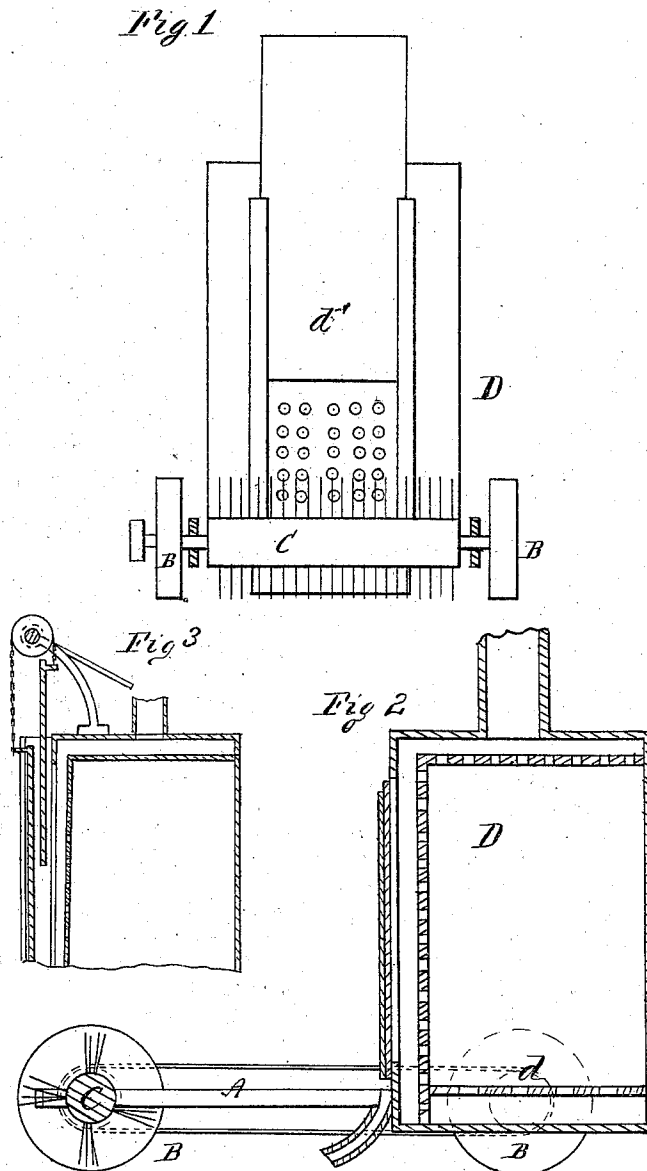


J. MULLALY.
Machines for Melting Snow.

No. 143,834.

Patented Oct. 21, 1873.



Witnesses:
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UNITED STATES PATENT OFFICE.

JOHN MULLALY, OF NEW YORK, N. Y.

IMPROVEMENT IN MACHINES FOR MELTING SNOW.

Specification forming part of Letters Patent No. **143,834**, dated October 21, 1873; application filed April 11, 1873.

To all whom it may concern:

Be it known that I, JOHN MULLALY, of New York city, in the county of New York and State of New York, have invented certain new and useful Improvements in Machines for Melting Snow; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

In the drawings, Figure 1 is a front-end view of my invention. Fig. 2 is a vertical longitudinal view of the same, and Fig. 3 is a detail view.

My invention has for its object to provide means for the speedy removal of snow from the streets of cities and towns. The means intended consist essentially of a carriage or vehicle designed to be drawn over the ground at a moderate rate of speed, said carriage being provided with wheels or runners, and impelled preferably by animal power. The carriage or machine is provided with a revolving brush or brushes, which sweep from the ground the snow lying thereon, and throw the same against a heated plate or plates, whereby the snow is melted and flows off in the form of water, suitable pipes being provided, if desired, to carry off the same. A single plate may be used, if desirable, against which the snow will be thrown; but I prefer to employ a series of plates so arranged that as one becomes cooled it will be withdrawn and a hotter plate substituted therefor. The changing of the plates may be effected either by sliding in and out of position or by revolving. The plates are designed to be warmed by a furnace located back of them, and this furnace may be so constructed that the plates will be heated either by direct contact with the flames, or that the sides, top, and bottom of the furnace itself will be plates for melting—the main idea being to melt the snow by throwing it upon a heated surface.

Referring to the drawing, A shows a suitable

frame, mounted upon ordinary traction-wheels, and designed to be drawn by animal power over the streets at a moderate rate of speed. For the wheels B B runners may be substituted, if desirable. C represents a brush or series of brushes located between the front wheels, and designed to be rotated by gear or other connection with said wheels, or by steam-power. D represents a furnace, located at the rear of the frame, having a grate, *d*. In front of this furnace is a plate or plates, *d'*, heated by the flames, so as to melt the snow which will be thrown upon said plate or plates by the brush C. The melted snow may be permitted to run down the plate to the ground; or suitable pipes may be employed to carry off the water, and, instead of the changeable plates, the back and bottom of the furnace, heated by any suitable fuel or artificial gas, may be used for melting the snow.

The means employed for producing a change of the plates are substantially as follows: Two vertically-sliding plates are connected by a chain passing over a pulley attached to a crank-shaft, which is supported upon standards above the boiler, as shown in Fig. 3. When one plate is raised the other is lowered, and vice versa. The plates may be changed in other ways besides that above described, which is presented merely as an illustration, and not necessarily as the best that can be adopted.

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

The combination, in a machine for melting snow, of a furnace, a movable plate or plates receiving heat from said furnace, and a brush or brushes so arranged as to throw the snow against said plate or plates to be melted, substantially as specified.

In testimony that I claim the foregoing I have hereunto set my hand this 1st day of March, 1873.

JOHN MULLALY.

Witnesses:

M. J. CONNELLY,

THOS. E. COURTENAY.