J. P. FULGHUM.
Grain-Drills.

No. 196,652. Patented Oct. 30, 1877.

Fig. 1.

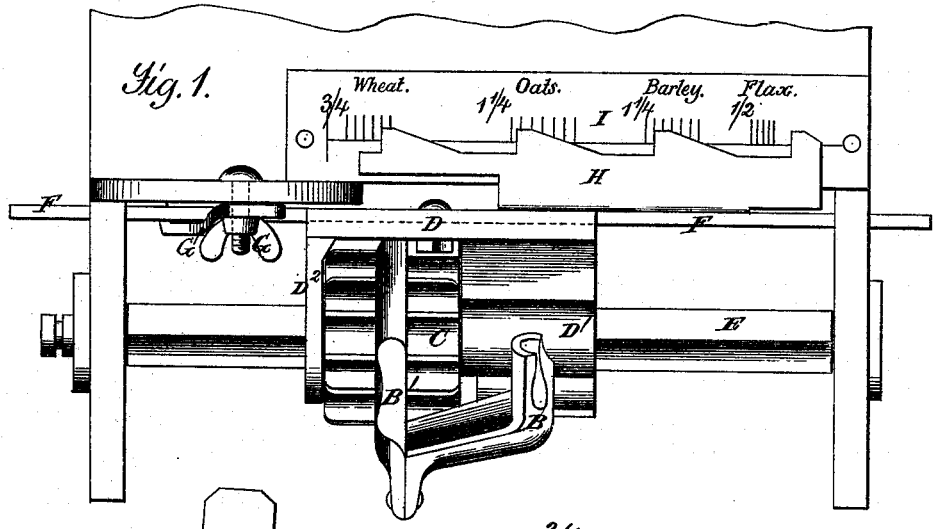


Fig. 2

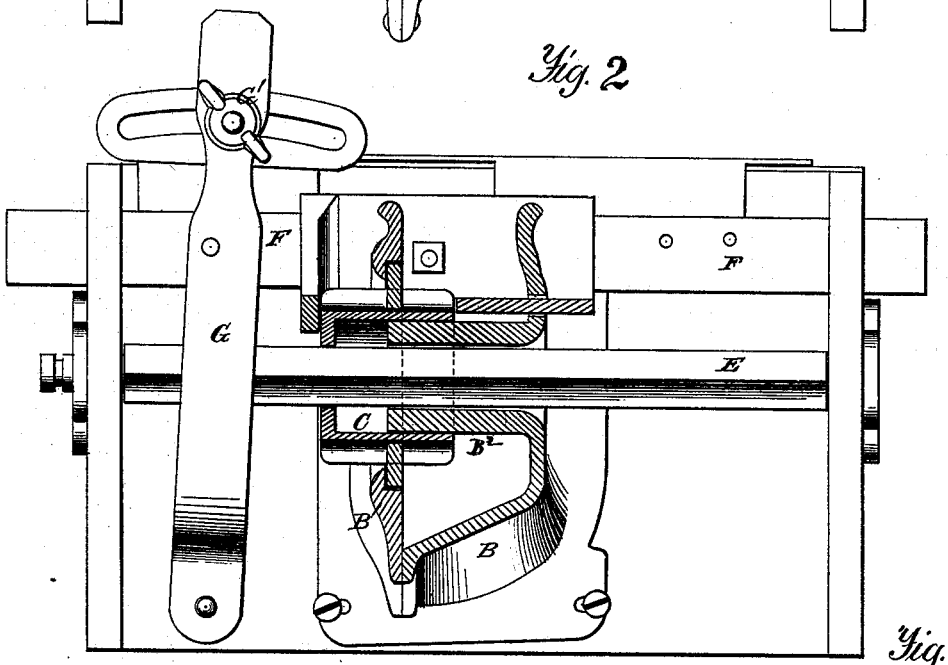


Fig. 3.

