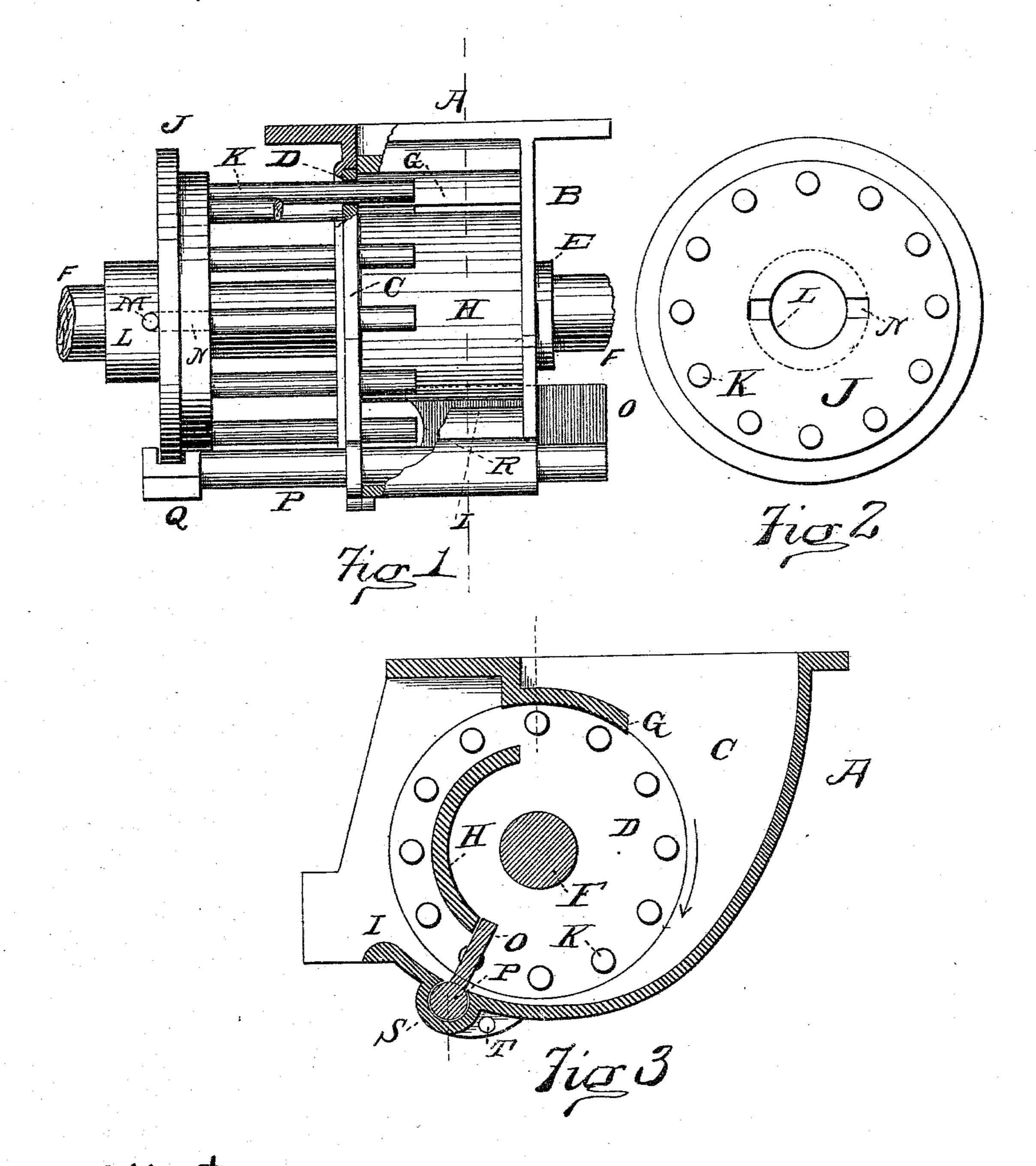
(Model.)

R. S. CARR.

SEEDER.

No. 274,460.

Patented Mar. 27, 1883.



Adhre Louis G. P. Tangiman

by James M. SEE atturney

United States Patent Office.

ROBERT S. CARR, OF HAMILTON, OHIO, ASSIGNOR, BY MESNE ASSIGNMENTS, TO THE SOHN RIDGE IMPLEMENT COMPANY, OF SAME PLACE.

SEEDER.

