

(No Model.)

G. W. GOODWIN.  
DISTRIBUTER AND PLANTER.

No. 324,468.

Patented Aug. 18, 1885.

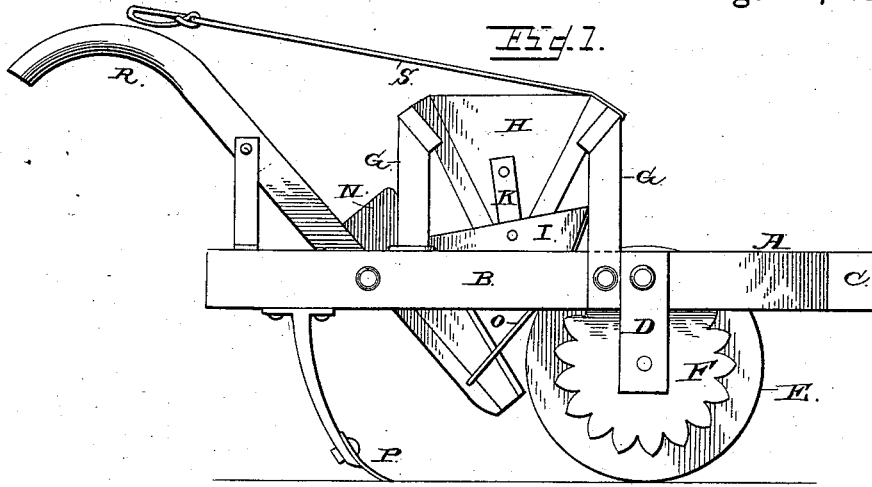


Fig. 2.

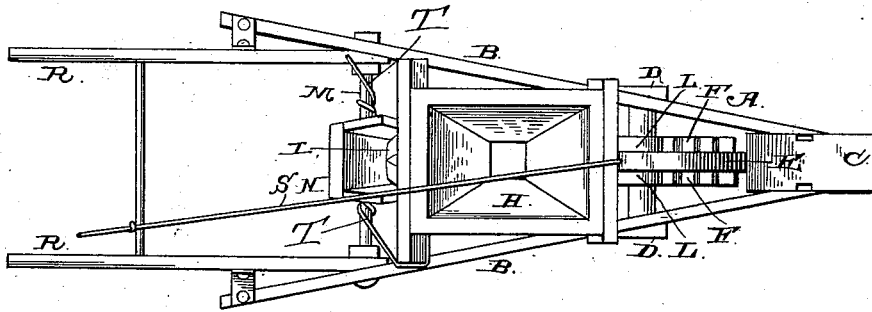
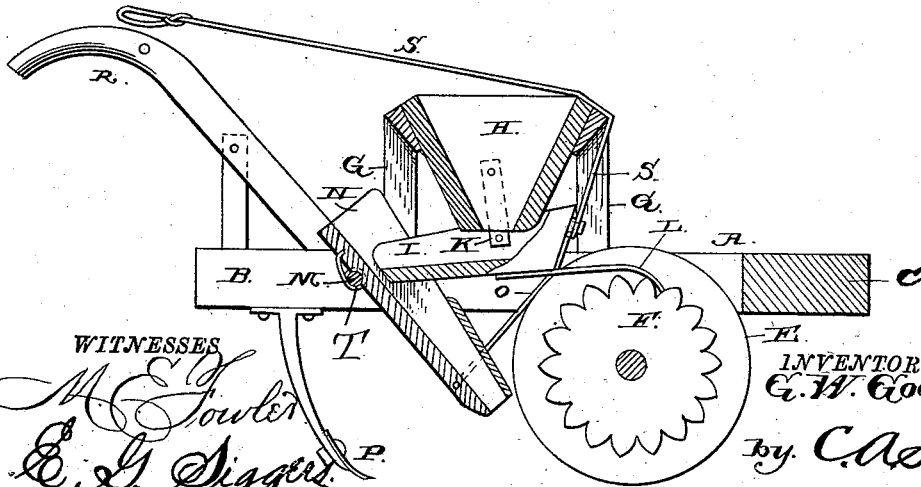


Fig. 3.



WITNESSES

*M. E. Fowler*  
*E. G. Digger*

INVENTOR  
*G. W. Goodwin*

by *C. A. Smith*

*His Attorneys*

# UNITED STATES PATENT OFFICE.

GEORGE WASHINGTON GOODWIN, OF PLAIN, SOUTH CAROLINA.

