

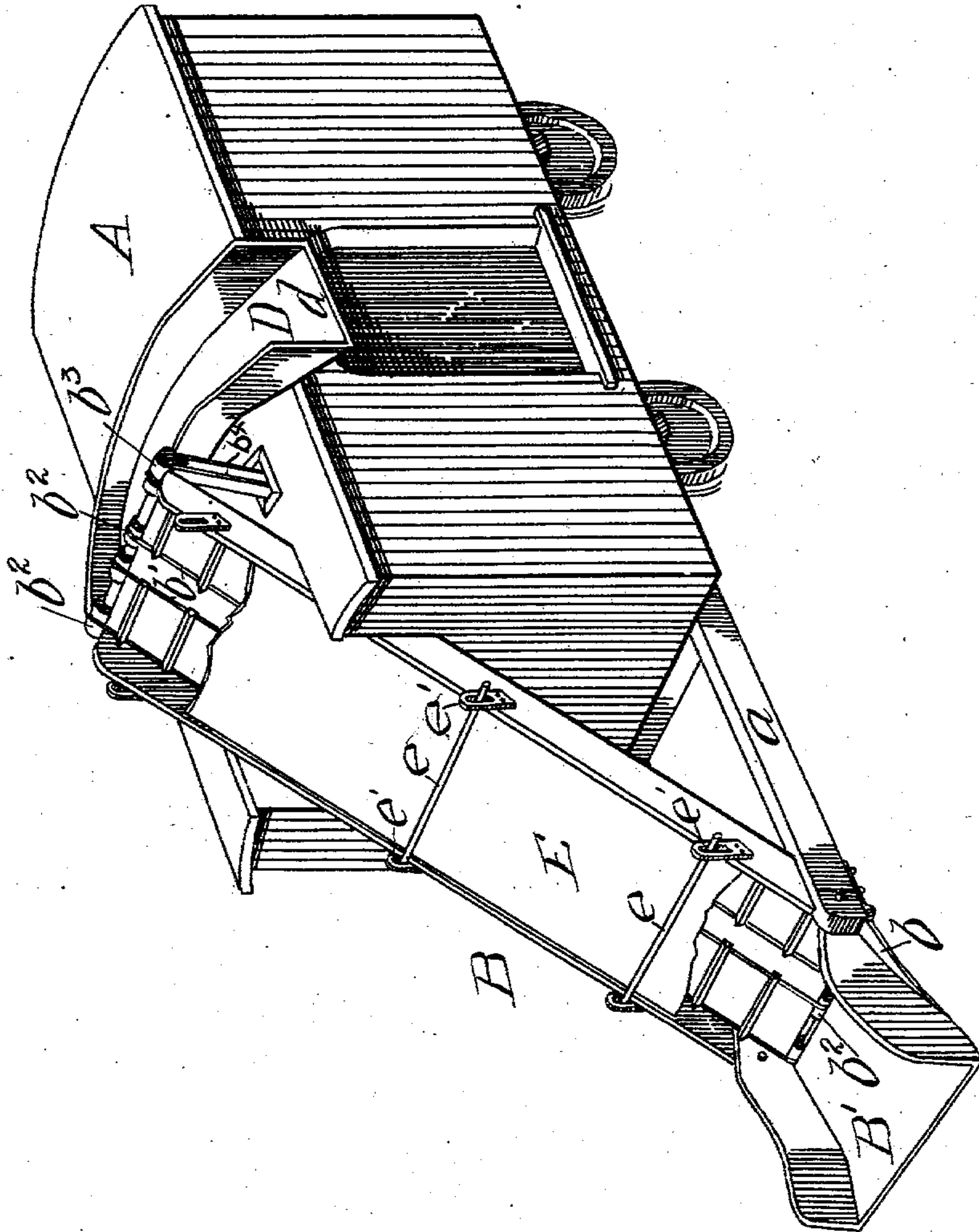
No. 720,942.

PATENTED FEB. 17, 1903.

J. A. MANION.  
DEVICE FOR REMOVING SNOW.

APPLICATION FILED APR. 19, 1902.

NO MODEL.



Witnesses

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# UNITED STATES PATENT OFFICE.