SPECIFICATION forming part of Letters Patent No. 274,460, dated March 27, 1883.

Application filed August 14, 1882. (Model.)

To all whom it may concern:

Be it known that I, Robert S. Carr, of Hamilton, Butler county, Ohio, have invented certain new and useful Improvements in Seeders, of which the following is a specification.

This invention relates to that class of seeders formed of a rotary seed-wheel inclosed in a seed-cup to which grain is admitted from a hopper, a series of the devices being generally arranged in one row upon a single actuatingshaft under a single hopper to form the wellknown grain-drill.

My invention consists of certain novelties of

structure hereinafter specified.

In the accompanying drawings, Figure 1 is an elevation of the discharge side of the device; Fig. 2, a face view of the seed-wheel, and Fig. 3 a vertical section of the device drawn transverse to the shaft.

drawn transverse to the shaft. A is the seed-cup, whose general form is as usual. B is one of the side walls of the cup; C, the opposite side wall; D, a disk fitted to revolve in the side wall C; E, a bearing-boss upon the side wall B; F, the usual cup-shaft, 25 in this case shown as a round shaft; G, an apron at the top of the cup, reaching from one side wall to the other; H, a segmental gate cast to wall B and reaching across the cup to the inner face of disk D; I, the usual dis-30 charge-weir; J, a disk fastened to the shaft F; K, round pins fixed in disk J, and projecting through holes in disk D into the seedcup; L, the hub projecting outward from disk J; M, a pin-hole through hub L and shaft F 35 to receive an attaching-pin; N, a mortise from inner face of disk J to pin-hole M, the hole M forming the bottom of the mortise; O, a gate fitted to slide through wall B into the cup and close the space between the bottom edge of 40 segmental gate H and the bottom of the seed-

cup; P, a stem to gate O, extending through wall O; Q, a notched head on stem P, grasping the periphery of disk J; R, a notch in the inner end of gate O; S, a bearing in the bottom of the cup, in which slides the stem P; T, the usual rivet for attaching the two parts

B C of the cup together.

The shaft F is arranged to slide longitudinally through the cup, as usual, and the usual

adjusting mechanism may be employed to ef- 50 fect the motion. When the shaft is adjusted endwise the pins K become projected more or less into the seed-cup. The gate O follows such movement of the shaft and feed-pins and closes so much of the space under the seg- 55 mental gate H as is not required for the passage of the pins as they rovolve in the direction indicated by the arrow in Fig. 3. These pins carry the grain through the space between the end of the gate O and the side wall 60 C toward the discharge I. The notch R in the inner end of the gate O permits the end of the gate to contact with the disk-D, and thus limit the further withdrawal of the pins K before the pins are so far withdrawn as to en- 65 danger their being withdrawn from the disk D entirely. The grain in the cup has free access to the entire surface of the pins, and the pins must be of a round or other non-cutting section to prevent damage to the grain. The 70 apron G, extending, as it does, well back into the seed-cup, prevents the leakage of grain over the top of the segmental gate H.

The arrangement of stem P to engage the disk J and move the gate O yields an efficient 75 and simple structure; but, if desired, the gate O may be operated from the shaft by other

means.

When the disk J is cast the mortise N is formed without a seperate core, and this mor- 80 tise naturally forms between its bottom and the side face of disk J the pin-hole M, thus saying the labor of drilling this hole through the hub L.

While I show a round shaft F, a square one 85 may be used without involving any modifications of any part of the device not within the

range of mechanical skill.

I do not claim, broadly, a feed-wheel formed of pins projecting through a disk into the seed-90 cup; nor do I claim, broadly, the combination of such form of seed-wheel with gates to close the front of the seed-cup.

I claim as my invention—

1. The combination, substantially as set 95 forth, of seed-cup A, having apron G, disk D, shaft F, feed-wheel J K, segmental gate H, and gate O.

2. The combination, substantially as set forth, of seed-cup A, having apron G and segmental gate H, disk D, shaft F, feed-wheel J K, and gate O, having stem P and head Q.

3. The combination, substantially as set forth, of seed-cup A, having apron G and segmental gate H, disk D, shaft F, feed-wheel J K, and gate O, having notch R.

4. The combination, substantially as set forth, of shaft F, feed wheel J K, having hub 10 L, and mortise N M.

ROBERT S. CARR.

Witnesses:
J. W. SEE,
JOHN LORENZ.