A. ANDERSON.

Potato-Digger.

No 19,009. Patented Dec 29, 1857

Fig. 1

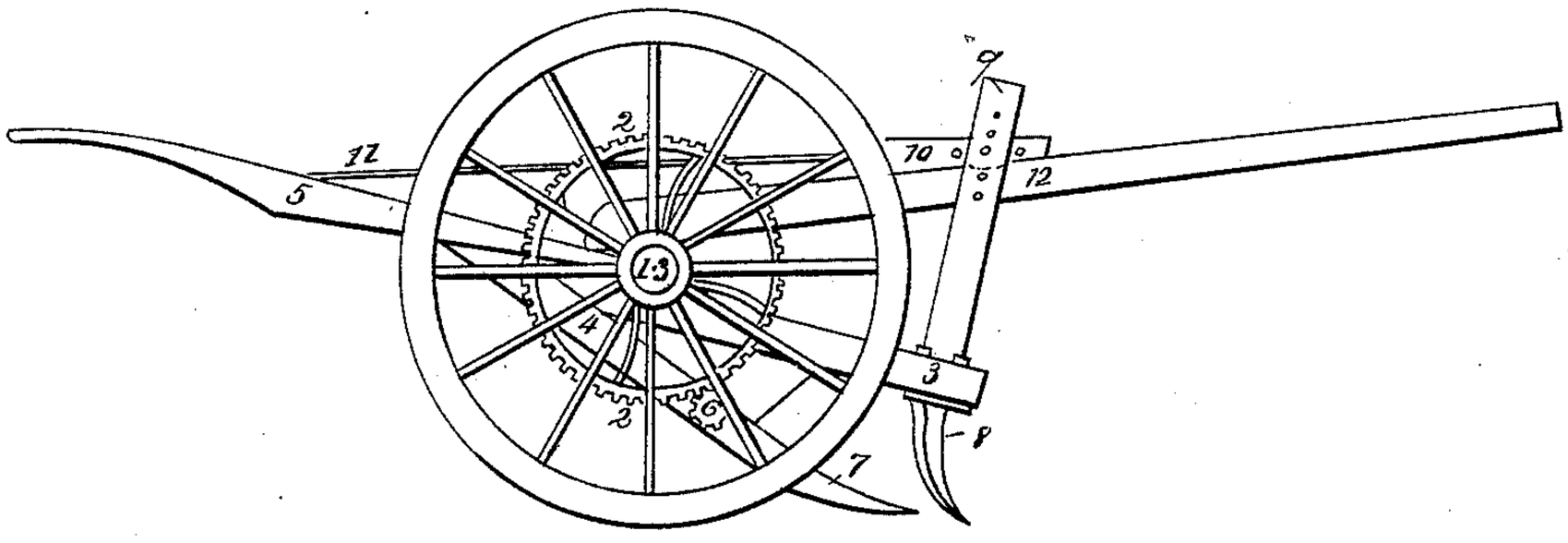


Fig. 4

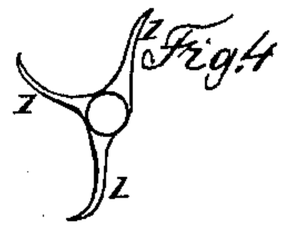


Fig. 2

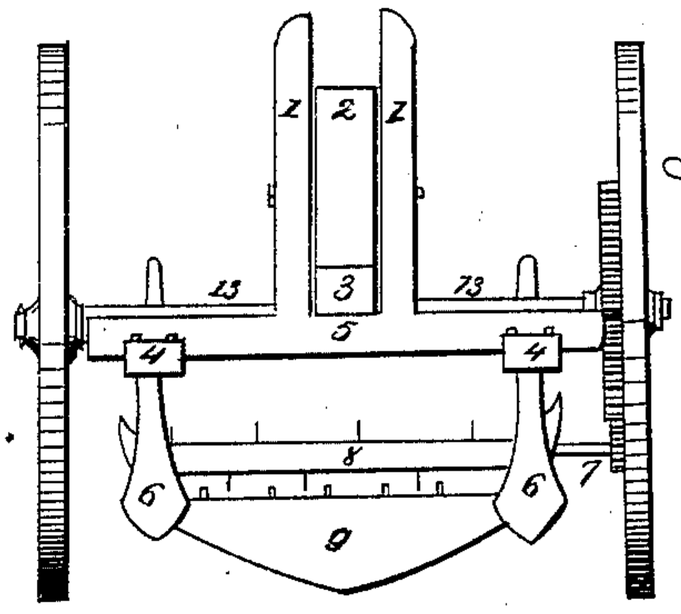
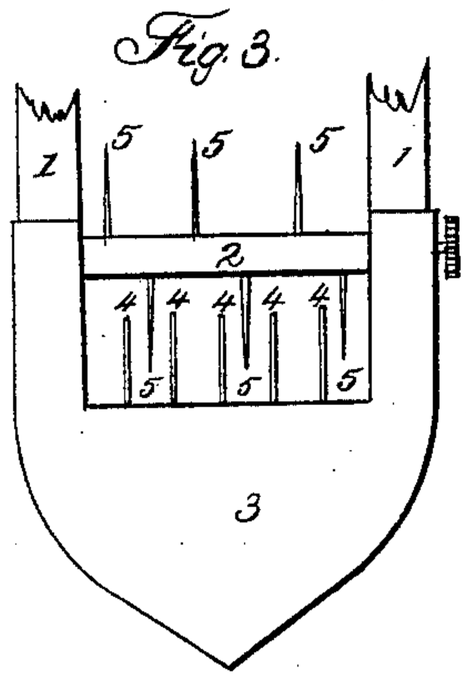


Fig. 3.



