D. H. RICHARDS.

STREET SWEEPING MACHINE.

No. 15,253. Patented July 1, 1856.

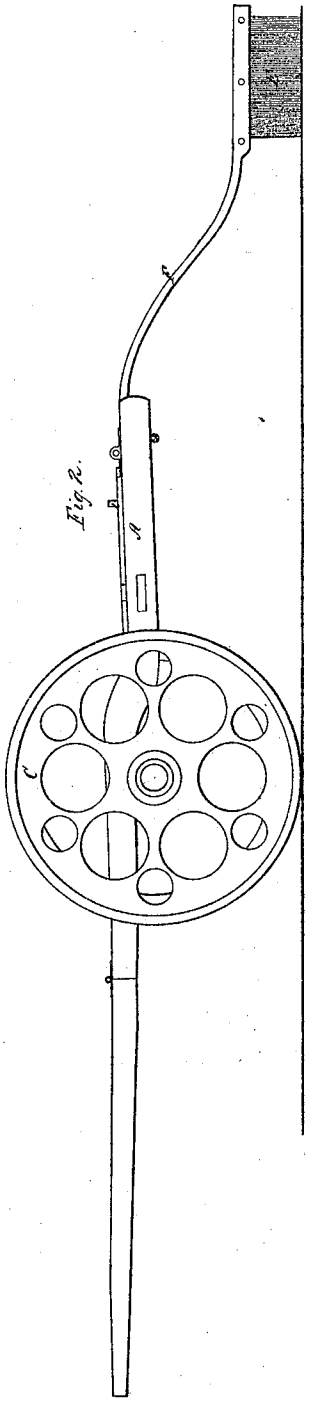

Fig. 2.

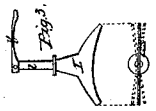

Fig. 3.

Fig. 1.

UNITED STATES PATENT OFFICE.

D. H. RICKARDS, OF GEORGETOWN, MASSACHUSETTS.

MACHINE FOR SWEEPING STREETS.

Specification of Letters Patent No. 15,253, dated July 1, 1856.

To all whom it may concern:

Be it known that I, D. H. Rickards, of Georgetown, in the county of Essex and State of Massachusetts, have invented a new and useful Machine for Sweeping Streets, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1, is a plan; Fig. 2, a side view; Fig. 3, details which will be referred to hereafter.

My invention consists in the use of a vibrating brush, which is so connected with a carriage, and so vibrated in contact with the pavement, as to sweep the dust in ridges as in the ordinary method of sweeping by hand.

My invention also consists in certain details whereby the brush may be adapted to sweeping in the middle of the street, or upon either side as may be required.

To enable others skilled in the art to understand my invention, I will proceed to describe the manner in which I have carried it out.

In the accompanying drawings A, is the carriage to which the brush is attached. Motion is imparted to the axis B, as the carriage proceeds, by means of the wheels C, which are secured thereto.

D, is a drum or short cylinder having a spiral cam groove *f*, upon its surface and which may be clutched with the shaft when the brush is to be set in operation by means of the clutch *g*. When going to and from its work or whenever as in turning, &c., the brush is not required to act, the drum is unclutched from the shaft, and the latter revolves without it.

The brush E, is affixed to the extremity of the lever F, which is pivoted to the carriage at *h*, and has a pin *i*, projecting up from it which enters a slot in one end of the arm G, pivoted to the carriage at *m*. The other end of this arm enters the spiral cam groove *f*, and thus when the cylinder is clutched with the shaft as the carriage proceeds, the brush is vibrated from side to side.

To enable my machine to operate upon the sides of the street, and to throw all the dust outward into one row or ridge, the following device has been originated: L, is a plate of the form represented in Figs. 1, and 3, and attached to the short shaft *l*, which passes through the cross timber H, of the carriage; upon the inner end of the shaft is a spring arm *y*, which enters one of three notches upon the face of the timber H, by which means the plate L, is held in one of three positions, as seen in Fig. 3, when in the position represented in black, the end of the brush lever is allowed to vibrate independent of it, and the brush operates in contact with the pavement as it swings upon each side—when, however, the plate L, is placed in either of the positions represented in colors, the end of the brush lever when moving in one direction, passes up over the plate, but when returning it is guided down under the plate, and the brush is thus raised up from the pavement, and it thus operates when moving in one direction only; by this means the machine is adapted to sweep upon the sides of the street, throwing the dust away from the gutters toward the center of the street.

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

1. The brush E operated by means of the cam groove *f*, in the manner substantially as herein set forth.

2. I claim the plate L, operating in the manner substantially as herein set forth, for the purpose of raising the brush upon the return stroke, when sweeping at the sides of the streets as described.

D. H. RICKARD.

Witnesses:

THOS. H. RIDLON,

T. P. CHEEVER.