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J. D. LANCASTER.

PLANTER.

APPLICATION FILED AUG. 13, 1907.

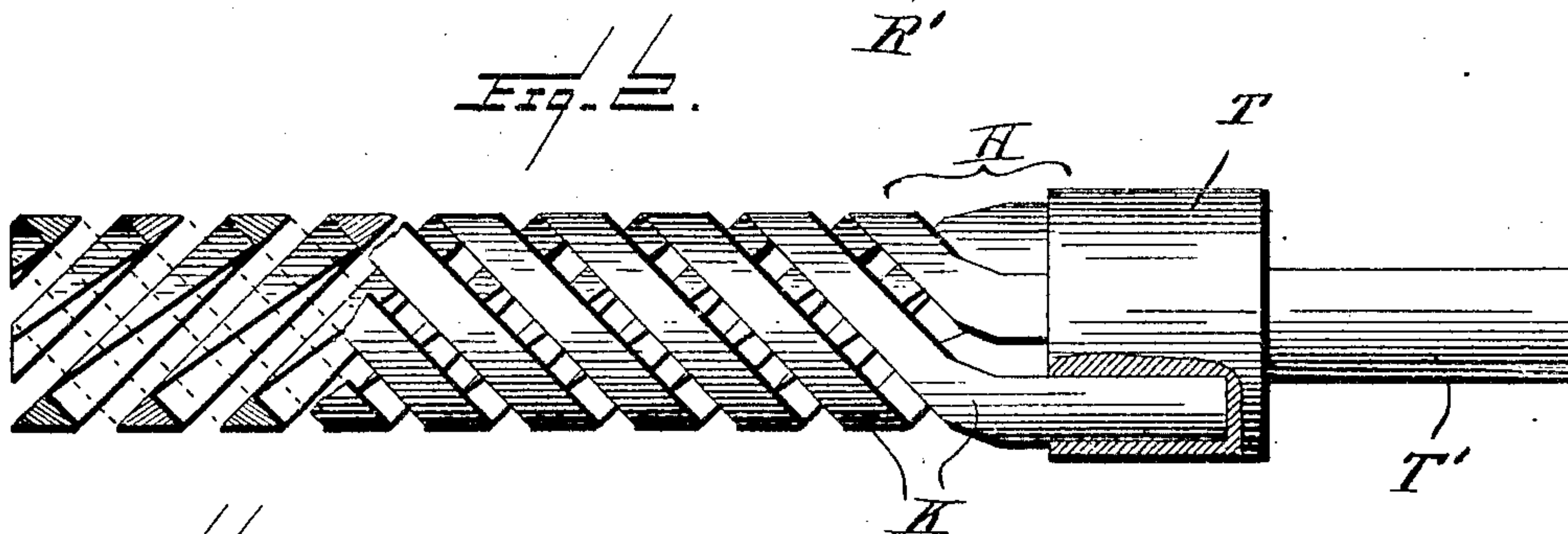
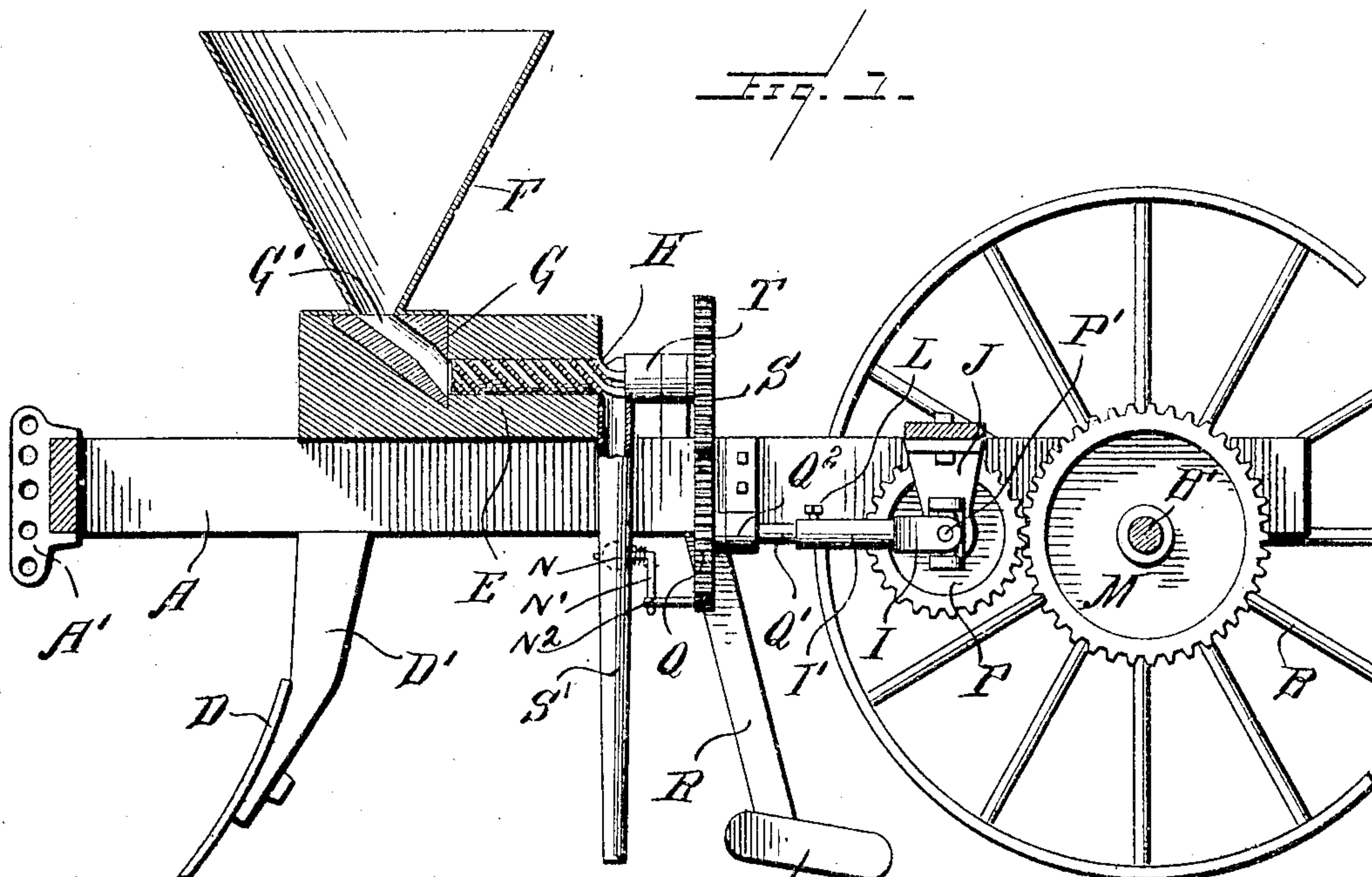
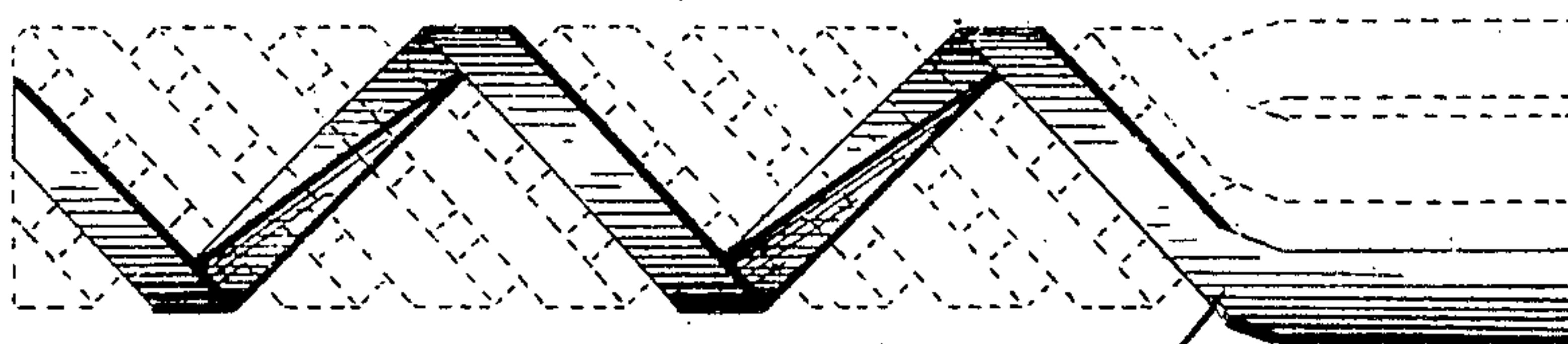


