H. RUTH.

Corn Planter.

No 35,545. Patented June 10, 1862.

Fig. 1.

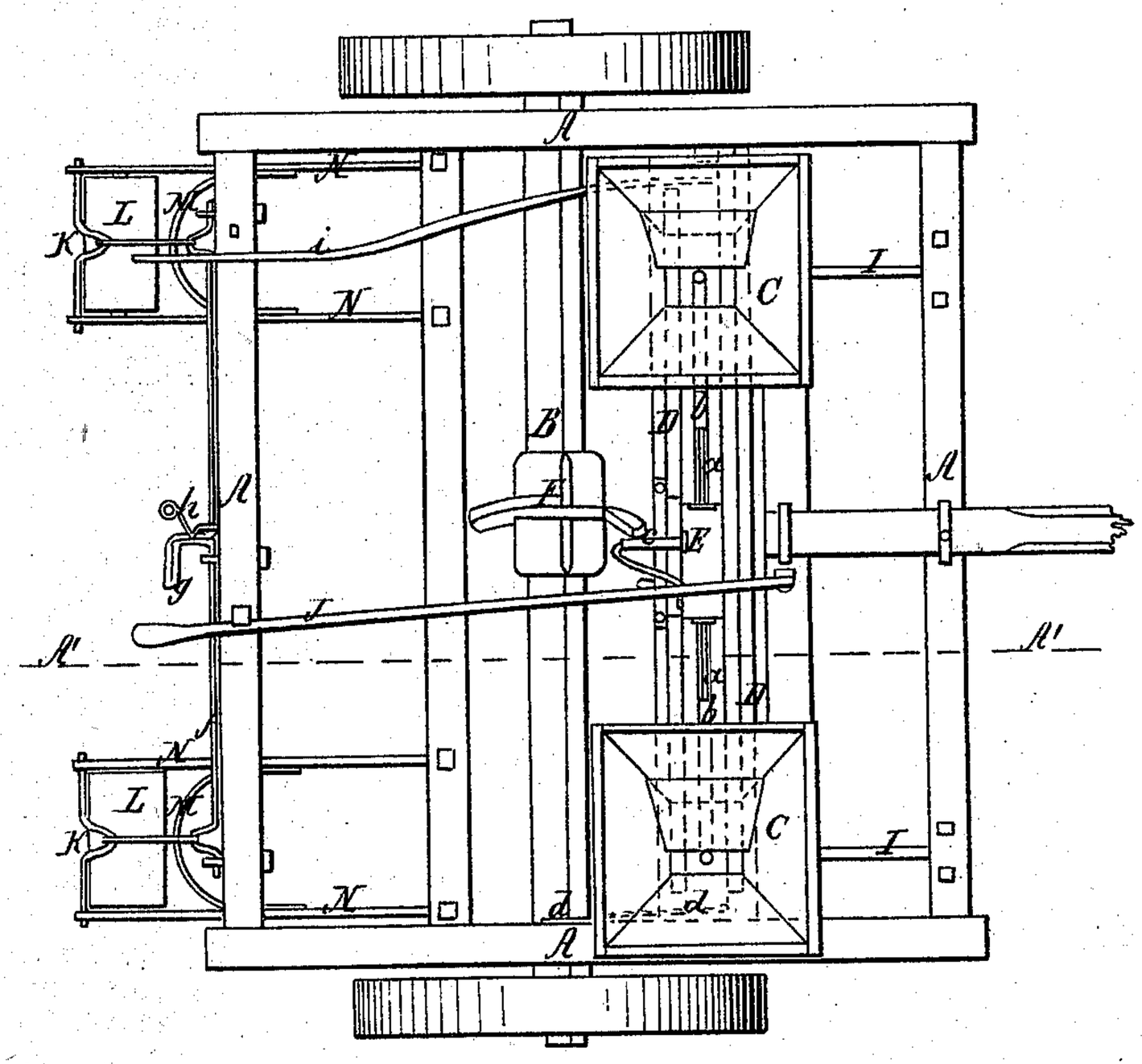
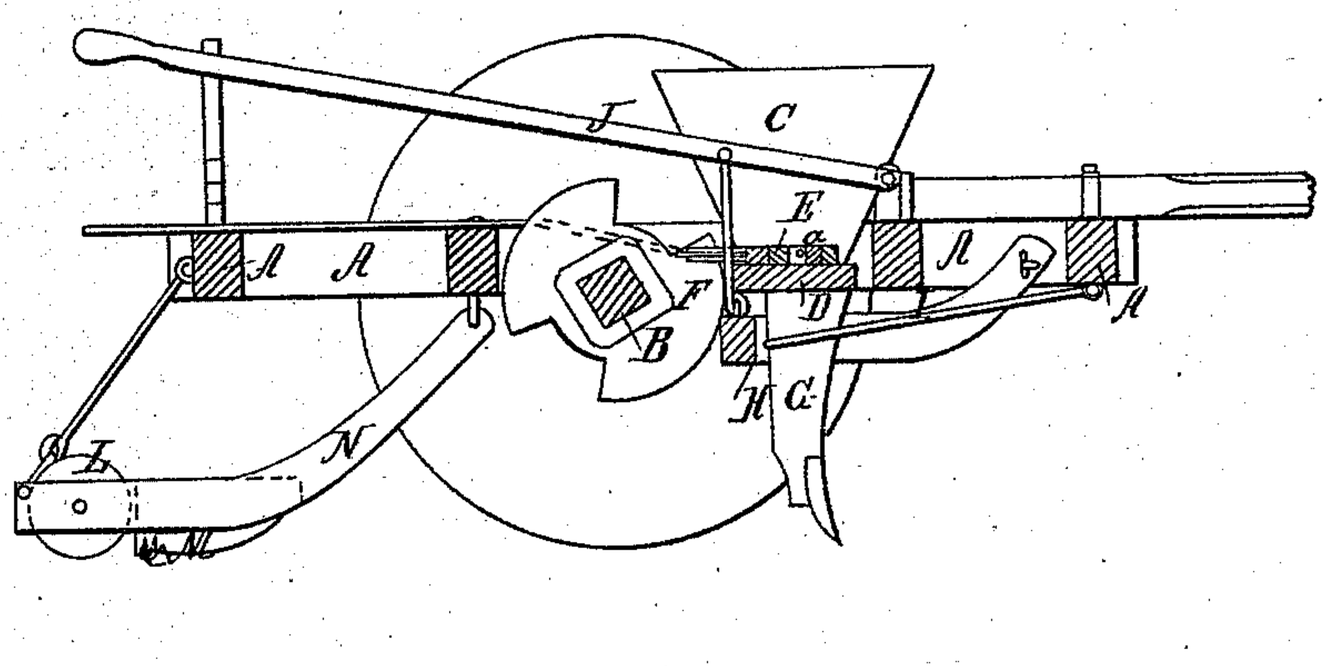


