PETER E. SMITH.

Improvement in Cotton-Seed Planters.

No. 115,123. Patented May 23, 1871.

Fig: 1.

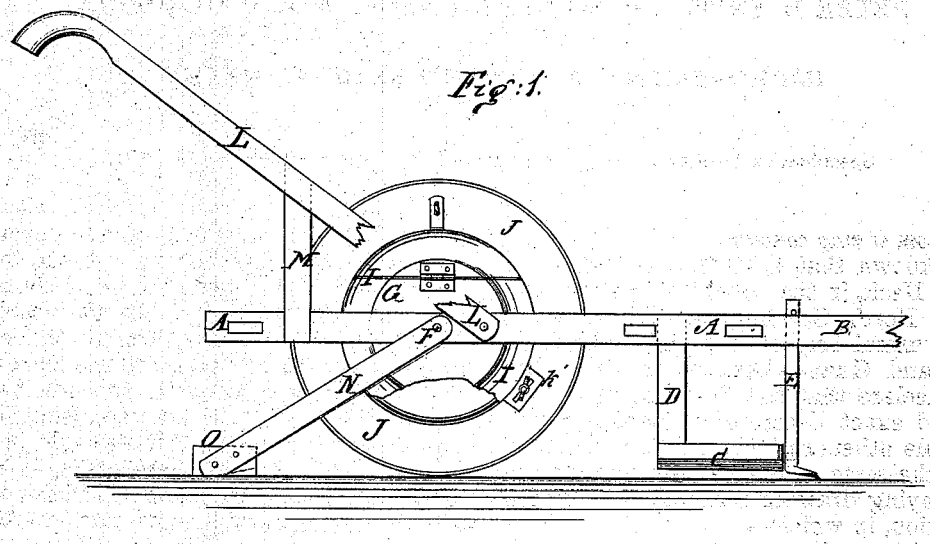


Fig: 2.

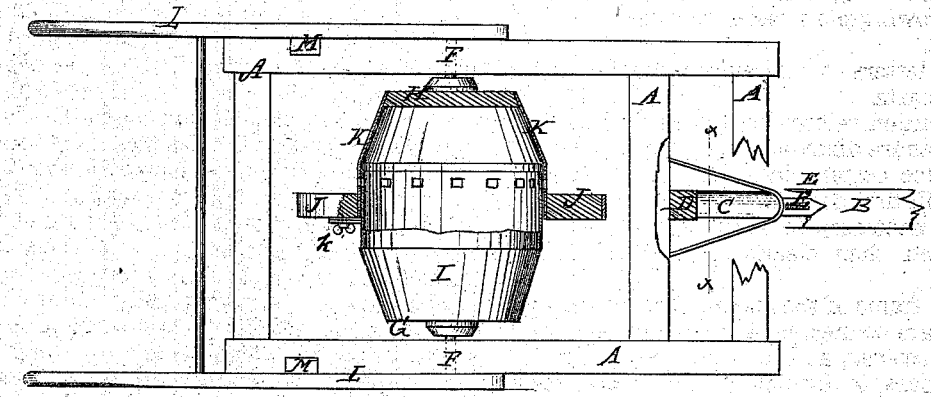
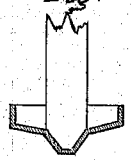


Fig: 3.



Witnesses:

Chas. Neda.

L. S. Mabee

Inventor:

P. E. Smith

Per Munn & Co

Attorneys.

UNITED STATES PATENT OFFICE.

PETER E. SMITH, OF SCOTLAND NECK, NORTH CAROLINA.

IMPROVEMENT IN COTTON-SEED PLANTERS.

Specification forming part of Letters Patent No. 115,123, dated May 23, 1871.

To all whom it may concern:

Be it known that I, PETER E. SMITH, of Scotland Neck, in the county of Halifax and State of North Carolina, have invented a new and useful Improvement in Cotton-Seed Planter and Guano-Distributer; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification, in which—

Figure 1 is a side view of my improved machine, parts being broken away to show the construction. Fig. 2 is a top view of the same, parts being broken away to show the construction. Fig. 3 is a detail cross-section of the furrowing-plow taken through the line *x x*, Fig. 2.

Similar letters of reference indicate corresponding parts.

My invention relates to cotton-seed planters and manure-distributers, and my object is to introduce certain improvements thereon, which I will first describe in connection with all that is necessary to a full understanding thereof, and then clearly point out in my claim.

A is the frame of the machine, consisting of two side bars connected at their rear ends by a single cross-bar, and at their front ends by two cross-bars, to furnish a substantial support for the tongue B and for the standards of the furrowing-plow. C is the shoe of the furrowing-plow, the rear end of which is securely attached to the lower end of the standard D, and the forward end of which is detachably attached to the standard or cutter E. The lower end of the standard or cutter E is bent forward, and has a point formed upon it to open the furrow, the sides of which are pressed apart by the V-shaped lower part of the shoe C. This construction of the standard or cutter E allows it to be detached when desired, to allow the point to be conveniently sharpened or replaced when worn. The sides of the shoe C project horizontally, as shown in Figs. 1, 2, and 3, so as to move along the surface of the ground and cause the furrow to receive the seed to be always of the same depth. The outer edges of the side wings of the shoe C are turned upward, or have upwardly-projecting flanges formed upon them, to prevent the soil from flowing in upon the top of said shoe, and also to enable side boards to be attached to it to give form to the top of the ridge or row. F is a shaft, the journals of which revolve in bearings in the side bars of the frame A. G and H are two disks, placed upon the shaft F just within the side bars of the frame A. One of these disks, as G, is rigidly attached to the shaft F, and the other, as H, is movably attached to said shaft. To the edge of the disk G is attached the outer edge of the casing I, the inner part of which is attached to the inner edge of the ring-wheel J, so that the said wheel may be in the central line of the machine and may roll along the furrow opened by the furrowing-plow C D E. To the edge of the disk H is attached the outer edge of the casing K, the inner edge of which overlaps the inner edge of the casing I, or of a piece attached to said casing I. In the overlapped edges of the casings I K is formed a series of openings, as shown in Fig. 2, so that by slightly turning the casing K upon the casing I the size of the discharge-openings may be adjusted at will, or as the size or character of the seed to be dropped or the fertilizer to be distributed may require. To the inner edge of the movable casing K are attached ears K′, which project up along the side of the wheel J, and are slotted transversely to receive a bolt attached to said wheel, and provided with a hand-nut, so that the movable casing K, when adjusted, can be securely fastened in place. The casings I K are made with a bilge, somewhat similar to the bilge of a barrel, to cause the contents of the dropper to always pass to the discharge-openings. In one side of the stationary casing I is formed a door, hinged at its outer edge, and secured at its inner edge by a hasp and staple, for convenience in putting in the seed or fertilizer. L are the handles, the forward ends of which are attached to the side bars of the frame A, and which are supported in position by standards M, as shown in Fig. 1. To the projecting ends of the journals of the shaft F are pivoted the forward ends of the bars N, to the rear ends of which is attached the block or drag O, by which the seed

is covered, and the lower side of which is concaved to give the proper form to the top of the ridge or row.

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

A rotary seed-hopper, formed of two overlapping and closed tubes, I K, one movable around the other, to adjust the size of the seed-apertures, and both turning together to drop the seed in the manner described.

The above specification of my invention signed by me this 6th day of July, 1870.

PETER E. SMITH.

Witnesses:
GEO. W. MABEE,
JAMES T. GRAHAM.