(Model.)

J. DEVEY.

WHEELBARROW.

No. 264,637. Patented Sept. 19, 1882.

Fig. 1.

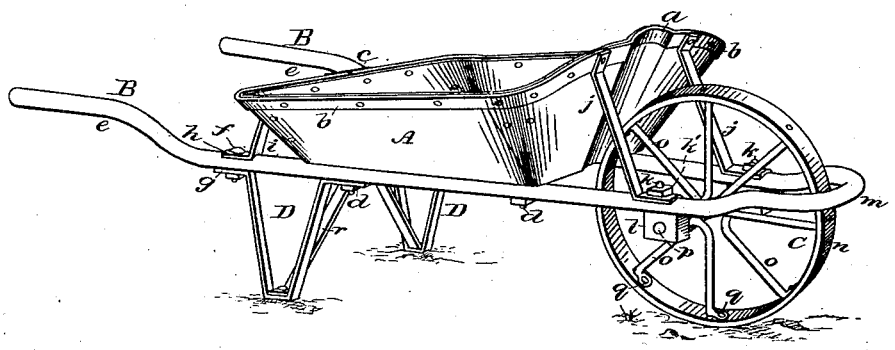


Fig. 3.

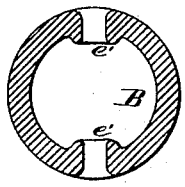
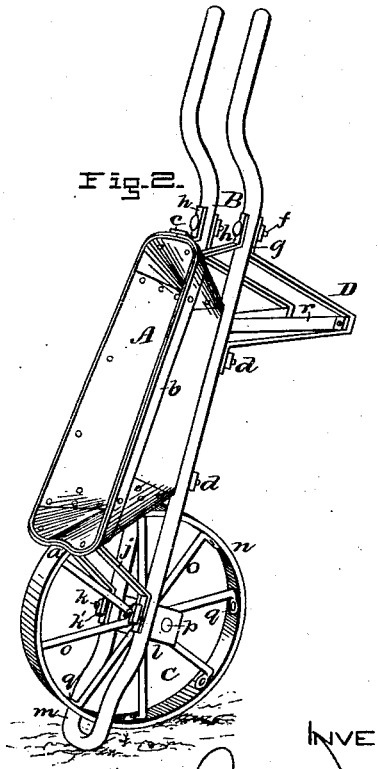


Fig. 2.



WITNESSES:

Jas. F. DuHamel.

Walter S. Dodge

INVENTOR:

John Devey,
by Dodger & Son,
Attys.

UNITED STATES PATENT OFFICE.

JOHN DEVEY, OF ALPINE CITY, UTAH TERRITORY.

WHEELBARROW.

SPECIFICATION forming part of Letters Patent No. 264,637, dated September 19, 1882.

Application filed May 9, 1882. (Model.)

To all whom it may concern:

Be it known that I, JOHN DEVEY, of Alpine City, in the county of Utah and Territory of Utah, have invented certain Improvements in Wheelbarrows, of which the following is a specification.

My invention relates to metallic wheelbarrows; and it consists in various features and details of construction hereinafter fully explained.

In the accompanying drawings, Figure 1 represents a perspective view of my improved wheelbarrow as it stands when being loaded or when not in use; Fig. 2, a perspective view of the same, showing the position given it in dumping; Fig. 3, a cross-section showing the manner of forming the holes in the handle bar or tubing.

The purpose of my invention is to render the barrow stronger and more compact than as at present constructed, and to make it more convenient in use.

To this end the invention consists in constructing the wheelbarrow as represented in the accompanying drawings, in which—

A represents the body; B, the handles or pipe forming the handles and side bars; C, the wheel, and D the feet or legs.

The body is formed of a single plate or sheet of iron, cut and bent at the corners, as indicated, and riveted together along the sides of the cuts or openings thus formed. At its forward end the body is bent or formed with a depression, *a*, which gives stiffness and strength to said end, and also permits the wheel to be thrown somewhat farther back than could otherwise be done, and around the upper edge of the body is secured a strengthening band or strip, *b*, as shown. A short metal strip, *c*, is placed over the joint formed by the meeting ends of the band *b*, to prevent the separation of the ends or the breaking of the box or body at that point. The body or box A, thus formed, is secured upon the side rail or handle-bar tubing B by bolts *d*, passing through holes punched in the box and tubing, instead of being drilled, as usual. By thus punching instead of drilling the holes a burr, *e*, is formed and turned inward around the sides of the holes, as shown in Fig. 3, the tubing being preferably heated before the punching is done, so that the burr may be more readily turned inward without destroying the integrity of the metal, and to a greater distance than can be done without heating. The sides or walls of the holes are thus formed without sharp angular edges, which soon cut away the bolts or wear away and enlarge, so that the bolts rattle and become loose. By my plan an extended bearing-surface is secured for the bolts.

