E. H. SNYDER.

CORN PLANTER.

APPLICATION FILED OCT. 15, 1909.

943,283.

Patented Dec. 14, 1909.

2 SHEETS—SHEET 1.

Fig. 1.

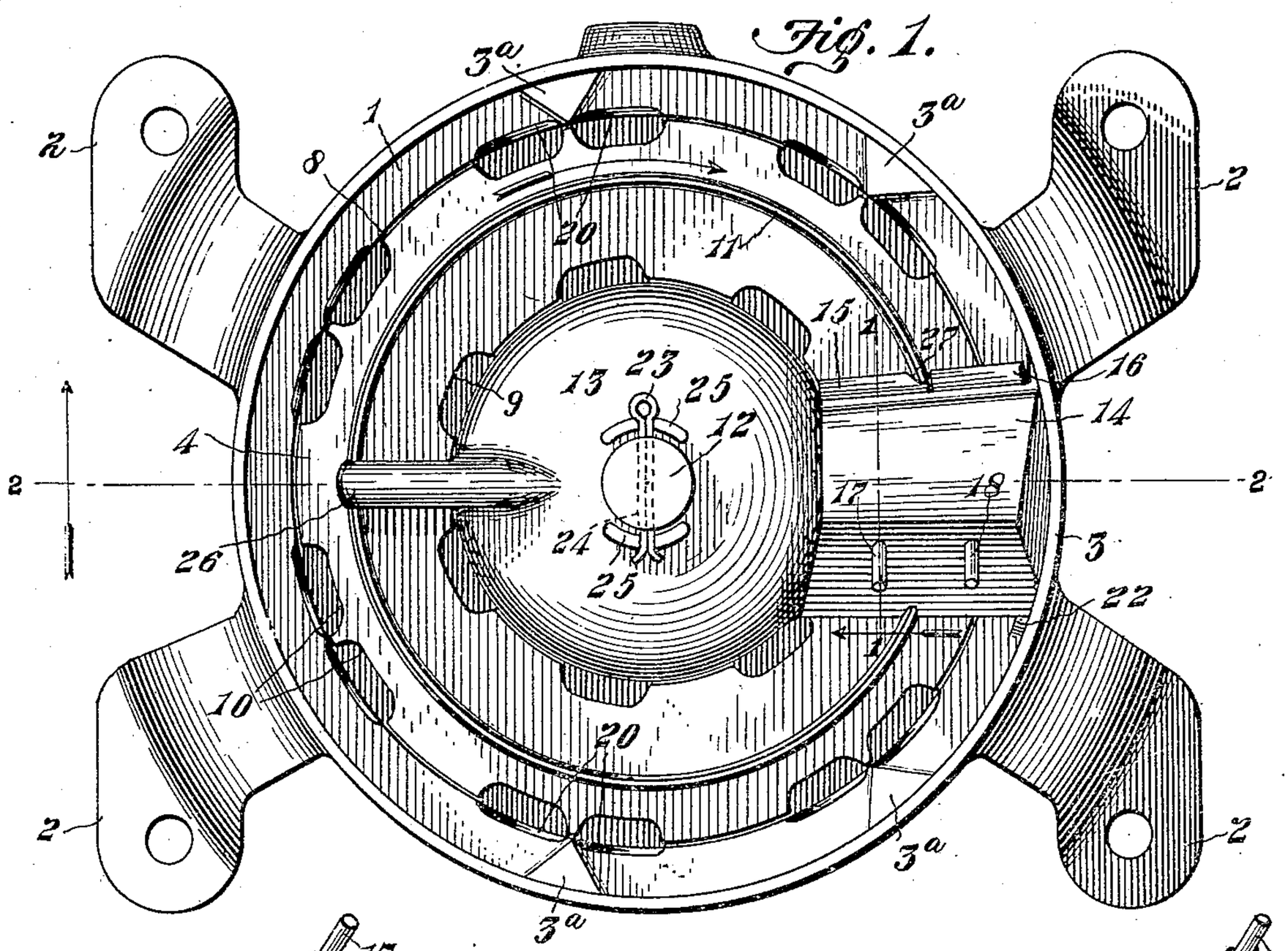


Fig. 3.

