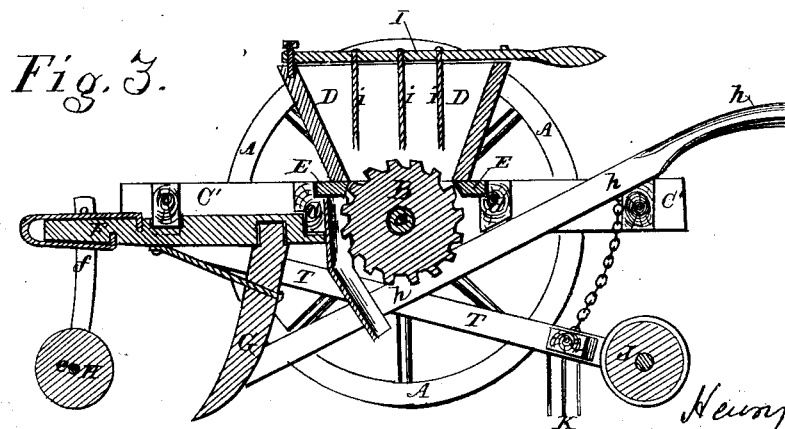
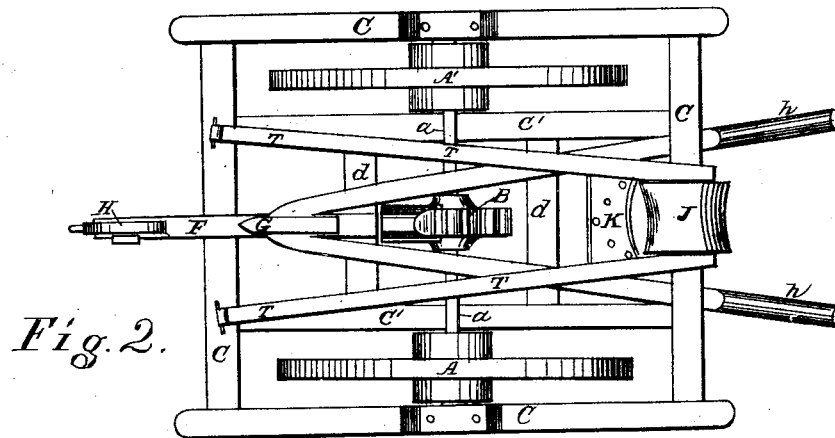
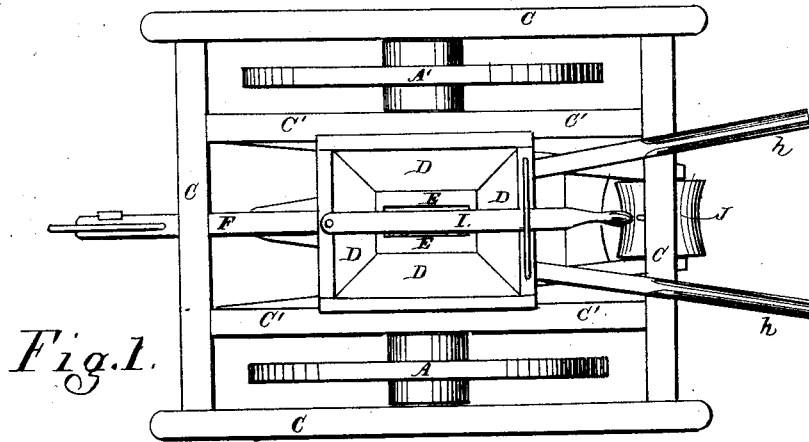


H. NICHOLLS.
Cotton Planter.

No. 106,859.

Patented Aug. 30, 1870.



Witnesses
J. B. Waldman
A. S. Miller

Inventor
Henry Nicholls
by A. M. Stout
his atty in fact

United States Patent Office.

HENRY NICHOLLS, OF FAIRFIELD, KENTUCKY.

Letters Patent No. 106,859, dated August 30, 1870.

IMPROVEMENT IN COTTON-SEED PLANTERS.

The Schedule referred to in these Letters Patent and making part of the same

To all whom it may concern :

Be it known that I, HENRY NICHOLLS, of the town of Fairfield, in the county of Nelson and State of Kentucky, have invented an improved Cotton-seed Planter; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon.

The nature of my invention consists in so constructing and operating a machine that it will open a furrow in the soil, drop the cotton-seed therein, at such intervals and in such quantities as may be desired, fill up the furrow, and cover the seed, and, by means of a roller, pack the soil over the seed, more or less in degree, as may be desired, all at one operation, and as fast as the machine may be drawn by a horse or mule.

