

(Model.)

J. R. RUDE.
Seed Cup for Seeding Machines.

No. 241,158.

Patented May 10, 1881.

Fig. 1.

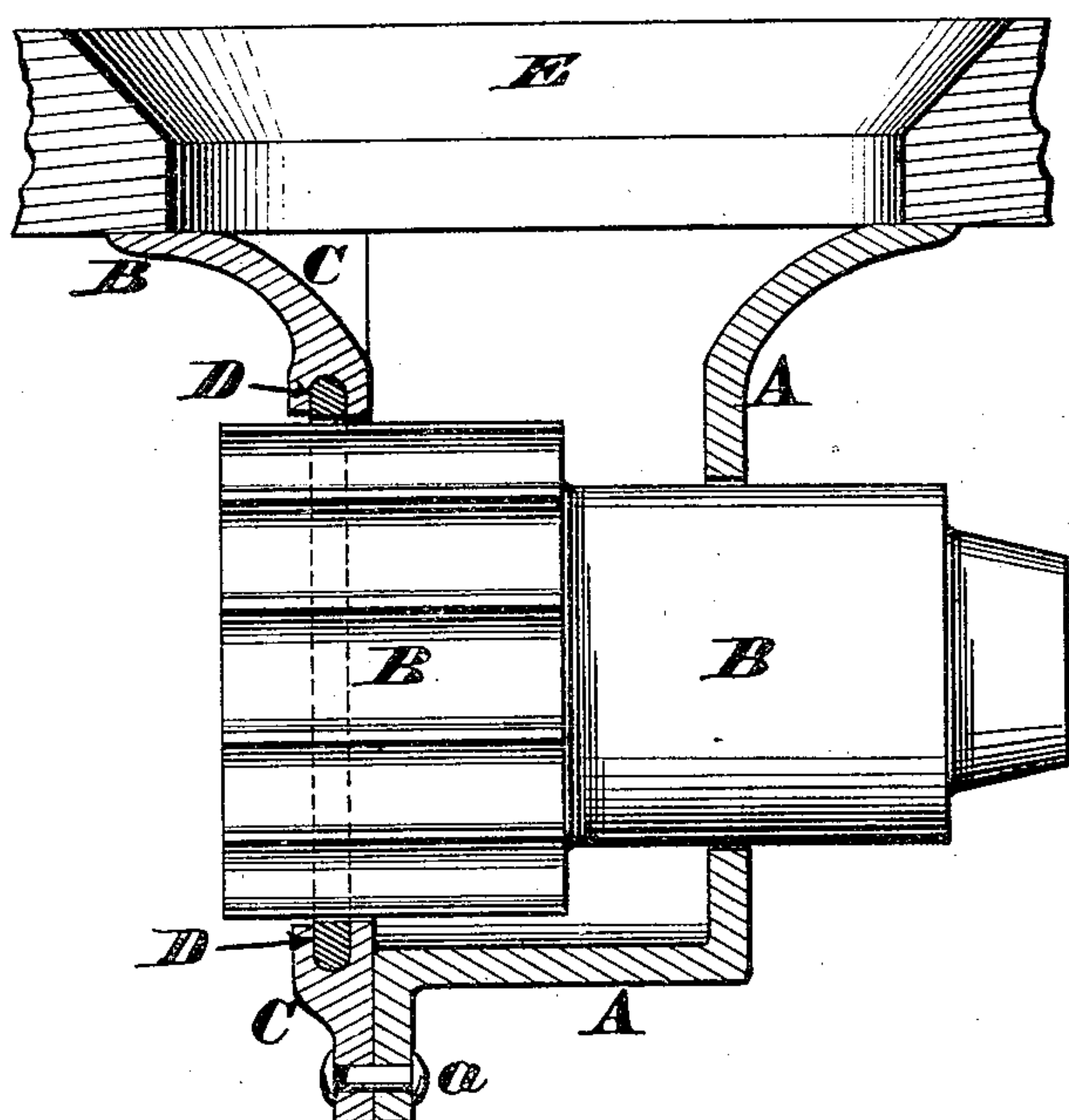


Fig. 2. Fig. 3.

