

(No Model.)

2 Sheets—Sheet 1.

W. LEATCH.
SNOW PLOW.

No. 557,995.

Patented Apr. 7, 1896.

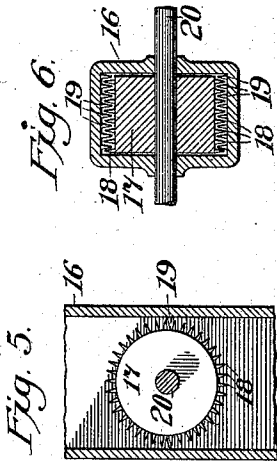
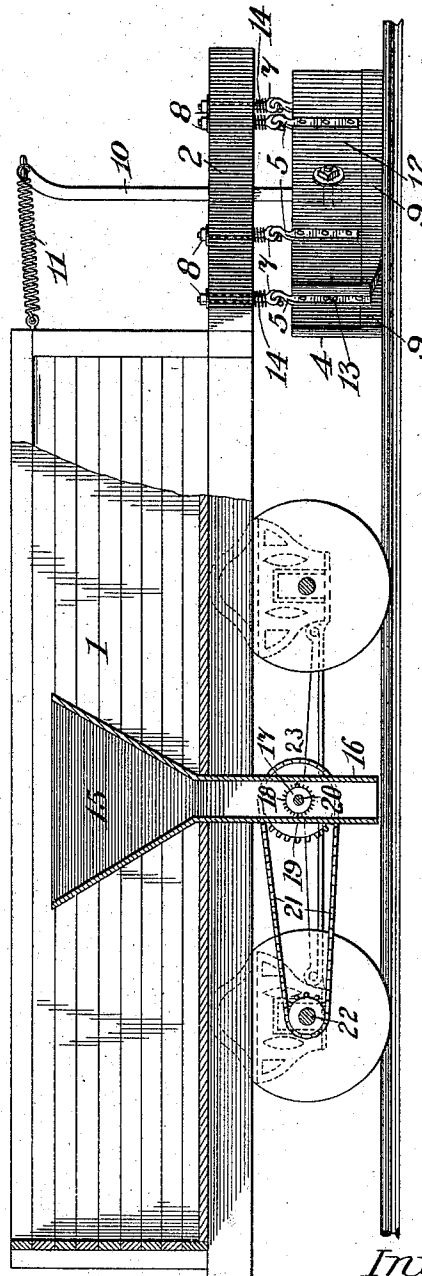


Fig. 1.



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2 Sheets—Sheet 2.

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SNOW PLOW.

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Fig. 2.

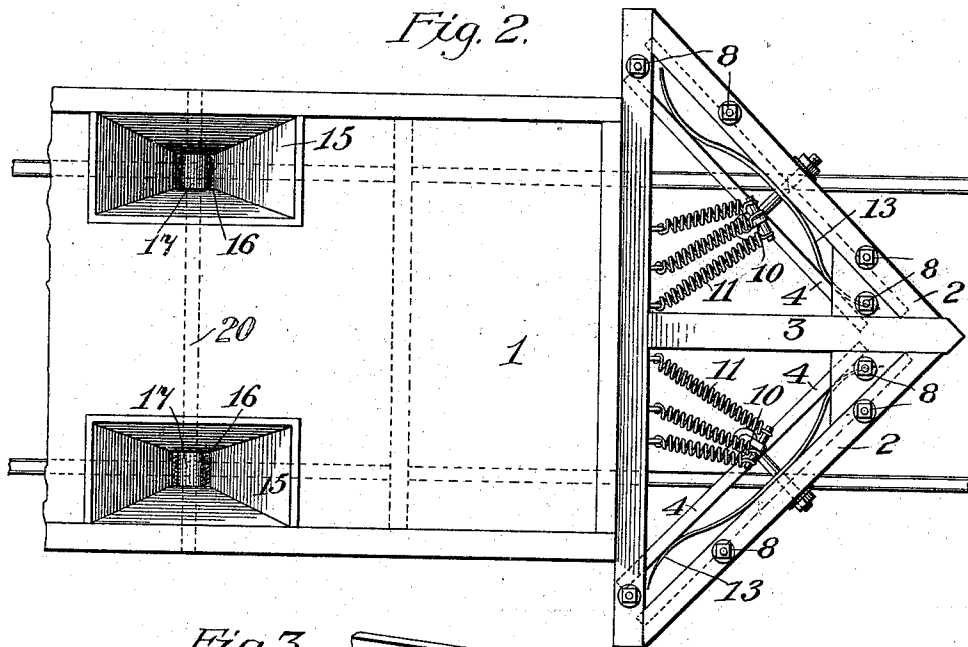


Fig. 3.

