Dec. 20, 1927. 1,653,118

R. S. PELLETTE

SNOWPLOW

Filed March 15, 1926 2 Sheets-Sheet 1

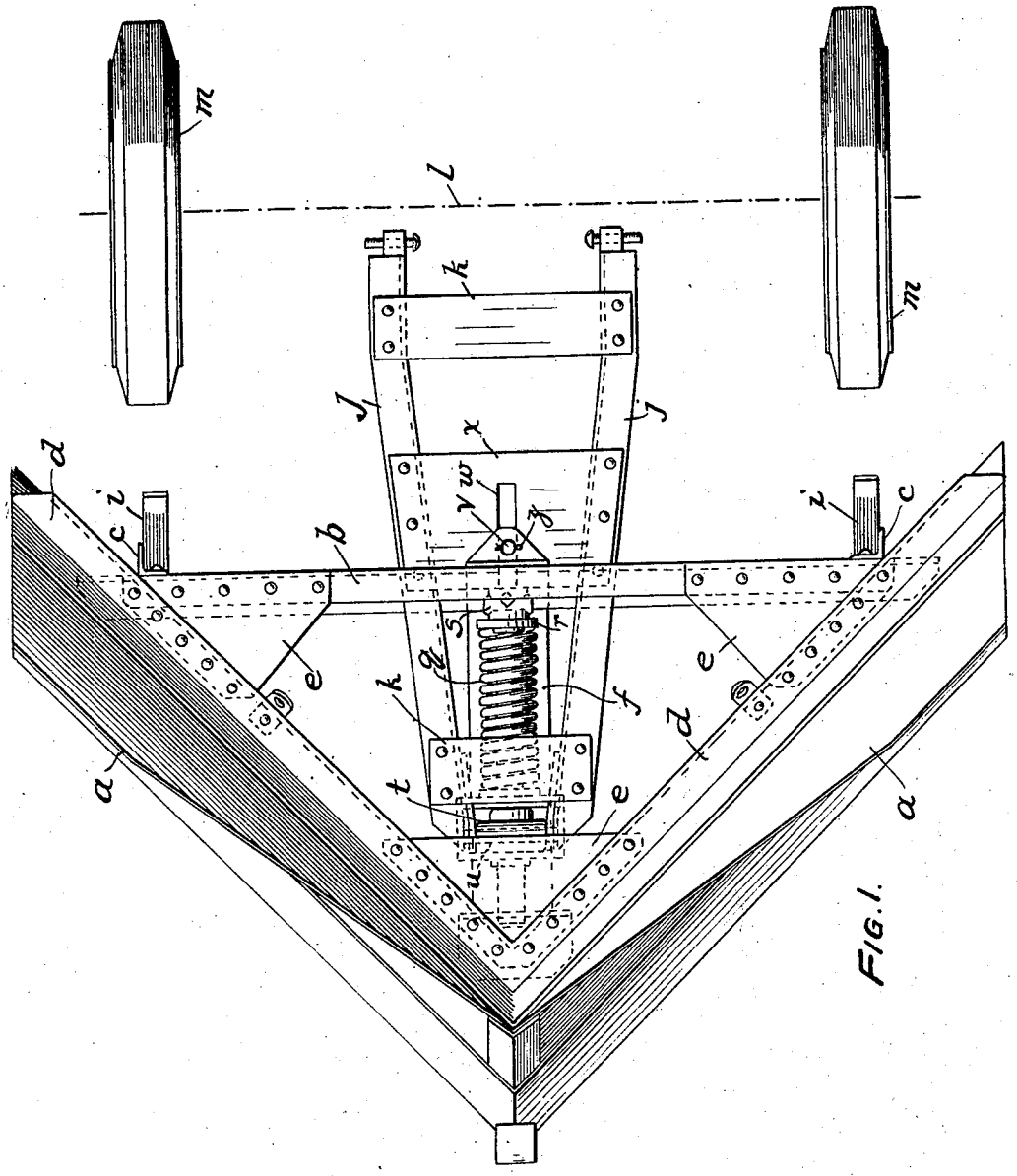


FIG. 1.

