No. 629,342. Patented July 25, 1899.

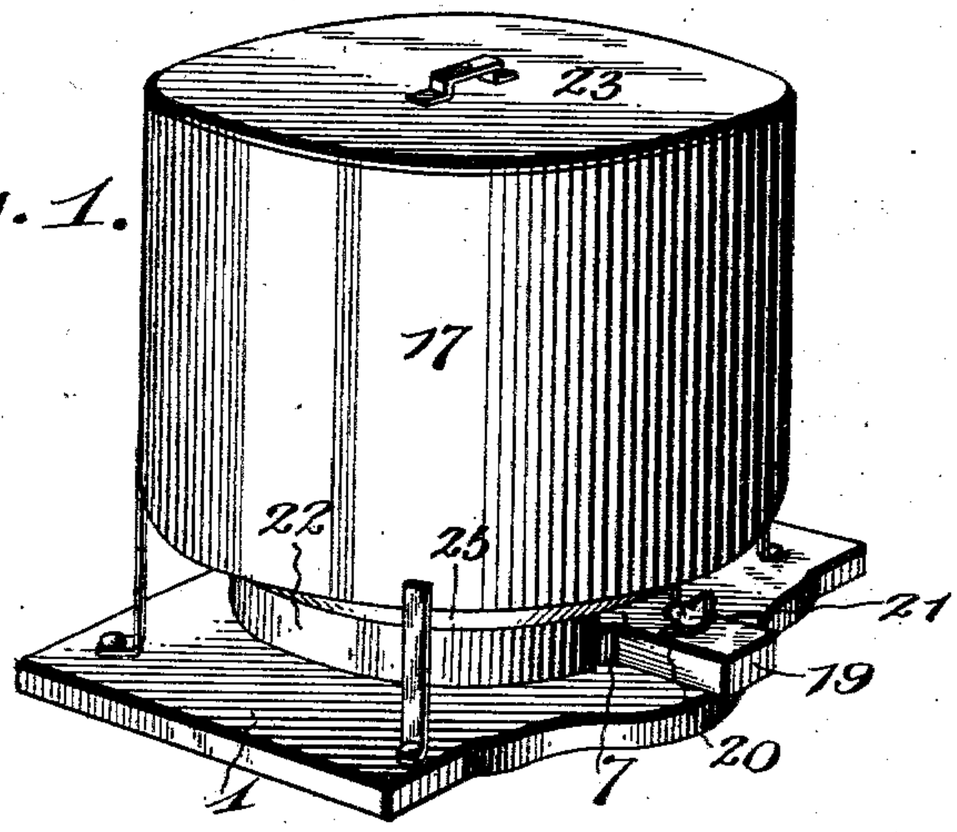
E. J. DODDS & T. A. JACKSON.

SEEDER.

(Application filed Jan. 11, 1899.)

(No Model.)

Fig. 1.



