United States Patent [19]

Siebert

[11] **3,810,320**

[45] **May 14, 1974**

[54] **SNOW SHOVEL**

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[22] Filed: **Mar. 19, 1973**

[21] Appl. No.: **342,758**

[52] **U.S. Cl.** **37/46,** 37/53, 294/54, 172/730

[51] **Int. Cl.** **E01h 5/00**

[58] **Field of Search** 37/44, 46, 47, 53; 294/54, 294/55, 57, 58

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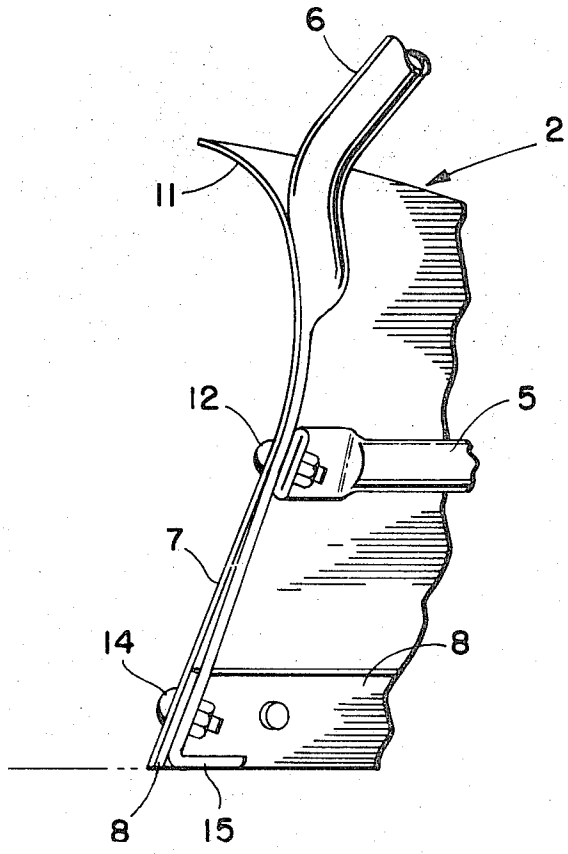
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[57] **ABSTRACT**

A snow shovel of the push or plow type having a U-shaped handle by which the V-shaped blade is pushed along a sidewalk or driveway to clear a path without lifting of the snow, said shovel being characterized in that the V-shaped blade comprises a pair of blade sections having their upwardly and rearwardly inclined leading ends detachably secured together, and a brace extending horizontally across the trailing ends of the blade sections and detachably secured thereto, and in that the U-shaped handle comprises upwardly and rearwardly inclined legs having their lower end portions detachably secured to the trailing ends of the blade sections and having their upper end portions detachably secured to the legs of a U-shaped handle member on the cross bar of which pushing force is applied to move the blade along the sidewalk or driveway which is to be cleared of snow. The snow shovel herein, by reason of the aforesaid detachable connections of the parts thereof, may be economically shipped in disassembled condition in a compact package.

The snow shovel herein is further characterized in that the extremities of the lower legs of the handle are bent to lie in the same horizontal plane as the bottom V-shaped edge of the blade thus to form skids to facilitate movement of the blade along the snow covered surface and additionally to form fulcrums for upward tilting of the blade when deep or heavy snow is encountered or when an irregularity is encountered in the sidewalk or driveway.

