M. J. GOGARTY.

SCOOP.

APPLICATION FILED MAR. 22, 1912.

1,075,561.

Patented Oct. 14, 1913.

2 SHEETS—SHEET 1.

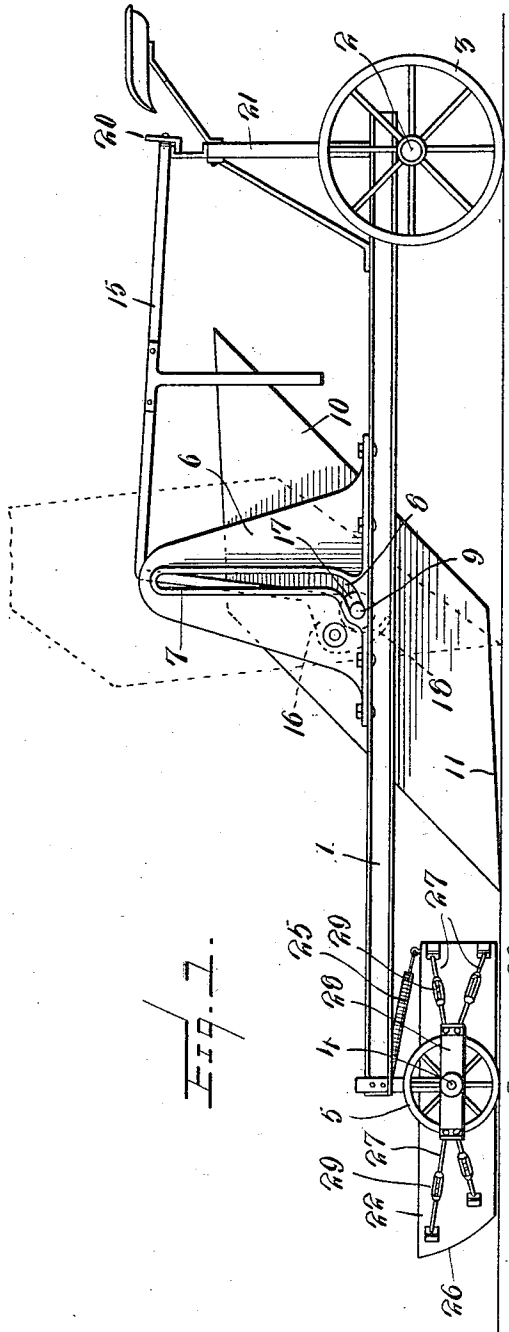


Fig. 1.

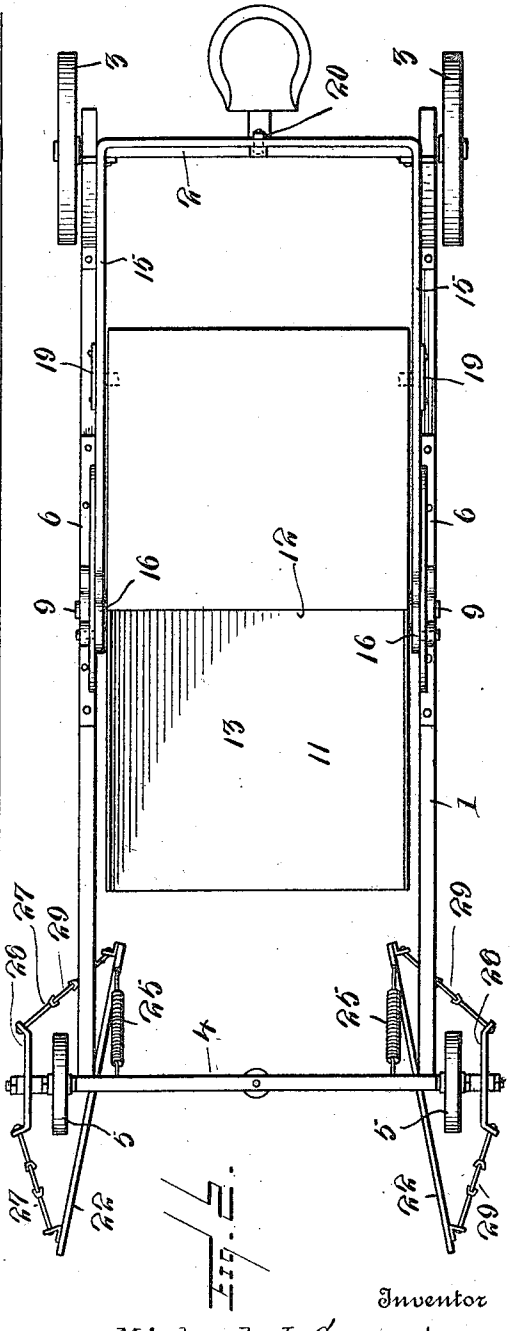


Fig. 2.