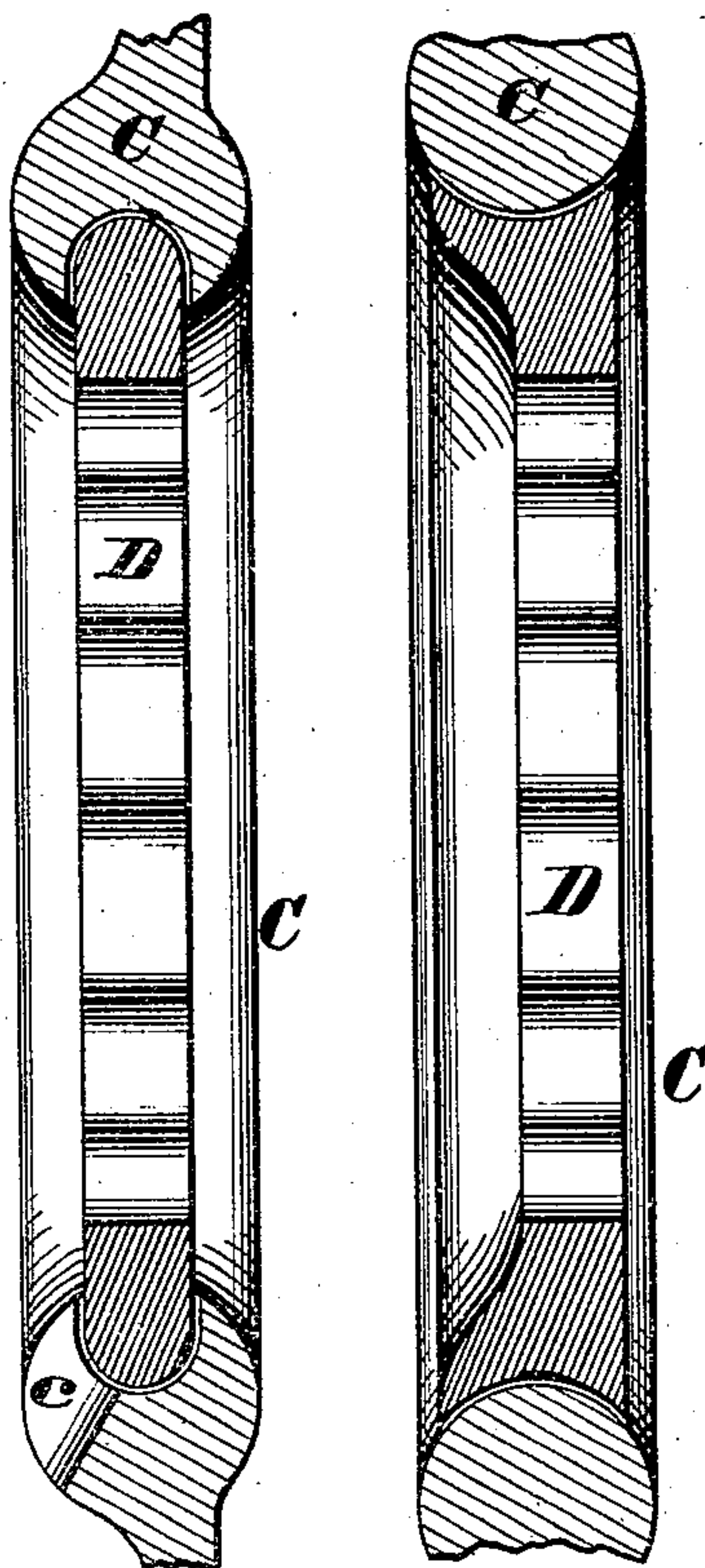


Fig. 4.