5 Claims, 4 Drawing Figures



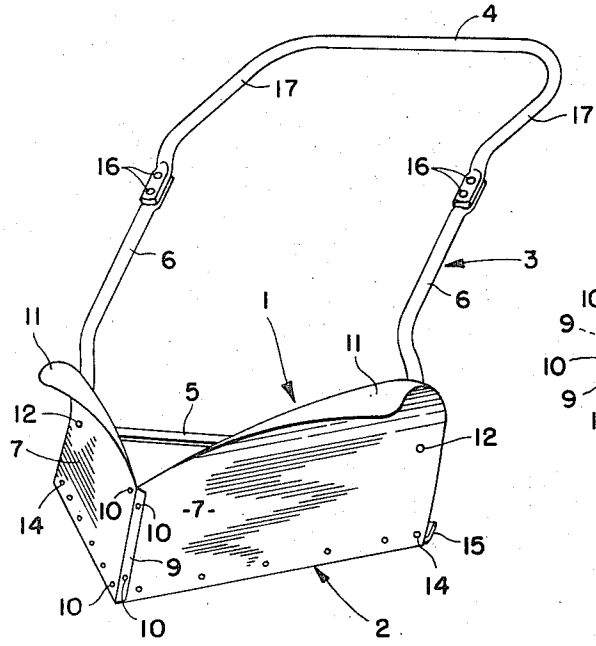


FIG. 1

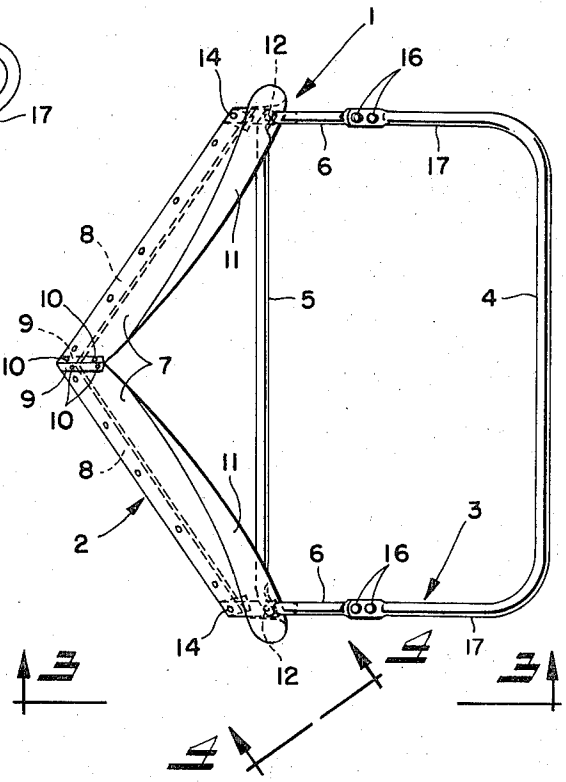


FIG. 2

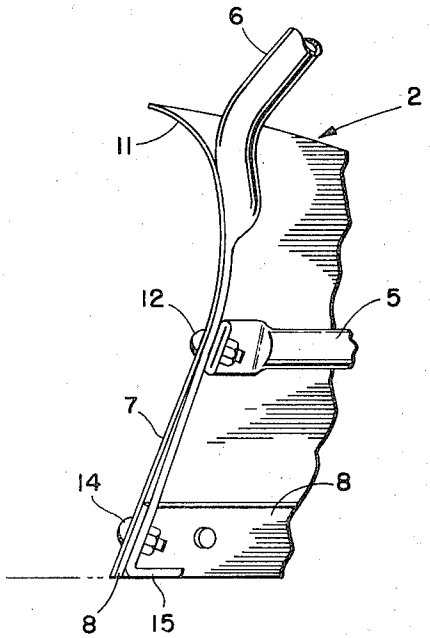


FIG. 4

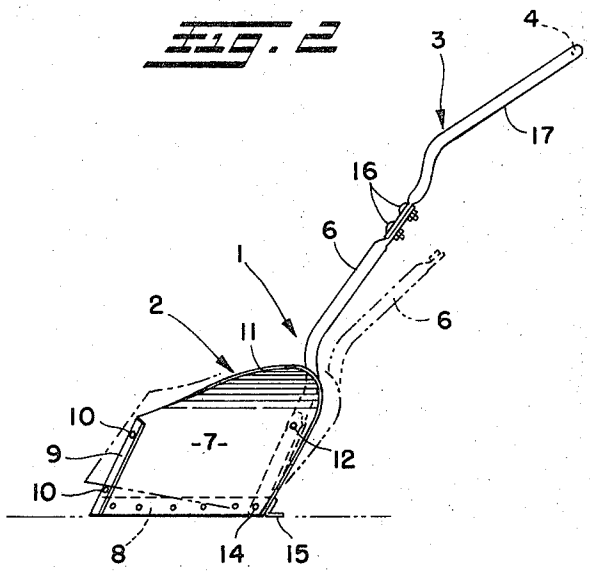


FIG. 3

SNOW SHOVEL

SUMMARY OF THE INVENTION

It is a principal object of this invention to provide a push or plow type snow shovel which is of strong and light-weight construction and with which a path on a snow covered surface may easily be cleared merely by pushing on the cross bar of the U-shaped handle connected to the trailing ends of the V-shaped blade without entailing any lifting of the snow.

It is another object of this invention to provide a snow shovel of the character indicated in which the components thereof are detachably secured together so that the shovel may be shipped in disassembled condition in a small package.

It is another object of this invention to provide a snow shovel of the character indicated in which the V-shaped blade is composed of a pair of blade sections which have bottom reinforced edges and which have leading ends detachably secured together and fashioned so as to reinforce the leading edge of the blade, the blade being further strengthened by a cross brace detachably secured to the trailing ends of the blade sections.