Fig. 2.



Witnesses:

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Edwd. J. Underwood

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UNITED STATES PATENT OFFICE.

HENRY RUTH, OF SUMMERFIELD, ILLINOIS.

IMPROVEMENT IN CORN-PLANTERS.

Specification forming part of Letters Patent No. **35,545,** dated June 10, 1862.

To all whom it may concern:

Be it known that I, HENRY RUTH, of Summerfield, in the county of St. Clair and State of Illinois, have invented certain new and useful Improvements in Corn-Planters; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the annexed drawings, making part of this specification, in which—

Figure 1 is a top view of my said improved planter; and Fig. 2 is a transverse vertical section through the same, taken on the line A′.

My invention consists in a novel method of making and operating the dropping-valve and in a novel construction of the covering apparatus.

The following description of my improvements will enable any one skilled in the art to which they appertain to make and use them.

Like letters of reference represent corresponding parts of the different figures of the drawings referred to.

In the drawings, A represents the main frame of my improved machine. It is of rectangular form and mounted upon the axle B, so as to about balance.

The hopper-boxes are represented by C C. They are arranged and secured upon a flat plank, D, which is formed in the main frame just forward of the axle in the manner shown. In the top of said plank, which constitutes the bottom of the hopper-box, a longitudinal groove is made, in which the dropping-valve E is arranged. Said valve is made double and long enough to reach under both hopper-boxes. The drop-hole in said valve is made adjustable, that it may be enlarged or contracted, by means of a screw represented by the pin *a*, which shoves forward or draws back the adjusting-pieces *b*. In the center of said valve, in one edge thereof, an arm, *c*, is fixed and braced in the manner shown. This arm is operated upon by the cam F, fixed on the main axle B. Against one side of the main frame, in the inside thereof, a small spring is fixed, (shown by *d*,) the end whereof bears against the end of the valve aforesaid, so that by means of said cam the valve is opened, and by means of said spring it is closed. The cam may be made to open the valve once, twice, or three times every revolution thereof, and the spring will of course instantly close it as soon as the cam clears it.

The seed-tubes, through which the corn drops, and which make the furrow in the ground, are represented by G. They are arranged in a hinged frame, H, and secured by means of the brace I, and said vibrating frame is attached to the lever J, by which the tubes are raised and lowered from and to the ground whenever it may be desired to suspend or commence the operation of the machine.

The covers are represented by K. They consist of two rollers, L, and a curved metal plate, M, arranged in front of said rollers between the string-pieces N. In the bottom edges of said curved plates teeth are cut, as shown by *e*, the object whereof is to knock the lumps of dirt to pieces. The object of said plates is to draw the dirt back into the furrow, and the object of said rollers is to press the dirt down on the seed. Said covers are raised and lowered from and to the ground by means of a crank-shaft, *f*, fixed against the rear part of the main frame. The cranks on said shaft are connected to said cover in the manner shown, and said shaft has a lever, *g*, attached thereto, by which the cranks are operated, so as to raise and lower the covers. When said lever is raised up so as to lift the covers off the ground it catches behind the spring *h*, which holds them up while the machine is being transported. One of the truck-wheels is fast on the axle, so as to turn the cam, but the other is loose to facilitate the turning of the machine. The spring-lever *i* is used to throw the valve out of gear with the cam when the machine is not in operation.

I claim—

1. In combination with the rollers L, the toothed curved plates M, arranged in a hinged frame, as described.

2. The cam F, in combination with the valve E, constructed and arranged as described.

HENRY RUTH.

Witnesses:

ROLLIN B. GRAY,

JAMES MCMAHON.