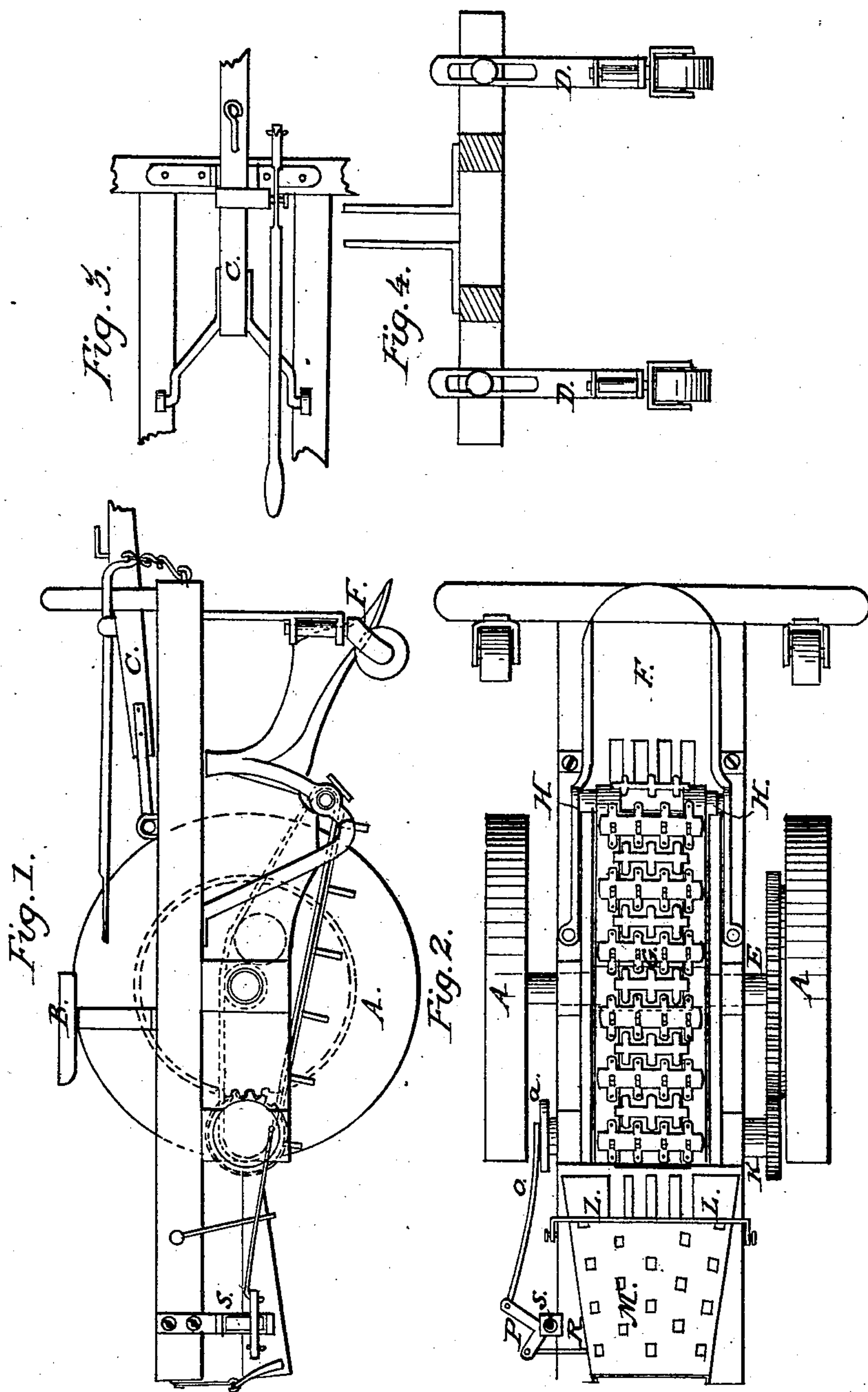


J. W. BLODGETT.

Potato Digger.

