A. TURNER.

Seed Planter.

No. 21,642. Patented Sept. 28, 1858.

Fig. 2.

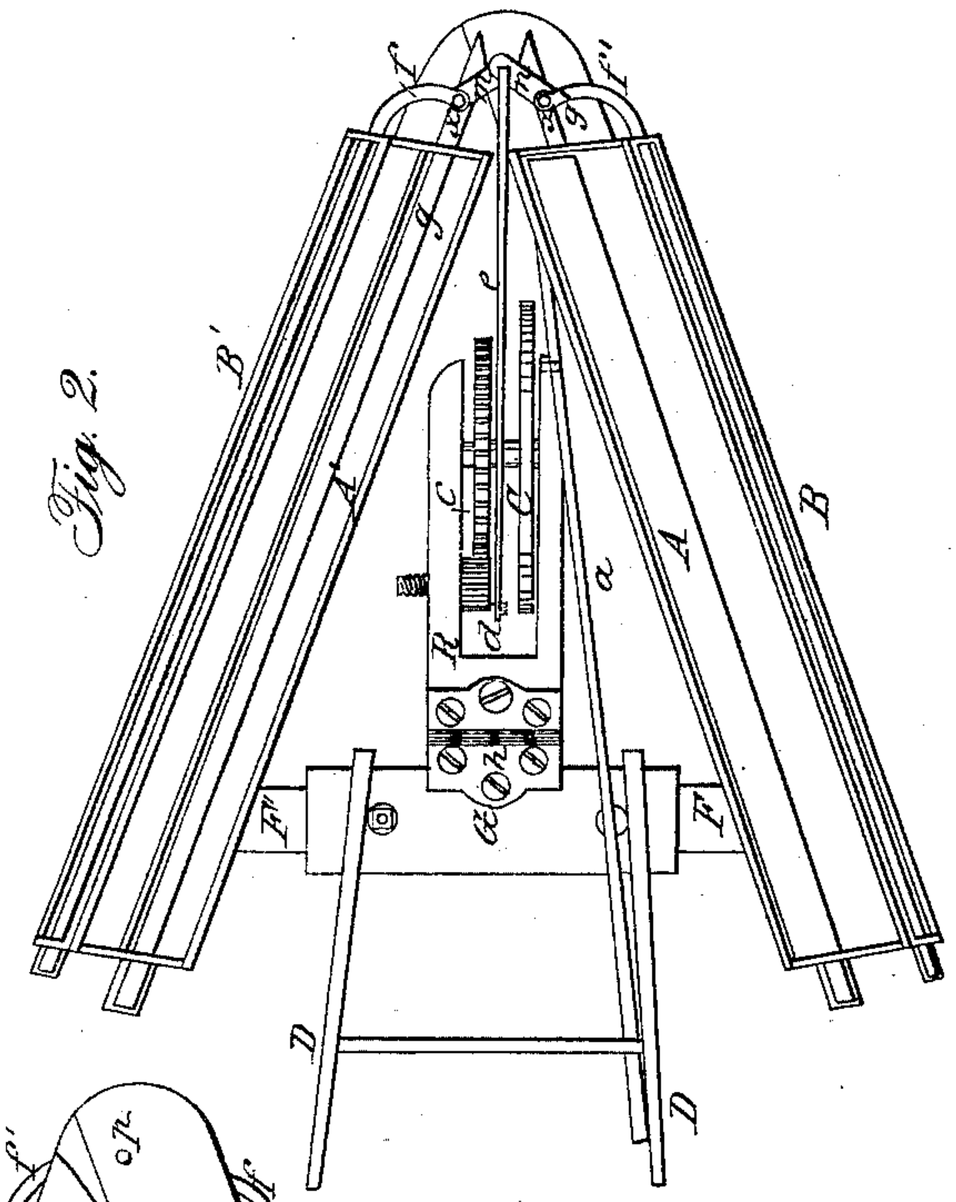


Fig. 1.