Other objects and advantages of this invention will appear from the ensuing description.

BRIEF DESCRIPTION OF THE DRAWING

FIG. 1 is a perspective view of a snow shovel embodying the present invention;

FIG. 2 is a top plan view;

FIG. 3 is a side elevation view as viewed along the line 3—3, FIG. 2; and

FIG. 4 is an elevation view on enlarged scale as viewed along the line 4—4, FIG. 2.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

The snow shovel 1 herein comprises a V-shaped blade assembly 2 and a U-shaped handle assembly 3 having a cross bar portion 4 by which the blade assembly 2 is adapted to be pushed through the snow to clear a path on a sidewalk or driveway, the blade assembly 2 being braced by a cross brace 5 extending across the trailing ends of the blade assembly 2 and across the lower ends of the legs 6 of the handle assembly 3.

The blade assembly 2 comprises two sheet metal blade sections 7 of generally trapezoidal shape which have riveted to the lower edges thereof relatively heavy gauge steel strips 8 and which have interfitting flanges 9 at their leading ends which are secured together by screw and nut means 10;10 to form a strong blade vertex composed of two thicknesses of the metal of the blade sections 7. The upper edges of the blade sections 7 are curled at 11 to induce rolling over of the snow as the shovel 1 is pushed to clear a path. The cross brace 5 is preferably made of tubing having flattened and bent end portions which are secured to the trailing ends of the blade sections 7 as by means of the screw and nut means 12 (see FIG. 4).

The handle assembly 3 comprises lower leg sections 6 preferably made of tubing and having flattened lower end portions which are secured to the trailing ends of the blade sections 7 by the same screw and nut means 12 as retains the cross brace 5 in place and by additional screw and nut means 14 as best shown in FIG. 4,

the legs 6 having lower ends which are bent as best shown in FIG. 4 to form skids 15 to facilitate movement of the shovel 1, said skids 15 additionally facilitating the tilting of the shovel 1 as shown in phantom lines in FIG. 3 when deep or heavy snow is encountered thereby raising the vertex of the blade assembly 2 from the sidewalk or driveway. The upper end portions of the legs 6 are flattened and are detachably secured by a pair of screw and nut means 16 to the flattened end portions of the legs 17 of the U-shaped handle member 4.

From the foregoing it can be seen that the snow shovel 1 herein is of strong, lightweight construction and that, by reason of the detachability of the parts as described, the snow shovel 1 may be shipped in disassembled condition in a compact package which is of length and width determined by the U-shaped handle member 4 and of thickness determined by the thickness of the blade sections 7 when packed between the legs 17 of the U-shaped handle member 4.

In the preferred embodiment of the invention herein disclosed the blade sections 7 are made of galvanized sheet steel, and the cross brace 5, legs 6 and handle member 4 are made from steel tubing. Obviously, these parts of the snow shovel 1 may be made of other materials such as aluminum. In lieu of the screw means 16 for detachably connecting the legs 6 and 17 together, it is to be understood that said legs 6 and 17 may be telescoped together and detachably retained by single screw means 16 or by suitable spring catch means.

The embodiments of the invention in which an exclusive property or privilege is claimed are defined as follows:

1. A push-type snow plow comprising: a V-shaped blade assembly having a leading edge and including a pair of generally upright blade sections diverging from said leading edge, said blade sections having top and bottom edges, trailing ends and rear surfaces, a U-shaped handle assembly having spaced-apart legs and a cross bar, said legs having lower end portions secured to said blade sections and extending along said rear surfaces adjacent said trailing ends over a major portion of the distance between said top and bottom edges for stiffening said blade sections, said lower end portions of said legs having terminal end portions bent rearwardly adjacent said bottom edges to provide runners, and a cross brace secured between said lower end portions of said legs.

2. The plow of claim 1 wherein said lower end portions of said legs are positioned between said rear surfaces of said blade sections and the ends of said cross brace, common fastener assemblies extending through and securing together said blade sections, lower end portions of said legs and opposite end portions of said cross brace, and additional fastener assemblies spaced from said common fastener assemblies for securing said blade sections to said lower end portions of said legs.

3. The plow of claim 2 wherein said blade sections have reinforcing strips secured thereto along said bottom edges thereof and said additional fastener assemblies extend through said reinforcing strips.

4. The plow of claim 3 wherein said handle and cross brace are made of tubing, said lower end portions of said legs and the opposite end portion of said cross brace being flattened.

5. The plow of claim 4 wherein each of said handle legs is detachably secured together intermediate said lower end portions thereof and said cross bar.

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