

J. CLARRIDGE.
CORN-PLANTER.

No. 178,414.

Patented June 6, 1876.

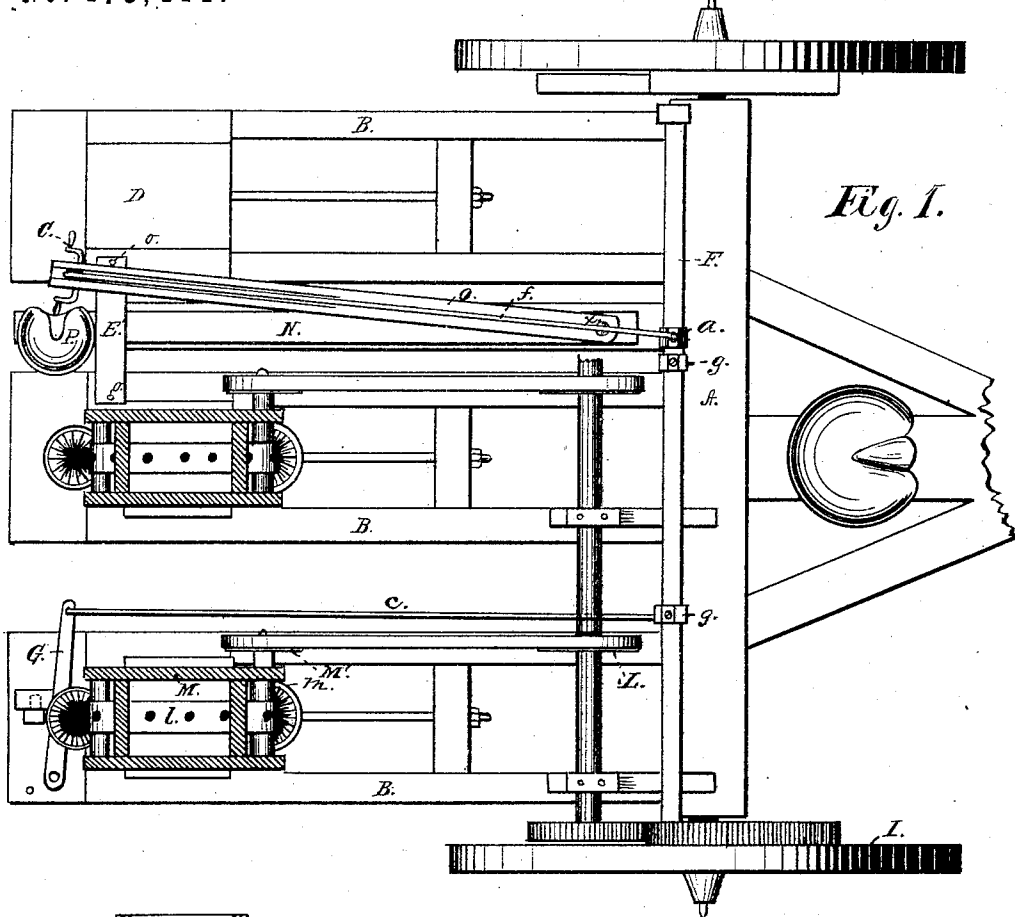


Fig. 1.

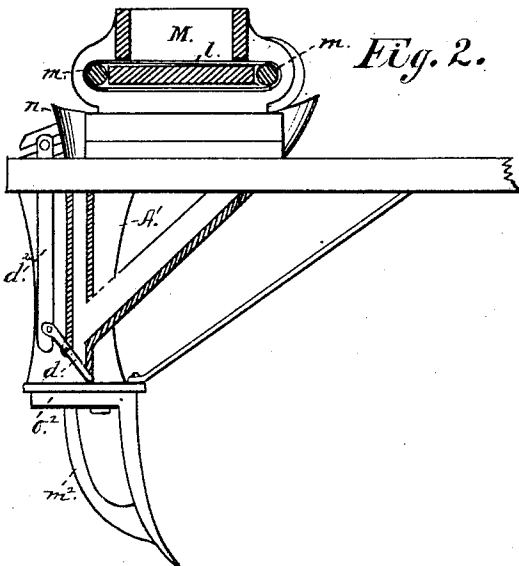


Fig. 2.

Fig. 3.