UNITED STATES PATENT OFFICE.

ALEXANDER ANDERSON, OF MARKHAM TOWNSHIP, CANADA.

IMPROVEMENT IN POTATO-DIGGERS.

Specification forming part of Letters Patent No. **19,009**, dated December 29, 1857.

To all whom it may concern:

Be it known that I, ALEXANDER ANDERSON, of Township of Markham, in the county of York and Province of Canada, carpenter, have invented a Potato-Digger; and I do hereby declare that the following is a full and exact description thereof.

Figure 1 on the annexed drawings represents side view of the machine. No. 1 represents in this figure driving-wheels three feet four inches in diameter, made as a wagon-wheel, with wooden naves or hubs, but without metallic boxes. No. 2 represents cog-wheel of cast-iron, the center being cast large enough to compass the hub of the driving-wheel. No. 3 represents one side of the frame, to the end of which an iron colter is fastened. (Marked hereinafter as No. 8 in this figure.) No. 4 represents one side of frame, to which the cylinder and share are attached. No. 5 represents one of the handles by which the share is raised out of work when traveling to and from the field. No. 6 represents a pinion-wheel, made fast to the end of an iron rod or axle which passes through the center of the cylinder. (Marked 2 in Fig. No. 3.) No. 7 represents side view of share or shovel. No. 8 represents colters or side shares for throwing off stones and waste earth for opening the way to the edge of the shovel. (Marked 7.) No. 9 represents one of the posts between which the tongue (marked 12) is placed, with holes in it to regulate the depth of the shovels by means of fly-blocks with holes through the center, through which a bolt passes, regulated at will by the driver by means of a cord passing from fly-block to handle. (Marked 5.) No. 10 represents the position of the block when machine is at work. No. 11 represents cord, which, when slackened and the handle pressed down, the block falls in lengthwise between the posts and rests in a niche in the upper side of the tongue to receive it, which keeps the share out of the earth when turning or traveling to or from the field, as shown in Fig. 2, No. 2. No. 12 represents tongue resting on top of axle, acting as a lever from fly-block to make it unnecessary to have any additional weight to prevent the wheel from sliding and stopping while at work. No. 13 represents the axle, (marked in Figs. 1 and 2,) a piece of oak scantling four inches square, the ends of which are turned into arms on which the driving-wheels revolve.

Fig. 2 on the annexed drawings represents front view of machine. No. 1 represents the posts between which the tongue is placed. (Marked 3.) No. 2 represents front view of fly-block described in No. 10, Fig. 1. No. 3 represents section of tongue when kept down by block, as shown in Fig. 2, No. 2, and marked 10 in Fig. 1. No. 4 represents ends of side of frame, to which the colters are fastened by means of iron bolts passing through frame. One of them is seen in Fig. 1, No. 3. No. 5 represents front bar of frame. No. 6 represents colters, as described in No. 8, Fig. 1. No. 7 represents pinion-wheel. No. 8 represents cylinder turned by pinion-wheel. No. 9 represents shovels or shares, as shown in this the front view, when out of the ground.

Fig. 3 in the annexed drawings represents front view of share. Nos. 1 1′ represent parts of sides of frame, (marked 4, Fig. 1,) to which the share is attached. No. 2 represents cylinder of wood, five inches in diameter, revolving with the pinion-wheel 7 in Fig. 2, described in No. 6, Fig. 1. No. 3 represents body of share, wrought-iron boiler-plate, one-fourth of an inch thick, sharp-edged, bolted to the side of frame marked 1 in this drawing. This share is twenty-one inches wide, of a concave form at the front, with sides made so as to lap over and bolt to frame 1, so as to inclose the whole drill or row of potatoes passing over the share of shovel coming in contact with the teeth or flanges, where they are separated from the earth and deposited again on the ground behind the machine. No. 4 represents teeth or flanges riveted to share. No. 5 represents teeth of wrought-iron, with a screw-thread of one inch in length, by which they are screwed into the top of the cylinder, revolving with the same, six inches long, to work between the flanges.

Fig. 4 on the drawings represents end view of cylinder. No. 1 shows the position and curvature of teeth, the curve being in a contrary direction to the motion.

Having thus fully described my invention, I claim—

The opening-shares 8 in Fig. 1 and 6 in Fig. 2, and the share or shovel marked 7 in Fig. 1, 9 in Fig. 2, and 3 in Fig. 3, in combination with fingers marked 4 in Fig. 3, and revolving toothed cylinder marked 8 in Fig. 2 and 2 in Fig. 3, for the purpose of digging and separating potatoes from the soil, the whole being constructed and arranged as described.

ALEXANDER ANDERSON.

Witnesses:

ALEX. LAMMOND,

FREDERICK ECKARTZ.