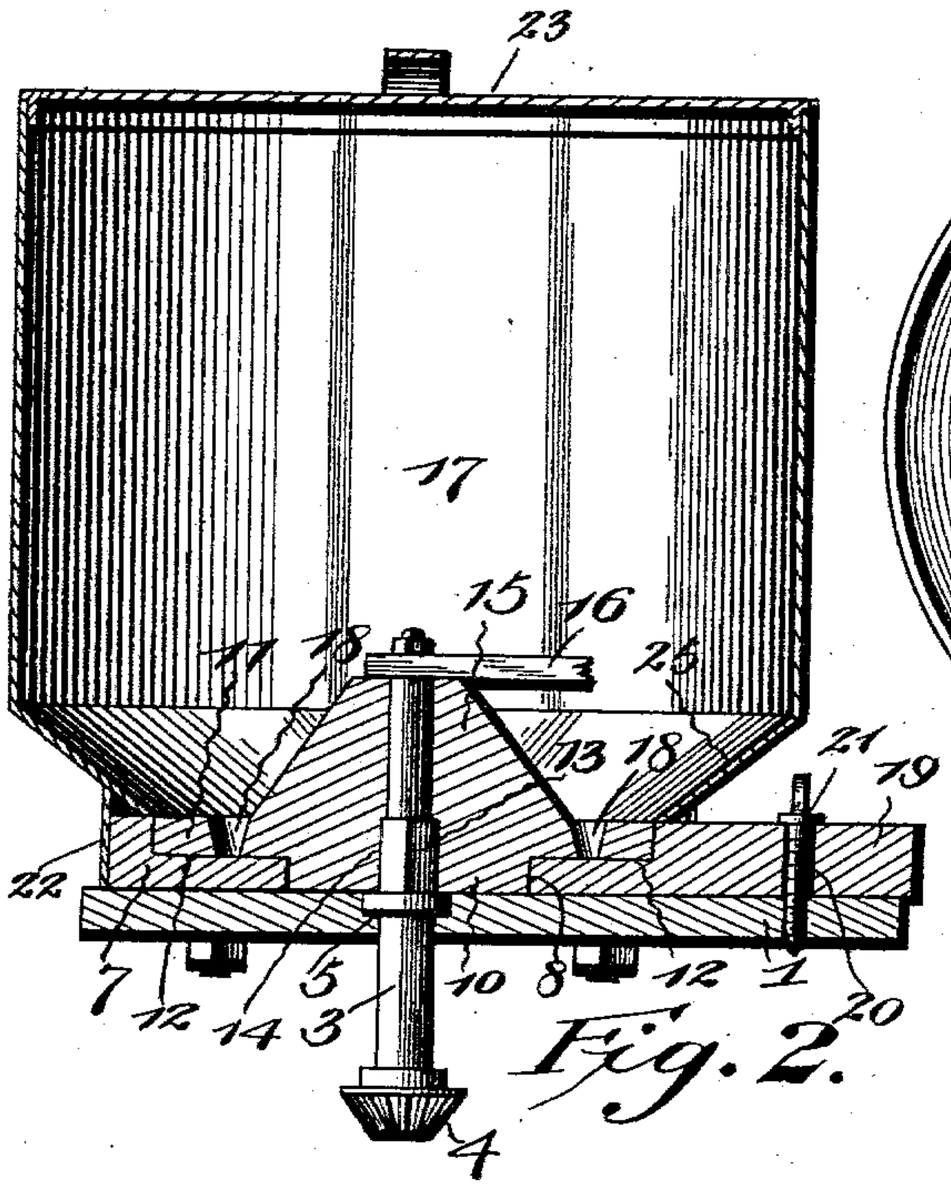


Fig. 2.