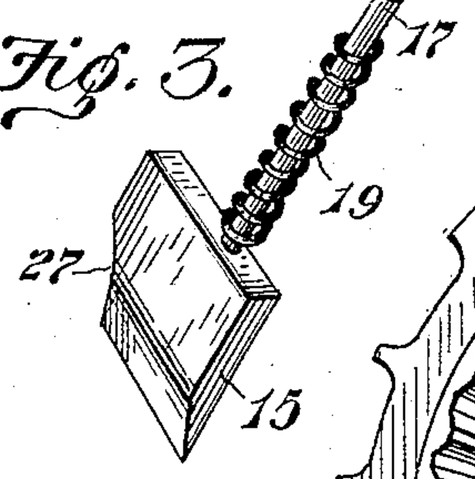
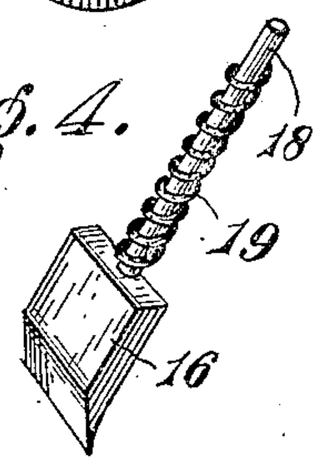


Fig. 4.