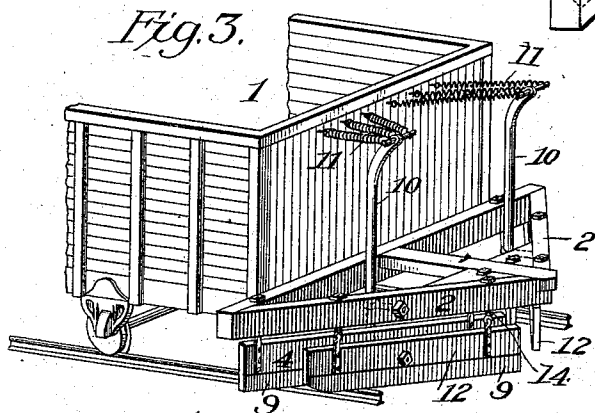
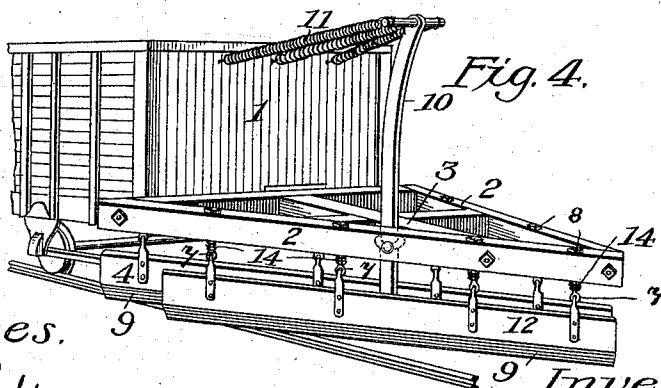


Fig. 4.



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UNITED STATES PATENT OFFICE.

WILLIAM LEATCH, OF CANAL DOVER, OHIO.

SNOW-PLOW.

SPECIFICATION forming part of Letters Patent No. 557,995, dated April 7, 1896.

Application filed June 13, 1895. Serial No. 552,706. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM LEATCH, a citizen of the United States, and a resident of Canal Dover, county of Tuscarawas and State of Ohio, have invented certain new and useful Improvements in Snow-Plows, of which I hereby declare the following to be a full, clear, and exact description, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in snow-plows; and the objects of the invention are to provide a simple and efficient form of plow which will not be easily clogged and which can be adapted to single or double tracks.

My invention also includes a salt-depositor operated by the car-axle and mounted upon the body of the car.

My invention consists in the pendent plowshares and equalizing-springs, with the manner of arrangement and construction of gearing, and in other details, as hereinafter described, shown in the accompanying drawings, and more specifically pointed out in the claims.

In the accompanying drawings, Figure 1 is a longitudinal section in elevation of my invention. Fig. 2 is a plan view of the same. Fig. 3 is a perspective view of front of plow, and Fig. 4 is a perspective view of plow having only one inclined face. Figs. 5 and 6 are detail views of the salt-grinder.

In the views, 1 is the body of the car, to which the plow is attached, and which is generally loaded with salt to apply to the track as the plow passes over it.

2 is a framework projecting over the end of the car, supported by the through-beam 3, which traverses the entire length of the car.

The plowshares 4 are scrapers placed diagonally across the track and pendent loosely from the triangular frame 2 by means of the hooks 5, passing through the eyes 7 of the bolts 8. The front faces or lower edges of the scrapers are protected with metal plates 9, which should closely scrape the tracks. Vertical bars 10, secured to these shares or scrapers, and tension-springs 11 connect their upper extremities with the front of the car-body. The function of these bars and springs is to prevent the swinging scrapers from being

beaten back by the accumulating snow, while permitting them to yield slightly when there is danger of stalling the plow. The rebound of the springs also serves to throw off the snow from the scrapers and keep them clean.

12 are an additional set of scrapers arranged in front of and parallel to the scrapers 4, and which are designed to take the most severe part of the work, and are thrown back against the scrapers in the rear, where the snow piles against them. Springs 13 prevent the parallel scrapers from knocking together and equalize the shock. Springs 14 are also employed upon the eyebolts to prevent their rising, which they are liable to do under the incessant jolting and rough usage incident to the work of the plow.

The salt distributor and grinder is clearly seen in Figs. 1, 5, and 6, where 15 is a hopper into which the salt is thrown with shovels. 16 is a box leading therefrom to the rail, in the sides of which are placed the spikes 19. In this box revolves the disk 17, into the periphery of which are driven the spikes or metal grinders 18. The spikes in the disk alternate with those on the sides of the box and pulverize the salt as it passes through the box. The disk is mounted upon the counter-shaft 20, which passes across the car and has a similar disk at the other extremity revolving in a similar box supplied also with a funnel. The counter-shaft is driven by the sprocket-chain 21 and wheels 22 and 23 on the axle and counter-shaft.

Other materials than salt can also be placed in the box.

Having described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a snow-plow the combination with a projecting frame, of diagonally-placed scrapers suspended from said frame and adapted to swing freely therefrom, parallel scrapers similarly suspended in front of the first-named scrapers, and spring mechanism adapted to prevent the scrapers from striking one another.

2. In a snow-plow, the combination with a projecting frame of depending scrapers diagonally placed and adapted to swing freely from said frame, auxiliary scrapers in front of said first-named scrapers and parallel

thereto, similarly-suspended springs between the parallel scrapers, vertical bars secured to the one pair of scrapers, and tension-springs connecting said bars, with the car-body, substantially as described.

3. In combination with the car-body of a snow-plow, a salt distributor and grinder, consisting in a hopper, a distributing-box leading to the rail, a grinding-disk provided with
10 projecting spikes adapted to rotate in said box, and corresponding spikes in the sides of the box, between which the salt passes, substantially as described.

4. In combination with the car-body of a snow-plow, a salt-distributor consisting in a
15 hopper, a distributing-box, a grinding-disk in said box and means for rotating the disk consisting in a counter-shaft and sprocket chain and wheels connecting said counter-shaft with one of the car-axles, substantially as described.

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