No. 79,439.

Patented June 30, 1868.



WITNESSES:

J. C. Smith

A. S. Hoffman

INVENTOR:

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United States Patent Office.

JOHN W. BLODGETT, OF THREE RIVERS, MICHIGAN.

Letters Patent No. 79,439, dated June 30, 1868.

IMPROVEMENT IN POTATO-DIGGER.

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

TO ALL WHOM IT MAY CONCERN:

Be it known that I, JOHN W. BLODGETT, of Three Rivers, in the county of St. Joseph, and State of Michigan, have invented a new and valuable Improvement in Potato-Diggers; and I 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, in which—

Figure 1 is a side view, with the front wheel removed.

Figure 2 is an inverted plan view, and

Figures 3 and 4 are details.

The object of my invention is to construct a potato-digger that shall more easily remove potatoes from the hills, and separate them from the soil, than any similar device heretofore known.

To this end I construct a machine as represented on the drawings, of which letters A are the wheels, letter B is the driver's seat, letter C is the neap. Letters D are upright standards, with casters at their lower ends, and made adjustable to the forward cross-bar of the carriage-frame by set-screws and slats, as shown on fig. 4.

The letter E represents a cog-wheel, adjusted to the inside of the carriage-wheel, as shown on fig. 2.

Letter F is the shovel, made in the usual form of shovels adapted to such purposes, except the rear end thereof is slotted, to allow space and room for the movement therein of the spikes on the endless belt, herein-after described.

The letter G is an endless belt, constructed with a strip of leather, or other suitable material, on each side thereof, which strips are united by cross-bars of iron plates, to every alternate one of which I attach iron pins or spikes, about two inches, more or less, in length, and at the relative distances from each other set forth in the drawings, fig. 2. These cross-bar plates are constructed in the form shown in the drawings, with alternate slats and arms, so as to form a continuous platform, with openings therein, to allow the passage downward of the earth taken up with the potatoes. The endless belt G is moved around two rollers, marked respectively H and K. The roller H is adjusted in bearings formed in strips of iron, that extend downwards from the frame of the carriage in the form of a V inverted, and is moved by the endless belt.

The roller K has a cog-wheel on one end thereof, fitted to mesh in the cogs of cog-wheel E. On the opposite end of this roller I affix a disk, with an opening therein, near its periphery, in which the arm O is secured, as hereinafter mentioned, and which serves as a cam, to provide the vibratory movement of the sieves M, as also described herein.

The letter M is a sieve, perforated in the manner shown on fig. 2. Its rear end is attached to the side frame of the carriage by swinging arms, and its front end is supported by a swinging bar, as shown at L. Its front end is slotted, to allow space and room for the movement of the spikes on the endless belt G, and it is adjusted to hang and vibrate in such manner that its rear end shall always be lower than its front, thereby affording means for the passage of the potatoes downward to the ground.

To produce the vibratory motion to this sieve, I attach the rear end of the arm O to the elbow-lever P, as represented on the drawings. The elbow-lever P is attached firmly to the upright standard S, which oscillates in its bearings. A hook, R, connects the sieve with the shortest arm of elbow-lever P. These devices secure to the sieve a sharp, quick, vibratory motion at each revolution of the roller K, and serve, not only to separate the potatoes from the soil, but also to deliver the potatoes upon the earth at the rear end of said sieve.

My device is believed to excel all other similar inventions in separating the potatoes from wet or clayey soil, and it is also well adapted for use in any soil that is tolerably free from roots and stones.

It will be observed that the lifting-apparatus, shown in figs. 1 and 3, is cheap and simple, and may be operated by the driver's foot.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The endless belt G, constructed as shown and described.
2. The sieve M, in combination with the disk α , shown and described, arm O, elbow-lever P; standard S, and connecting-rods R and L, all constructed, arranged, and operating substantially as specified.

JOHN W. BLODGETT.

Witnesses:

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L. N. STROM, Jr.