

R. JONES & J. STEWART.
Potato Planter.

No. 228,902.

Patented June 15, 1880.

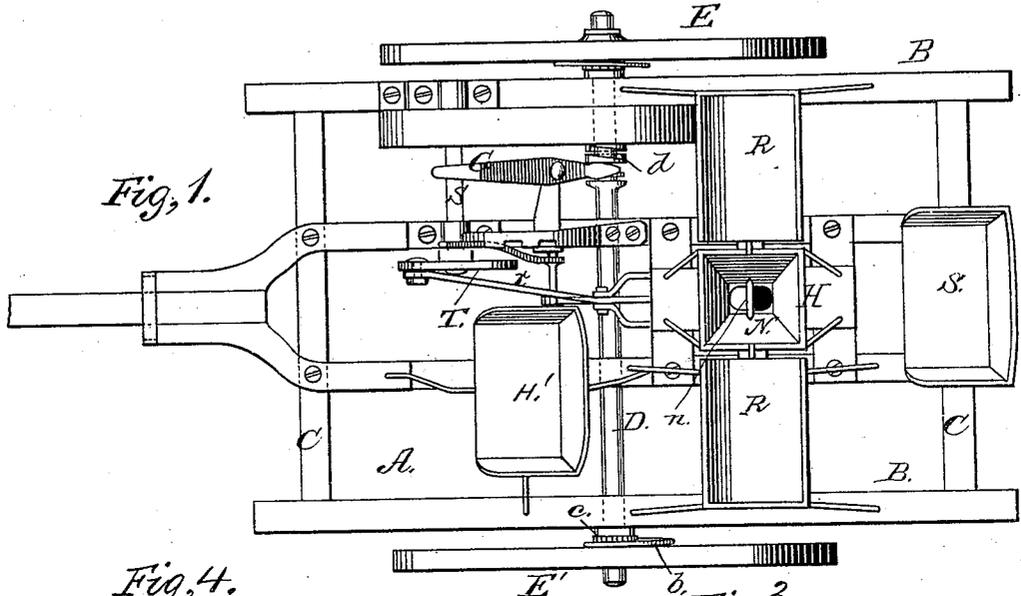


Fig. 4.

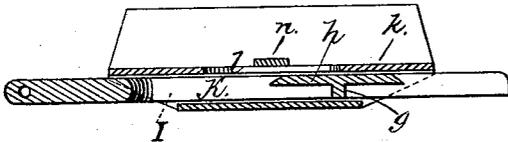


Fig. 3.

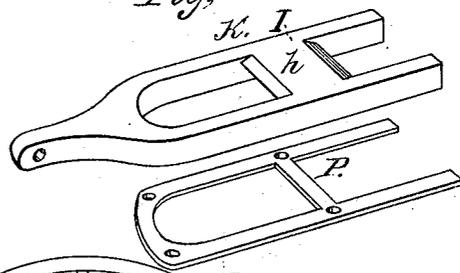


Fig. 5.

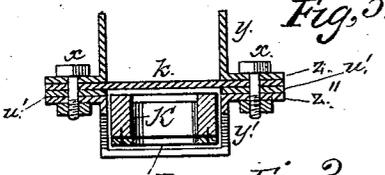


Fig. 2.

