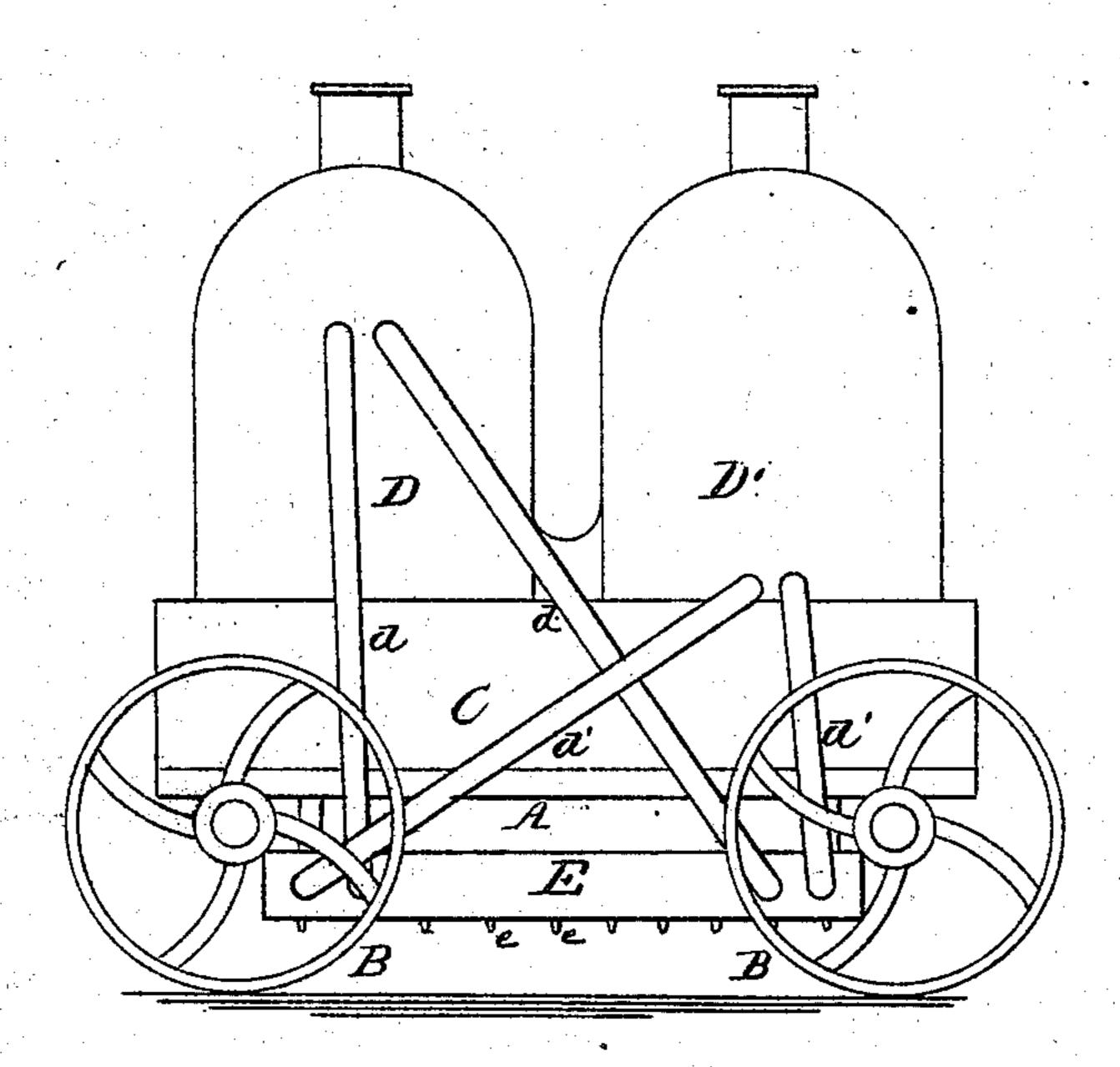
### J. MULLALY.

## Machines for Melting Snow.

No. 137,018.

Patented March 18, 1873.



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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. 137,018, dated March 18, 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 drawing which forms a part of this specification.

In the drawing, Figure 1 is a side elevation

of my invention.

My invention has for its object the speedy removal of snow and ice from streets; and it consists essentially of a machine, which, in its passage over the ground, discharges hot water or hot water and steam, either natural or superheated, upon the snow and ice, melting the same so that they will flow off in the form of water.

I have illustrated in the accompanying drawing specific means for carrying my invention into effect; but reserve to myself the privilege of varying the particular construction shown, while adhering to the spirit of my invention.

A represents a frame mounted on traction-wheels B B, flanged, if desired, to adapt them to railroad tracks; or, when convenient, runners may be substituted for the wheels. C represents a furnace, and D and D' boilers, from one of which hot water is taken, the other supplying steam for melting the snow and ice, and, if necessary, for supplying power for the propulsion of the machine. E represents a tank located beneath the frame of the machine,

having perforations or open projections e e, through which the steam and hot water, or the latter alone, are discharged upon the snow and ice in the street. The steam and hot water are conveyed from their respective boilers by means of the pipes d d'. Instead of the tank, I may discharge the water or water and steam from a series of pipes, or from perforated revolving cylinders or into a perforated hopper, which receives the snow swept up by a suitable brush, these several means being more fully described in other of my patents of even date herewith; and, instead of using natural steam with the water I may superheat it by means substantially as described in another of my applications for patents of previous date to this, which has reference to the use of superheated steam alone for the purpose of this invention.

#### Claim.

A machine for melting snow and ice, consisting of suitably-mounted portable steam and hot water apparatus, in combination with the perforated distributing tank or chest E, through which hot water alone or hot water and steam together may be discharged upon the snow or ice, said tank being arranged beneath the truck, substantially as specified.

In testimony that I claim the foregoing I have hereunto set my hand this 5th day of February, 1873.

JOHN MULLALY.

Witnesses:

GEO. C. SHELMERDINE, M. DANL. CONNOLLY.