INVENTOR.

Robert S. Pellette

BY

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ATTORNEYS.

WITNESS:

Robt. P. Stitchel

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SNOWPLOW

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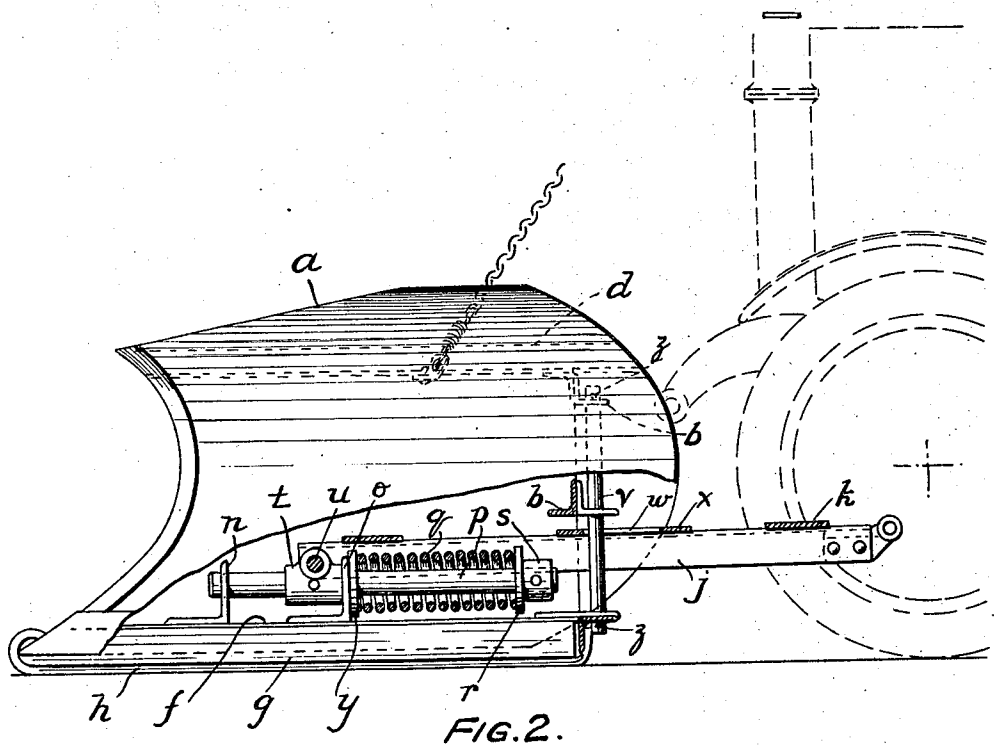


FIG. 2.

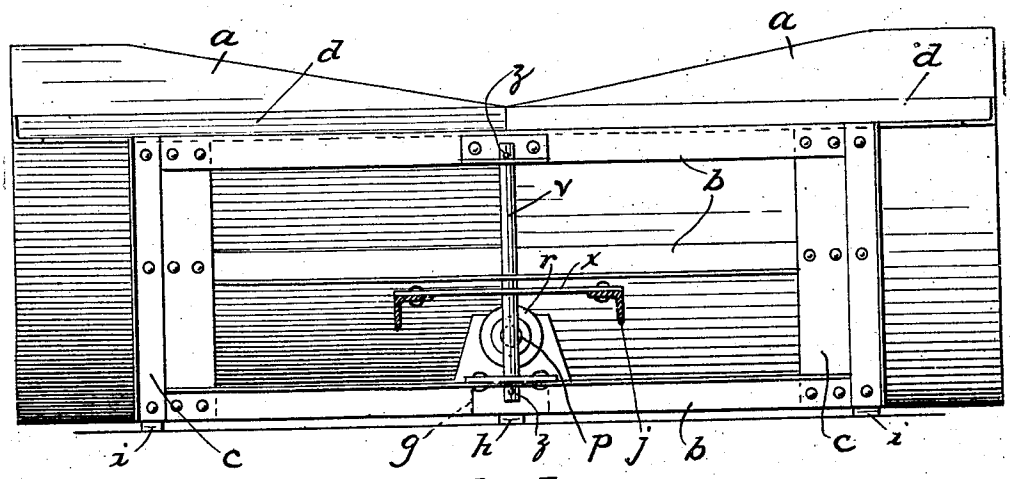


FIG. 3.

