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SNOW CLEARING IMPLEMENT

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2,891,330

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Application May 27, 1957, Serial No. 661,642

1 Claim. (Cl. 37—53)

The present invention relates to certain new and useful improvements in implements which are expressly designed and adapted to scrape and clear accumulated snow from one's pavement, walkway, driveway or similar surface in and around front and rear doors for obvious purposes. More particularly, the invention pertains to a channel-like elongated scoop having scraping means at its leading end and handle means at its trailing end. The user holds the scoop in a forwardly and downwardly inclined position and as he walks along and scoops up the snow, it is channeled upwardly and rearwardly for disposal purposes.

If one were to run a survey uncovering the state of development of the art to which the invention relates, he would soon learn that implements of the above named character are, generally speaking, old. That is to say snow plows and handle-equipped scoops have been offered by others. While numerous prior patents could be referred to as typical, it will suffice to make reference briefly to the Stevenson Snow Plow covered in Patent No. 2,114,641 of April 19, 1938. He discloses a forwardly pushed plow or implement which may be categorized as a scoop and which has marginal wall means so cooperating with the blade means that a laterally disposed flared side emptying discharge member or moldboard functions to unload the snow to one side as the implement is handled in a well known scraping and shoveling manner.

The obvious objective here is to structurally, functionally and otherwise improve upon prior art scoop-type snow scrapers having side dumping or emptying facilities. To this end the present invention has to do with an elongated channel-like scoop, the upper discharge end of which is constructed and arranged to empty the upwardly moving load of snow into a trough-like trap, said trap being so constructed and inclined and laterally disposed that it functions as a trapping and dumping chute. Therefore the collected snow is shunted to one side of the surface which is being cleaned where it piles up and is out of the way in an advantageous snow clearing manner.

Other objects, features and advantages will become more readily apparent from the following description and the accompanying drawing.

In the drawing wherein like numerals are employed to designate like parts throughout the views:

Fig. 1 is a perspective view of a snow clearing and dumping implement constructed in accordance with the principles of the present invention;

Fig. 2 is a central longitudinal sectional view on a slightly enlarged scale with parts omitted and with the section taken on the plane of the line 2—2 of Fig. 1 looking in the direction of the arrows; and

Fig. 3 is a section at right angles to Fig. 2 taken on the plane of the vertical line 3—3 of Fig. 2.

Referring now to the drawing the vertically inclined elongated scoop is denoted, as an entity by the numeral 6.

The scoop will be made of lightweight but sturdy sheet

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material which is preferably non-corrodible. The longitudinal flanges or side walls 8 and 10 are parallel and of suitable height to provide a relatively shallow channelway. The bottom of the channel or scoop has a forward suitably sharpened leading edge 12 which is a satisfactory scraping edge and if desired a reinforcing cleat or bar 14 may be placed on the underneath side of the bottom to cooperate and to provide a suitably reinforced scraping edge. The leading end portion of the bottom of the scoop or channel is substantially flat at 16. The remaining portions of the bottom are of undulated form and the undulations are denoted by the numerals 18, 20 and 22. These humps have been found to assist the riding or climbing of the accumulated snow with the result that there is less likelihood of its sticking or hanging. In other words, this bottom with the undulations facilitates the flow or movement of the snow from the intake to the discharge end of the scoop. The discharge end 24 is arranged to overlie a lip flange 26 at an intake end portion of the cooperating laterally disposed snow trapping and shunting chute denoted generally at 28. This chute is sometimes referred to as a trough-like trap and it has a bottom 30, one end of which is rolled at 32 and fastened around a cooperating limb 34 of the U-shaped push-pull handle 36. The bottom cooperates with the confining sides 38 and 40 and the sides in conjunction with the slanting bottom 42 provide a wide mouth outlet at 44. This outlet or discharge end portion of the chute extends well beyond the limb 46 of the handle where it serves to cause the snow to gravitate and be shunted to the side of the path along which the implement is being gradually pushed by the user in a seemingly obvious manner. The numeral 48 designates the bight portion of the handle and 50 designates a reinforcing rod or tube 50 of rigid but lightweight from around which a marginal edge portion of the chute wall is curled and fastened in place at 52.

The free end portion of the limb 46 is suitably fastened to the upper end portion of the flange 8 as at 54. It will be noticed that the intermediate portion of the reinforcing tube is riveted or otherwise secured at 56 to a median portion of the limb 46 to thus provide a well balanced and sturdy construction.

Briefly summarized, the preferred embodiment of the concept has to do with the shallow open ended channel-like scoop 6 with the undulated bottom and which has its upper open end discharging into the right angularly disposed easy-dumping chute which is denoted generally by the numeral 58. Novelty is also predicated on the construction which is supported and reinforced on and by the limbs of the U-shaped handle carried by the upper discharge end portion of the scoop.

The foregoing is considered as illustrative only of the principles of the invention. Further, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction and operation shown and described, and accordingly, all suitable modifications and equivalents may be resorted to, falling within the scope of the invention as claimed.

What is claimed as new is as follows:

A snow clearing implement comprising an elongated scoop channel-shaped in cross-section and having a bottom wall and side walls, said bottom having longitudinally spaced transversely extending undulations extending between the side walls and functioning as means which assist in the passage of snow as it gradually accumulates and channels its way through the scoop, a substantially U-shaped handle having a bight portion and limbs, the limbs having their forward ends connected to the upward ends of the side walls of the scoop, a trough-like chute at right angles at the upper end of said scoop and having

an outwardly and laterally inclined bottom and having one end portion rolled upon itself and joined with an end portion of one of the limbs of the handle and having an edge portion rolled and secured to a cross brace mounted between the limbs of the handle so that the chute is thus supported primarily by the handle to facilitate unloading and dumping of the trapped snow from said chute.

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