July 26, 1938. H. PETER 2,124,927

SNOW PLOW

Filed Nov. 3, 1936

Fig. 1.

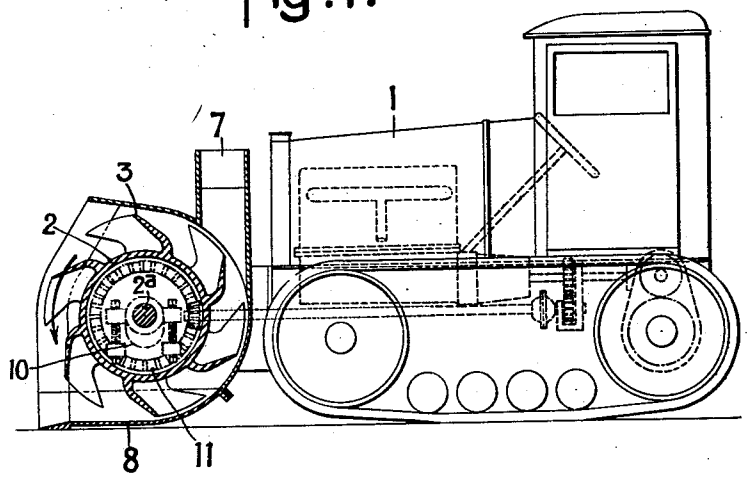
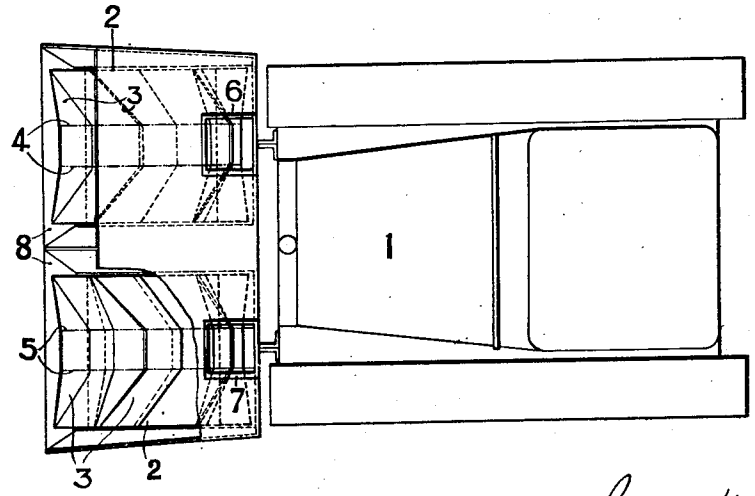


Fig. 2.



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SNOW PLOW

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Application November 3, 1936, Serial No. 109,040
In Switzerland November 23, 1935

2 Claims. (Cl. 37—43)

The object of the present invention is a snow plow of which the plowing wheels are constructed to work on the peripheries and over the whole working surface are as far as possible equal to the size of the surface to be cleared, the plowing wheels having the form of drums provided on their periphery with scoops forwardly inclined to the axis of rotation and arranged to collect and condense the snow and to eject the same through ejecting orifices or funnels.

An example embodying the invention is illustrated in the accompanying drawing.

Figure 1 shows the snow plow in side view, one of the plowing wheels being shown in cross section.

Figure 2 shows the plow in plan.

The tractor 1 is provided at the front with two drum-like plowing wheels 2 mounted side by side in a housing open at the front face upon a horizontal cross-shaft 2^a which is adjustable in height and power-driven in the direction of the arrow, the means for achieving these results being only diagrammatically indicated in the drawing. Thus, for example, the shaft 2^a is adjustably held in two vertical slots 10 of the frame and carries a gear 11 for its connection with the motor drive of the vehicle.

The scoops 3 mounted on the periphery of the wheels 2 are at their mid parts parallel to the axis of rotation and at both ends inclined forwards in the direction of rotation. They can however be of full V form, i. e. without the parallel mid parts, and constitute in all cases a kind of convergent milling-cutters, so as to collect and condense the snow during operation.

During forward movement of the tractor the scoops 3 of the wheels engage the snow and impart to it, owing to the action of the end parts of the scoops 3 extending obliquely from the outside to the center line of the periphery of the plowing wheels, a relative movement thereon so as to drive it from the sides towards the mid parts 4 and 5 of the two wheels, from whence it it conveyed to the snow ejecting funnels 6 and 7 provided at the rear of the above said housing so as to be thrown out therethrough with the aid of the intervening centrifugal action.

If the layer of snow upon the street surface is to be cut away, a shield 8 removably arranged under each wheel is removed so that when the cross shaft 2^a has been lowered the wheels can act upon said layers.

As it may be seen from the foregoing, the described device acts in fact as a rotary snow cutter and thrower.

What I claim is:—

1. A snow plow comprising a housing open at the front face, plowing wheels therein in form of a drum mounted on a horizontal transverse axis and arranged to enable the whole rectangular front face of the snow plow to be cleared, inclined scoops on the periphery of said plowing wheels and snow ejecting funnels on said housing, said scoops extending obliquely across a certain part of the periphery of the plowing wheels so as to impart to the snow a relative movement thereon to drive it towards the discharge opening of said ejecting funnels and to centrifugally project it therethrough.

2. A snow plow comprising a housing open at the front face, plowing wheels therein in form of a drum mounted on a horizontal transverse axis and arranged to enable the whole restangular front face of the snow plow to be cleared, inclined scoops on the periphery of said plowing wheels and snow ejecting funnels on said housing, said scoops being V-shaped so as to condense the snow while driving it towards the dischange opening of said ejecting funnels.

HANS PETER.