At the forward end of the body or box A the bolts *d* pass through the box and the pipe or tubing B only; but at the rear end of the box they also pass through ears or flanges formed upon the upper ends of supporting-legs D, thus serving to secure the legs to the pipe or tubing. The legs, which are of V shape, are further secured to the tubing by bolts *f*, which pass through the flanges *g* of the legs, the tubing B, and flanges or ears *h* of two braces or stays, *i*, reaching from the tubing to the upper edge of the box or body A, and riveted thereto at their upper ends. At the forward end of the body similar braces, *j*, support the front end of the box or body, the two sets of braces effectually preventing any end movement of the box, and sustaining said box against the weight of the load inside in carrying and in dumping. The upper ends of the braces *j* are riveted to the box or body, and the lower ends are secured to the tubing or pipe B, the threaded or bolt stems *k* of metal blocks or eyes *l*, which carry the ends of the axle of wheel C, the stems being thus made to hold both the eyes and the braces when supplied with nuts *k'*. Being thus readily removable, the blocks or eyes *l* may be renewed or repaired when worn without trouble or difficulty; but being made of Norway iron, preferably, they will not wear very rapidly, and will consequently need to be renewed only at long intervals.

The side rail or handle-bar tubing B is bent upward at its rear ends to raise the handles *e* to the proper height, and the forward bowed end, *m*, is likewise bent upward, as shown in Figs. 1 and 2, to form a guard for the wheel, and particularly to form a bearing upon which the barrow may be tipped sidewise to discharge its contents at the side, or forward, to discharge said contents at the front, as will be readily understood by referring to Fig. 2. By

thus raising the bow *m* it is brought directly in front of the wheel when the barrow is being wheeled or moved about, and it is caused to strike the ground in dumping only after the box or barrow is raised to the proper height, when it serves to prevent the wheel from running back, and as a bearing or center on which to tip or rock the barrow, as explained.

The wheel C consists of a metal rim or felly, *n*, and a series of spokes, *o*, arranged in two groups, those of one group alternating with those of the other in their attachment to the rim, as shown. The spokes of each group are welded together at one end and bent outward to form a journal or axle, *p*, which enters the eye or block *l* at each side of the barrow, as shown. The flanges *q*, by which the spokes are joined to the rim, are all turned forward in line with the rim, by which arrangement they are caused to enter and withdraw from mud or soft soil with the least practicable resistance, and to take up the smallest practicable amount of such soil.

A brace, *r*, stiffens and supports the legs D against lateral strain, said brace being riveted at its ends to the feet and at its middle to the box or body A.

I am aware that a tubular handle-bar has been raised at the front of the barrow and bent back to form a brace for the box or body; but under such construction the bow does not extend in front of the wheel, and therefore cannot serve either as a guard therefore or as a stop to limit the tipping of the barrow.

I am aware that a tubular handle-bar has been bent around in front of the wheel of a wheelbarrow, and that a barrow box or body has been formed with an opening through its front and bottom to receive a large wheel, the opening being arched over with wood or metal, and such construction I do not claim. I am not, however, aware that any one has heretofore constructed a metallic barrow box or body with a depression in its front end, by which the end is stiffened and additional room afforded for the wheel without producing a projection or unevenness of the bottom of the box, which is very undesirable, since it greatly interferes with removing matters therefrom with a shovel, as is frequently desirable. As stated, by raising the bow *m* in the manner shown it is prevented from striking the ground before the barrow is sufficiently tipped, and it is also brought into position to better protect the wheel when in motion.

I claim—

1. A metallic body or box for wheelbarrows, provided with a bend or depression in its front end, as shown and described, whereby the front is stiffened and space is afforded for the wheel.

2. A metal box or body for wheelbarrows, having a bend or depression, *a*, in its forward end, a binding-strip, *b*, around its upper edge, and a strip, *c*, applied across the joint of the binding-strip *b*, as shown and described.

3. In combination with the tubular side bars or handle-bar B, having holes formed with inwardly-turned edges, as shown and described, a box or body, A, and bolts *d*, applied, as shown, to secure the box to the handle bar or tube.

4. In a wheel-barrow, a tubular handle bar or rail extending beneath the body or box at both sides, and formed with an upwardly-curved bow at its forward end extending in front of the wheel, as shown.

5. The herein-described wheelbarrow, consisting of body or box A, provided with depression *a*, side rails or tubing, B, having raised bow *m*, wheel C, braces *j*, and eyebolts *k l*, all combined and arranged as shown and described.

6. In combination with body A and tubular side rails, B, braces *i* and *j*, applied as shown, whereby the body is sustained against end movement.

JOHN DEVEY.

Witnesses:
WORTHY NASH,
R. T. BOOTH.