Aug. 23, 1955 J. DORKO 2,715,786

SNOWPLOW

Filed Jan. 9, 1952

FIG. 1.

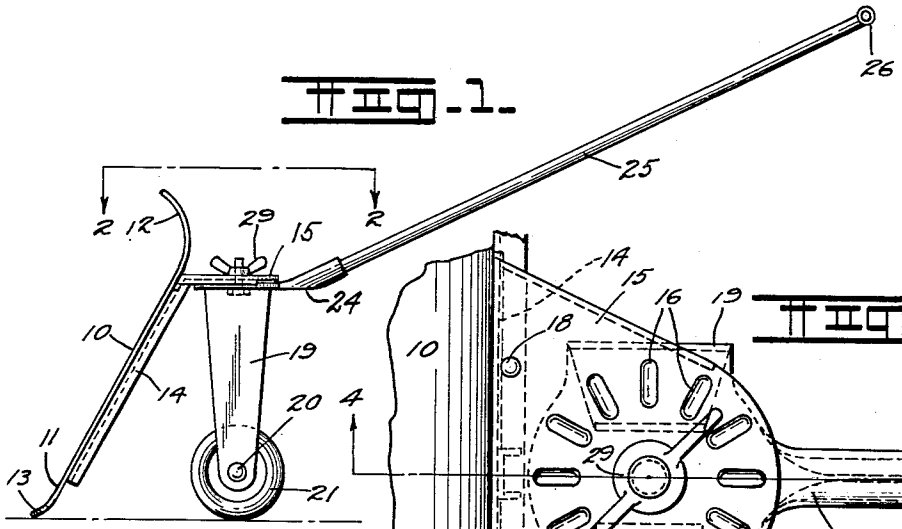
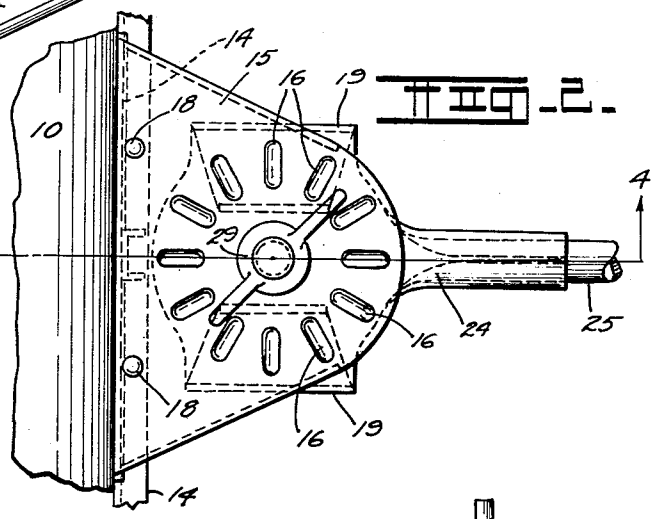


FIG. 2.



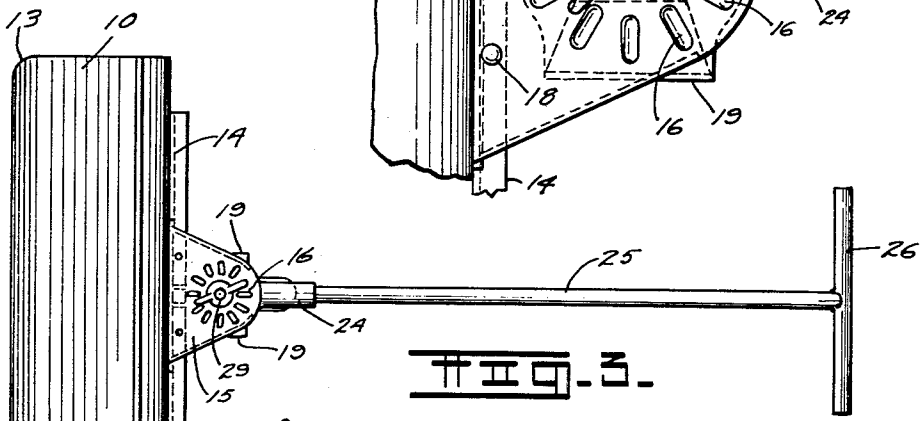


FIG. 3.