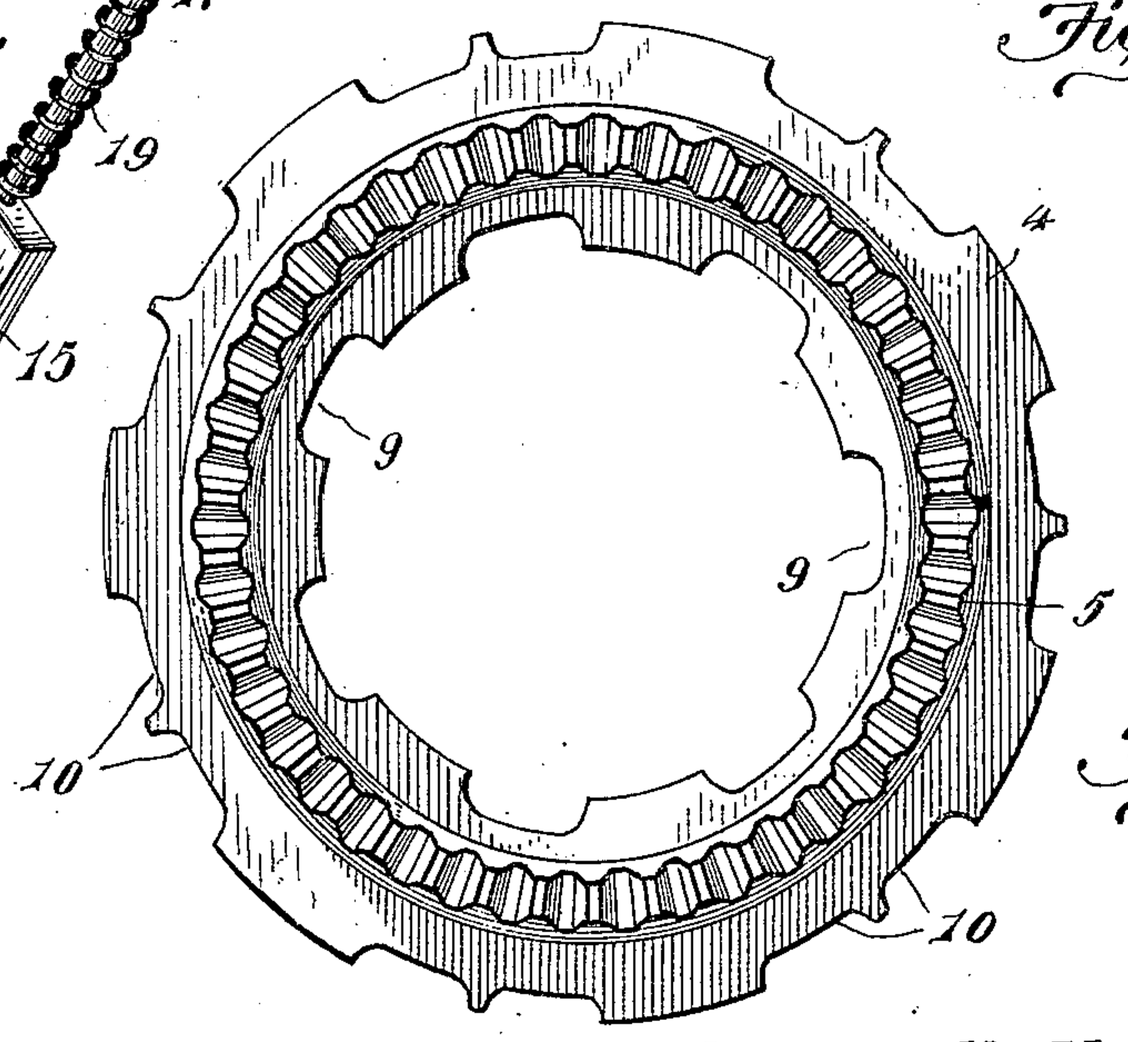


Fig. 2.

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2 SHEETS—SHEET 2.

Fig. 5.

