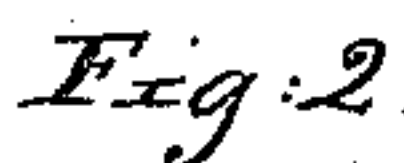


Patented Apr. 5. 1864.

Fig. 1.



Inventor:

A. Hoffman
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UNITED STATES PATENT OFFICE.

AUGUSTUS HOFFMANN, OF HALF DAY, ILLINOIS.

IMPROVEMENT IN GRAIN-DRILLS.

Specification forming part of Letters Patent No. 42,192, dated April 5, 1864.

To all whom it may concern:

Be it known that I, AUGUSTUS HOFFMANN, of the town of Half Day, Lake county, in the State of Illinois, have invented certain new and useful Improvements in Seeders; and I hereby declare that the following is a true 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 invention consists in the use of certain new devices in the construction of seeders.

Figure 1 in the annexed drawings represents a plan view of my machine. Fig. 2 represents a vertical section of the same. Fig. 3 is a side view of the jointed lever. Fig. 4 represents a side elevation of lever Y and plate q.

My seeder consists of the wheels S, the axle g, the frame b, mortised into axle g, and supporting the seed-boxes H and I.

The letter h represents a series of beams passing under the axle g, at right angles with it, and confined at their outer ends by the slotted tie a by means of screws passing through the slots into the ends of beams h. This arrangement enables the operator to raise or depress the beams h at pleasure. The opposite ends of beams h are kept in position by blocks of wood between them, through which an iron rod passes, the rod being supported at its ends by pendants fastened to the sides of frame b. These pendants have a slot in them, with a screw running through the slot, by the use of which the inner ends of beams h can be raised or lowered. To the beams h the standards m are fastened.

d represents a foot-lever, having its fulcrum on the axle g immediately in front of the driver's seat. The outer end of lever d is hooked so as to hold a small chain which passes around tie a. By the means of the lever d and the chain attached to it the tie a can be elevated or depressed.

R represents two corrugated metal wheels, cut out at the center sufficiently to pass over the hub of wheel S, and fastened together at their inner edge, the outer wheel, R, being also securely attached to the spokes of wheel S. The wheels R are concentric, with radial corrugations in each, and are placed a little distance apart, the convex elevations in one being opposite to the concave depressions in the other wheel. Between the two wheels R the lever O works, as hereinafter described.

H represents the larger seed-box, and I the

smaller, H being intended for wheat, rye, and oats, and I for seed of less size. Each of the seed-boxes has a longitudinal bar passing through it, with one end projecting a little beyond the end of the box. These bars are penetrated by pins at a suitable distance apart, and placed vertically, their object being to agitate the grain in the boxes.

O represents a horizontal lever, which passes through slots in the ends of supports U and V. One end of lever O, being pointed, plays between the wheels R, from which it receives an oscillating horizontal motion. The lever O works on a pivot through the slot in U, and at the end next the seed-boxes H and I is divided into three laminated branches, the two upper branches embracing the projecting ends of the bars in H and I, being fastened to them by bolts. The lowest branch is attached to a metal plate at the bottom of seed-box H. The object of this plate is to scatter the seed by the motion which it receives from lever O. The support U, to which lever O is pivoted, rests in an opening made in the upper surface of frame b, its inner end extending through the metal plate q, and is fastened to the vertical lever Y. (See Fig. 4.) The lever Y plays laterally on a pivot, t, which passes through plate q, and is designed to throw lever O in or out of gear with wheels R. Lever Y is held in the desired position by a pin passing into either of the two holes made through plate q.

The letter L, Fig. 3, represents a jointed lever in the rear of seed-box H, and is intended by means of two metal rods, one at each end, which connect it with the inclined board K in box H, to increase or diminish the opening between K and the inner side of H, and thus regulate the passage of the seed to the earth.

Having thus described my machine, what I claim, and desire to secure by Letters Patent, is—

The lever Y, in combination with plate q, supports U and V, branch lever O, and wheels R, the whole constructed and operated substantially as herein described.

In testimony that I acknowledge the foregoing I hereby affix my signature in the presence of witnesses.

AUGUSTUS HOFFMANN.

Witnesses:

LEWIS SONSHINE,
F. SONSHINE,
J. A. WELLS.