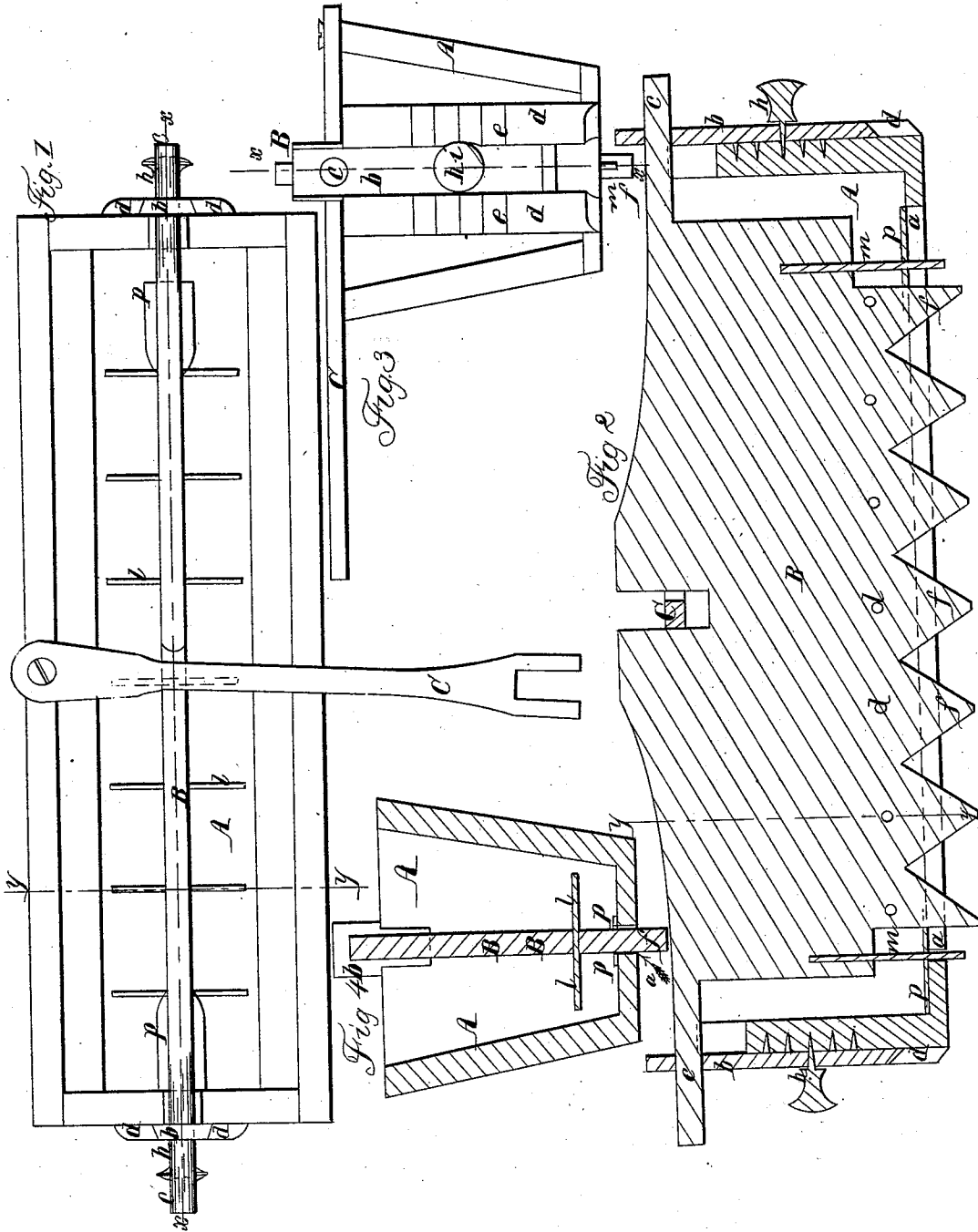


M. D. WELLS.
Seed Dropper.

No. 13,135.

