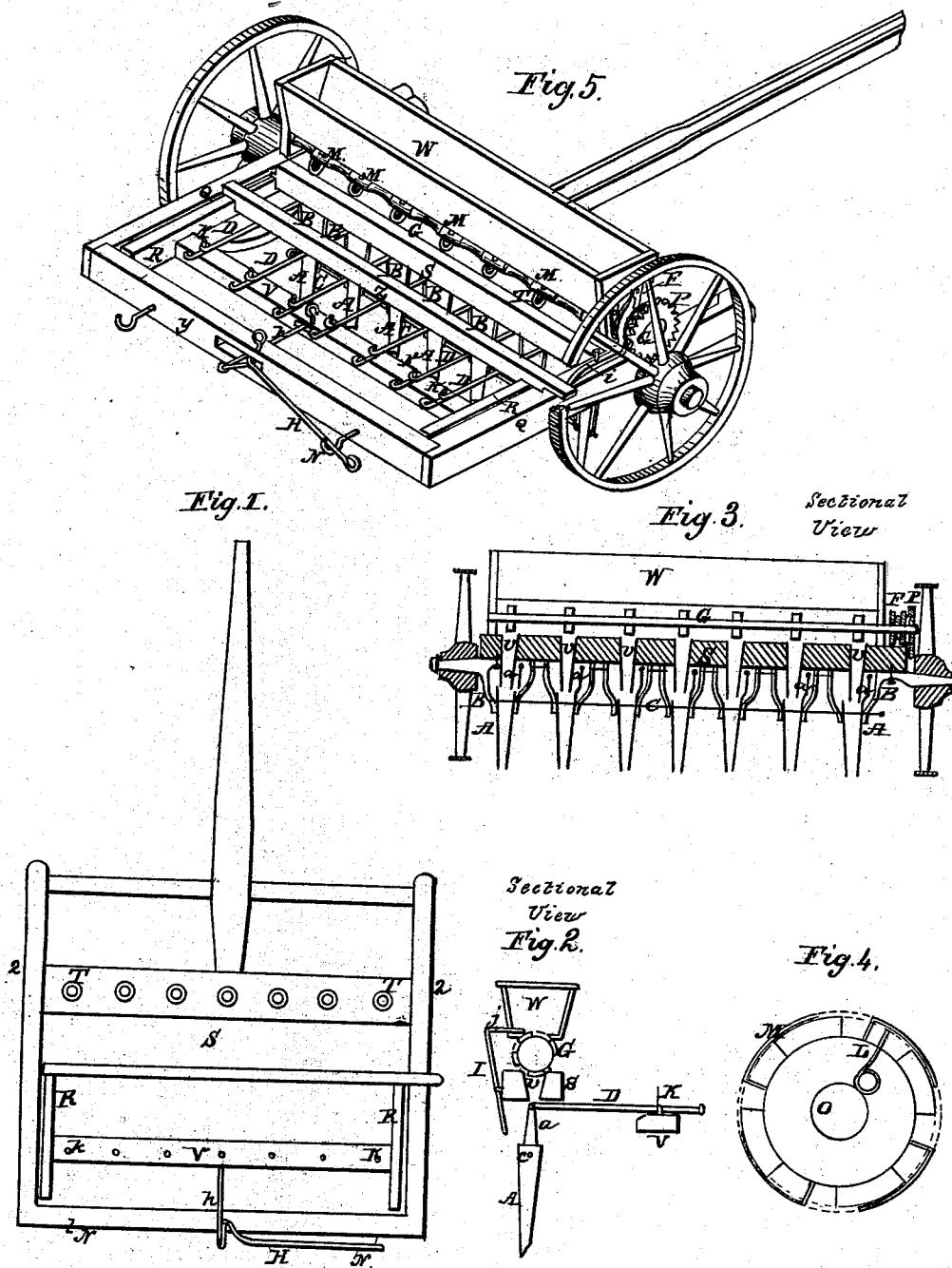


A. SANDOE.

Grain Drill.

No. 7,294.

Patented Apr. 16, 1850.



# UNITED STATES PATENT OFFICE.

ANTHONY SANDOE, OF MIFFLINTOWN, PENNSYLVANIA.

## IMPROVEMENT IN GEARING OF SEED-PLANTERS.

Specification forming part of Letters Patent No. 7,294, dated April 16, 1850.

