *d d*, and the method of securing is generally by means of screws and nuts *p p*. These screws pass through oblong apertures in the bars D D D, as shown at *n*, Fig. 5, so that the bars may be adjusted in position transversely across the jaw B. Any other equivalent mode of adjustment may be employed. There is just room enough between the side *b* of the jaw B and the supporting-bars D D D to receive the jaw C and allow it to move therein. Projections *s s s*, Figs. 1 and 5, are secured to the upper sides, respectively, of the bars D D D, near the ends opposite to their attachment to the jaw B, and extend upward to or toward the side *b* of said jaw. These projections respectively fit into slots *g g g* in the jaw C, arranged at a suitable and uniform angle to the inner edge of the jaw, substantially as represented in Figs. 1 and 3, and thus compose guides for the jaw C to move on, and such as always to keep the inner edge of the jaw C at a precisely-uniform distance from the inner edge of the side *c* of the jaw B, whether greater or less, and to cause the said movable jaw to close toward or open from the side *c* of the fixed jaw to any required extent, by simply moving it endwise in one direction or the other. This longitudinal movement is conveniently applied by means of a lever, E, pivoted at the side of the seed-box above the jaws, its short arm *l* extending down through an oblong longitudinal slot, *e*, Fig. 4, in the fixed jaw, and into an oblong transverse slot, *i*, Figs. 1 and 3, in the movable jaw, the latter slot being oblong to allow the transverse adjustment of the supporting-bars D D D. The movable jaw C, after an adjustment, may be secured in its position by a tightening-screw, *m*, passing through an oblique slot, *h*, in the movable jaw and into a screw-socket in the fixed jaw. The slot *h* is made oblique, so as not to interfere with the movement of the movable jaw. Any other suitable means may be employed for securing the jaw in position.

The inner or adjacent edges of the jaw C and side *c* of the jaw B should first be accurately jointed straight, so as to fit accurately together. They are then brought into contact through their whole length, and the bars D D D then firmly secured in that position to the jaw B. The aperture between the jaws will then be of exactly uniform width, how-



ever far the jaws may be separated. They may thus in a few moments be adjusted so as to sow any required size of seeds or any amount to the acre.

If desired, an index and scale may be connected with the lever E, so as to indicate the amount which the different portions of the jaw C will cause to be sowed to the acre by the position of said lever.

Whenever, by wearing, the edges of the jaws become untrue, so as not to furnish a uniform width of space between, they are taken apart, jointed, and then again put together, in the manner above specified, by adjusting the bars D D D; and should, by any accident or cause, the jaws become disarranged in their relative positions they are always readily readjusted to the proper positions by the same method.

Thus by means exceedingly simple and cheap is produced a device that can be adjusted to the utmost degree of accuracy, that is never

affected in the slightest degree by the swelling or shrinking of the wood, and that almost never becomes disarranged, and, if ever, that can be readjusted by any one without skill or care with the utmost facility and readiness.

Instead of having the bars D D D fixed and employing the oblique slots *g g g* in connection therewith, the bars may turn on pivots attached both to the fixed jaw and movable jaw. This would be only a mere modification of the device represented.

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

The arrangement and combination of the fixed attaching-jaw B, movable adjusting-jaw C, and adjustable supporting guide-bars D D D, substantially in the manner and for the purposes herein specified.

PIERPONT SEYMOUR.

Witnesses:

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E. J. SEYMOUR.