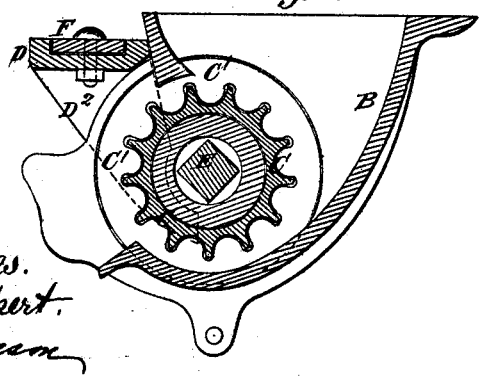
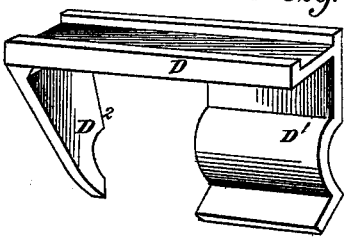


Fig. 4.



Witnesses.
A. Ruppert.
Jno. F. Mason

J. P. Fulghum
Inventor.
D. P. Holloway & Co
Attys

UNITED STATES PATENT OFFICE.

JESSE P. FULGHUM, OF MILTON, ASSIGNOR OF ONE-HALF HIS RIGHT TO WAYNE AGRICULTURAL COMPANY, OF RICHMOND, INDIANA.

IMPROVEMENT IN GRAIN-DRILLS.

Specification forming part of Letters Patent No. **196,652,** dated October 30, 1877; application filed March 12, 1877.

To all whom it may concern:

Be it known that I, JESSE P. FULGHUM, of Milton, in the county of Wayne and State of Indiana, have invented a new and useful Improvement in Grain-Drills, of which the following is a specification:

This invention relates to the feed-wheels and connected mechanism, by which the grain in regulated quantities is fed from the hopper to the drill-teeth, and its scope will be indicated distinctly in the following specification and claims.

In the annexed drawings, making part of this specification, Figure 1 is a rear elevation; Fig. 2, a plan and horizontal section; Fig. 3, a vertical transverse section, and Fig. 4 a perspective view of the bracket which controls the adjustment of the seed-wheel.

The same letters are employed in all the figures in the indication of identical parts.

The grain is carried in a hopper, A, having holes in the bottom, under which are hung seed-cups, made in two parts, B B^1, curved and converging toward the mouth, in which is placed the wheel C and arm D^1 of the bracket D, which slide longitudinally in the mouth.

The wheel is longitudinally fluted, and slides in and out through the side of B^1 of the seed-cup, passing through the annular plate C′, which is formed to conform to the fluted roller, and revolves freely in a recess in plate B^1, formed to receive it, thereby supporting the wheel C, so that it can rotate and move longitudinally. The other end of the wheel C is supported by and slides freely on the tubular bearing B^2, which is formed by the part B of the cup, where it is drawn in around the shaft, as clearly shown in Fig. 2. The wheel C is thus supported at both ends independently of the square shaft E, which passes through it.

The end of the fluted feed-wheel runs in contact with the edge of the arm D^1 of bracket D, which slides in a groove cut in plate B, and closes so much of the mouth of the seed-cup as is not closed by the fluted wheel C. The wheel being placed between the arms D^1 D^2 of the bracket D, as the latter is moved one way or the other, it carries with it the feed-wheel. In this manner the quantity of grain supplied is regulated by the position of the fluted feed-wheel in relation to the throat of the seed-cups. This adjustment is effected by means of the sliding bar F, to which the bracket is attached, and which is actuated by the lever G, bolted to it by a round bolt, and which, when the feed-wheel is properly adjusted, may be held in proper position by the thumb-nut G′, confining the lever to a segmentally-slotted plate.

To indicate the proper opening for the seed-wheel, a plate, H, is attached to bar F, and has a series of points placed opposite a corresponding series of graduated marks on plate I, made to indicate what is a proper opening for different kinds of grain, such as wheat, oats, barley, &c.

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

1. A feed-cup for seed-drills, having on one inner side a tubular journal or bearing, B^2, cast on or rigidly attached thereto, whereon the feed-wheel both rotates and slides axially, as set forth.

2. In combination, a feed-cup having on one inner side a tubular journal or bearing, B^2, cast on or rigidly attached thereto, and on which a feed-wheel both rotates and slides, and in the other side a ring or disk, through which said wheel passes, as set forth.

3. The combination of the feed-cup, having on one inner side a tubular journal or bearing, cast on or rigidly attached thereto, and on which the feed-wheel both rotates and slides, the sliding bar, and brackets, for the purpose of moving said wheel on the line of its axis, substantially as specified.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

J. P. FULGHUM.

Witnesses:

M. Y. MICHAEL,

W. G. HILL.