(Model.)

C. SCHOLZ.

GRAIN DRILL.

No. 257,520. Patented May 9, 1882.

Fig. 3.

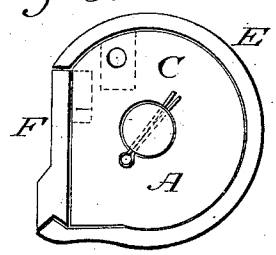


Fig. 2.

Fig. 1.

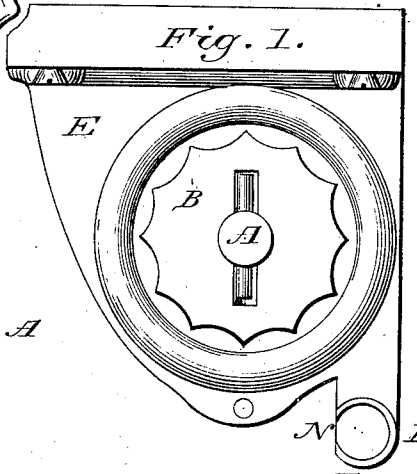
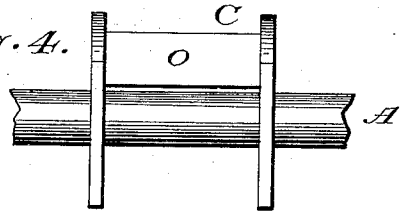


Fig. 4.



Witnesses:
John Trautmann
Leopold Leibold

Inventor:
Charles Scholz
By B. Pickering
His atty.

UNITED STATES PATENT OFFICE.

CHARLES SCHOLZ, OF DAYTON, OHIO.

GRAIN-DRILL.

SPECIFICATION forming part of Letters Patent No. 257,520, dated May 9, 1882.

Application filed April 18, 1881. (Model.)

To all whom it may concern:

Be it known that I, CHARLES SCHOLZ, of the city of Dayton, State of Ohio, have invented new and useful Improvements in Grain-Drills, of which the following is a specification.

My invention relates to improvements in the seed-case, swinging conveyer, and the regulator, as will be more clearly hereinafter set forth. The said improvements are illustrated in the accompanying drawings, in which—

Figure 1 is a side view of the seed-case. Fig. 2 is a front view of the same with the swinging conveyer attached. Fig. 3 is a front view of the regulator. Fig. 4 is an end view of the seed-case or the housing thereof, the opposite of Fig. 1. Fig. 5 is a front view of the washer.

E represents a seed-case, constructed similarly to those largely in use. It is attached to the under side of the seed-box of a grain-drill, and receives the seed from the same. Within this case, and attached to the shaft A, is the corrugated feeding-roller B. In contact with this roller are two washers, C, connected with the plate *o*. These washers are of irregular form, (see Fig. 4,) and embrace the shaft, and thereby give support to it. These washers fill the space within the housing on the side of the seed-case, and can move freely laterally, but cannot rotate. This housing has an opening closed by the plate F, Fig. 4. This plate is grooved at the bottom and sets on a tongue of the housing, and where the inner end is made to project beneath the rib of the seed-case it is securely held in position.

The manner of connecting the washers is shown at Fig. 5, the plate being riveted to the washers; but the connection may be made by other means. The washer serves the double purpose of sustaining the shaft and preventing the lateral escape of the grain, and permits the grain to flow freely into the space inclosed by the external plate.

The swinging conveyer D is cast with flattened projections P interiorly, and arranged transversely, and is suspended in circular orifices N on the external surface of the lower ends of seed-case. These orifices are notched at the front for the purpose of receiving the flattened projections. These projections are entered when the conveyer is in a nearly horizontal position, and gravitating to a vertical position are thereby securely attached.

To the conveyer is attached the gum tube which conveys the grain to the hoe.

At Fig. 3 is illustrated the regulating device by which the volume of grain discharged is regulated. The device is somewhat similar to those in use, but differs in some of the details.

G is a cylindrical sleeve which slips loosely onto the shaft, where it is held by washers and pins at both ends. The pins enter shallow grooves of the washers to prevent the washers moving in contact with the pins. Thus the sleeve bears against the washers, which are carried with the rotating shaft. On the side of the sleeve is a pin-projection which enters an orifice of the arm H, and this is jointed to the link I. This arm is pivoted to the plate J, which is secured to the side of the seed-box.

M is an indicator-plate, which is screwed to the side of the seed-box, and which may be provided with a scale to indicate the amount of distribution. Near the top is a projection, used simply as a handle. Within a mortise, and beneath this handle, is pivoted the binding-bar L. In the lower end of this bar is a screw, S, which, when screwed in, binds the raised part of the indicator-plate between the adjusting-arm and the binding-bar, thus securely holding the arm in position when set for a given distribution. The devices in use admit of some play at the junction of the adjusting-arm and shaft, and when set in position are liable to change for want of a secure fastening. To overcome these defects is the object of my invention. The purpose of the improved washer is that the grain may flow freely within the housing, and when desirable the shaft can be carried sufficiently to the right to release the plate, upon the removal of which the seed-case may be fully cleaned. The novelty in the swinging conveyer is its attachment to the seed-case, which is a convenient and simple attachment. These several improvements are but modifications of well-known devices used in grain-drills.

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

1. The pivotal binding-bar L, with set-screw S, in combination with the adjusting-arm I

and indicator-plate M, substantially as and for the purpose specified.

2. The sleeve G, supported on shaft A, between washers pinned to said shaft, and adjusting-arm I, connected by link H, in combination with the feeding mechanism of a grain-drill, substantially as and for the purpose specified.

3. The solidly-cast swinging conveyer D, with interior flattened projections, P, in combination with the seed-case E, having external cavities, as set forth, substantially as and for the purpose specified.

4. The washer C, composed of two plates embracing the shaft, the inner being a cut-off and the outer an end wall, and connected by plate *o*, substantially as set forth.

CHARLES SCHOLZ.

Witnesses:
JOHN HANITCH,
ANGEVINE HIMES.