L. WINSTON.

Corn Planter.

No. 106,976. Patented Aug. 30, 1870.

Fig. 1.

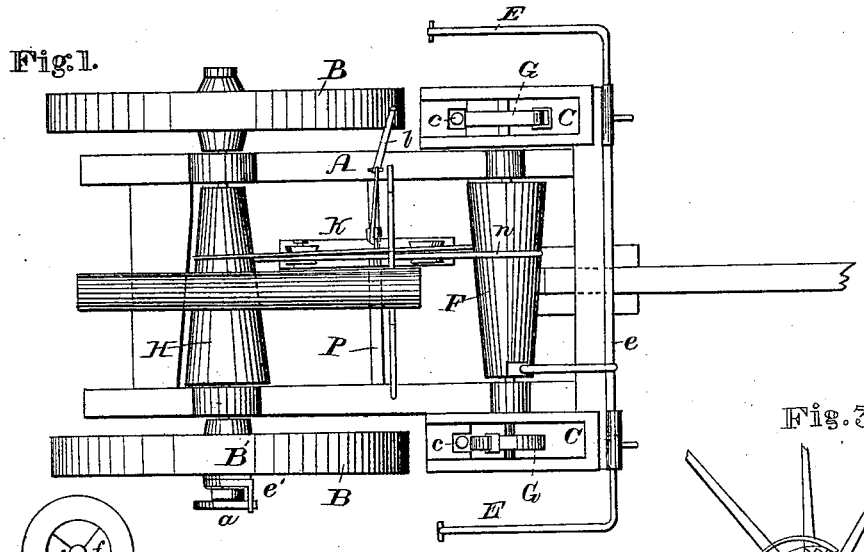


Fig. 3.

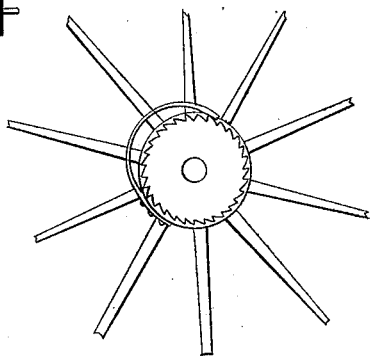


Fig. 4.

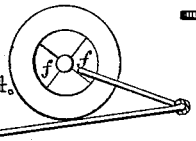


Fig. 2.

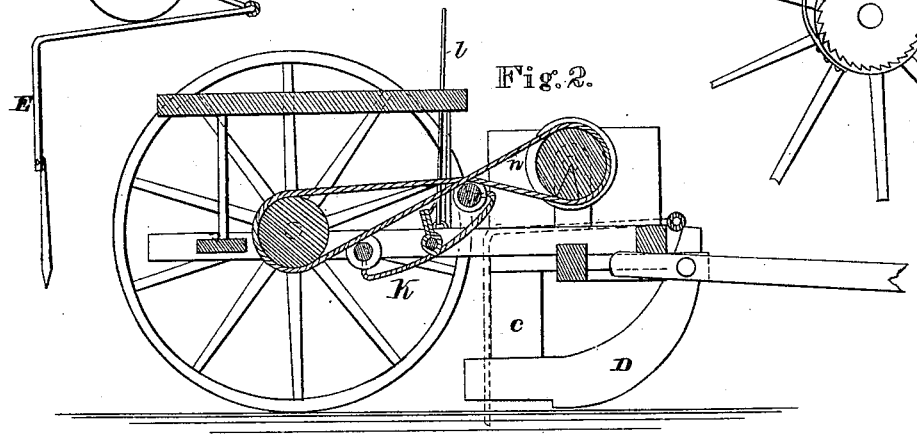
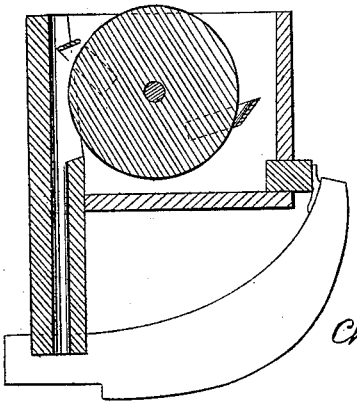


Fig. 5.