Witnesses

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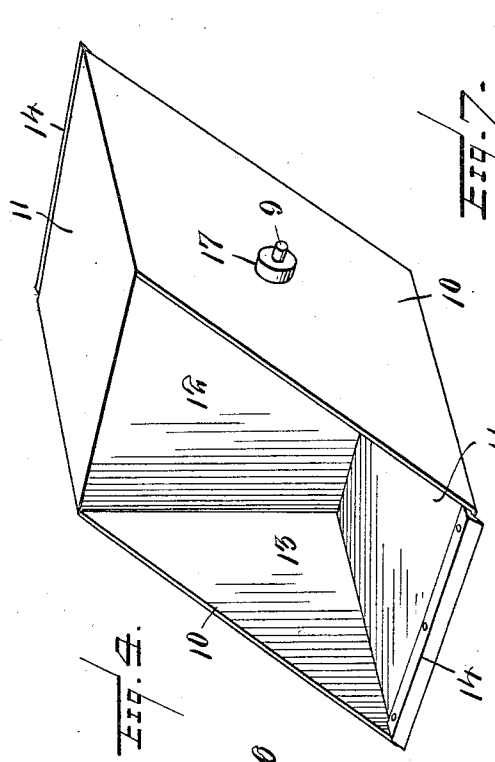


Fig. 4.

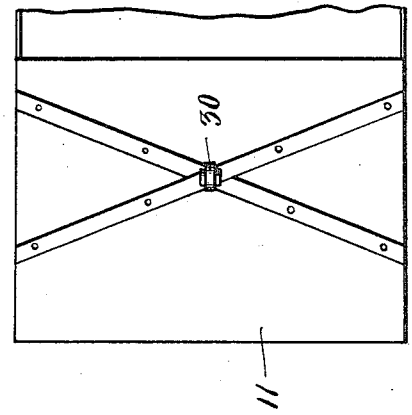


Fig. 7.

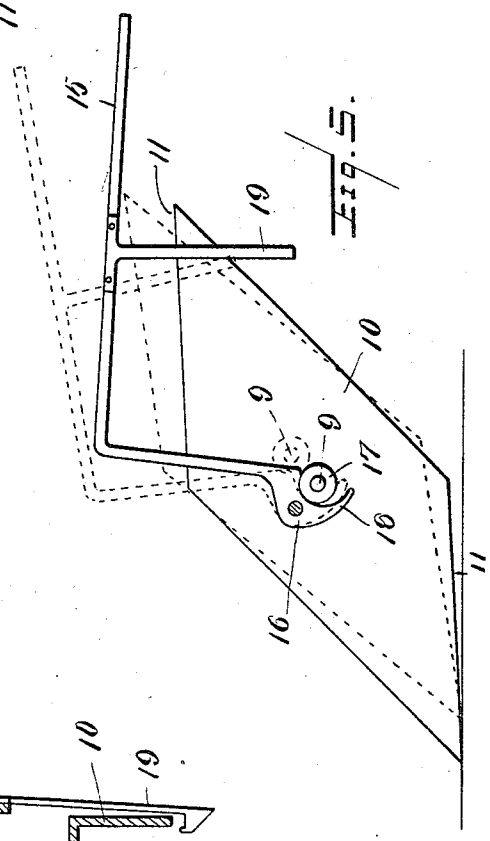


Fig. 5.

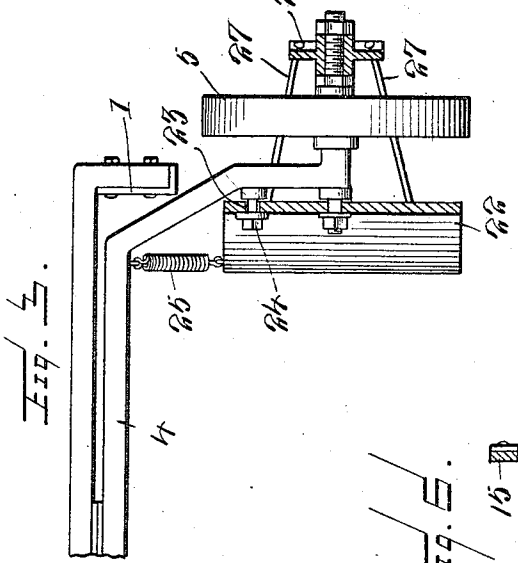


Fig. 1.

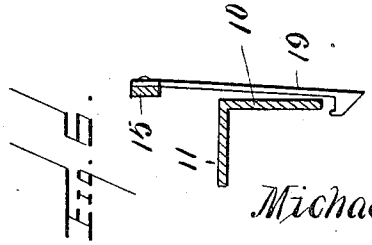


Fig. 6.

Witnesses

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UNITED STATES PATENT OFFICE.

MICHAEL J. GOGARTY, OF BROOKLYN, NEW YORK.

SCOOP.

1,075,561. Specification of Letters Patent. Patented Oct. 14, 1913.

Application filed March 22, 1912. Serial No. 685,475.

To all whom it may concern:

Be it known that I, MICHAEL J. GOGARTY, a citizen of the United States, residing at Brooklyn, in the county of Kings and State of New York, have invented new and useful Improvements in Scoops, of which the following is a specification.

This invention relates to scoops and more particularly to a scoop adapted to collect a pile of snow or like substances.