*To all whom it may concern:*

Be it known that I, ANTHONY SANDOE, of Mifflintown, in the county of Juniata and State of Pennsylvania, have invented a new and Improved Grain-Drilling Machine; and I do hereby declare the following to be a full and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a plan of the frame of the machine, Fig. 2 a longitudinal section, and Fig. 3 a transverse section, thereof. Fig. 4 is an enlarged section of one of the planting-rollers, and Fig. 5 a perspective view of the entire machine.

Similar letters indicate like parts in all the figures.

W is the hopper for the reception of the grain to be planted.

G is the shaft on which is placed the series of planting-rollers M M, which shaft is driven by the pinion P, secured to one end thereof, and working into a cog-wheel on the inner end of one of the hubs of the bearing-wheels of the machine.

S is a broad transverse beam, passing immediately below the planting-rollers.

T T are vertical holes through the beam S, in which are inserted the conducting-tubes U U.

B B are hangers descending from the under side of the beam S, between each pair of which the planting-tubes A A are suspended, immediately below the conducting-tubes U U, by means of the rod C, passing through the hangers and the planting-tubes.

Q Q are the side pieces of the frame of the machine, and Y is the rear end piece of the same. A sliding frame composed of the transverse pieces Z V and the side pieces R R is placed within the frame of the machine, as shown in Fig. 5, grooves being formed in the inner sides of the side pieces Q Q of the frame of the machine, that received tongues on the side pieces R of the sliding frame, or vice versa.

From one side of the upper end of each planting-tube A A there rises a lever, *a*, and to the upper end of each of the said levers *a* is jointed a horizontal rod, D, which passes rearward under the cross-piece Z of the sliding frame and over the cross-piece V thereof. The series of rods D D rest upon V, and are connected thereto by means of the wooden pins K K, which are inserted therein and pass through coils in the rods, as shown in Fig. 5.

Gates J are placed at the base of the hopper W for the purpose of closing the planting-apertures in the bottom thereof when occasion may require, which gates are jointed to levers I, that are connected by fulcrum-joints to the beam S, as shown in Fig. 2, and are operated by the rods D.

The pinion P, on the end of the planting-shaft G, is rigidly combined therewith, or made to play loosely thereon by means of the clutch F and lever *i*, as shown in Figs. 3 and 5. The curved end of the lever *i* passes through a mortise in the end of the transverse piece Z of the sliding frame, which causes the lever to be turned upon its fulcrum when the frame is moved back and forth, so as to clutch and connect the pinion to the shaft G when the sliding frame is moved rearward, and to disconnect the same when the frame is moved in an opposite direction.

The sliding frame is operated by means of the bent lever H, which is jointed to the rod *h*, projecting from the rear side of V, as shown in Fig. 5. The sliding frame is retained in its proper position by placing the lever H in one or the other of the hooks, N N, at the rear side of the rear piece, Y, of the frame of the machine. When the lever H is placed in the right-hand hook N the machine is in a proper condition for planting. By throwing the lever around and placing it in the hook N at the left the sliding frame R R V Z will be moved forward, which movement will unclutch the planting-shaft G, as above described, and cause the rods D D to close the gates J in the bottom of the hopper and turn the planting-tubes A A on the fulcrum-rod C into inclined positions with their points thrown backward, so that the machine can be moved forward without performing the planting operation.

The rods D D are within convenient reach of the person who follows and attends to the machine, so that when it may be necessary in planting points of land or passing around stumps he can operate the rods singly and throw any number of planting-tubes out of use that may be desired.

The pins K K, that connect the rods D D to the cross-piece V of the sliding frame, are made of wood for the purpose of enabling them to give way when the planting-tubes strike against any immovable obstruction, and thereby prevent more serious damage to the machine.

Having thus fully described my invention,

what I claim as new, and for which I desire to secure Letters Patent, is—

1. The sliding frame R, in combination with the rod D, for the purpose of raising and depressing the drills A A, and also for stopping the feeding simultaneously, as above set forth.

2. I do not claim the simultaneous throwing out of and into action the feed-roller and its respective drills; nor do I claim the slide or shut-off J, as I am aware these both have been

done; but what I do claim is operating the shut-off J and lever I by means of the arm D, as set forth, for the purpose of causing the same to be self-acting, either when coming in contact with any obstruction or when desired for sowing pointed or irregular lands.

ANTHONY SANDOE.

Witnesses:

TOBIAS KREIDER,  
LEWIS B. CODER.