(No Model.) 2 Sheets—Sheet 1.

S. GRENON & C. F. LA CLAIR.

POTATO PLANTER.

No. 440,404. Patented Nov. 11, 1890.

Fig. 3.

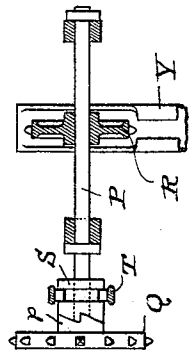


Fig. 1.

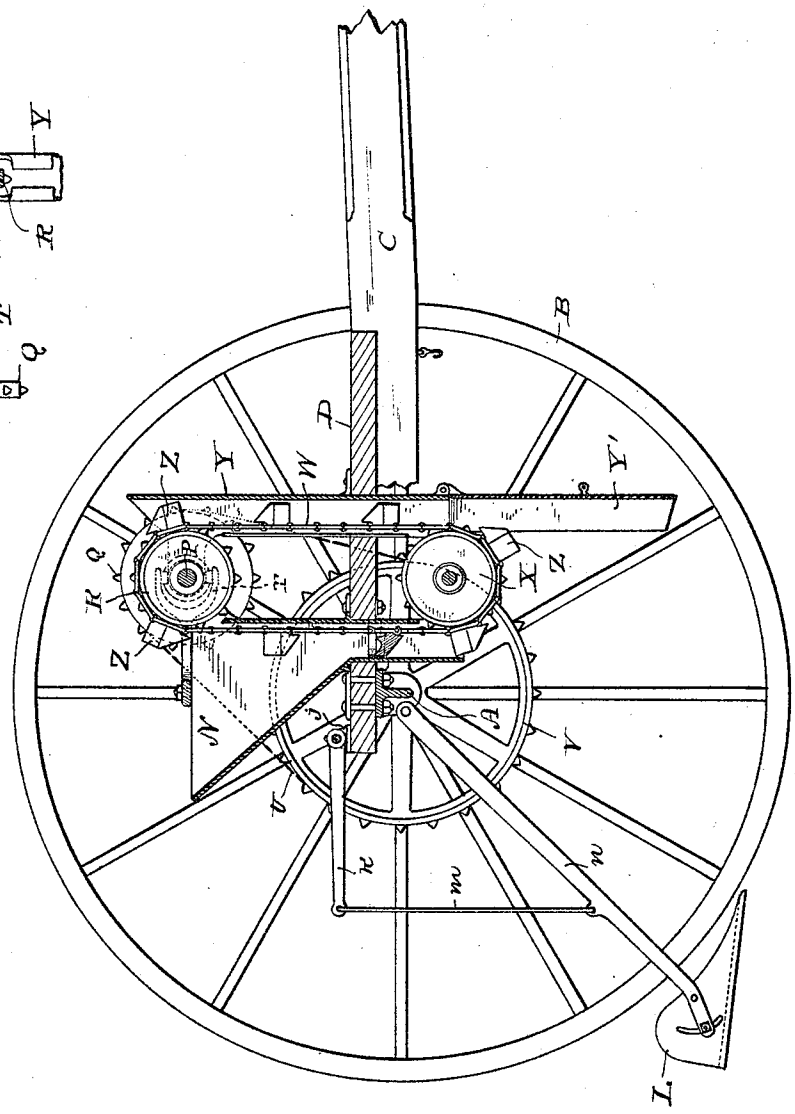
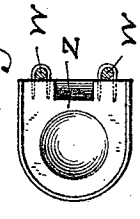


Fig. 5.



Witnesses
Geo. W. Young.
Lawson Scott

Inventors
Sam Grenon
Charles F. LaClair
By H. G. Underwood
Attorney

THE HORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

(No Model.) 2 Sheets—Sheet 2.

S. GRENON & C. F. LA CLAIR.

POTATO PLANTER.

No. 440,404. Patented Nov. 11, 1890.

Fig. 2.