Patented June 26, 1855.



UNITED STATES PATENT OFFICE.

MOSES D. WELLS, OF MORGANTOWN, VIRGINIA.

IMPROVEMENT IN SEEDING-MACHINES.

Specification forming part of Letters Patent No. 13,135, dated June 26, 1855.

To all whom it may concern:

Be it known that I, MOSES D. WELLS, of Morgantown, in the county of Monongalia and State of Virginia, have invented a new and useful Improvement in Seeding-Machines; 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 drawings, forming part of this specification, in which—

Figure 1 is a plan. Fig. 2 is a longitudinal section taken on line *x x* and perpendicular to bottom of seeding-machine. Fig. 3 is an end view, and Fig. 4 is a transverse section on line *y y*.

Similar letters of reference denote the same part.

The object of my invention is to furnish an adjustment by which the machine can be adapted to the sowing of both small and large grain and the quantity of either regulated.

It consists in constructing the hopper with a longitudinal slot in its bottom, having within it an agitator deeply serrated on its lower edge, said agitator resting in supports capable of vertical adjustment, as will be set forth, so as to increase or diminish the extent of the discharge-openings by the protrusion of the teeth of the agitator through the said slot, the agitator being constructed with supplementary slides for permitting its movement without uncovering the extremities of the discharge-slot, the details of construction and operation being as follows:

In the drawings, A is the hopper, designed to be supported on wheels or carried by the operator, as may be desired. In its bottom is a longitudinal slot, *a*, of sufficient width to receive the serrated edge of the agitator B. This agitator rests upon the adjustable supports *b* by arms *c* passing through openings in said supports, and is moved longitudinally by lever *U*, operated by hand or any suitable gearing. The supports *b* are movable vertically in guides *d*, raising and lowering the agitator and regulating the protrusion of the teeth *f* through the slot *a* in the bottom of the hopper. The guides *d* are graduated to denote the sowing capacity of the machine for the various positions of the agitator, the machine being capable of discharging the greatest quantity of the largest grain when the line *i* indicates the top line of the scale, and the machine entirely closed when it joins the bottom line, *e*. The sliding supports *b* are secured in position by pins *h* or screws.

Projecting from the agitator are pins *l* for stirring the contents of the hopper and preventing the packing of plaster, guano, or other fertilizer.

At the extremities of the agitator, and held in place by the pins *m*, are sliding plates *p*, moving with the agitator and keeping the slot at its extremities always covered, the pins *m* passing through the openings in the said plates *p* permitting the vertical movement of the agitator.

In using this machine the only adjustment necessary is the regulation of the protrusion of the teeth *f* to the intended use—raising the agitator so as to leave large openings when it is designed to sow oats or other large grain, and diminishing the openings by lowering the agitator when smaller grain or fine manure is to be sown—the exact position of the agitator for the different purposes to which the machine is to be applied being determined by experiments and indicated by the scales above described.

The plates *p* serve an important function in the adjustment of the machine, as without them the same opening would necessarily exist for all positions of the agitator, or the longitudinal movement decrease with the diminution of these openings.

If desired, the teeth of the agitator may be formed in gangs, leaving closed spaces between the several gangs to adapt the machine to a sparing distribution of the contents of the hopper.

Other modifications of details may be made which need not be here particularized.

I make no claim to the serrated agitator when susceptible of a longitudinal movement only; but

I claim—

1. The serrated agitator adjustable vertically within the slot *a*, substantially as described, for regulating the discharging capacity of the machine, as herein set forth.

2. The supplemental slides *p*, arranged and operating as described, for enabling the agitator to preserve a constant reciprocation under all changes of discharge capacity, as specified.

In testimony whereof I have hereunto signed my name before two subscribing witnesses.

MOSES D. WELLS.

Witnesses:

GEO. PATTEN,
JOHN L. SMITH.