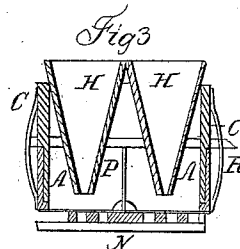
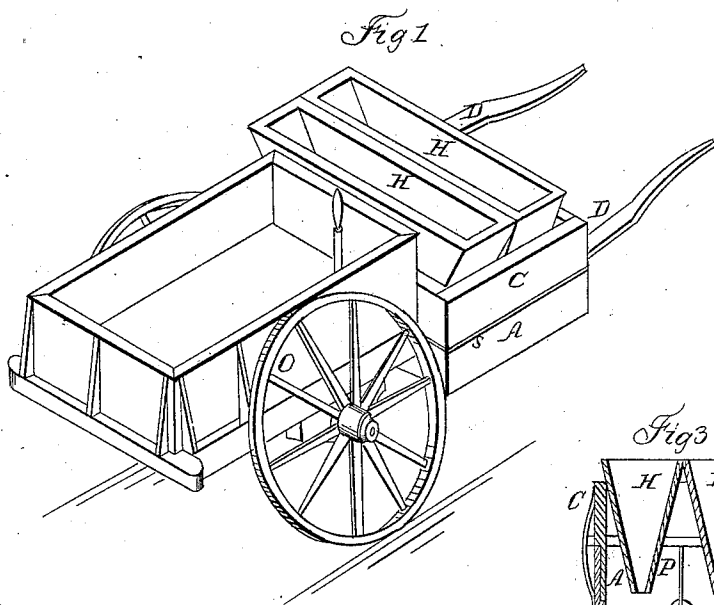
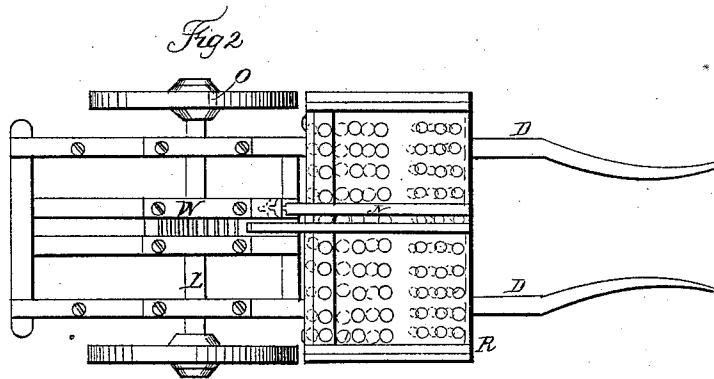


W. W. WILLIAMS.

Fertilizer.

No. 27,754.

Patented Apr. 3, 1860.



Witnesses.
J. G. Clayton
Chas B Burch

Inventor.
W W Williams
per Atty
J. Pigott

UNITED STATES PATENT OFFICE.

WILSON W. WILLIAMS, OF ELIZABETH CITY, NORTH CAROLINA.

IMPROVEMENT IN SOWING-MACHINES.

Specification forming part of Letters Patent No. 27,754, dated April 3, 1860.

To all whom it may concern:

Be it known that I, WILSON W. WILLIAMS, of Elizabeth City, in the county of Pasquotank and State of North Carolina, have invented a new and useful machine for sowing broadcast all kinds of small grain, with or without guano or any other pulverized fertilizer; 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.

Figure 1 is a perspective view of the machine, which consists of an ordinary cart-body with two wheels, with the sowing apparatus attached to the shafts D in front. This machine consists of the two hoppers H, leading down, as represented by the dotted lines, into the box A, it having a partition, P, longitudinally to keep separate the grain and manure, and perforated at the bottom with holes of any size or number required to discharge the material sown. C is a frame fastened to the shafts, in which frame the hoppers rest. The box A is suspended from the frame C by leather straps R, of which there are four, two being on either side. The width of the space S between the frame and box is immaterial—say about an inch.

Fig. 2 is a view of the bottom of the cart and box A, showing how the spur-wheel W, attached to the axle L, shakes the box by means of the lever or spring N. The axle revolves with one

of the wheels O, but turns freely in the other; or the axle may extend clear through in one solid piece with two spur-wheels, say three and one-half or four feet apart, using two levers or springs instead of one, as above, N, and the axle revolving the whole length in journals, one wheel being stationary in the axle and the other left free to work upon it, which will make the cart work as an ordinary cart.

Fig. 3 shows how the material presses through and is kept separate by the partition P. There is a sliding-board to be put on the outside of the bottom of the box A, and perforated with holes to correspond and moved at pleasure with a lever or string to cut off the sowing.

The bottom of the hoppers or riddles described in Fig. 1, H, may be made of zinc, sheet-iron, or wood, with the holes perforated corresponding with the quantity or size of grain to be sown, and may be taken out at will and another of a different size placed in.

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

The arrangement of hoppers H, box A, partition P, frame C, straps R, and wheel W, placed on an ordinary or common cart, operating as described, and for the purposes set forth.

WILSON W. WILLIAMS.

Witnesses:

TIMOTHY GILBERT,
CHAS. G. ELLIOTT.