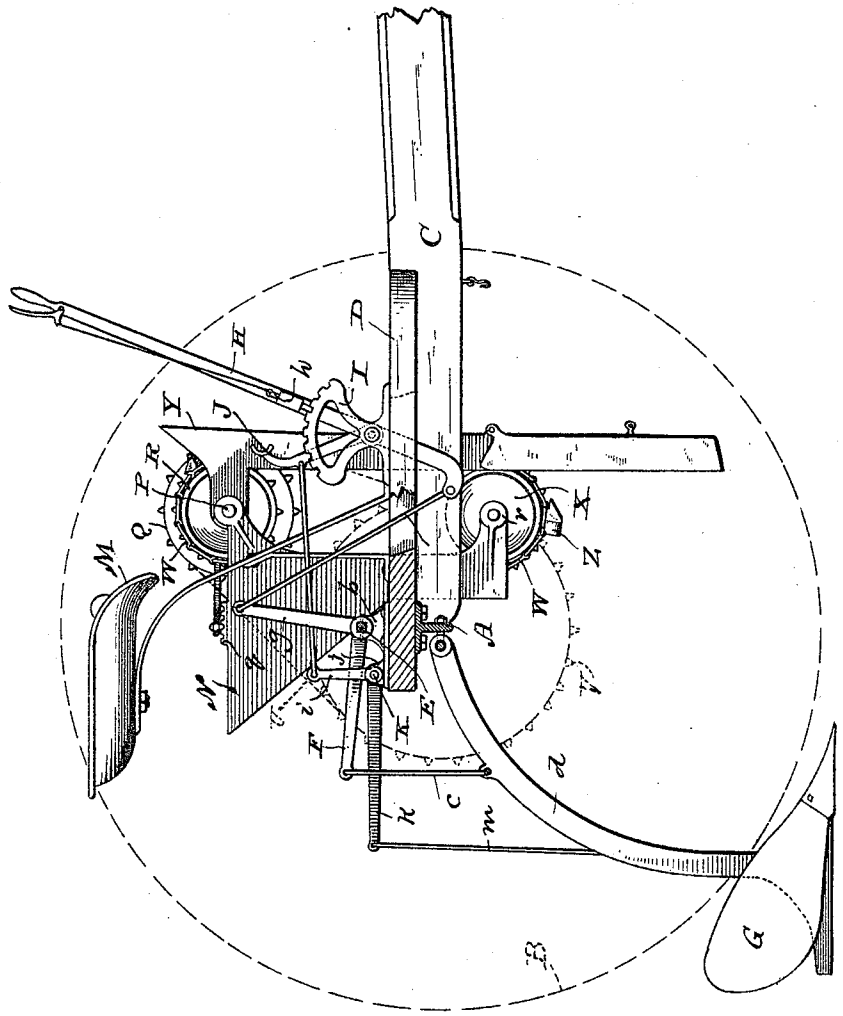
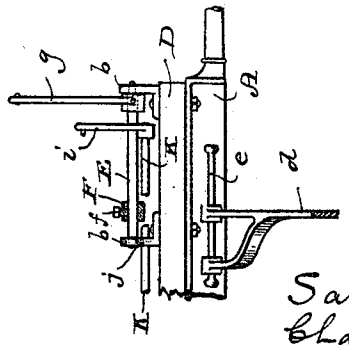


Fig. 4.



Witnesses
Geo. W. Young.
Lawson Scott

Inventors
Sam Grenon
Charles F. La Clair
By H. G. Underwood,
Attorney

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

SAM GRENON AND CHARLES F. LA CLAIR, OF HURLEY, WISCONSIN.

POTATO-PLANTER.

SPECIFICATION forming part of Letters Patent No. 440,404, dated November 11, 1890.

Application filed May 26, 1890. Serial No. 353,235. (No model.)