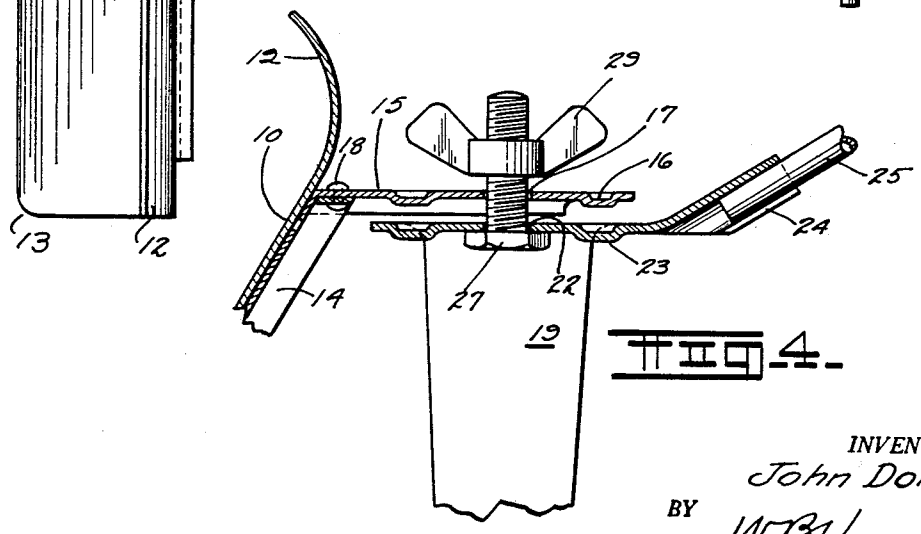


FIG. 4.

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SNOWPLOW

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1 Claim. (Cl. 37—53)

This invention relates to snowplows in general and more particularly to a snowplow adapted for manual use in clearing sidewalks, driveways and the like.

The principal object of the invention is the provision of a manually operated snowplow incorporating means for guiding the same and an adjustably mounted blade for deflecting snow.

A further object of the invention is the provision of a snowplow for manual use comprising a simple, inexpensive construction capable of being adjusted for specific requirements with respect to angularity of the snowplow blade.

A still further object of the invention is the provision of a snowplow for manual use incorporating a guiding wheel capable of directing the snowplow in a straight line regardless of the angular positioning of the blade thereof.

A still further object of the invention is the provision of a snowplow for manual use incorporating mechanical interlocking means between the blade and handle portions thereof permitting the blade to be positioned and locked at any desired angle with respect to the angle of the handle.

The snowplow disclosed herein is of a size and design making it particularly suitable for use by an individual in clearing snow from a sidewalk or a driveway. It is designed to permit the blade to be set at any desired angle so as to conform with the width of the sidewalk or driveway being cleaned or with the consistency of the snow and it is capable of being moved sidewardly by an angularly positioned blade.

The snowplow includes a single guiding wheel, the direction of which is fixed with respect to the handle of the snowplow and which wheel serves to guide the snowplow in a straight line despite the angular positioning of the blade thereof.

The device incorporates means for locking the blade at any desired angle with respect to the wheel and handle and which means is easily and quickly operated.

With the foregoing and other objects in view which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being the intention to cover all changes and modifications of the example of the invention herein chosen for purposes of the disclosure, which do not constitute departures from the spirit and scope of the invention.

The invention is illustrated in the accompanying drawing, wherein:

Figure 1 is a side view of the snowplow.

Figure 2 is an enlarged detail of a portion of the snowplow shown in Figure 1.

Figure 3 is a top view of the snowplow shown in Figure 1.

Figure 4 is a horizontal section taken on line 4—4 of Figure 2.