INVENTOR

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ATTORNEYS.

WITNESS:

Robt. S. Pellette.

Patented Dec. 20, 1927. 1,653,118

UNITED STATES PATENT OFFICE.

ROBERT S. PELLETTE, OF KENNETT SQUARE, PENNSYLVANIA, ASSIGNOR TO AMERICAN ROAD MACHINERY COMPANY, INC., OF KENNETT SQUARE, PENNSYLVANIA, A CORPORATION OF DELAWARE.

SNOWPLOW.

Application filed March 15, 1926. Serial No. 94,663.

My invention relates to snow plows and more particularly to snow plows of the type adapted to be propelled by a tractor or motor truck.

Heretofore it has been well known to provide snow plows mounted on or connected to a frame adapted to be secured to a motor truck axle in such a manner as to enable the truck to push the plow ahead of it. It is also well known to mount or secure a plow in association with a frame adapted to receive a tractor and connected to the tractor in such a manner as to enable the tractor to propel the plow.

Structures such as those indicated have proved to be of great advantage in clearing snow from highways and city streets and they are extensively used in those cities and sections of the country which are subject to substantial snow falls.

As a result of the extensive use of such plows, however, various defects have been observed and various modifications made to correct them. However, it may be observed that such plows, and more particularly the V type plow, are frequently damaged by obstructions as, for example, ice, and are relatively inefficient in snow of substantial depth due to the fact that they are positively propelled by the truck or tractor to which they are attached.

Now it is the object of my invention to provide a snow plow of the type indicated, which will be propelled through the medium of resilient means, thus enabling the plow to more effectively act in heavy or deep snow and at the same time avoid injury on the striking of an obstruction. Further objects of my invention are to provide a novel and highly effective and durable structure and at the same time a structure of simplicity and economy in manufacture.

Having now indicated, in a general way, the nature and purpose of my invention, I will proceed to a detailed description thereof with reference to the accompanying drawings in which there is illustrated a preferred embodiment and in which:—

Figure 1, is a plan view of a snow plow of the V type embodying my invention.

Figure 2, is a side view of the plow shown in Figure 1 partly broken away to show details of construction.

Figure 3, is a view from the rear and partly in section, of the plow shown in Figures 1 and 2.

In the several figures the plow is formed by a pair of angular extending blades *a* internally braced by means of a frame composed of angle members *b*, extending transversely between the blades adjacent their rear ends, vertical angle members *c*, to which the cross members are secured, and angle members *d*, secured together at the front of the plow and to the upper cross member *b*, through plates *e*. A bar *f* extends from the lower cross member *b* to the nose of the plow and beneath the bar is secured a filler strip *g*, preferably of wood, beneath which is mounted a runner *h* the forward end of which is turned back over the nose of the plow. Runners or shoes *i* are secured beneath the rear of the plow adjacent the ends of the lower cross members *b*.

A frame, comprising a pair of side members *j* cross braced adjacent their ends by members *k*, is adapted to be pivotally secured to a suitable fitting mounted on the front axle of a motor truck, indicated by line *l* between wheels *m*, or to the front of a frame such as is usually utilized in connection with tractor propelled plows.

On the bar *f* are mounted a pair of spaced guides *n* and *o*, in which is adapted to slide one end of a rod *p* upon the other end of which is positioned a heavy coil spring *q*. The spring is retained on the rod under tension between a washer *y* which bears against the guide *o* and a washer *r* which bears against a collar *s* secured to the pin.

Secured to the rod *p* is a bracket *t* on the top of which is provided a journal for a pin *u* which extends therethrough and through the ends of the frame side members *j*.