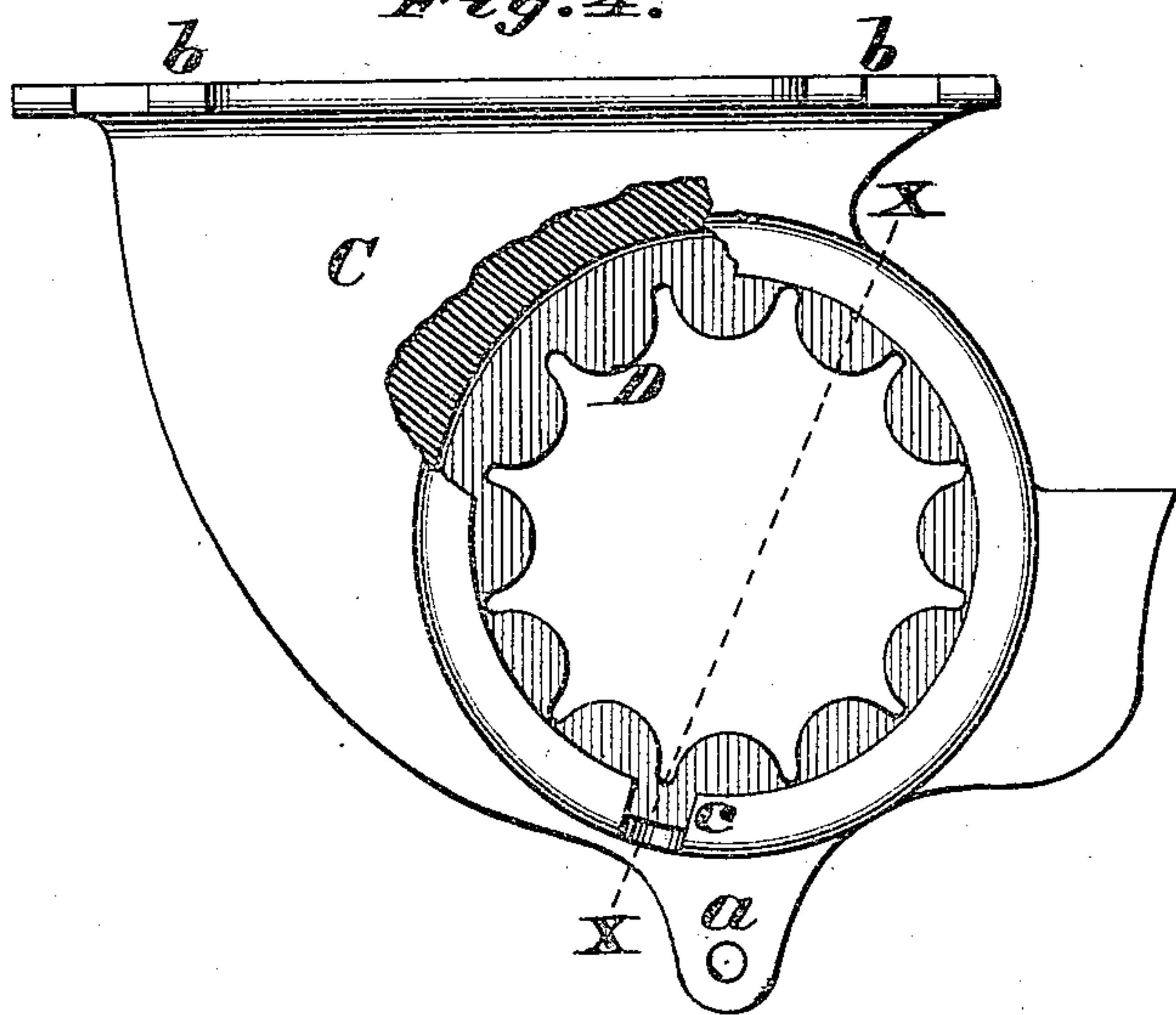
