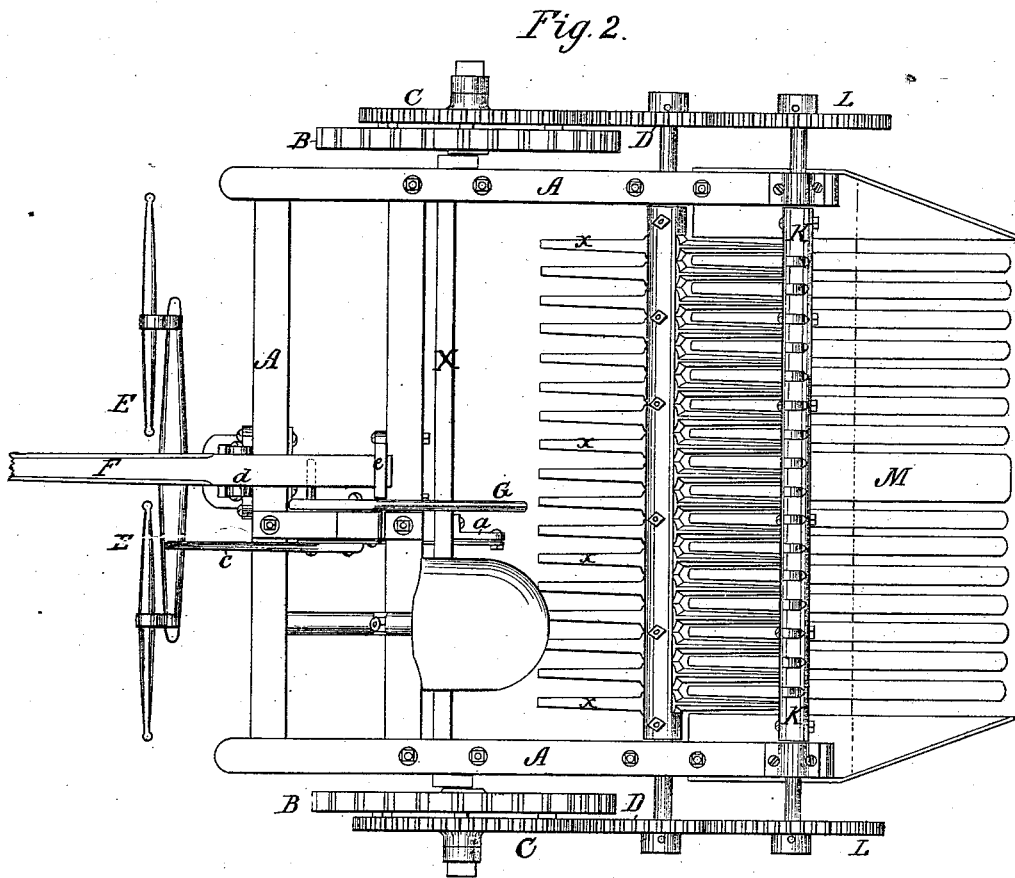
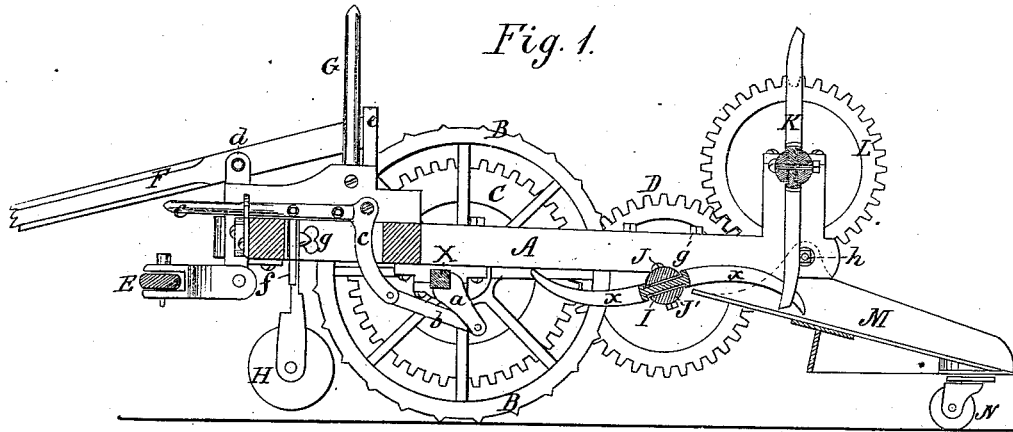


H. W. KING.
Potato-Digger.

No. 161,520.