A rod *v* extends vertically through the cross members *b* and through a slot *w* in a plate *x* secured to the frame members *j*. The rod is maintained in place by pins *z*.

It will now be observed that if the frame members *j* be connected to propelling means as a motor truck or tractor, and it will be understood that for the purposes of my invention a motor truck or tractor are equivalent, that the plow will be propelled through the medium of the spring *q*, which acts between the rod *p*, which through the bracket *t* and pin *u* is secured to the frame members *j*, and the bracket *o* which is mounted on the

bar *f* secured to the plow. The rod *v* as will be observed prevents lateral movement of the plow. It will be also observed that the rod *p* is turnable in guides *n* and *o* thus permitting the plow to retain a level irrespective of the frame members *j*, and since the pin *u* is turnable in the journal in bracket *t*, the nose of the plow may lift to clear ordinary obstructions.

It will be noted that due to the propulsion of the plow through the medium of the spring *q* shock on the plow and propelling means is substantially reduced and that due to the substantially universal connection between frame members *j* and the bar *f* the plow may clear obstructions without damage.

I claim:—

1. A snow plow of the V type having two blades connected to each other at the apex of the plow, a supporting frame comprising an upper and a lower set of horizontal bars connected to the blades, the bars of each set being connected to each other at one end at the apex of the plow, vertical bars connected to the other ends of the horizontal bars, upper and lower cross bars connected to the vertical bars, and a longitudinal bar connected to the center of the lower cross bar and to the two lower horizontal bars at the apex of the plow.

2. A snow plow of the V type having two blades connected to each other at the apex of the plow, a supporting frame comprising an upper and a lower set of horizontal bars connected to the blades, the bars of each set being connected to each other at one end at the apex of the plow, vertical bars connected to the other ends of the horizontal bars, cross upper and lower bars connected to the vertical bars, a longitudinally extending bar connected to the lower cross bar and the apex of the blades, and means on said longitudinally extending bar for resiliently connecting a plow pushing element thereto.

3. A snow plow of the V type having two blades connected to each other at the apex of the plow, a supporting frame comprising an upper and a lower set of horizontal bars connected to the blades, the bars of each set being connected to each other at one end at the apex of the plow, vertical bars connected to the other ends of the horizontal bars, upper and lower cross bars connected to the vertical bars, a longitudinally extending bar connected to the lower cross bar and the apex of the blades, a runner connected to the longitudinally extending bar, a shoe connected to each end of the lower cross bar, and resilient means on said longitudinally extending bar for connecting a plow pushing element thereto.

4. A snow plow of the V type having two blades connected to each other at the apex of the plow, bracing for the blades including upper and lower cross bars connected to the rear ends of the blades, a vertical rod connected to the central portion of the cross bars, and a pushing element pivotally connected to the plow between the apex thereof and the vertical rod, said pushing element extending to the rear of the plow and having a guide slot therein engaging said vertical rod.

5. A snow plow of the V type having two blades connected to each other at the apex of the plow, bracing for the blades including upper and lower cross bars connected to the rear ends of the blades, a vertical rod connected to the central portion of the cross bars, and a yielding pushing element pivotally connected to the plow between the apex thereof and the vertical rod, said pushing element extending to the rear of the plow and having a guide slot therein engaging said vertical rod.

6. A snow plow of the V type having two blades connected to each other at the apex of the plow, bracing for the blades including upper and lower cross bars connected to the rear ends of the blades, a vertical rod connected to the central portion of the cross bars, a longitudinal bar connected to the apex of the plow and the lower cross bar, a horizontal rod mounted for reciprocation in two guides connected to the longitudinal bar, a pusher pivotally connected to the horizontal rod between the guides, a compression spring on the horizontal rod arranged to be compressed by the pusher and the load on the plow, and guiding means on the pusher engaging the vertical rod.

In testimony of which invention, I have hereunto set my hand, at Kennett Square, Pa., on this ninth day of March, 1926.

ROBERT S. PELLETTE.