To all whom it may concern:

Be it known that we, SAM GRENON and CHARLES F. LA CLAIR, of Hurley, in the county of Ashland, and in the State of Wisconsin, have invented certain new and useful Improvements in Potato-Planters; and we do hereby declare that the following is a full, clear, and exact description thereof.

Our invention relates to potato-planters, being an improvement on what is shown in Patent No. 403,264, dated May 14, 1889, to Sam Grenon, assignor of one-half to Charles F. La Clair; and it consists in certain peculiarities of construction and combination of parts, to be hereinafter described with reference to the accompanying drawings and subsequently claimed.

In the drawings, Figure 1 represents a vertical longitudinal section of our machine and illustrates the hopper dropping and covering mechanism; Fig. 2, a side elevation of the machine, partly in section; Fig. 3, a detail plan view, partly in horizontal section, and illustrates a clutch and drive gear that forms part of the machine; Fig. 4, a detail rear elevation illustrating the mechanism for raising and lowering the plow and coverer, and Fig. 5 a detail plan view of one of a series of buckets that are secured to a link-belt and carry the potatoes from the hopper into a delivery-spout.

Referring by letter to the drawings, A represents the axle; B, the wheels; C, the tougue, and D the platform that constitutes the carriage of our machine. The platform is provided with bearings *b* for a transverse shaft E, and laterally adjustable on this shaft is an arm F, connected by a link *c* with the standard *d* of a plow G, said standard being pivotally and laterally adjustable on a bracket *e*, that extends from the rear side of the axle A, and to lock the plow in its laterally-adjusted position we provide the arm F with a set-screw *f* for impingement against said transverse shaft. By having the plow laterally adjustable the space between furrows may be regulated at the will of the operator. The transverse shaft E is provided with another arm *g*, that is linked to the lower end of a hand-lever H, the latter being pivoted to a standard I on the platform D and provided with a latch *h* for engagement with the curved and serrated upper edge of said standard to hold the plow in its raised or lowered position. A foot-lever J is also pivoted to the standard I and linked to an arm *i*, fast on a rod K, the latter being arranged in bearings *j* on the platform D and provided with another arm *k*, that is connected by means of a link *m* with the standard *n* of a pivotally-adjustable coverer L, said standard being pivotally connected to the axle A, so as to be readily raised up by pressure on the foot-lever, the latter and the hand-lever H being adjacent to a driver's seat M, as illustrated in Fig. 2.

Secured to the platform D is a hopper N, and arranged in forwardly-extended bearings at the upper end of the hopper is a shaft P, carrying sprocket-wheels Q R, the former one of these wheels being normally loose on the shaft and provided with a clutch-hub *p* for engagement with a clutch S, splined on said shaft and controlled by a cranked spanner T, the latter being pivotally connected to one edge of the hopper and arranged to lock in a rack *q*, secured to the opposite edge of said hopper.

The sprocket-wheel Q is connected by means of a link-belt U with another sprocket-wheel V, fast to one of the wheels B of the machine, and the sprocket-wheel R, fast on the shaft P, is connected by a link-belt W with a like wheel X, having the axle thereof arranged in forwardly-extended bearings *r* at the lower end of the hopper. The link-belt W travels within the hopper and a delivery-spout Y, the latter being adjacent to the front of said hopper and provided at its lower end with a hinged extension Y', that is swung up out of the way when the machine is on the road.

Secured to the links of the belt W at suitable intervals are buckets Z, that carry the potatoes from the hopper into the delivery-spout Y, from whence they are dropped into the furrows, and finally covered, the distance apart of the potatoes thus planted being proportionate to the number of said buckets and the speed at which they are traveled.

Like in the patent above named, the plow and coverer are so arranged that while the machine is planting and covering one furrow another furrow is being made.