Patented March 30, 1875.



WITNESSES:
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Chas. A. Pettit

INVENTOR:
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UNITED STATES PATENT OFFICE.

HENRY W. KING, OF CANAAN, NEW YORK.

IMPROVEMENT IN POTATO-DIGGERS.

Specification forming part of Letters Patent No. 161,520, dated March 30, 1875; application filed March 10, 1875.

To all whom it may concern:

Be it known that I, HENRY W. KING, of Canaan, in the county of Columbia and State of New York, have invented a new and Improved Combined Potato-Digger and Cultivator; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing forming a part of this specification, in which—

Figure 1 is a sectional side elevation, and Fig. 2 a plan view.

This invention relates to certain improvements in potato-diggers; and it consists in the combination of a series of S-shaped revolving digging-fingers with a second series of clearing-fingers and a pivoted inclined shaker-table consisting of slats, the said digging-fingers lifting the potatoes and dirt from the hill, and the clearing-fingers passing between the diggers and transferring the potatoes and disintegrated clods to the inclined table, which, being agitated by the unevenness of the ground, allows the dirt to pass through the slats and the potatoes to be delivered at the rear. It also consists in the combination of a crank-axle bearing a gear-wheel with a connecting-link and lever for throwing the operating mechanism out of gear.

In the drawing, A represents the frame-work, resting upon wheels B B, which are journaled upon a crank-axle, X, and carry cog-wheels C, that mesh with wheels D. Said crank-axle is provided with an extension, *a*, a link, *b*, and an elbow-lever, *c*, by means of which the connection between the driving-wheels and the wheels D is broken, and the digging devices lifted for continued transportation and turning corners. E is the draft attachment for the horses, and F is the tongue, which is pivoted at *d*, and free to move at its rear end in a yoke, *e*. G is a second lever, pivoted to the frame, and provided with an arm, which raises the free end of the tongue in the yoke *e* for regulating the depth of the digging devices in the ground and lifting the same over obstructions, the weight of the frame-work being so balanced upon the driving-wheels as to readily admit, by means of these devices, of the elevation of the front and the depression of the rear of the machine, and vice versa. H is a wheel under the

front part of the frame-work, contained within a standard, *f*, which is vertically adjustable by means of a slot and a binding-screw, *g*. I is the digger, revolving in the frame-work through the wheels D. Said digger consists of a series of separate and independent fingers, *x*, of an S-shape, and having flat sides in the direction of their revolution. These fingers have shoulders *g* at the middle, by means of which they are firmly held between the two pieces J J', that constitute the shaft. One of these pieces, J, is made readily detachable, so that it may be taken off and a new finger substituted for a broken one. K is the clearer, which is journaled in supports a little above and to the rear of the digger, and is revolved synchronously with it by means of the wheels L. Said clearer is, with respect to construction, almost identical with the digger having fingers attached to a shaft in the same way, and of the same general shape, but nearly straight. M is the shaker-table, pivoted to the frame-work at *h*, and constructed of slats, upon which the potatoes are raked by the clearer from the digger. The said table is inclined rearwardly, and is agitated by the passage of a supporting-roller, N, over the rough ground, the roller being made with a swivel-joint to facilitate turning.

The operation of this machine is as follows: The machine being in position, the crank-axle is shifted and the digger let down in such position as to take the row or hill, and the implement is driven down the hills or across the rows, the hills or rows being of such a distance apart as to allow the digger to enter the same at every semi-revolution. Now, as the curved ends of the S-shape digger-fingers lift a hill or portion of a row of potatoes, the clearer-fingers, registering in their revolution with the spaces between the digging-fingers, strike the dirt-clods and potatoes just about the time they are being delivered upon the table M, and with a positive motion break up and disintegrate the clods, and deposit both the dirt and potatoes upon the table, when the dirt falls through the slats from the agitation of the table, and the potatoes are delivered over the inclined end of the table in the rear.

Having thus described my invention, what I claim as new is—

1. The revolving digger I, consisting of the

S-shaped fingers *x*, having shoulders *g*, the section *J'*, and the detachable section *J*, all combined and arranged substantially as and for the purpose described.

2. The combination of the digger *I* with the clearer *K* and the table *M*, substantially as and for the purpose described.

3. The combination, with the wheels *D* and

the digging devices, of the wheels *B B*, carrying the cog-wheels *C*, the crank-axle *X*, and the devices for shifting the same, substantially as and for the purpose described.

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Witnesses:

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