By referring to the drawings and Figures 1 and 2 in particular it will be seen that a snowplow has been disclosed which comprises a blade **10** having an outwardly curved lower surface **11** and an outwardly curved upper surface **12**. The blade **10** is substantially longer than its height and its lower opposite corners are rounded as at **13** to form a suitable leading edge for the blade when the same is set at an angle with respect to its line of travel. The blade is provided on its rear side with a mounting bracket **14** of material preferably L-shaped in cross section to impart suitable rigidity to the blade **10** and the upper portion of the bracket **14** is provided with a horizontally positioned rearward extension **15**, which extension **15** is generally triangular in shape and provided with a plurality of downwardly extending projections **16** arranged in a radial pattern about a central opening **17**.

The extension **15** is secured to the bracket **14** on the back of the blade **10** by suitable means such as rivets **18**. Alternately, the extensions **15** may be formed integrally with the bracket **14** and in any event the same provides means for attaching a handle and ground engaging wheel to propel and support the blade **10**.

The preferred means for attaching the handle and the ground engaging wheel are illustrated in Figures 1 and 4 of the drawings and comprises an inverted U-shaped wheel carrying bracket **19**, the vertical portions which carry an axle **20** on which a wheel **21** is positioned. The horizontal portion of the inverted U-shaped wheel carrying bracket **19** has a central opening **22** and a plurality of depressions **23** formed therein in a radial pattern about the said opening and adapted for registry with the radial pattern of downwardly extending projections **16** in the rearward extension **15** heretofore described.

The horizontal portion of the inverted U-shaped bracket **19** has a rearward tubular extension **24** defining a socket adapted to receive a handle **25**, the upper end of which has a cross member **26** thereon. It will occur to those skilled in the art that if desired the handle **25** and cross member **26** may be integrally formed with the extension **24** rather than separately formed and attached thereto as shown herein.

A bolt **27** is positioned through the openings **22** and **17** and has a butterfly nut **29** thereon which in operation clamps the rearward extension **15** against the horizontal portion of the inverted U-shaped bracket **19**.

By referring now to Figure 3 of the drawings it will be observed that the blade **10** and the mounting bracket **14** are located offcenter with respect to the ends of the blade **10** and this permits the operator of the snowplow to choose the point of leverage with respect to the blade **10** when in angular position with respect to the handle **25** best suited to move snow of different consistencies or amounts. For example, heavy snow will be advantageously moved to one side by the plow if the blade **10** is positioned at an angle to the handle **25**, as shown in Figure 3 of the drawings, so that the shorter end of the blade is closer to the handle **25** and the longer end of the blade is relatively further away therefrom, thus placing the majority of the weight in balance against the end of the handle. Thin layers of snow may be more advantageously handled by reversing the angle of the blade so that the longer end of the blade **10** is closer to the handle **25**.

In using the snowplow herein disclosed it will occur to those skilled in the art that the wheel **21** will always be parallel with the handle **25** regardless of the angle of the blade **10** with respect thereto and that the same serves to enable the plow to be moved straight ahead in a given path and to plow snow to one side thereof. The construction disclosed also permits the snowplow to be used as a snow shovel or scraper when the blade **10** is positioned crosswise to the handle **25**, as shown in Figures 1 and 3 of the drawings.

It will thus be seen that a snowplow has been disclosed which may be economically formed of simple parts and is capable of being advantageously used in removing snow from sidewalks, driveways and the like. The device is relatively light in weight and therefore does not materially add to the labor of moving the same and that the wheel **21** provided carries this weight in guiding the plow in the direction parallel with the handle.

Having thus described my invention, what I claim is:

A snowplow comprising a curved blade positioned at an angle from vertical and having adjacent the top edge thereof a horizontally positioned rearward extension provided with an opening and a plurality of downwardly extending projections radially spaced thereabout, a wheel carrying inverted U-shaped bracket pivotally secured to the lower surface of said extension by a nut and bolt assembly engaging said opening and having depressions radially spaced about said nut and bolt assembly registering with said projections, said wheel carrying bracket having a tubular extension rearwardly thereof and a handle secured to said tubular extension.

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