JOHN A. MANION, OF MONTREAL, CANADA.

## DEVICE FOR REMOVING SNOW.

SPECIFICATION forming part of Letters Patent No. 720,942, dated February 17, 1903.

Application filed April 19, 1902. Serial No. 103,824. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN A. MANION, a subject of the King of Great Britain, residing at Montreal, in the county of Hochelaga, Province of Quebec, Canada, have invented a new and useful Improvement in Devices for Removing Snow, of which the following is a specification.

This invention relates to snow-plows; and its object is to provide a device of this character which is especially adapted to remove snow from the tracks of street-railways.

A further object is to provide a device for removing snow which can be utilized with advantage for the removal of snow, ice, and other accumulations from the streets and side walks of cities.

A further object is to provide a device for removing snow which is simple in construction, effective in operation, and which can be manufactured at a comparatively low cost and economically operated.

To these ends the invention consists of a device for removing snow constructed substantially as hereinafter illustrated and described, and defined in the appended claim.

The figure of the drawing is a view in perspective of a device for removing snow constructed in accordance with this invention, parts being broken away to show the construction.

In the drawing, A represents the vehicle, which supports and transports the operating mechanism, which for convenience is termed a "car." Within the car is located a suitable motor for propelling the car itself and another motor for supplying power to the elevator B. As these motors may be of any well-known or preferred type, their detailed illustration is regarded as unnecessary. Access to the interior of the car may be had by means of suitable doors arranged at convenient points.

The forward end of the car A is provided with two projecting beams *a*, between the outer ends of which is supported the lower end of the elevator or conveyer frame B, which extends upwardly through a cut-away portion of the car and projects above the roof of said car.

To the forward extremities of the beams *a* and the lower end of the elevator-frame B is pivotally supported the scraper B', which is

provided with a flared or enlarged mouth and is normally held down in its operative position by means of the spring-arms *b*, secured thereto and to the under side of the beams *a*. By means of this construction the scraper is permitted to yield upwardly to compensate for inequalities of grade, or it may be lifted by hand to clear obstructions, as will be obvious. The scraper B' will be of sufficient width to extend entirely across the track and project a sufficient distance on each side thereof.

On the bottom of the elevator-frame B are arranged, preferably, two sets of elevating devices *b'*, consisting of suitable ropes or chains and connecting cross-rods, which pass over suitable drums *b''*, fixed on shafts journaled in the upper and lower extremities of the elevator-frame B, a construction well known in devices of this character. The extremity of the upper shaft is provided with a suitable pulley *b'''*, which receives power from the belt *b''''*, leading from the operating-motor within the car A.

Adjacent to the upper extremity of the elevator-frame B is the distributing-trough D, which is securely fixed upon the top of the car A and which is provided with a discharge end *d*, projecting, preferably, over the side of the car in convenient position to discharge the snow from the elevator into receiving-carts to be carried away, thus obviating the necessity of a second handling.

Upon the top of the elevator-frame B and located between the sides thereof is arranged the metal cover E, which extends from end to end of the elevator-frame and serves to retain the snow within the elevator-frame and to compact the snow upon the elevating devices *b'*, thus insuring the constant movement of the snow.

The cover E is free to rise a suitable distance, but is prevented from accidental displacement by means of cross-rods *e*, secured thereto, the ends of which are loosely sleeved in the slotted brackets *e'*, secured at suitable intervals to the sides of the elevator-frame B.

It is obvious that many changes may be made in the details of construction and arrangement without departing from the scope of the invention.

It is believed that the operation of the de-

vice will be readily understood in view of the above description and calls for no further explanation.

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

In a device for removing snow, the combination with a suitable car, of a scraper pivotally mounted on the front of said car, an elevator-frame connected with said scraper,  
10 elevating devices arranged within said frame, a chute located adjacent to the upper end of the elevator-frame, a weighted cover loosely

secured to said elevator-frame and capable of vertical movement with respect to said frame, and means, substantially as described, for restricting the said vertical movement of said cover, substantially as set forth. 15

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOHN A. MANION.

Witnesses:

P. E. BROWN,  
I. E. DERY.