Witnesses.
D. D. Kane.
Chas Kenyon

Inventor.
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Chipman Hoomer & Co
Attys

UNITED STATES PATENT OFFICE.

LUCIUS WINSTON, OF PONTIAC, ILLINOIS.

IMPROVEMENT IN CORN-PLANTERS.

Specification forming part of Letters Patent No. **106,976**, dated August 30, 1870.

To all whom it may concern:

Be it known that I, LUCIUS WINSTON, of Pontiac, in the county of Livingston and State of Illinois, have invented a new and valuable Improvement in Corn-Planters; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a top view of my invention. Fig. 2 is a central vertical longitudinal section of the same. Figs. 3, 4, and 5 are details.

My invention relates to corn-planters; and it consists in the construction and novel arrangement of devices designed to plant a field in checks, keeping the rows and cross-rows straight and the hills equidistant without previously marking the field.

The letter A of the drawings designates the rectangular frame of my corn-planter, supported by the wheels B B. Attached to the forward part thereof are the seed-boxes C C, provided with the descending tubes *c c* at their rear ends, whereby the corn is guided into the furrows made by the furrowing-shoes D D.

E E designate the markers attached to each end of a shaft, *e*, arranged in front of the seed-boxes. The ends of the shaft are bent first to the rear and then downward, in order that the lower ends of the markers may be in line with the lower ends of the seeding-tubes, and that at the same time they may have sufficient weight to keep the tongue *b* in contact with the recessed end of the conical or tapering roller F, secured between the seed-boxes to the shaft bearing the pocket-wheels G G. Recesses *f f* are formed in the smaller end of the tapering roller F. These recesses are in the form of sectors, and are two in number, diametrically opposite to each other, as shown. By this arrangement the tongue *b* is raised by the surface of the roller between the recesses sufficiently to keep the markers E E off the ground; but when the tongue falls into the recess *f* the markers drop, making impressions on the ground. These impressions are designed to be made at the same time that the corn is dropped, so that the indications will be in line with the hills. The markers extend outward on each side of the planter a distance equal to one-half of the distance from center to center between the shoes. Thus in returning the marker of one side is designed to strike in the impressions previously made by it, while the opposite marker is making impressions which will be followed by the latter after turning in a similar manner, thus keeping the hills equidistant.

It is obvious that by increasing the number of pockets upon the wheels G G and correspondingly the number of sector-like recesses *f f* at the end of the tapering roller F the cross-rows may be brought closer together; but the arrangement followed in the drawings is usually adopted.

H represents the driving-roller, made conical or tapering in the same manner that the cam-roller F is constructed, but reversely placed upon the axle of the wheels B in such a manner that the smaller end thereof shall be in line with and opposite to the large end of the cam-roller.

The driving-roller is operated by the rotation of the wheel B′ when moving in a forward direction, and a ratchet-wheel, *a*, is attached to the end of the axle to effect this object by engaging with the spring-pawl *e′*, secured to the hub of this wheel. The teeth of the ratchet-wheel are made sufficiently inclined on one side to prevent action when the heel moves backward.

K designates a spring provided with a pulley, *z*, at one or both ends thereof, and arranged to slide upon a rod, *p*, secured between the side bars of the frame. This spring is operated by the lever *l*, and is designed to control the position of the cord *n*, which passes from the driving-cam over the cam-roller F. By means of this device the relation subsisting between the two rollers may be varied at will, thus regulating the stroke of the markers, causing them to strike faster or more slowly, as may be desired. In this way the

marker may be brought to the indication whenever any irregularity in its stroke is produced by passing over lumps or uneven ground.

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

In combination with the pocket-wheels G G of a corn-planter, the rising and falling markers E, sliding spring K, tapering cam-roller F, and reversely-tapering drive-roller H, when constructed and arranged to operate as and for the purposes herein shown and described.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

LUCIUS WINSTON.

Witnesses:

CHAS. P. CULVER,

JOSEPH F. CULVER.