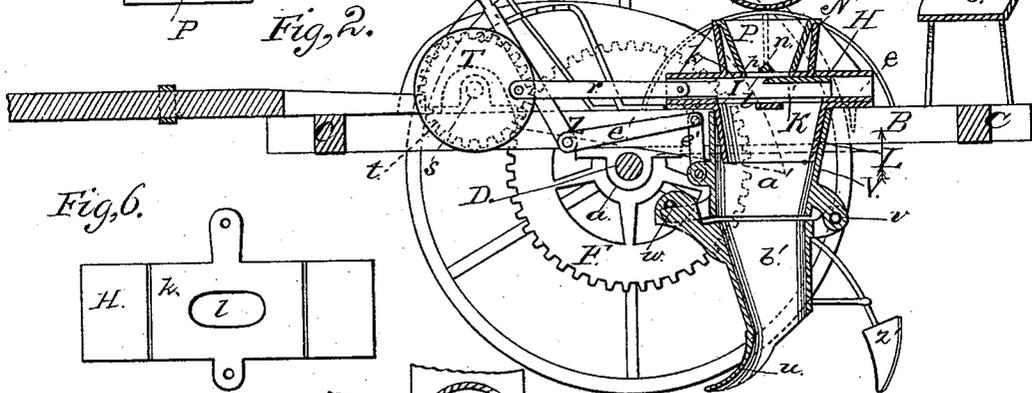


Fig. 6.

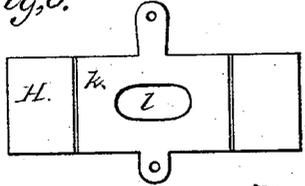
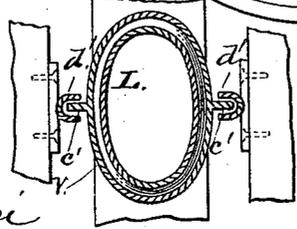


Fig. 7.



WITNESSES
Villette Anderson.
Francis J. Masi

INVENTORS
Rodman Jones
James Stewart
By E. W. Anderson
his ATTORNEY

UNITED STATES PATENT OFFICE.

RODMAN JONES AND JAMES STEWART, OF SCHOOLEY'S STATION, OHIO;
SAID STEWART ASSIGNOR TO HENRY CLIMER, OF SAME PLACE.

POTATO-PLANTER.

SPECIFICATION forming part of Letters Patent No. 228,902, dated June 15, 1880.

Application filed February 27, 1880.

To all whom it may concern:

Be it known that we, RODMAN JONES and JAMES STEWART, of Schooley's Station, in the county of Ross and State of Ohio, have invented a new and valuable Improvement in Potato-Planters; and we 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 representation of a top view of my improved planter. Fig. 2 is a longitudinal vertical section thereof; and Figs. 3, 4, 5, 6, and 7 are details.

This invention has relation to potato-planters; and it consists, mainly, in the construction and novel arrangement of the feed-box and cutter-plate slides; in the double-acting reciprocating knife and the holding-bar in the feed-box; and in the adjustable spout having its lower part hinged, and carrying the furrowing-plow and coverers; and, finally, in the combination, with these parts, of the operating mechanism constituting a wheel potato-planter, all as hereinafter fully shown and described.

In the accompanying drawings, the letter A designates the frame of the planter, which is usually constructed with longitudinal bars B and cross-bars C, and supported by bearings *a* on a rotating shaft, D, carrying the wheels E and E', which rotate on the spindle ends of said shaft, and are provided with spring-pawls *b*, which engage with the ratchet-collars *c*, which are rigidly connected to the shaft, so that as the wheels turn in advancing the shaft will be rotated, while when the wheels turn to the rear the shaft will not be rotated.

F indicates the main driving-gear, which is provided with a clutch, *d*, on the shaft, so that it may be disengaged and turn loosely on the shaft when the knife is not required to be in operation, a hand-lever, G, being provided for adjusting the clutch.

H indicates the feed and cutting box, which is made in rectangular tubular form below, to provide a way, *e*, for the reciprocating

knife K, whereof the frame I is made in H form, having a transverse bar, *g*, under the middle of the cutter *h*, which is double acting, cutting on the rear as well as on the forward stroke. Below the way *e* is a downward chute, L, through which the cut pieces of potato fall into the spout. Above the way *e* is formed the hopper or feed-box N, having as its bottom a removable slotted cutter-plate, *k*, which also, when in position, forms the top of the way *e*, in which the knife moves. This plate is provided with a rounded longitudinally-elongated slot, *l*, through which the potatoes are fed to the knife on either side of a cross-bar, *n*, which is secured in the feed-box and extends across the middle of the slot *l*, this bar serving to hold the potatoes in proper place until they are entirely cut in pieces by the knife below and dropped, the transverse bar *g* under the knife serving to pull the pieces off under the knife and into the spout.