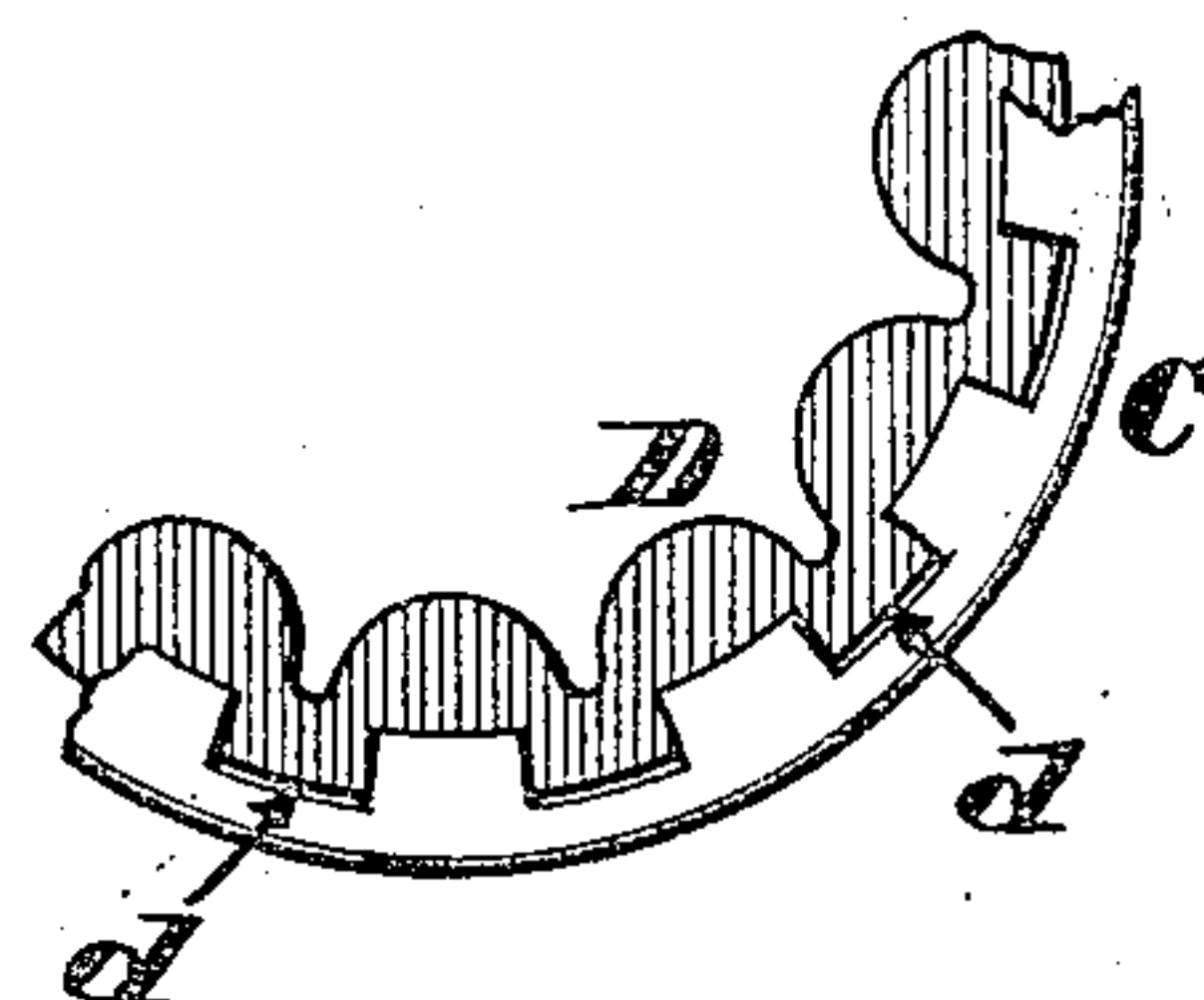