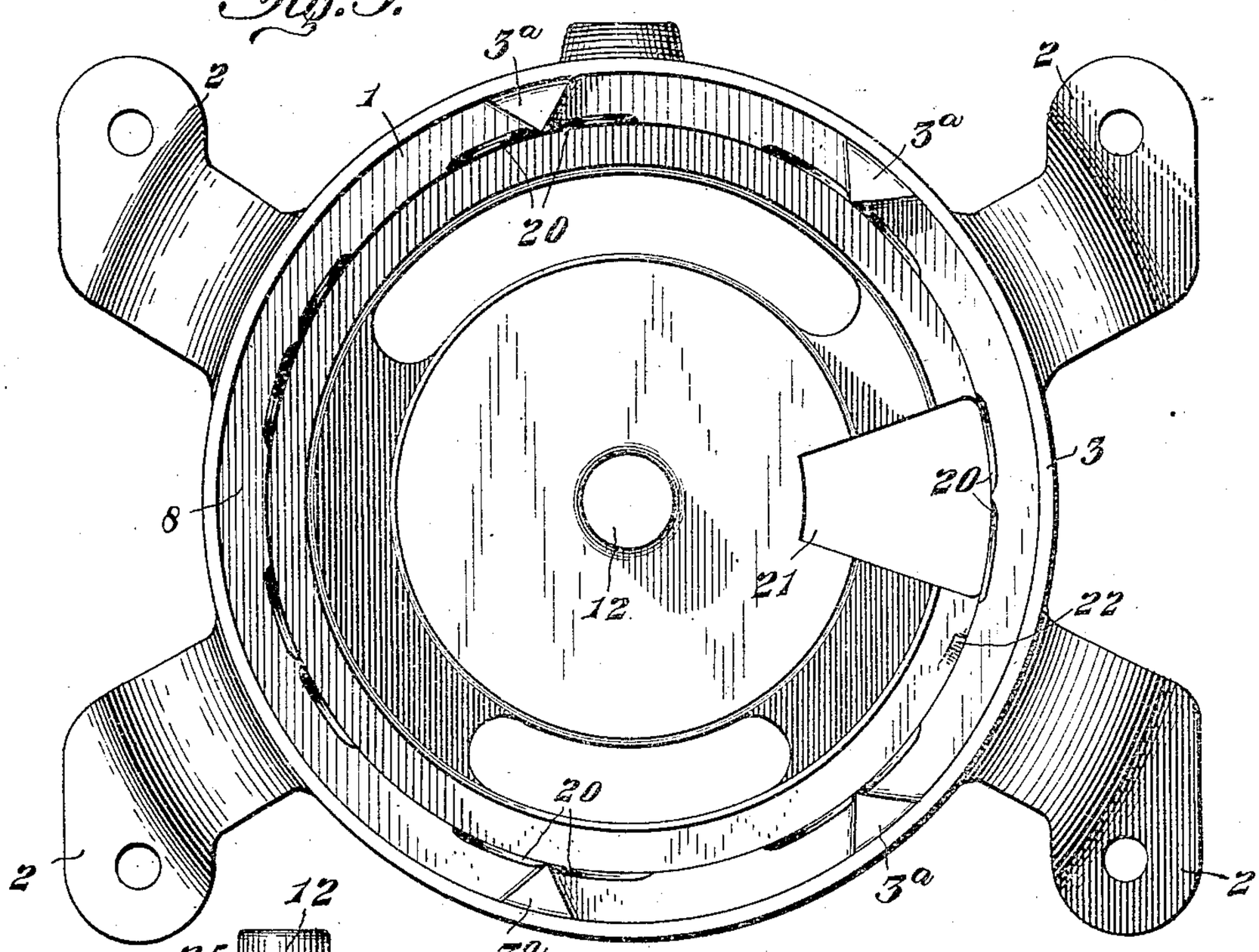

Fig. 6.