To enable others skilled in the manufacture and use of such implements to make and use seed-planters after my invention, I will proceed to describe the construction and operation of the same.

In the drawing—

Figure 1 represents a plan view of my machine as seen from above.

Figure 2, a bottom view as seen from beneath.

Figure 3, a longitudinal vertical sectional view of it, showing the right half as if cut through the center of the cog-wheel B and tongue F.

The seed-hopper D and the frame C C C C are supported upon the axle *a*, and are moved over the ground by means of the wheels A A.

The pieces C' C' are framed into the end pieces C C, so as to be parallel to the side pieces, and about six inches distant therefrom, one on each side, so that the hub of each wheel is confined in its place by a side piece, C, and inner side piece, C'; and each one of the four pieces has a journal-box on its under side for the axle.

On the center of the axle is fixed the cog-wheel B, so that, when the axle revolves, it will revolve also.

The form of the seed-hopper, with its bottom E resting upon two cross-pieces, *d d*, will be seen in the drawing.

An opening is cut in the bottom of the seed-hopper, so that the cog-wheel B may extend up into the interior of the hopper, say, two and a half inches, if it be about two feet in depth, and the opening should be so nicely adjusted to the size and form of the cog-wheel that, when it revolves, no cotton-seed will escape except those thrown forward and down, as designed, by the teeth or cogs of the wheel.

As a matter of course, the number of seed thrown out by each tooth of the wheel B will depend upon the length and width of the teeth, and their distances apart on the periphery of the wheel, and, therefore,

the manufacturer can, by changing dimensions and proportions, regulate the rate of discharge of seed at will.

The right-hand wheel A' is fixed fast upon the axle, and, like the cog-wheel B, which is the seed-dropper, revolves with the axle, while the left-hand wheel A revolves upon the axle independently.

The wheel H revolves upon the bolt *e*, and its office is to regulate the depth of the opener G, which has the form shown in the drawing, and is fixed in the frame.

By the construction and arrangement of the bearing for the wheel H, marked *f*, it is adjustable in connection with the beam F. This, as well as the clevis and some other parts, may be of metal, and the rest of the parts of wood, but nothing is claimed herein for novelty in material.

Two suitable bars, *r r*, are fastened, by hinge-joints, to the front cross-piece of the frame, and constitute a frame for the roller J, which serves to level the surface and pack the soil when the seed has been dropped by the wheel B, and covered by the rake K. The head-piece of the rake also constitutes a part of the frame, within which the roller revolves.

The form of the stirrer is shown in the drawing, and it is marked I.

The bar I passes through the front head-piece of the seed-hopper, and has three teeth, *i i i*, which may be so long only as to reach down within a couple of inches of the top of the cog-wheel B.

The stirrer is so arranged on the top of the hopper that the teeth may be moved in the seed forward or backward, or to the right or the left, to loosen up the seed when they become packed into lumps, or otherwise; and it should be long enough for the driver to use while walking between the handles *h h*.

The beam F may be formed as shown in the drawing, and fixed in the frame, and braced and stiffened in its position, as may be desired.

By means of a chain and a hook and eye, as shown in the drawing, the rake and roller may be suspended above the surface when not in use.

This, my machine, may well be used for the planting of other seeds than those of the cotton-plant.

It is scarcely necessary to add a word of explanation of the operation of my machine. The opener G opens the furrow, the cog-wheel B drops the seed into it, the rake K fills up the furrow and covers the seed, and the roller J levels the surface and packs the soil, so as to prevent the moisture from drying up too quickly about the seed.

Having fully described my invention,

What I claim as new, and desire to secure by Letters Patent, is—

1. The combination and arrangement of hopper D,

having a slotted bottom, with the cog-wheel B, for regulating the discharge of the seed or grain, the axle *a*, rigidly fixed to and revolving with one of the carriage or driving-wheels, the toothed stirrer I, pivoted at the forward end, the carriage-wheels A and A', the wheel H, with its adjustable bearing, and the frame of the seed-planter, and constructed and operated substantially as described.

2. The combination and arrangement of the hopper D, stirrer I, cog-wheel B, axle *a*, carriage-wheels A and A', and frame of a seed-planter, the roller J,

with its bars T T hinged to the frame forward of the main axle, and the rake K, when they all are constructed and operated substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

HENRY NICHOLLS.

Witnesses:

JOHN A. TERRELL,

LYNCH M. TERRELL.