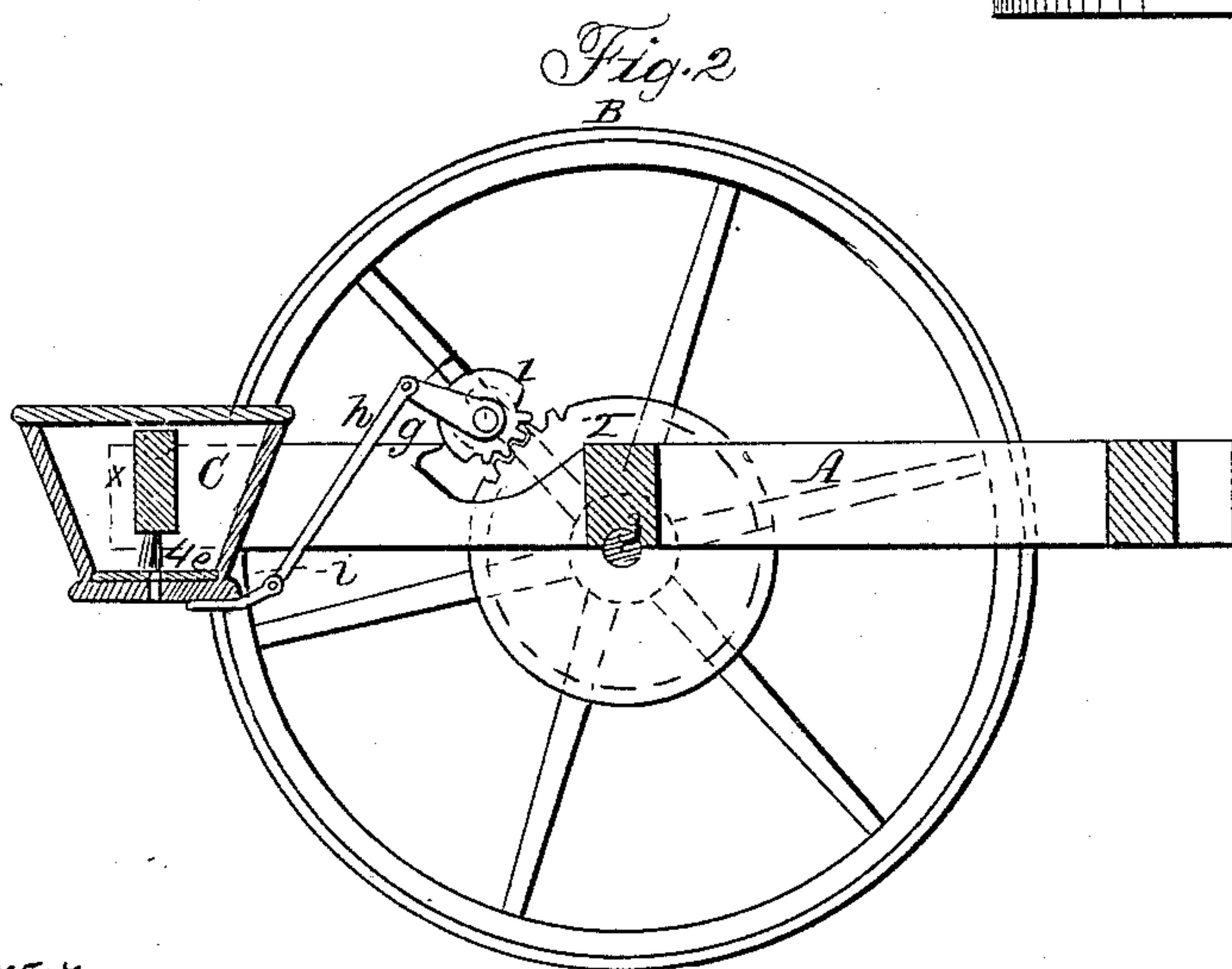
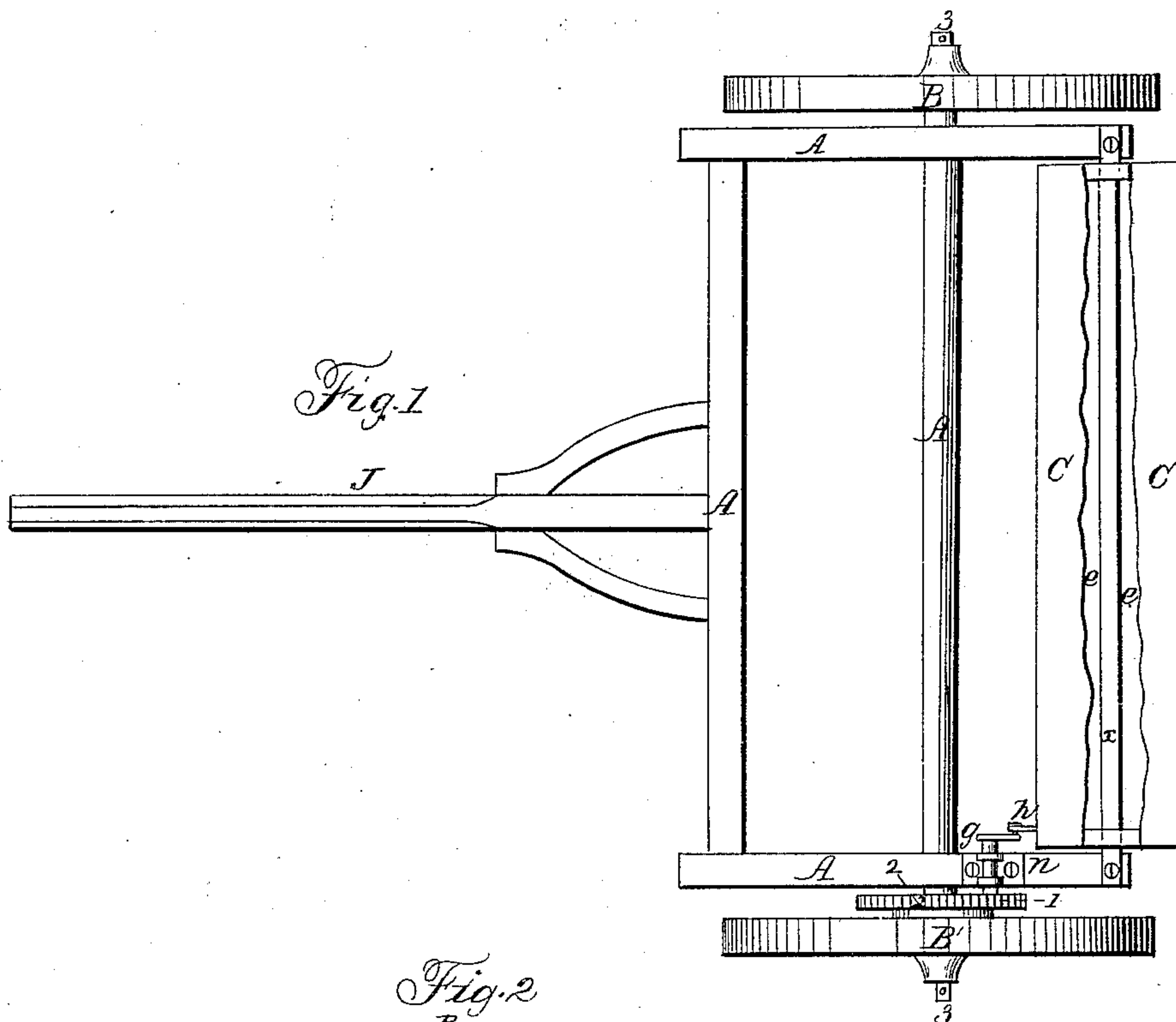