P represents a metallic lining having tapering walls, sloping together to a bottom opening, *p*, which is designed to be of similar form and dimensions to the slot *l* of the bottom slide-plate, *k*. This lining is notched at each side to receive the cross-bar *n*, and serves to facilitate the feeding to the slot of the cutter-plate. Several of these cutter-plates, having slots of different dimensions for potatoes of different sizes, are designed to be furnished with each machine, and different linings are to be furnished to correspond with the cutter-plates.

On each side of the feed-box is an open-ended trough, R, supported with its mouth about level with the upper edge of the feed-box, and designed to enable the feeder, who is seated at S in rear of the cutting-box, to feed easily with both hands.

The knife is operated by a pitman, *r*, which is connected to a crank-wheel, T, on one end of a short shaft, *s*, the other end of which carries a pinion, *t*, which engages with the main driving-gear.

V represents the spout, which consists of an upper section, *a'*, and a lower section, *b'*, which are hinged together in rear at *v*, and connected in front by means of a catch, *w*. The lower section, *b'*, is provided in front with

the furrow-plow or opening-point *u*, and in rear with the forked covering-shovels *z'*, which are connected to this section by arms and braces, and are arranged in rear of said spout, at a little distance therefrom, and somewhat turned toward each other, as shown in the drawings. The upper section, *a'*, of the spout is provided with side guides, *c'*, which work in vertical slideways *d'*, attached to the frame on each side thereof, and by means of a knee-lever, *Z*, arranged in suitable bearings on the frame and connected by a link, *e'*, to this section, the entire spout may be adjusted up or down, according to requirement in planting.

The upper portion of the upper section is made large enough to receive and slide freely on the downward chute-guide *L* of the feed-box.

The lower section, when the planting devices are not in use, can be thrown up to the rear on its hinge out of the way.

The driver's seat is indicated by the letter *H'*.

In order to cut the potatoes in slices of different thicknesses, and thus plant a greater quantity to the acre, the box *H* is made in two sections, *y y'*, having edge flanges *z z''* and coupling-bolts *x*. By interposing washers *w'* between the flanges *z z''* and reapplying the bolts *x* the depth of the box is correspondingly increased, and the knife being raised by the application to its under side of the correspondingly-shaped plate *P*, the thickness of the slices cut is necessarily increased by the thickness of the washers. These latter will go in several sets of various thicknesses with each machine, and there will also be an equal number of plates *P* of corresponding thickness.

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

1. The upper section, *a'*, of the spout, provided with side guides, *c'*, working in vertical slideways *d'*, attached to the frame on each side thereof, and operated by mechanism attached to said frame, whereby the spout may be adjusted up or down, as shown and described.

2. The combination, with the spout *V*, having slide-ribs *c'* passed over the chute *L*, of the ways *d'*, secured to the planter-frame, and the knee-lever *Z*, arranged in suitable bearings on the frame and connected by link *e'*, whereby the spout is raised up or down, the upper section, *a'*, of the spout sliding over the chute *L*, as shown and described.

3. In a potato-planter, the combination, with the wheels, shaft, and driving-gear, of the reciprocating double-acting knife *K*, having the under transverse bar, *g*, the slideway *e*, the chute *L*, secured thereto, and the vertical adjustable spout *V*, having the upper section, *a'*, working up and down in said slideways, and the hinged lower section, *b'*, carrying the opening-plow *u* and the forked coverers *z'*, as shown and described.

In testimony that we claim the above we have hereunto subscribed our names in the presence of two witnesses.

RODMAN JONES.
JAMES STEWART.

Witnesses:

SAMUEL B. ERSKINE,
GEORGE W. ERSKINE.