The principal object of the invention is the provision of means employed in connection with a double ended scoop for automatically reversing the scoop when one side is filled and locking the scoop in operative position.

Another object of the invention is the provision of novel guiding members which serve to contract the material being operated upon and which are so constructed as to permit them to readily pass over any stationary obstruction.

Further objects of this invention will appear as the following specific description is read in connection with the accompanying drawing, which forms a part of this application, and in which:—

Figure 1 is a side elevation. Fig. 2 is a top plan view. Fig. 3 is a detail vertical sectional view. Fig. 4 is a perspective view of the scoop body removed from the frame. Fig. 5 is an elevation showing the scoop and its operating lever. Fig. 6 is a detail vertical section showing the manner of raising the rear end of the scoop body. Fig. 7 is a bottom plan view of one side of the scoop showing a friction roller thereon.

Referring more particularly to the drawings, 1 represents a substantially rectangular frame, which is preferably constructed of channel iron or similar material, and is mounted upon the rear axle 2 which carries the wheels 3, and upon the front axle 4, which is pivoted to the frame and carries the wheels 5. Mounted upon the side members of the frame are suitable brackets 6 in which is formed a vertical slot 7 which communicates with a laterally offset or diagonal slot 8. These brackets 6 have the stub pintles or shafts 9 of the scoop body slidably mounted in the slots 7 and 8, the gravity of said body normally holding the pintles at the ends of the slots 8.

The scoop body comprises substantially diamond-shaped side members 10, bottom members 11, and a central dividing partition 12, which divides the scoop body into separate compartments 13. The forward end of each bottom member 11 is preferably provided with a removable cutting blade 14 of hardened steel or similar material to take the wear and reinforce the body.

15 represents the operating lever which is substantially U-shaped in formation, as shown in Fig. 2, and has its legs bent at right angles to the normal plane thereof adjacent their ends and connected to a combined locking and lifting member 16 which is pivoted to the bracket 6. These members 16 normally overhang the stub shaft and are brought into direct engagement with rollers 17 mounted thereon and serve when in the position shown in Fig. 1, to lock the shaft in the bottoms of the slots 8. When the lever is elevated, as shown in dotted lines in Fig. 5, the member 16 will be released from the rollers and the shafts 9 freely move in the slots 8 and 7. Upon a further upward movement of the lever 15, the hooked lower ends 18 of the members 16 will engage beneath the rollers and elevate the shafts 9 and the scoop body to the position shown in dotted lines in Fig. 5. At this time, the plates 14 will engage the ground, stop the progress of the scoop, and force the pintles to rise in the slots 7 and the scoop to reverse, as is indicated in dotted lines in Fig. 1. If it is found that the scoop has not been raised sufficiently to accomplish this purpose, spring arms 19 may be attached to opposite legs of the lever and engage beneath the sides of the scoop whereupon a further upward movement of the lever will cause the rear end of the scoop to be raised and the forward end to engage the ground. The rear end of the lever is preferably locked in the position shown in Fig. 1 by a catch 20 which is carried upon the seat post 21.

Pivoted on to the front axle 4 are guiding boards 22 slotted at their upper ends, as shown at 23, and having stub bolts 24 engaging said slots to limit the movement in one direction. The springs 24 hold the guiding boards in substantially horizontal position but permit their forward ends to rise when these boards engage an immovable object. The boards preferably have their front edge inclined, as shown at 26, so as to facilitate their riding over any stationary object.

These boards are held in adjusted inclined position by means of the rods 27 which are connected to opposite ends of the boards and to plates 28 mounted upon the outer ends of the axles. The rods 27 have included in their length, suitable turn buckles 29 by which the angular relation of the boards may be adjusted.

In order to support the operative end of the scoop, I provide a friction roller 30 which is secured to the bottom of each scoop compartment, as shown in Fig. 7, and is adapted to rest upon the ground, thus taking direct sliding wear off the scoop when the machine is in operation.

It will be readily understood that this machine may be either drawn by horses connected up in the usual manner or by an engine mounted on the frame and geared to the rear wheels thereof, the operator of the machine steering the same in the manner of traction engines, automobiles, or the like. As this forms no part of my invention, I have not illustrated the same or made any further reference thereto.

What is claimed is:—

1. In combination, a wheel frame, a double ended scoop pivotally mounted thereon and arranged for vertical movement on the frame, a lever for raising the rear end of the scoop, whereby the front end will be brought into engagement with the ground and bodily raised thereby to reverse the scoop, and means carried by the lever for locking the scoop in operating position.

2. In combination, a rectangular frame, slotted brackets mounted thereon, a scoop body pivotally mounted and slidably connecting the brackets, a lever pivoted to the bracket, means carried by said lever for locking the scoop in operative position, means carried by the lever for raising the scoop, whereby the forward end will engage the ground and thereby be automatically elevated and reversed, and means for locking the lever with the locking means thereon in operative position.

In testimony whereof I affix my signature in presence of two witnesses.

MICHAEL J. GOGARTY.

Witnesses:
E. EDMONSTON, Jr.,
MAUD FROTHINGHAM.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."