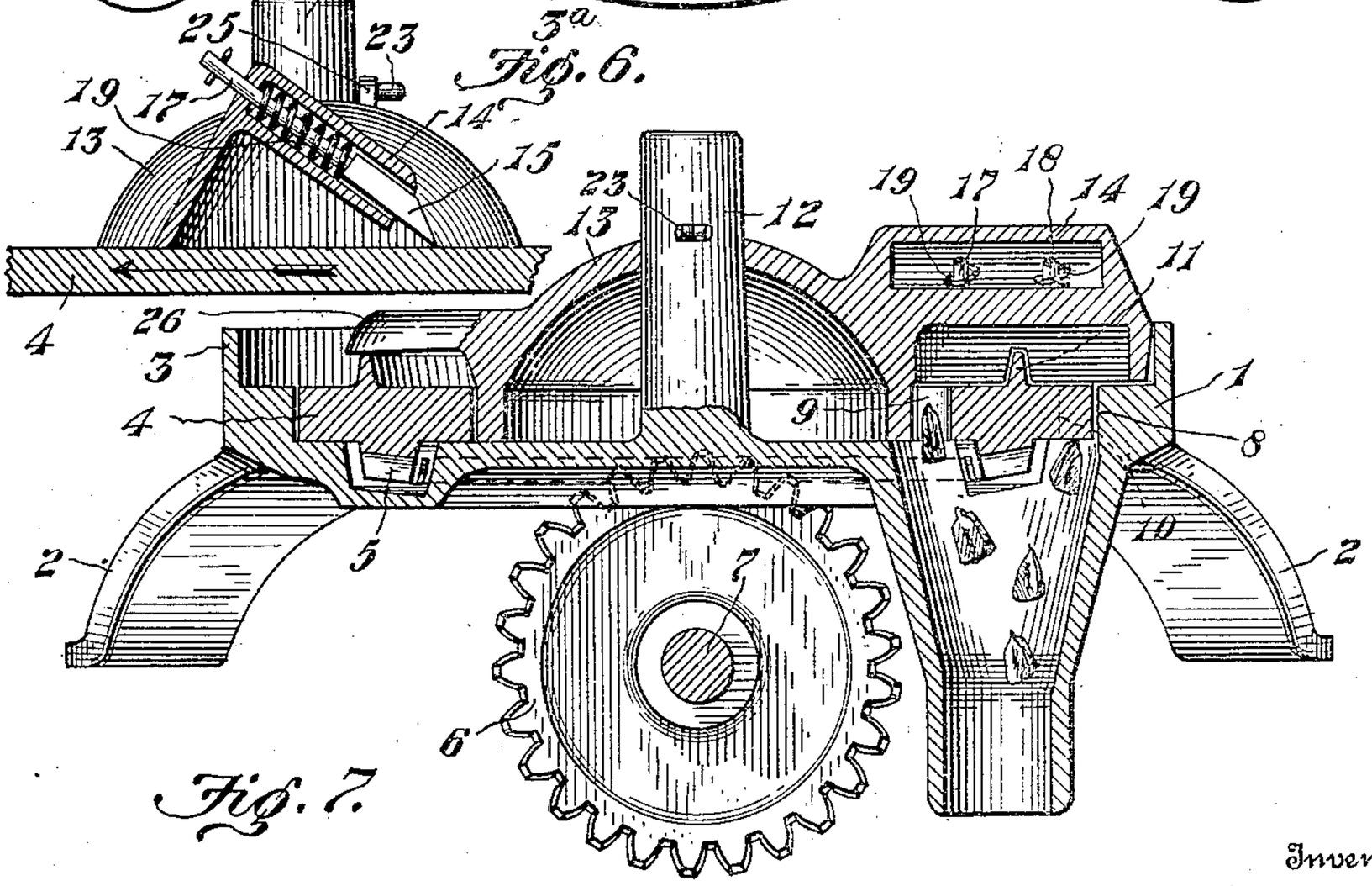

Fig. 7.

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UNITED STATES PATENT OFFICE.

EMMANUELL H. SNYDER, OF CANTON, OHIO.

CORN-PLANTER.

943,283. Specification of Letters Patent. Patented Dec. 14, 1909.

Application filed October 15, 1909. Serial No. 522,748.

To all whom it may concern:

Be it known that I, EMMANUELL H. SNYDER, a citizen of the United States, residing at Canton, in the county of Stark and State of Ohio, have invented certain new and useful Improvements in Corn-Planters; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, and to the numerals of reference marked thereon, in which—

Figure 1 is a top plan view. Fig. 2 is a bottom or underside view of the rotating seed ring and gear plate. Fig. 3 is a detached view of the inner scraper and its spring. Fig. 4 is a similar view of the outer scraper. Fig. 5 is a top plan view of the base or bottom frame proper. Fig. 6 is a view of the scraper head showing one of the scrapers, said view being taken on line 1—1, Fig. 1. Fig. 7 is a vertical section taken on line 2—2, Fig. 1.

The present invention has relation to corn planters and it has specific reference to the dropping mechanism independent of the frame and independent of the means designed to impart rotary motion to the dropping ring and plate or intermittent rotary motion to said dropping ring or plate.

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

In the accompanying drawing, 1 represents the fixed base which is connected to a corn planter frame by means of the feet 2. The base 1 is of the usual form and is provided with the vertical annular flange 3, which flange is provided with the grain deflecting projcetions 3ª, which flanges are for the purpose of assisting in moving the grain away from the annular vertical flange 3. Upon the top face or the base 1 is located the gear plate and dropper ring 4, which gear plate and dropper ring is provided upon its bottom or underside with the teeth 5, which teeth mesh with the gear wheel 6, said gear wheel being mounted upon the shaft 7, which shaft is journaled and actuated in the usual manner. The combined gear plate and dropper ring is held in proper relative position by means of the annular flange 8, said gear plate being formed of a diameter to correspond substantially with the diameter of the circle inclosed by the flange 8, except that the diameter of the gear plate should be sufficiently less to allow free movement of the gear plate. The combined gear plate and dropper ring 4 is formed of a single piece of metal and is provided with the inner grain notches 9 and the outer grain notches 10. The notches 9 and 10 are so arranged that the seed is fed upon both notches at the same time by which arrangement the number of grains can be better regulated by different sized notches. Ordinarily one grain of corn is to occupy each notch and owing to the fact that there are two notches 10 opposite the notches 9 three grains of corn will be dropped.

For the purpose of providing a partition or divider as between the inner and outer grain dropping notches 9 and 10 the annular rib 11 is provided, which annular rib is located substantially as shown in Figs. 1 and 7.

To the base 1 is securely attached or formed integral with the post 12. Upon the post 12 is located the convexo-concave disk 13, which disk is formed of a diameter corresponding substantially with the inner diameter of the gear plate and is so formed for the purpose of exposing the inner grain dropping notches 9 as best illustrated in Fig. 1. To the convexo-concave disk 13 is attached or formed integral with the scraper head 14, which scraper head is substantially of the form shown in Fig. 6 and rests upon the base 1. The scraper head 14 is provided with the scrapers 15 and 16, which scrapers are provided with the shanks 17 and 18 around which shanks are located the springs 19, which springs are for the purpose of holding the scrapers 15 and 16 down and in close contact with the gear plate 4, said scrapers being located and arranged substantially as shown in Fig. 6.

