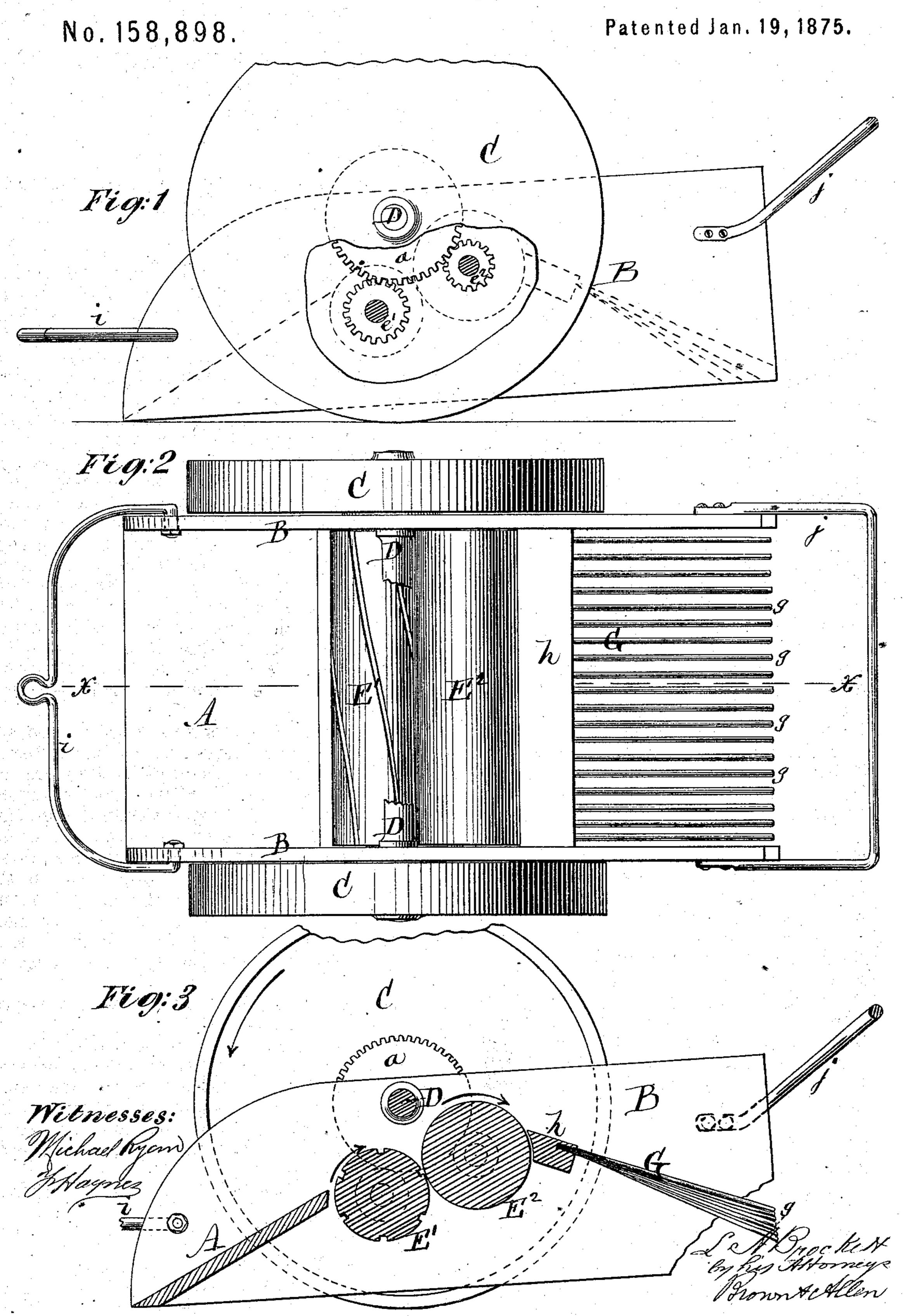
L. A. BROCKETT.
Potato-Diggers.



UNITED STATES PATENT OFFICE.

LEONARD A. BROCKETT, OF SALISBURY, NEW YORK.

IMPROVEMENT IN POTATO-DIGGERS.

Specification forming part of Letters Patent No. 158,898, dated January 19, 1875; application filed December 1, 1874.

To all whom it may concern:

Be it known that I, LEONARD A. BROCKETT, of Salisbury, of the county of Herkimer and State of New York, have invented a new and useful Improvement in Potato-Diggers; 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 part of this specification.

My invention consists in a novel combination of a scraper, a series of rollers, and a grating inclined downward toward the rear, and also toward one side of the machine, whereby the potatoes and soil are carried up the inclined surface of the scraper to the rollers, and by them deposited on the inclined grating, where the potatoes are separated from the soil, and deposited at one side out of the way of the operator.

In the accompanying drawing, Figure 1 is a side view of my invention. Fig. 2 is a top view. Fig. 3 is a longitudinal vertical section

taken in the line x x of Fig. 2.

The scraper A is arranged between two side boards, B B, through which runs the axle D, the ends of which carry the wheels C C. Under, and slightly to the rear of, the axle D two rollers, E¹ E², are arranged, with their ends journaled in the side pieces B. One or both of these rollers may be grooved like the roller E¹, or smooth like the roller E². There may be any desired number of rollers, but the two shown are deemed sufficient for illustration. Near the ends of the rollers are gear-wheels e^1 e^2 , engaging with gear-wheels a a on or attached to the hubs of the wheels C C, but not engaging with each other, so that they will both revolve in the same direction, but in an opposite direction to the wheels C. The roller E¹ revolves faster than the earth approaches it, and the gear-wheel e^2 is smaller than the gear-wheel e1, so that the roller E2 will revolve at a greater speed than the roller E1; and where more than two rollers are employed, they are so arranged that each one, after the first, shall revolve at a greater rate of speed than the next preceding one. The second roller is placed somewhat higher than the first; and where more than two are employed, each one, after the first, is arranged higher than the

preceding one, so that their axes will lie in a plane about parallel with that of the scraper. Immediately in rear of the roller E² is a beam, h, arranged transversely of the machine, with its ends attached to the side boards B. To the rear edge of this beam is attached a grating, G, which is composed of iron bars g, having their front ends inserted in the bar h, and their rear ends inclined downward both longitudinally and laterally, each bar, after the first one, being inclined or depressed more than the next preceding one, so that one of the rear corners of the grating is much lower than the other rear corner, and the rear edge of the grating, formed by the rear ends of the bars g, is inclined downward from one side to the other, as shown in Fig. 3. The front end of the machine is provided with a clevis, i, or other suitable means for attaching a team, and the rear end is furnished with a handle, j, for the operator to guide the machine.

In the operation of this machine the soil and potatoes are excavated by the scraper A, up the inclined surface of which they are carried to the rollers E¹ E², and, by the revolution of said rollers, deposited on the grating G, where they are sifted, and the potatoes are separated from the soil and conveyed down the inclined grating and deposited on the ground at one side out of the way of the operator. The main axle D may be arranged either above or below or through the axle of one of the rollers, as may be found most desirable.

What I claim as new, and desire to secure

by Letters Patent, is—

The combination of the scraper A, the series of rollers, each of which has an accelerated motion as compared with the one immediately forward of it, and the grating G inclined downward toward the rear, and also toward one side of the machine, substantially as shown and described.

LEONARD A. BROCKETT.

Witnesses:

Z. C. BROCKETT, H. E. BROCKETT, GEO. L. BYINGTON, D. D. COOL.