

J. W. Corwin

Patato Tigger.

No. 109389.

Patented Nov. 22, 1870.

Fig. 1

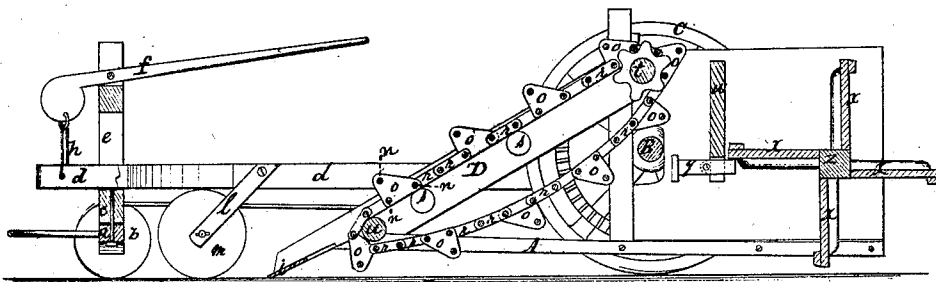
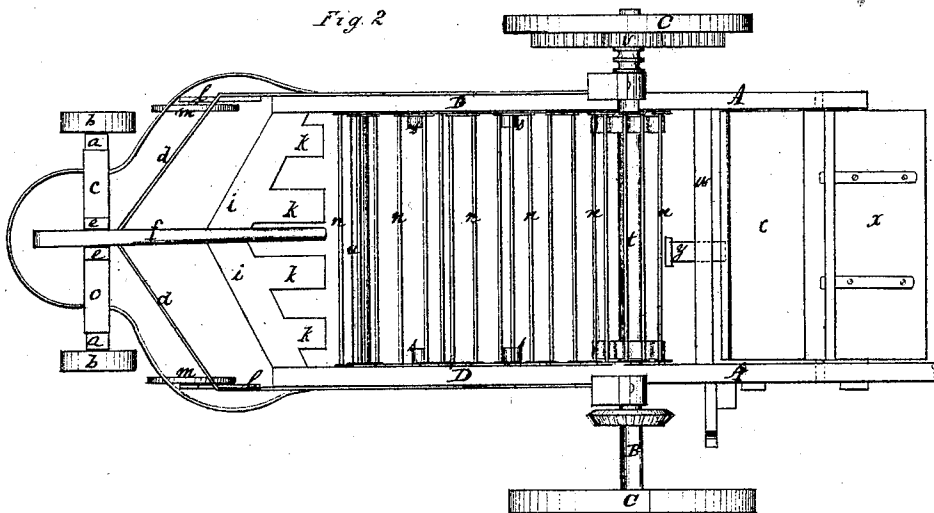


Fig. 2



Witnesses.
M. E. Clinton,
James Campbell

John W. Corwin, Inventor.
by Geo. E. Brown,
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United States Patent Office.

JOHN W. CORWIN, OF LEBANON, OHIO.

Letters Patent No. 109,389, dated November 22, 1870:

IMPROVEMENT IN POTATO-DIGGERS.

The Schedule referred to in these Letters Patent and making part of the same.

I, JOHN W. CORWIN, of Lebanon, Warren county, Ohio, have invented certain Improvements in Potato-Diggers, of which the following is a specification.

Figure 1 is a sectional elevation, and

Figure 2, a plan view.

This invention relates to a machine whose frame-work is connected at its front end by rigid bars, with a bolster mounted on a swinging axle; the forward extremities of the said bars being combined with a lever, by means of which the frame-work of the machine may be raised or lowered; the colters which run at the sides, and the share, which runs beneath the row of potato-hills, being rigidly secured to said bars.

In the drawing—

A A are the frame-work of the machine.

B is the axle; and

C C, the wheels on which the frame-work is supported.

a is an axle in front of the frame-work A.

b b are the wheels in which the axle a is supported.

c is a bolster, to and beneath which the axle a is loosely jointed by a king-bolt.

The axle is at liberty to swing freely, but the bolster is rigidly attached to the frame-work A by iron bars d d, which pass in contact between standards e e, that are stepped in the bolster, which bars diverge from each other at a point immediately in rear of the standards, and pass, one to one side of the frame-work A, and the other to the other side, and are secured to said frame-work by screws.

A lever, f, is pivoted between the standards e, and its shorter arm connected with the bars d at a point in front of the standards by a link, h.

By depressing the lever f, the front part of the frame-work A can be raised through the medium of the bars d.

The front side of the frame-work A is inclined.

To its lower front corner is attached the share i that runs under and unearths the potatoes.

The depth to which the share runs is regulated by the lever f.

The share is constructed with fingers k, projecting in the same plane from its upper rear edge.

The fingers k serve to conduct the potatoes to the carrier above.

Arms l, attached to the bars d, and projecting downward therefrom, bear, at their lower ends revolving colters m, which are placed just outside and in front of the share, and have for their office to cut through weeds, potato-tops, and the like, so as to prevent them from encumbering the machine.

The carrier is composed of transverse rods n fastened at their ends in plates o and r, which are connected in sufficient numbers to form endless chains, one at each side of the frame-work, supported on rollers s, which extend inward from the inclined side pieces D D.

The plates o are triangular in shape, so that one of the three rods n, whose ends are secured in each plate, is always lifted above the other two, when running upward in the carrier, these elevated rods forming ribs across the carrier, by which the latter is enabled to take hold of the mass of vines, earth, &c., presented to it by the share i, and bear the same onward.

There are two of the plates r between each pair of triangular plates o, the rods n serving as the pivots which connect the plates.

The carrier passes over a shaft, t, mounted crosswise of the frame-work at the upper ends of the inclined pieces D and bearing fluted rollers, which draw against the bars n.

A plain shaft, u, sustains the carrier at its lower end.

The upper shaft t receives rotation from a pinion, v, of its own engaging with the annular-toothed rim of the master-wheel C.

The earth and vines fall through the spaces between the rods n as they ascend, but the potatoes remain in the carrier until they arrive at the upper end, when they are dumped into a receptacle formed by the vertical partition w, placed crosswise between the sides of the frame-work A, in connection with the radial wings x that project from a shaft, z, parallel with said partition.

A weighted pin, y, passes horizontally through the partition w, being supported upon a pivot on the opposite side of the partition from the blades, and serving as a stop to each one of the latter in turn, keeping it horizontal, so that it, with the vertical wing next in rear, and the partition forms a box, into which the potatoes fall from the carrier, until the weight in the box overbalances the weight on the end of the pin y, when the blades whirl around and let the load of potatoes fall upon the ground in a heap.

The pin y returns to its horizontal position in time to stop the next wing, and thus provide a fresh receptacle for the potatoes.

By placing an ascertained weight on the pin y, the potatoes may be weighed in this manner at the same time that they are measured.

A second carrier might be adjusted to the rear end of the machine, to receive the potatoes from the first carrier, and conduct them to one side, to a wagon or other receptacle.

I claim as my invention—

The arrangement of the bars d, bolster c, standards e, lever f, arms l, revolving colter m, and share i, as specified.

JOHN W. CORWIN.

Witnesses:

WM. H. ROCKHILL,
LOT WRIGHT.