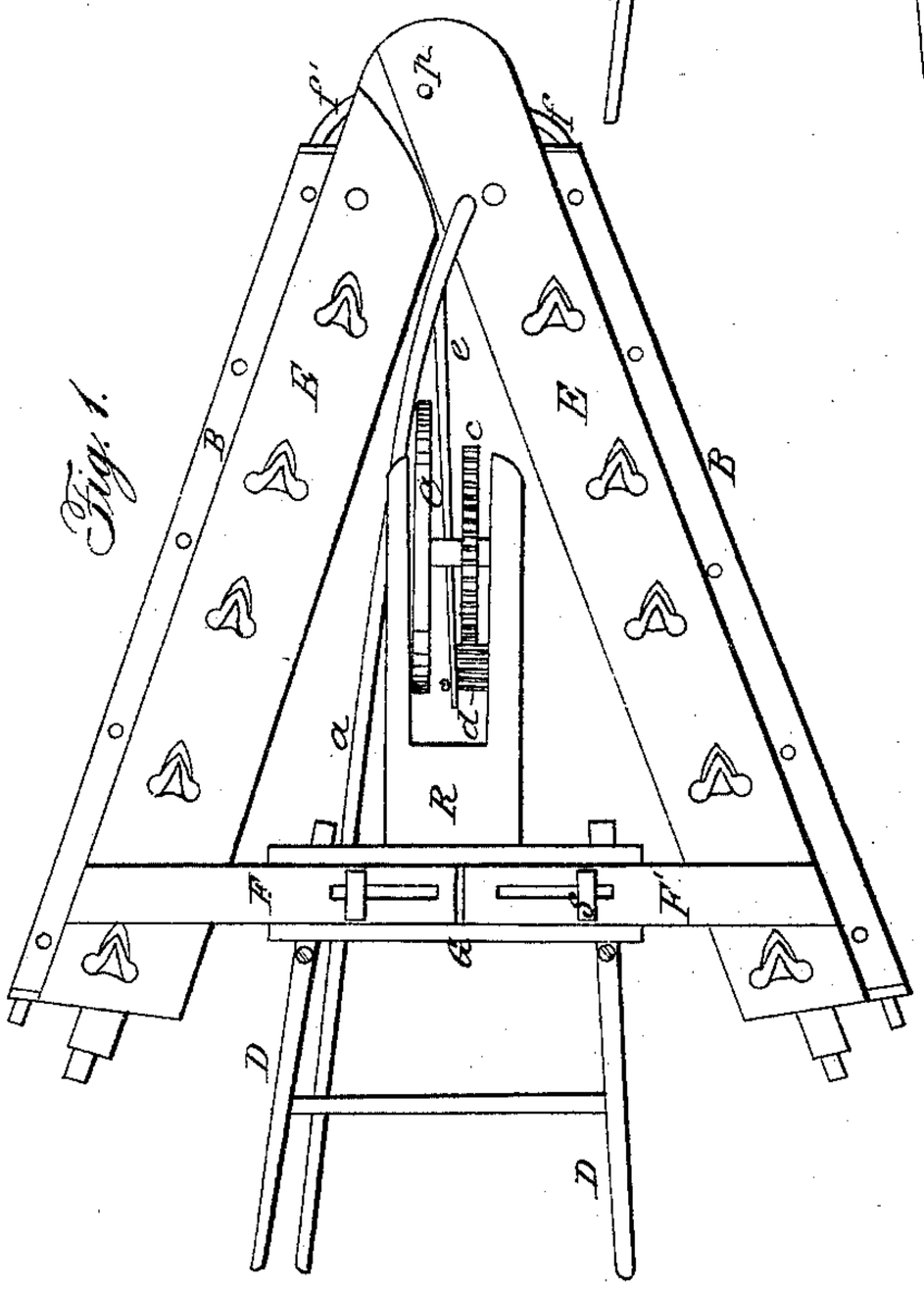
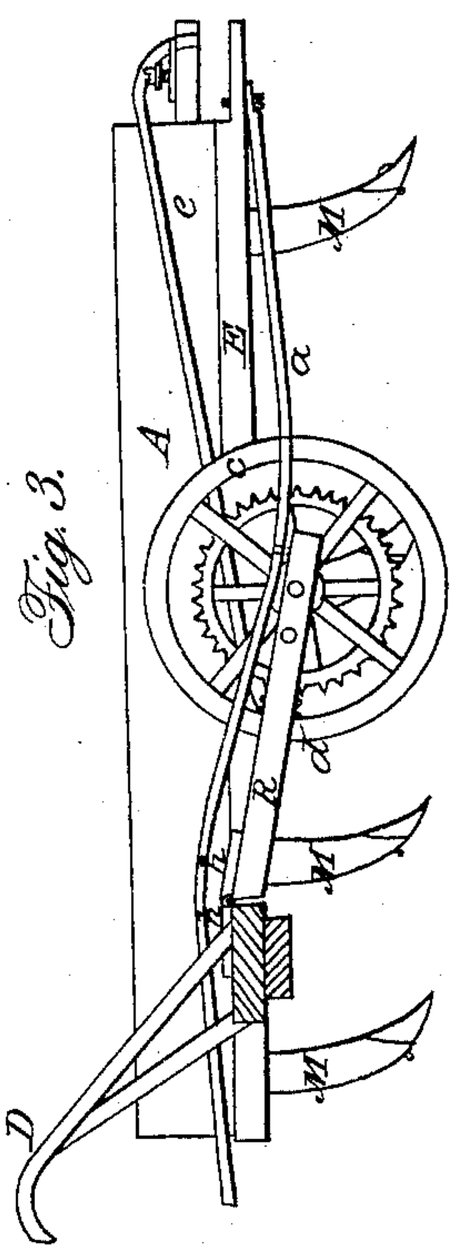


Fig. 3.