## DISTRIBUTER AND PLANTER.

SPECIFICATION forming part of Letters Patent No. 324,468, dated August 18, 1885.

Application filed April 10, 1885. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE W. GOODWIN, a citizen of the United States, residing at Plain, in the county of Greenville and State of South Carolina, have invented a new and useful Improvement in Fertilizer-Distributers and Planters, of which the following is a specification, reference being had to the accompanying drawings.

10 My invention relates to an improvement in fertilizer-distributers and cotton-planters; and it consists in the peculiar combination and construction of devices that will be more fully set forth hereinafter, and particularly pointed out in the claim.

Figure 1 is a side elevation of a machine embodying my invention. Fig. 2 is a top plan view of the same. Fig. 3 is a vertical sectional view.

20 A represents a frame, which is composed of two converging side beams, B, that are united at their front ends to a block, C. Brackets D are bolted to the beams, near their forward ends, and in the depending ends of these brackets is journaled a wheel, E, which is provided with spurred cams F on either side. Four standards, G, rise from the frame, and in between these standards is supported a hopper, H.

30 I represents a vibrating shoe, that is suspended below the hopper by means of straps K, which are secured to the sides of the hopper. This shoe extends rearwardly from the hopper, and from the front side of the shoe project spring-arms L, which engage with the cams F and impart vibratory motion to the shoe.

M represents a transverse bar, which extends across the frame in rear of the hopper, and on this bar is fulcrumed the upper end of a conveying-spout, N, the lower end of which extends to the ground immediately in rear of the wheel E. The rear end of the shoe extends into the open upper portion of the front side of the spout, and the spout is connected to the front end of the shoe by means of rods O, and is thereby vibrated with the shoe.

P represents cultivator-teeth, that are secured to the rear ends of the beams B, and R

represents the handles by which the machine is directed in the usual way. The block C, at the front end of the beams, is adapted to receive a cultivator or furrow-opener to run in front of the wheel E. To the front end of the shoe is attached a rod or cord, S, which extends back to the plow-handle. By pulling upon this rod or cord the front end of the shoe may be raised high enough to cause the arms L to be disengaged from the cams, so as to cease the operation of the machine and avoid wasting the seeds or fertilizer while the machine is being drawn across the field. This rod also serves the purpose of regulating the quantity of fertilizer or seeds sown.

65 By conducting the fertilizer from the shoe to the closed spout it is conducted thereby directly to the ground and therein deposited, and avoids the danger of its being blown about by the wind and sown irregularly and where not needed, as would be the case if the spout were not employed. By connecting the spout with the shoe and causing it to partake of the vibratory motion of the latter the fertilizer is prevented from becoming clogged in the spout on its way to the ground. Springs T are wrapped or coiled around the rod M, and bear at their free ends against the upper rear side of the fulcrumed spout N. The function of these springs is to cause the arms L to descend forcibly between the teeth of the cam-wheel as the latter revolves, and thereby agitate the lower end of the spout N with a sufficient degree of force to prevent the seeds or fertilizer from clogging therein. It will be seen that the spout N is inclined at a sufficient angle to cause the seeds or fertilizer to roll therein in their descent. By causing this rolling motion to be imparted to the seeds or particles of the fertilizer their tendency to form in a lump or mass together and clog the spout is prevented.

90 When planting cotton with this machine, the furrow-opener is attached to the block C, and a foot-board is bolted or otherwise secured across the cultivator-teeth at the rear end of the beams, and this board serves to cover the seeds as they are sown.

A cotton-planter and fertilizer-distributer 100

thus constructed is exceedingly cheap and simple, is easily operated, and is not likely to get out of order.

5 Having thus described my invention, I claim--

10 The combination, in a fertilizer-distributor and seed-planter, of the hopper, the shoe I, suspended below the hopper, and having the arms L, the toothed wheel for vibrating the arms, and the shoe, the spout N, fulcrumed in rear of the vibrating shoe, the upper end of the spout communicating with the discharge end of the shoe, and the rod O, connecting the

lower end of the spout with the shoe, whereby the spout and the shoe are vibrated and the arms L are forced against the latter by the springs T bearing against the spout, substantially as described. 15

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses. 20

GEORGE WASHINGTON GOODWIN.

Witnesses:

A. J. MOSELEY,

THOS. T. WOODSIDE.