Fig. 3.



Fig. 4.



WITNESSES.

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PLANTER.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, JOHN D. LANCASTER, a citizen of the United States, residing at Lorena, in the county of McLennan and State of Texas, have invented certain new and useful Improvements in Planters; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

This invention relates to new and useful improvements in seeders or planters and comprises various details of construction and combination and arrangement of parts which will be hereinafter fully described and then specifically defined in the appended claims.

I illustrate my invention in the accompanying drawings, in which:—

Figure 1 is a vertical sectional view through a planter, showing parts of my invention in elevation. Fig. 2 is an enlarged detail side elevation, partly in section, of the feeding apparatus. Fig. 3 is an end view of the construction shown in Fig. 2, and Fig. 4 is a view showing one of the spiral arms of the feeding apparatus in full lines and the others being shown in dotted lines.

Reference now being had to the details of the drawings by letter, A designates the beam of the planter having an apertured plate A' fixed to the end thereof for attachment to a whiffle tree.

B designates a wheel fixed to a shaft or axle B' journaled in suitable bearings upon said beam, and D designates a plow which is fixed to the knee or standard D' projecting downward from said beam.

E designates a block which is mounted upon said beam and F is a hopper which is fixed to said block.

G designates a movable member which is inclined upon its lower edge and is adapted to rest upon the inclined bottom of a recess formed in said block. Said member G has a diagonally disposed duct G' therein, through which seed from the hopper may fall by gravity into the horizontal passage-way in the block in which the feeding member H is mounted. Said feeding member is made up preferably of four spiral arms, designated each by letter K. Each of said spiral arms, (a large detail of one being shown in Fig. 1

of the drawings), is convexed upon its outer face, as shown in Fig. 3 of the drawings, and has one straight edge, designated by letter N, and a concaved portion O so shaped in order to facilitate the feeding of the seed through the passage-way in the block E. Each of said spirals K is mounted in a head T which is fixed to the shaft T' mounted in suitable bearings upon the beam.

S designates a gear wheel which is fixed to the shaft T' and which is in mesh with a gear wheel Q mounted upon the shaft Q' journaled in the bearings Q².

M designates a gear wheel which is movably held upon the shaft B' with which it is made to rotate, and P designates an interchangeable gear wheel which is in mesh with the wheel M and is mounted upon a shaft P', supported by the yoke J, said yoke being adapted to have a swinging movement in order to bring the gear wheels P of different diameters into mesh with the gear wheel M. The end of the shaft P' has knuckle joint connection with the forked member I, which latter has a hollow socket portion I' in which the shaft Q' telescopes, a suitable set screw L being provided for holding the shaft Q' in an adjusted position.

Projecting from the lower portion of the beam A is a knee or standard R, having a scraper R' fixed at an inclination at the lower end thereof.

S' designates a spout which is positioned as shown in Fig. 1 so that the seed, as it is fed out of the block by the spiral arms K, may fall to the ground. In order to feed a few kernels of the seed at once, I provide a damper N in the pipe S', which damper has a crank arm N' projecting therefrom and which is disposed in the path of a pin N² upon the wheel Q whereby, as the wheel rotates, it will tilt the damper and allow the seed, which may accumulate thereon, to fall to the ground. A coiled spring S² is provided to return the damper to a closed position after being tilted.

The operation of my invention will be readily understood:—The seed to be planted is placed in the hopper, a suitable block G with the desired sized duct therein first being placed in the block E. As a rotary movement is imparted to the spiral arms of the feeding member H, the seed will be caused to be fed so as to drop through the spout S' to the ground. If it is desired to increase or diminish the speed at which it is desired to

have the feeding member rotate, the gear wheels P of various diameters may be adjusted upon the shafts, the swinging movement of the yoke J and the telescoping of the shaft Q' allowing gear wheels of different diameters to be employed.

What I claim is:—

1. A planter comprising a beam, a seed hopper, a block upon said beam upon which said hopper is mounted, a movable member having a duct mounted therein arranged in the recessed portion of the beam and communicating with said hopper, spiral feeding arms in a passageway in said block, and means for rotating said feeding member, as set forth.

2. A planter comprising a beam, a seed hopper, a block upon said beam upon which said hopper is mounted, a movable member having a duct mounted therein arranged in the recessed portion of said beam and communicating with said hopper, a plurality of independent spiral feeding arms, a head to which said arms are fastened, said arms being mounted in a passageway leading to and communicating with the duct in said movable block, and means for rotating said arms, as set forth.

3. A planter comprising a beam, a seed hopper, a block upon said beam upon which said hopper is mounted, a movable member having a duct mounted therein arranged in the recessed portion of said beam and communicating with said hopper, a plurality of independent spiral feeding arms, a head having holes therein, each adapted to receive a spiral arm, and means for rotating said head, as set forth.

4. A planter comprising a beam, a seed hopper, a block upon said beam upon which said hopper is mounted, a movable member having a duct mounted therein arranged in the recessed portion of said beam and communicating with said hopper, a plurality of independent spiral feeding arms, a head having holes therein, each adapted to receive a spiral arm, a shaft upon which said head is fixed, and gear mechanism for rotating the shaft, as set forth.

In testimony whereof I hereunto affix my signature in the presence of two witnesses.

JOHN D. LANCASTER.

Witnesses:

HENRY S. REED,
EDGAR W. REED.