Fig. 5.



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JOHN R. RUDE, OF LIBERTY, INDIANA, ASSIGNOR TO RUDE BROTHERS, OF
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SEED-CUP FOR SEEDING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 241,158, dated May 10, 1881.

Application filed April 5, 1881. (Model.)

To all whom it may concern:

Be it known that I, JOHN R. RUDE, of Liberty, Union county, Indiana, have invented a certain new and useful Improvement in Seed-Cups for Seeding-Machines, of which the following is a specification.

My invention relates to an improvement in the construction of seed-cups for seeding-machines of that class which employs a laterally-sliding fluted feed-wheel with washers, or "rosettes," as they are commonly called, recessed in the end wall of the cup for the wheel to slide through and have its bearing in.

As hitherto constructed, these washers were simply placed in a recess formed in the inner side of the end wall of the cup, and were held in place by overlapping portions of the saddle or of the body of the cup when the parts were put together. Such construction is objectionable on account of the difficulty in making smooth castings and obtaining a proper fitting of the parts, which is very necessary to prevent crushing of the grain and the binding of the wheel or the washer.

My purpose is to obviate these objections by casting the end wall of the cup around the washer in such a manner that the washer is embraced by the cup-wall and becomes practically a part of the same, though free to revolve.

The novelty consists in the combination, with a feed-cup, of a disk or washer recessed in the end wall thereof by having the metal of said end wall cast around it in such manner that the periphery of the disk on both sides is overlapped by the end wall of the cup, whereby, when said washer is so applied, it becomes practically a part of the cup-wall and cannot be removed, and whereby a smoother and more perfect bearing is formed, as will be herewith set forth.

In the accompanying drawings, Figure 1 is a central sectional side elevation of a feed-cup with the wheel and washer in place. Fig. 2 is an enlarged central sectional view through the line *xx* of Fig. 4. Fig. 3 is a corresponding view, representing a modification in the construction. Fig. 4 is an elevation of the end wall of the cup, with a portion broken away. Fig. 5 is a detail view, showing a second modification of the construction.

The same letters refer to like parts in the different figures.

The main portion of the cup A and the feed-wheel B may be of the usual or any suitable construction.

The end wall, C, containing the washer D, is adapted to fit against the main portion of the cup, which it completes, and to which it may be riveted, as at *a*; and, furthermore, it is provided with lugs *b*, Fig. 4, by which it may be screwed to the bottom of the hopper E. The washer D, with a central fluted aperture to correspond with the flutes upon the feed-wheel B, is embraced on both sides of its periphery by the end wall of the cup, as shown in Figs. 1, 2, and 4.

The method of casting the end wall thus around the washer forms the subject of a separate application which I have made for the process of casting a bearing around a circular object, and I will only here briefly allude to it as follows:

The washer is coated with some adhesive liquid, as asphaltum or shellac varnish, and then covered with parting-sand to a sufficient depth. After being dried it is used as a core in the mold and the end wall, C, cast around it. When removed from the mold it only requires a few raps to loosen and break off the sand and varnish, leaving the washer free in its bearing. This process enables me to make a perfectly smooth and true casting, with the bearing almost as smooth and true as if it had been turned and polished. By thus inclosing the sides of the periphery of the washer all danger of cutting or crushing the grain is obviated.

In the above manner of securing the washer in the end wall that shown in Fig. 3 may be employed. The only difference in this case is that the washer, instead of being embraced by the end wall, embraces said end wall, as will be readily understood by reference to the figure.

In using the first form—that shown in Figs. 1, 2, and 4—it is necessary or advisable to form outlets for the dirt or dust which might accumulate in and finally clog the bearing. This I obviate by cutting away or leaving an opening, *c*, in the outer lower portion of the bearing, as seen in Fig. 4, or else by having a series of those

openings, as at *d*, on the outer side and extending entirely around the bearing, as in Fig. 5. The only essentials of these openings are that they should extend as low as the bottom of the gutter in which the washer revolves.

Having thus fully described my invention, I claim—

1. In the feed mechanism of a seeding-machine of that class which employs laterally-sliding and adjustable feed-wheels, the rosette or washer through which the feed-wheel slides, and in which it has its bearing, in combination with and embraced by the end wall of the seed-cup, which is cast around it, substantially as described.

2. A feed-cup for seeding-machines, having a rosette or washer for the feed-wheel to slide and rotate in cast into the end wall of said cup, substantially as and for the purpose specified.

3. A feed-cup for seeding-machines, having a rosette or washer for the feed-wheel to slide and rotate in cast into the end wall of said cup, and having one or more openings upon the outer side of the bearing, to permit the escape of dirt and dust, substantially as described.

JOHN R. RUDE.

Witnesses:

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JOE LANDIS.