Witnesses;
Chas. M. Peck
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UNITED STATES PATENT OFFICE.

JOHN CLARRIDGE, OF MOUNT STERLING, OHIO.

IMPROVEMENT IN CORN-PLANTERS.

Specification forming part of Letters Patent No. **178,414**, dated June 6, 1876; application filed September 2, 1875.

To all whom it may concern:

Be it known that I, JOHN CLARRIDGE, of Mount Sterling, in the county of Madison and State of Ohio, have invented certain new and useful Improvements in Corn-Planters; and I hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, in which—

Figure 1 is a plan view of a corn-planter provided with my improvements. Fig. 2 is a side elevation of the rear of one of the plow-frames, showing in section some of the devices. Fig. 3 is a perspective view of an ordinary interchangeable scoring-plow.

This invention relates to that class of planters designed for use upon large farms, and having three or more plow-frames arranged parallel to each other, and suitably connected to an axle supported upon wheels, in the usual manner.

My improvements consist in the mechanism for actuating the dropping devices, in the construction of the seed-box, and the apparatus for conveying the corn therefrom, and dropping it into the standards, as will be set forth, and the invention distinctly pointed out in the claims.

To enable others skilled in the art to make and use my invention, I will thus proceed to describe it.

Hinged to the axle A, at right angles, are a set of rearwardly-projecting plow-frames, B, Fig. 1. These frames support upon their rear ends platforms D and the seed-boxes or hoppers, from which the grain is distributed. To the under side of the frames, just beneath the platforms, are bolted the standards or shanks A', to which the plows are attached. Between any two of the frames, and of an equal length, is a seat-beam, N, rigidly fastened to the axle, and inclined slightly upward, so that the operator, sitting in the swiveled seat P, will be enabled to overlook the hoppers. Upon this beam is pivoted near the axle, at *x*, a swinging beam, O, resting upon the short transverse beam E', which has at each end stop-pins *o*, to limit the movement of the beam O. This beam carries in suitable bearings at its rear end a double crank, C, to which is attached one end of a rod, *f*, whose

other end is connected to the top of an arm, *a*, secured upon a rock-shaft, F, supported in bearings directly over the rear edge of the axle, and in a line with it. This rock-shaft has pendent arms *g*, from the bottom of which rods *c* extend to levers G, which they operate, for the purpose of alternately opening and closing the valves *d*, pivoted in the bottom of the standards. M represents my improved seed-box arranged upon the frames, as described and shown, and having a slot or mortise in its bottom, in which an endless perforated belt or apron, *l*, fits and passes at each end, through openings just large enough to admit a passage over pulleys *m m*, Fig. 2.

This apron receives motion from the supporting-wheel I, by means of the pulleys L and M' and a connecting-belt. The perforations in the endless belt or apron *l* are just large enough to accommodate one grain of seed, which, as the belt travels, is carried through the opening in the end of the seed-box, and dropped through the chute *n* and shank A' into the furrow made by the plow.

I am aware that a perforated endless apron has been used in connection with a hopper, and a single chute is illustrated in Patent No. 21,273, granted August 24, 1858, to Kieper and Fox; but by this arrangement, in case of a backward motion of the belt, from accident or other cause, the grain would be carried out of the hopper at the opposite end to the chute and be wasted.

By my arrangement, in which I have a chute at each end of the apron, as shown, it makes no difference which way the apron revolves, as the grain will always be carried into the standard and deposited on the valve.

By keeping the valve in the standard constantly open, the corn may be drilled in single grains at equal distances, regulated by the distance from each other of the perforations in the belt *l*; or several grains may be collected in the standard and dropped in the check-rows by the operator, in the seat P, turning the crank C, thereby actuating the rock-shaft F and the rods *c*, which work the lever G and the valves in the bottom of the standards.

Having fully described my invention, I claim and desire to secure by Letters Patent—

1. The combination and arrangement of the pivoted crank-bearing O, rod *f*, lever or arm *a*, rock-shaft F, and the pendent arms *g*, for opening the dropping device, substantially as and for the purpose specified.

2. The combination, with the perforated apron *l* and pulleys *m*, of the hopper M, and chutes *n*, whereby the grain is deposited in the standard from either end of the apron, substantially as described.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

JOHN CLARRIDGE.

Witnesses:

CHAS. M. PECK,

WM. RITCHIE.