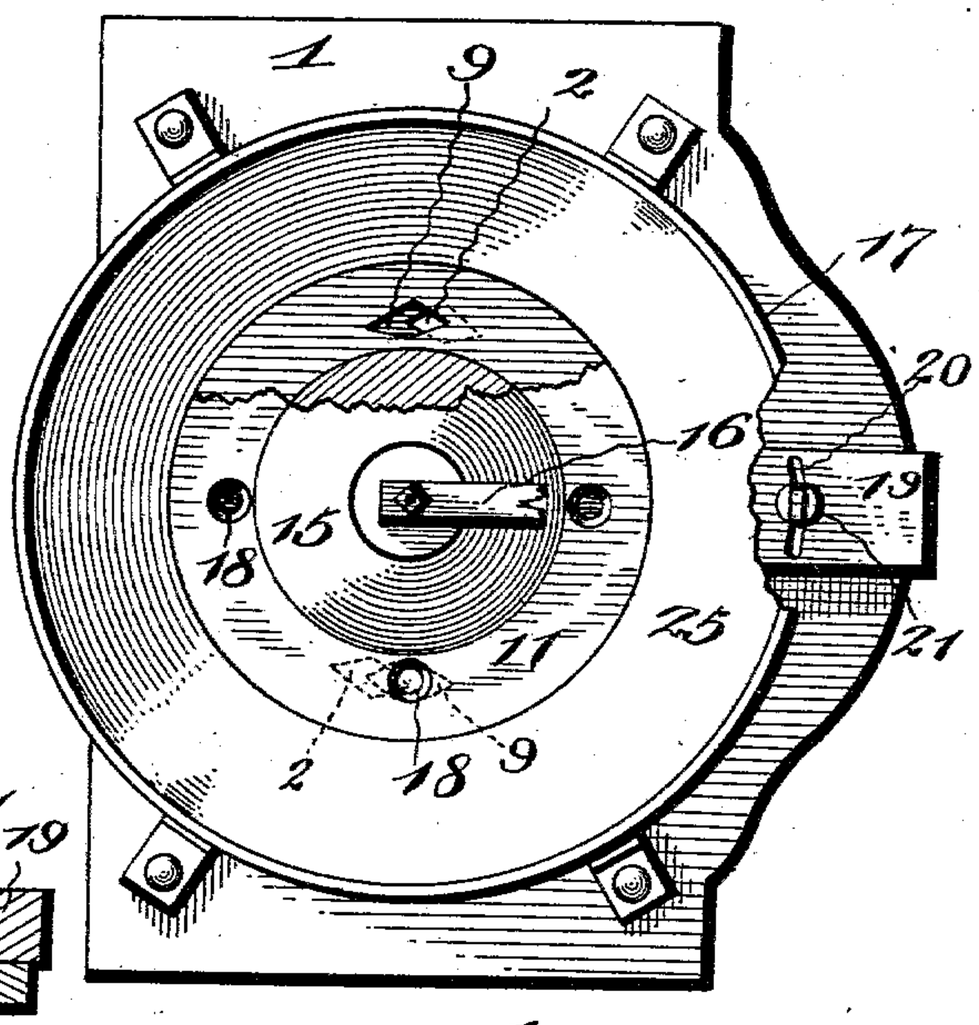


Fig. 3.

Witnesses
A. Roy Appleman Jr.
H. E. Boyle

E. J. Dodds and T. A. Jackson, Inventors.

By their Attorneys.

C. A. Snow & Co.

UNITED STATES PATENT OFFICE.

EDWARD J. DODDS AND THOMAS A. JACKSON, OF PUTNAM, TEXAS.

SEEDER.

SPECIFICATION forming part of Letters Patent No. 629,342, dated July 25, 1899.

Application filed January 11, 1899. Serial No. 701,867. (No model.)

To all whom it may concern:

Be it known that we, EDWARD J. DODDS and THOMAS A. JACKSON, citizens of the United States, residing at Putnam, in the county of Callahan and State of Texas, have invented a new and useful Seeder Attachment for Plows, of which the following is a specification.

Our invention relates to seeders and planters, and particularly to a seeder attachment for sulky and other plows; and the object in view is to provide a simple, compact, and efficient construction and arrangement of parts whereby the quantity of grain sowed may be accurately regulated.

Further objects and advantages of this invention will appear in the following description, and the novel features thereof will be particularly pointed out in the appended claims.

In the drawings, Figure 1 is a perspective view of a seeder attachment constructed in accordance with our invention. Fig. 2 is a central vertical section of the same, indicating suitable means whereby rotary motion may be imparted to the seed plate or disk. Fig. 3 is a plan view showing the seed-plate partly broken away.

Similar reference characters indicate corresponding parts in all the figures of the drawings.

The device embodying our invention is adapted particularly for use as an attachment for application to sulky and other plows, the movable members of the attachment being adapted to receive motion from the supporting wheel or axle of the plow by means of suitable connections, which, however, form no part of our invention and may be modified to suit the construction of the plow in connection with which the device may be used.

In the drawings, 1 designates a base provided with feed-openings 2, which are elongated on lines approximately concentric with a central spindle 3, mounted vertically in the base, said spindle in the construction illustrated being fitted below the plane of the base with a gear 4, to which continuous rotary motion in a uniform direction may be communicated.

Arranged upon the base or bed plate concentric with the spindle 3 (which is shouldered, as at 5, to fit in the upper surface of said base or bed plate) is a feed-regulator 7 of annular construction, having a central opening 8 and a plurality of feed-openings 9, adapted for registration with the feed-openings 2 and also elongated upon lines concentric with said spindle. In practice we preferably construct the feed-openings 9 and 2 of diamond shape, or tapered toward their extremities, with the major diameter thereof disposed upon said lines concentric with the spindle. The feed-regulator 7 is adapted for rotary adjustment concentric with the spindle, and it is held centered with relation to said spindle by means of a journal boss or enlargement 10, depending from a seed-plate 11, mounted in a countersink or depression 12 in the upper side of the feed-regulator, and rotary motion may be communicated from the spindle to the seed-plate by means of a squared or angular portion 13 of said spindle, fitted in a squared socket 14, formed centrally in the seed-plate. Also the seed-plate is provided upon its upper side with a conical enlargement forming a deflector 15, and the upper end of the spindle projects above the apex of said deflector and is fitted with an agitator-arm 16 of any suitable construction, adapted to traverse a circular path in the hopper 17 to prevent the arching of the grain or the choking of the feed-openings and insure a steady and uniform feed of the material. The disk portion of the seed-plate 11 is provided with any suitable number of feed-openings 18, which by the rotation of the plate are brought successively into registration with the registering feed-openings 9 and 2, formed, respectively, in the feed-regulator and base or bed plate.

