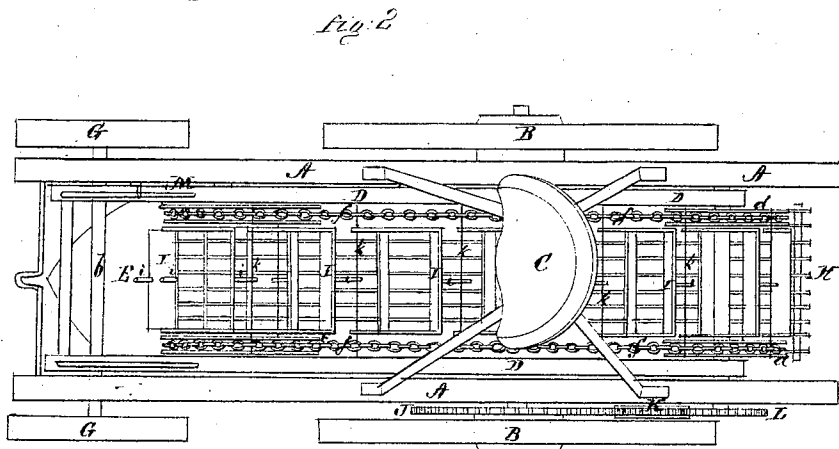
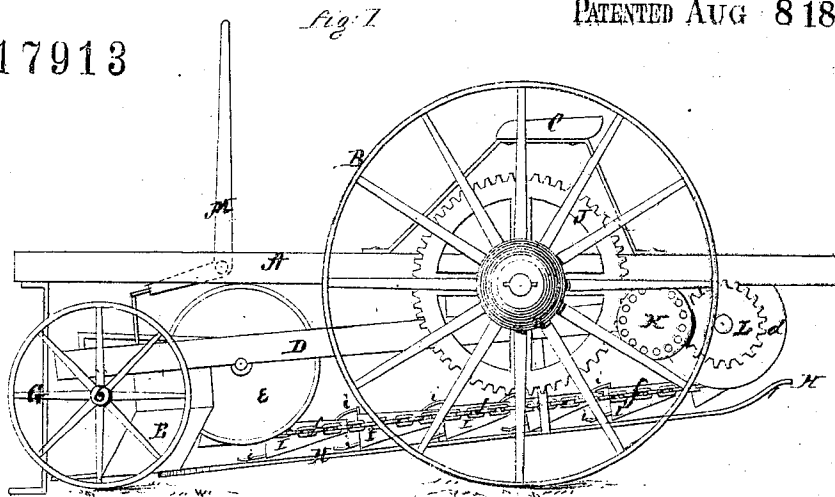


Henry J Moore Potato Digger

PATENTED AUG 8 1871

117913



Witnesses
 C. L. Everett,
 A. R. Marr

Inventor
 Henry J. Moore
 per
 Alexander Murray
 atty.

UNITED STATES PATENT OFFICE.

HENRY J. MOORE, OF TOPEKA, KANSAS.

IMPROVEMENT IN POTATO-DIGGERS.

Specification forming part of Letters Patent No. 117,913, dated August 8, 1871.

To all whom it may concern:

Be it known that I, HENRY J. MOORE, of Topeka, in the county of Shawnee and in the State of Kansas, have invented certain new and useful Improvements in Potato-Diggers; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon making a part of this specification.

The nature of my invention consists in the construction and arrangement of a potato-digger, as will be hereinafter fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a side elevation, and Fig. 2 is a plan view of my machine.

A A represent two parallel beams, through which passes an axle having a wheel, B, at each end, and said beams support the driver's seat C. At the front ends the beams A A are connected by a rod or other suitable means, and a tongue is to be attached to them in any convenient manner. Immediately in front of the axle, on the inner side of each of the beams A, is attached a plate, *a*, which extends downward a suitable distance, and has a beam, D, pivoted to it. Said beams, being connected at or near their front ends, form a swinging frame, to which the scoop, screen, and elevator are attached. The scoop E is placed under the front end of the swinging frame and suitably connected to the same. Above the scoop, in adjustable bearings, is placed a shaft, *b*, having at each end a wheel, G, which regulates the depth at which the scoop E is to work. From the rear end of the scoop E extends a screen, H, composed of wire rods suitably connected with each other, and also connected with and suspended from the swinging frame D. The screen H is inclined upward toward the rear, and attached at its rear end to a receiving-box connected in any suitable manner with the main frame of the machine. As this receiving-box may be constructed and attached in any desired manner, I have not deemed it necessary to represent the same in the drawing. At the rear end of the swinging frame D, in suitable bearings, is

placed a cross-shaft, having at each end, within the frame, a pulley, *d*, grooved around its periphery, and near the front end of the frame is another cross-shaft with similar grooved pulleys or wheels *e e*. The wheels *e e*, or rather the diameter of said wheels is so much larger than that of the wheels *d d* that endless chains *f f*, placed around and connecting said pulleys, will be in an inclined position on the under side, so as to correspond with and follow close to the inclined screen H. The two endless chains *f f* are connected by rods *k k*, placed at suitable and equal distances apart, and on each rod is hinged a bucket, I. Each bucket I is in the center, on its outer side, provided with two curved pins or hooks, *i i*, one above and the other below the rod *k* of the next bucket, allowing the bucket to vibrate up and down only for a certain distance. On the inner side of one of the wheels B is attached a cog-wheel, J, which gears with a pinion, K, on the side of the swinging frame D, and this pinion gears with another cog-wheel or pinion, L, upon the end of the shaft which carries the two pulleys *d d*. By this means motion is communicated to the endless chains and buckets. A lever, M, pivoted to the inner side of the main frame, is, by a rod or chain, connected with the front end of the swinging frame D, as shown in Fig. 1.

My machine, it will be seen, is only two-wheeled, which is a great advantage over any three or four-wheeled machines for convenience in turning and moving about.

The scoop, screen, and elevator with forward wheels, being secured in the frame D, which swings on pivots, are elevated by the lever M so as to clear the ground from eight inches to one foot, said operation at the same time disconnecting the cog-gearing. The inclination of the scoop E is so slight that free and easy entrance in any kind of soil is insured. The bucket-elevator, carrying the potatoes along the screen to the box at the rear, constantly clears the scoop and prevents choking. The point of the scoop, being situated under the axle of and supported by the wheels G G, will take a regular depth when working in uneven ground. The necessary depth is also gauged by the adjustability of the wheels. The elevating-buckets I I are so constructed and attached that, when in contact with

stones or potatoes, they will give, and therefore not crush the potato nor break the machine by the force of the stone.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The hinged or pivoted buckets I I, provided with curved rods or hooks *i i*, substantially as and for the purposes herein set forth.

2. In combination with the buckets I I and curved rods or hooks *i i*, the rods *k k* and endless chains *f f* passing around the grooved wheels or pulleys *d e* of unequal diameter, all substantially as and for the purposes herein set forth.

3. The arrangement of the main frame A supported upon the two wheels B B, the swinging frame D, scoop E, screen H, elevator *f* I, and adjustable wheels G G, all constructed substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 8th day of March, 1869.

HENRY J. MOORE.

Witnesses:

ORRIN T. WELCH,
D. T. NICHOLS.