AM. PHOTO-LITHO. CO. N.Y. (OSBORNE'S PROCESS.)

UNITED STATES PATENT OFFICE.

ALEX. TURNER, OF FRANKLIN, INDIANA, ASSIGNOR TO HIMSELF AND REDDEN BESS AND H. SLOANE, BOTH OF SAME PLACE.

IMPROVEMENT IN SEED-DRILLS.

Specification forming part of Letters Patent No. **21,642**, dated September 28, 1858.

To all whom it may concern:

Be it known that I, ALEXANDER TURNER, of Franklin, in the county of Johnson and State of Indiana, have invented certain new and useful Improvements in Seed-Drills; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The nature of my improvement consists in the arrangement of the several parts which will be hereinafter described.

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

In the annexed drawings, Figure 1 represents a bottom view of the machine. Fig. 2 represents a top view of the machine. Fig. 3 represents a side elevation, one side being removed.

In the several figures, A A′ and B B′ represent four seed-boxes. These boxes are secured to a V-shaped frame, (marked E E.) The two parts of this frame are secured together at one end by means of a pin or pivot. Cross-bars F F′ are secured to them at the other end. A piece, G covers these bars, and they are secured to it by means of bolts *s s*. Bars F F′ are slotted, as seen in Fig. 1, and bolts *s s* pass through these slots, and the bars are adjustable by means of them. The pieces of the frame E may thus be expanded at one end, so that the machine will cover more ground, and at the same time increase the distance between the drill-rows.

R is a frame, in which the driving-wheel is secured. This frame is hinged at *h h* to the piece G. On the same shaft with the driving-wheel is a cog-wheel, *c*, which works into a pinion, *d*. To this pinion is secured one end of the rod *e*, which communicates motion to the seed-slides. The other end of the rod *e* is secured to the connecting-pieces *m n*. These pieces *m n* are connected to the seed-slides *g g′* and *f f′* at *x x*, Fig. 2.

g g are the seed-slides, which are operated in the boxes A A′, and *f f′* are slides operating in boxes B B′. These boxes are for the purpose of seeding different kinds of grain, A A′ being used for seeding wheat and such like, while B B′ are used for seeding grass, timothy, clover, and the like.

a is a rod secured to the forward end of frame E, and passes back through a loop or frame, R, to the handles of the machine. This rod *a* is used as a lever, and by pressing it down the forward end of the machine is elevated, so that it will pass over obstructions in its way.

M M are the discharge-spouts, and D D the handles of the machine.

In the operation of this machine the grain to be drilled is placed in the boxes used for its kind. The machine is then set in motion. Motion is communicated to wheel *c*, and by it to pinion *d*, thence by means of rod *e* to the seed-slides. The grain is carried out by the motion of the slides, and passes through the discharge-spouts M M to the ground.

The advantages resulting from the form of this drill are, first, the machine may be easily contracted or expanded, thus changing the relative distances of the drill-rows, according to the strength of the land. The land may be strong, and the drill-rows may thus be very close together by simply contracting the frame E E; or the land may be weak, so that the drill-rows will be farther apart. This is done by expanding the frame. The relative distances of all the drill-rows are changed at once by expanding or contracting the frame, without the trouble of altering the entire construction of the machine to suit different kinds of ground. Another advantage of the form is, the machine will not choke the discharge-spouts, and, not being all in a line, will not collect straw, grass, weeds, &c., which choke up ordinary machines. The driving-wheel, being in a hinged frame, will pass over any obstruction in its way without throwing the machine out of the ground; or, should any obstruction be found in the way of the whole machine, it may be passed over by bearing upon lever *a*, thus elevating the spouts above ground.

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

The arrangement of the seed-boxes A A and B B, the driving-wheel C, secured as herein described, and the lever *a*, wheels *c* and *d*, rod *e*, and seed-slides *f f′* and *g g′*, the whole being constructed and operated in the manner and for the purpose herein fully described.

ALEX. TURNER.

Witnesses:

C. M. ALEXANDER,

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