The feed-regulator is provided with a radial arm or extension 19, resting upon the upper surface of the base or bed plate and provided with a slot 20, concentric with the spindle and engaged by a set-screw 21, threaded into the base, whereby said regulator may be secured at the desired adjustment or with the feed-openings 9 thereof either wholly or partly in registration with the openings 2 in the base.

The disk portion of the feed-plate 11 is countersunk in the upper surface of the feed-regulator 7 sufficiently to arrange the upper surface of the former flush with that of

the latter, and the hopper is provided with a depending collar 22, which fits snugly around the periphery of the feed-regulator, with at one side a slot or opening through which the radial extension or arm 19 projects, whereby said arm is exposed exteriorly to facilitate the manual adjustment of the regulator. Also the hopper, which may be fitted with a suitable lid 23, is contracted at its lower end to form an inwardly-inclined deflector 25, of which the lower edge rests upon the surface of the regulator contiguous to the periphery of the disk portion of the feed-plate. Thus the outward deflector 15, which is carried by the feed-plate, coöperates with the inward deflector 25, formed by the partially-closed lower end of the hopper, to leave an annular interval between the lower edges of said deflector, said interval being closed by the disk portion of the feed-plate, which is provided with the feed-openings 18. Hence in operation the grain or seed is fed continuously to the openings 18, and the device may be operated until all of the grain in the hopper has been utilized.

Various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

Having described our invention, what we claim is—

1. A seeder attachment for plows, having a base or bed plate provided with feed-openings, a feed-regulator mounted for rotary adjustment upon the base and having feed-openings for registration with those of the base, means for securing said regulator at the desired adjustment, a rotary feed-plate having an annular disk portion countersunk in the upper portion of the feed-regulator, and provided with feed-openings for successive registration with those of the regulator and base, means for communicating rotary motion to the feed-plate, and a hopper of which the bottom is formed by said feed-plate, substantially as specified.

2. A seeder attachment for plows, the same having a base or bed plate provided with elongated feed-openings, a feed-regulator mounted for rotary adjustment upon the base and having feed-openings for registration with those of the base, means for securing the regulator at the desired adjustment, a feed-plate having a disk portion countersunk in the upper side of the feed-regulator, and provided with feed-openings for successive registration with those of the regulator, and also having a central conical deflector, means for communicating rotary motion to the feed-plate, and a hopper seated with its lower end contiguous to the plane of the upper surface of said feed-plate, and contracted at its lower end to form an inwardly-inclined deflector terminating at the periphery of said annular portion of the feed-plate, substantially as specified.

3. A seeder attachment for plows, the same having a base or bed plate provided with feed-openings, a hopper, rising from and supported by the base, provided with a lower contracted portion forming an inward deflector, and having a depending collar, below said deflector, a feed-regulator mounted for rotary adjustment within said collar of the hopper, said feed-regulator being provided with feed-openings for registration with those of the base, an arm extending radially from the feed-regulator and provided with a slot concentric with the axis of the feed-regulator, a set-screw for securing said arm at the desired adjustment, a feed-plate having a central conical deflector and an annular disk portion countersunk in the upper surface of the feed-regulator and provided with feed-openings for successive registration with those of the regulator, and a spindle, mounted in a bearing in the base or bed plate, having an annular portion fitted in a socket in the feed-plate, and extending above the conical deflector of said feed-plate to carry an agitator-arm, substantially as specified.

4. A seeder attachment for plows having a revolubly-adjustable feed-regulator, provided with feed-openings, and having a recessed upper side and an open center, means for securing said regulator at the desired adjustment, a spindle extending through the open center of the regulator and provided in the plane thereof with an angular portion, and a feed-plate, fitted in said recess of the feed-regulator, provided with a depending journal portion fitting in the open center of said regulator, and having feed-openings for successive registration with those of the regulator, said feed-plate having an annular central opening or socket to receive said angular portion of the spindle, substantially as specified.

In testimony that we claim the foregoing as our own we have hereto affixed our signatures in the presence of two witnesses.

EDWARD J. DODDS.
THOMAS A. JACKSON.

Witnesses:
M. R. SURLES,
D. L. JOHNSON.