J. D. JONES.

Grain-Drill.

No. 50,134.

Patented Sept 26. 1865.



*Witnesses*  
*James J. Johnston*  
*W. H. Gouge*

*Inventor*  
*James D. Jones*

# UNITED STATES PATENT OFFICE.

JAMES D. JONES, OF PITTSBURG, PENNSYLVANIA.

## IMPROVEMENT IN GRAIN-DRILLS.

Specification forming part of Letters Patent No. 50,134, dated September 26, 1865.

*To all whom it may concern:*

Be it known that I, JAMES D. JONES, of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Grain-Drills and Broadcast-Sowers; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The nature of my invention consists in suspending the hopper or seed-box of grain-drills or broadcast-sowers on a stationary bar furnished with a wiper, and imparting to the hopper or seed-box an oscillating motion, the whole being constructed, arranged, and operating in the manner hereinafter described.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

In the accompanying drawings, Figure 1 represents a top view of my improved grain-drill or broadcast-sower. Fig. 2 represents a sectional view of the same.

In the drawings, A represents the frame of the drill or sower, the construction of which will readily be understood by reference to the accompanying drawings. B and B' represent the wheels. 3 represents the axles of the wheels. J represents the tongue of the grain-drill or broadcast-sower. To the hub of the wheel B' is attached a cog-wheel, marked 2, which gears into a small cog-wheel, marked 1, placed on the end of the shaft of the crank *g*, which has its journals or bearings in the piece marked *n'*. To the crank *g* is attached a connecting-rod, *h*, which is also attached to a piece marked *i*, which is secured to the bottom of the hopper

or seed-box, C, which is suspended on the stationary bar *x*, the lower edge of which is furnished with bristles for wipers. In the bottom of the hopper or seed-box C is placed a slide, marked *e*, which is furnished with a suitable number of holes through which the seed passes. As the construction, arrangement, and operation of this slide *e*, in its connection with the hoppers of grain-drills, is well understood, I will proceed to describe the operation of my improved grain-drill and broadcast-sower, which is as follows:

The revolving of the wheel B' will revolve the cog-wheel 2, which will revolve the cog-wheel 1 and crank *g*, which will impart, by means of the connecting-rod *h*, an oscillating motion to the hopper or seed-box, which motion will throw the seed toward the stationary bar *x*, and the bristles marked 4 will wipe or force the seed by the oscillating of the hopper down through the openings in the slide *e* into suitable conductors, when applied to grain-drills, and onto a distributing-board when applied to a broadcast-sower.

Having thus described the nature, construction, and operation of my improvement, what I claim as of my invention is—

Suspending the hopper or seed-box C on a stationary bar, *x*, and imparting to the hopper or seed-box an oscillating motion, the whole being constructed, arranged, and operating substantially in the manner herein described and for the purpose set forth.

JAMES D. JONES.

Witnesses:

JAMES J. JOHNSTON,  
ALEXANDER HAYS.