For the purpose of guiding the corn or grain to the outer notches 10, the upper inner corner of the flange 8 is provided with the beveled portions 20, which beveled portions permit and aid the grains of corn to find their way into the outer notches 10 when the grain comes in contact with the guide flanges or projections 3ª, said guide flanges and beveled portion also assist in ending up the grains of corn, thereby bringing them into proper position to be dropped.

It will be understood that the grain passage or opening 21 must be provided and is located substantially as shown in Fig. 5. For the purpose of preventing the convexo-

concave disk and the scraper head from rotating the stop flange or lug 22 is provided.

For the purpose of holding the convexo-concave disk 13 snugly down upon the base and in proper position with reference to the gear plate 4, the cotter 23 is provided, which cotter is passed through the aperture 24 formed in the post 12, and for the purpose of assisting in holding the convexo-concave disk 13 in position the notched flanges 25 are provided, said cotter resting upon the flanges. For the purpose of preventing any tilting movement of the gear plate or any relative vertical movement between the gear plate and the base the convexo-concave disk 13 is provided with the arm 26, the bottom or underside of said arm resting upon the dividing rib.

For the purpose of permitting the scrapers 15 and 16 to abut edge to edge the scraper 15 is provided with the cut out portion 27, which cut out portion provides room for the annular rib or partition flange 11.

Having fully described my invention, what I claim as new and desire to secure by Letters Patent, is—

1. In a corn planter of the class described, a base provided with a post, a gear plate and dropping ring provided with outer and inner grain dropping notches, an annular partition rib located between said inner and outer grain dropping notches, inwardly extending deflecting grain guide flanges secured to the base and said base provided with beveled portions adjacent said inwardly extending flanges, a convexo-concave disk provided with a scraper head, scrapers carried by the head, said scrapers located upon and in contact with the gear plate and dropper ring, substantially as and for the purpose specified.

2. In a corn planter of the class described, a base provided with vertical concentric flanges, a gear plate and dropper ring rotatably mounted upon the base, said gear plate and dropper ring provided with inner and outer grain notches, a dividing rib located between the inner and outer grain dropping notches, a post secured to the base, a non-rotatable convexo-concave disk fixed to said post, said disk provided with an arm, said arm adapted to rest upon the rib dividing the outer and inner grain notches, a scraper head provided with scrapers, said scrapers located upon opposite sides of the rib dividing the grain notches, and means for rotating the gear plate, substantially as and for the purpose specified.

3. In a corn planter of the class described, a base provided with vertical concentric flanges, a gear plate and dropper ring rotatably mounted upon the base, said gear plate and dropper ring provided with inner and outer grain notches, a dividing rib located between the inner and outer grain dropping notches, a post secured to the base, a non-rotatable convexo-concave disk fixed to said post, said disk provided with an arm, said arm adapted to rest upon the rib dividing the outer and inner grain notches, a scraper head provided with scrapers, said scrapers located upon opposite sides of the rib dividing the grain notches and means for rotating the gear plate, said flange provided with grain deflecting flanges, substantially as and for the purpose specified.

4. In a corn planter of the class described, a base provided with vertical concentric flanges, a gear plate and dropper ring rotatably mounted upon the base, said gear plate and dropper ring provided with inner and outer grain notches, a dividing rib located between the inner and outer grain dropping notches, a post secured to the base, a non-rotatable convexo-concave disk fixed to said post, said disk provided with an arm, said arm adapted to rest upon the rib dividing the outer and inner grain notches, a scraper head provided with scrapers, said scrapers located upon opposite sides of the rib dividing the grain notches, means for rotating the gear plate, said flange provided with grain deflecting flanges, and a stop lug adapted to hold the convexo-concave disk against rotation, substantially as and for the purpose specified.

In testimony that I claim the above, I have hereunto subscribed my name in the presence of two witnesses.

EMMANUELL H. SNYDER.

Witnesses:
JOHN H. SPONSELLER,
F. W. BOND.