

## Stone-Gatherer.

Patented Feb. 21, 1854.



# UNITED STATES PATENT OFFICE.

JOHN T. FOSTER, OF JERSEY CITY, NEW JERSEY.

## IMPROVEMENT IN STONE-PICKING MACHINES.

Specification forming part of Letters Patent No. **10,542**, dated February 21, 1854.

*To all whom it may concern:*

Be it known that I, JOHN T. FOSTER, of Jersey City, in the State of New Jersey, have invented certain new and useful Improvements on his Stone-Picking and Self-Loading Cart patented June 29, 1852; and I do hereby declare the following to be a full description of the same.

The nature of my improvement consists in combining three or more (or less) series of rows of teeth with a cylinder secured on the axle of the cart, or rods running lengthwise of the cylinder, in such a way as to fall back and be concealed in the cylinder as they come in contact with the discharging-plate, so as to prevent any liability to locking the cylinder by stones wedging underneath them when falling into the discharging-trough, as is sometimes the case in my original machine, and in their dropping out again as they get to the under side of the cylinder to pick up the stones again, and in which position they are held by spurs on the end of the rods, working or running over a cam attached to the cart-frame for that purpose.

To describe my invention more particularly, I will refer to the accompanying drawings, forming a part of this schedule, the same letters of reference, wherever they occur, referring to the same parts.

Figure 1 is a side view of the machine. Fig. 2 is a back end view of the same. Fig. 3 is a plan view of the same. Fig. 4 is a side view of the cylinder and teeth, showing the spurs on the ends of the rods on which they are arranged and the cam over which the spurs run for throwing out the teeth and holding them out, and also an edge view of the discharging-plate.

Letter A is the frame of the cart. B is the axle-tree, on which are secured two cart-wheels, C C. Between the main part of the frame, and on the axle-tree, is secured a cylinder, D, which is made of iron and of any suitable size required. Lengthwise of the cylinder, from end to end, are three rods, E E E. These rods are near the periphery of the cylinder, and have secured on them, so they will not slip round, a series of teeth, F F, &c., having their points bent up for the purpose of lifting the stone more readily. On the ends of the rods are also secured double spurs G G G, so as to hold the teeth out while lifting the stone, after having been dropped back into the re-

cesses h h, &c., out in the casing of the cylinder, on coming in contact with the discharging-plate I to drop the stone into the discharging-trough J, arranged in front of the cylinder, on the cart-frame. This operation of holding the teeth out is done by means of a cam, K, secured to the cart-frame, which forms a half-circle around the axle-tree vertically, so that as the point of the concealed row of teeth passes below the lower edge of the discharging-plate (see Fig. 4, dotted outline of concealed teeth) one of the spurs on the rod comes in contact with the lower end of the cam and throws the latch out, and the other point of the spur is then brought against the back of the cam, and as the cylinder rotates holds the teeth out to lift the stone as it rides up against the adjustable rake L, secured to the back end of the cart-frame. This rake is made of iron, and has a set of teeth, M M, &c., and is curved so as to be graduated in their dip by means of arms N N, &c., secured on the axle-tree and radiating therefrom, so as to hold the rake in a relative curve to the curve of the cylinder and admit of being raised or depressed by a pinion-wheel, P, working into racks R R on the back of the rake. These pinions are secured on a shaft, S, secured in boxes arranged on the back end of the frame, and is operated by a crank, T, and held by a pawl, V, from falling down.

Letter V is the cart-box, arranged on the axle-tree so as to receive the stones as they fall from discharging-trough. On the front end of it is a latch, W, for holding the box from dumping till loaded.

Having now described my invention, I will proceed to state what I claim and desire to secure by Letters Patent:

1. The use of a cylinder for picking stone or other articles, in combination with series of rows of drop-teeth and cam and spurs for operating the same, substantially as hereinbefore set forth.

2. The use of the solid discharging-plate and its combination with the drop-teeth in a cylinder, and operated substantially as hereinbefore set forth, and the combination of the drop-teeth with the adjustable rake.

J. T. FOSTER.

Witnesses:

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