Having thus described our invention, what

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

1. In a potato-planter, the combination of a carriage, a hopper mounted on the carriage and provided with upper and lower forwardly-extended bearings, a shaft arranged in the upper bearings, a clutch and sprocket gear connecting the shaft and a wheel of the carriage, the sprocket-wheel R, fast on said shaft, another sprocket-wheel X, having its axle arranged in the lower bearings on the hopper, a delivery-spout secured to said carriage in front of the sprocket-wheels R X, and an endless carrier arranged on the latter wheels to travel in said hopper and delivery-trough, substantially as set forth.

2. In a potato-planter, the combination of a carriage, a hopper mounted on the carriage and provided with upper and lower forwardly-extended bearings, a power-driven shaft arranged in the upper bearings, a sprocket-wheel fast on the shaft, another sprocket-wheel having its axle arranged in the lower bearings on the hopper, a delivery-spout secured to the carriage in front of the sprocket-wheels and provided at its lower end with a hinged extension, and an endless carrier arranged on said wheels to travel in said hopper and delivery-spout, substantially as set forth.

3. In a potato-planter, the combination of a carriage, a hopper mounted thereon and provided with upper and lower forwardly-extended bearings, a power-driven shaft arranged in the upper bearings, a sprocket-wheel fast on the shaft, another sprocket-wheel having its axle arranged in the lower bearings on the hopper, a delivery-spout secured to the carriage in front of the sprocket-wheels, an endless carrier arranged on said wheels to travel in said hopper and delivery-spout, and a coverer arranged in the rear of said spout, substantially as set forth.

4. In a potato-planter, the combination of a carriage, a hopper and delivery-spout secured to the carriage, an endless carrier traveling in the hopper and delivery-spout, a coverer arranged in rear of said delivery-spout, and a laterally-adjustable plow connected to the carriage at that side of the machine opposite the coverer, substantially as set forth.

5. In a potato-planter, the combination of a carriage, a hopper and delivery-spout secured to the carriage, an endless carrier traveling in the hopper and delivery-spout, a coverer arranged to follow said delivery-spout, and a pivotally and laterally adjustable plow connected to the carriage at that side of the machine opposite the coverer, substantially as set forth.

6. In a potato-planter, the combination of a carriage, a hopper mounted thereon and provided with upper and lower forwardly-extended bearings, the shaft P, arranged in the upper bearings, the sprocket-wheels Q and R, fast and loose on the shaft, a similar wheel fast to a wheel of the carriage, a link-belt connecting the same with the one Q, clutch-teeth on the hub of the latter wheel, the clutch S, splined on said shaft in opposition to said clutch-teeth, a cranked spanner pivoted to the hopper and engaging said clutch, another sprocket-wheel X, having its axle arranged in the lower bearings on said hopper, an endless carrier arranged on the wheels R X, and a delivery-spout arranged in front of the latter wheels to inclose the carrier, substantially as set forth.

7. In a potato-planter, the combination of a carriage, a hopper and delivery-spout secured thereto, an endless carrier traveling in the hopper and delivery-spout, the bracket *e* on the carriage-axle, the plow-beam *d*, laterally adjustable on the bracket, the lever-controlled shaft E, mounted on the carriage, the arm F, laterally adjustable on the shaft, and a link connecting said arm and plow-beam, substantially as set forth.

8. In a potato-planter, the combination of a carriage, a hopper and delivery-spout secured thereto, an endless carrier traveling in the hopper, the bracket *e* on the carriage-axle, the plow-beam *d*, laterally adjustable on the bracket, the lever-controlled shaft E, mounted on the carriage and linked to said arm, the lever-controlled rod K, also mounted on the carriage and provided with the arm *k*, a pivotal standard, a coverer connected to the latter, and a link connecting the standard and said arm on the lever-controlled rod, substantially as set forth.

In testimony that we claim the foregoing we have hereunto set our hands, at Hurley, in the county of Ashland and State of Wisconsin, in the presence of two witnesses.

SAM GRENON.
CHARLES F. LA CLAIR.

Witnesses:
CHAS. W. CLEVELAND,
JOE ALLIE.