

(No Model.)

J. H. GRAHAM.
SNOW PLOW FOR STREET RAILWAYS

No. 541,928.

Patented July 2, 1895.

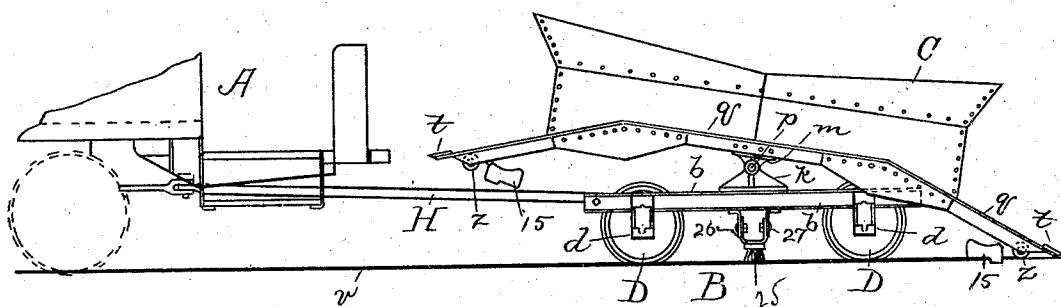


Fig. 1.

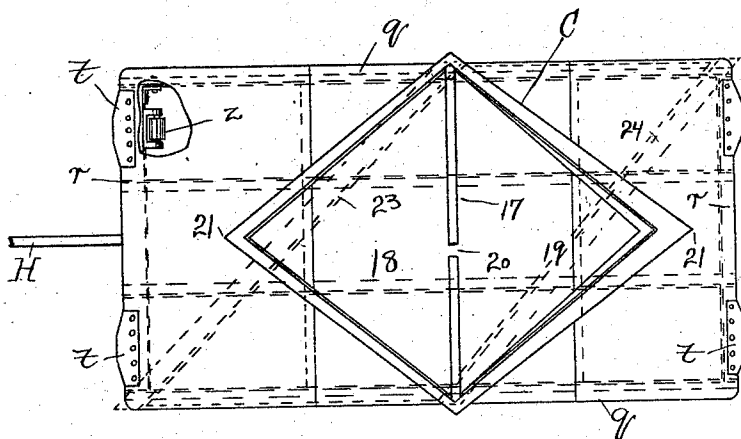


Fig. 2.

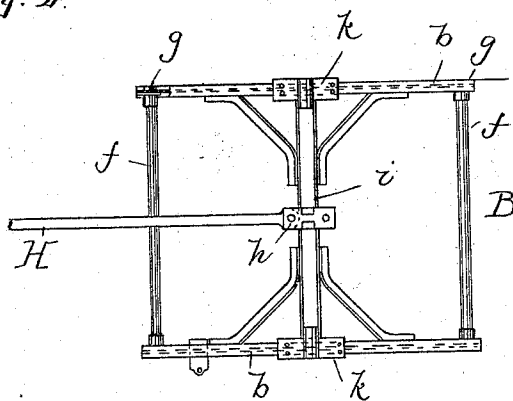


Fig. 3.

WITNESSES.

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SNOW-PLOW FOR STREET-RAILWAYS.

SPECIFICATION forming part of Letters Patent No. 541,928, dated July 2, 1895.

Application filed January 7, 1895. Serial No. 534,085. (No model.)

To all whom it may concern:

Be it known that I, JOHN H. GRAHAM, of Boston, in the county of Suffolk, State of Massachusetts, have invented certain new and useful Improvements in Snow-Plows for Street-Railways, of which the following is a description sufficiently full, clear, and exact to enable any person skilled in the art or science to which said invention appertains to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a side elevation showing my improved snow plow in position for use, and coupled to a motor-car; Fig. 2, a top plan view of the plow, and Fig. 3 a plan view of the truck.

Like letters and figures of reference indicate corresponding parts in the different figures of the drawings.

My invention relates especially to a "double end" or reversible snow plow which is particularly adapted for use on street-railways; and it consists in certain novel features hereinafter fully set forth and claimed, the object being to produce a simple, cheap and effective device of this character.

The nature and operation of the improvement will be readily understood by all conversant with such matters from the following explanation:

In the drawings, A represents the motor car, B the truck of the plow and C the body of the plow. The truck, B, is mounted on wheels, D, and is constructed of side-bars, *b*, of I-beams which are mounted on the pedestal, *d*, said side-bars being connected by tubular end-bars, *f*, through which a stiffening rod, *g*, is carried. An elongated rigid coupling-bar, H, is employed so that it may project under the body, C, of the plow and be pinned at, *h*, by suitable means to the center of a central cross-bar or I-beam, *i*, said I-beam being turned on to its side.

The body, C, is preferably quadrangular or diamond-shaped when viewed in plan view as shown in Fig. 2, and is mounted to rock vertically and longitudinally of the truck, B, by means of lugs, *k*, bolted centrally to the side-bars, *b*, of the truck and to which corresponding lugs, *m*, on said body are connected

by a pivot-rod, *p*. The sill-bars, *q*, of the body are extended and curved vertically downward as shown in Fig. 1, their outer ends being connected by cross-bars, *r*, upon which iron shoes or shares, *t*, are secured in suitable position to engage the rails, *v*. On these cross-bars, *r*, there are rollers, *z*. At the rear of each roller, *z*, there is an ordinary scraper, 15, fitted to engage the track and arranged diagonally thereto.

The main portion of the body, C, above the side-bars, *q*, is divided by a vertical partition, 17. The two compartments, 18, and 19, thus formed are adapted to hold water. A sluice, 20, is formed in the partition, 17. By tilting the body on its pivot, *p*, in either direction the water will run into the corresponding end of said body forcing the shares, *t*, downward on to the tracks. This diamond-shaped body is employed for single tracks so that when snow or other obstruction on the track is taken up by the frame of said body it will be divided and spread by the angle of the tanks.

When the plow is employed on a double track road, instead of the diamond shaped tanks I employ two fenders, 23, and, 24, arranged in parallelism and diagonally of the truck so that the refuse will be shunted off at one side.

When the plow reaches a terminus it is only necessary for the operator to tilt the body on the pivot, *p*, permitting the water in the tank to run into the other end which will depress the shares, *t*, at such end on to the track. This tank-shaped body can also be used as a sprinkler, if desired. To each side-rail, *b*, of the truck between the wheels, D, I interpose a brush, 25. This brush is mounted in a casting, 26, and is adjustable by bolts, 27, so that it may engage the track, *v*, with different degrees of tension.

It will be understood that I do not confine myself to employing water as a counterbalance for tilting the body of the plow, but deem this preferable particularly in moderate weather.

Having thus explained my invention, what I claim is—

1. In a rail-way snow plow a truck, a body pivoted thereon to rock vertically,

and a weight on said body movable longitudinally as the body is tilted, substantially as and for the purpose set forth.

5 2. In a railway snow plow, a truck, a body pivoted thereon to rock vertically; a liquid containing tank on said body and shares on the body adapted to engage the rails all being combined and arranged to operate substantially as specified.

10 3. In a rail-way snow plow a truck in combination with a body pivoted to rock vertically on said truck and bearing shares for engaging the road way in combination with a tank on said body for containing liquid and dispensing the weight thereof at corresponding sides of the pivot as said body is rocked.

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Witnesses:

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