(No Model.)

W. H. C. GOODE.

WHEELBARROW.

No. 382,523. Patented May 8, 1888.

Fig. 1.

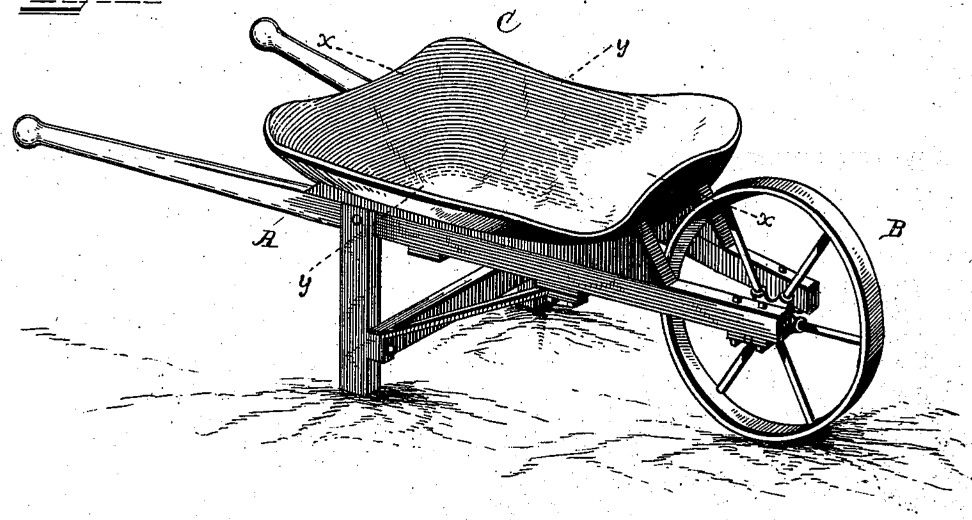


Fig. 2.

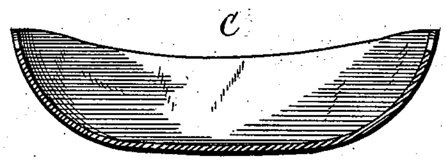


Fig. 3.

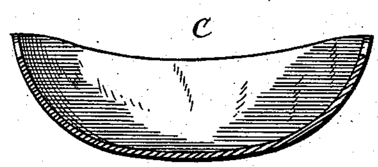
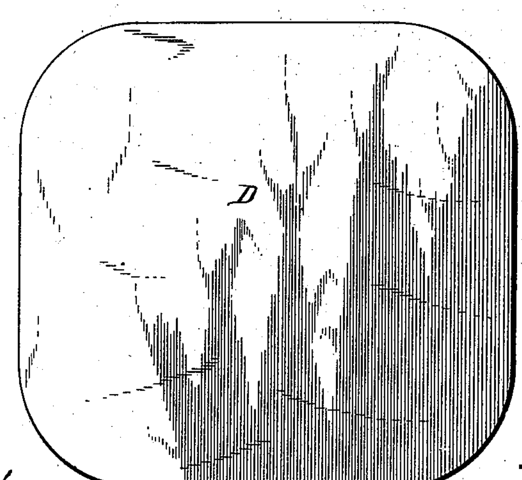


Fig. 4.



Witnesses.

Albert Speiden

Emil Kiesmetter

Inventor,

Wm H. C. Goode.

By his Attorneys.

Anderson & Myers.

UNITED STATES PATENT OFFICE.

WILLIAM H. C. GOODE, OF SIDNEY, OHIO, ASSIGNOR OF ONE-HALF TO WILBER E. KILBORN, OF SAME PLACE.

WHEELBARROW.

SPECIFICATION forming part of Letters Patent No. 382,523, dated May 8, 1888.

Application filed March 16, 1888. Serial No. 267,383. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. C. GOODE, a citizen of the United States of America, residing at Sidney, in the county of Shelby and State of Ohio, have invented certain new and useful Improvements in Wheelbarrows, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to wheelbarrow-trays, one object of the invention being to produce from a single metal blank a seamless tray whose sides and ends brace from the bottom, whereby strain put upon any particular part is distributed to all the other parts, by which construction a very strong and durable tray with a raw edge—that is to say, without a strengthening-rim—may be formed from comparatively light metal; and another object of my invention is the avoidance of all angles in the tray, by reason of which the contents, even if of a tenacious nature, may be readily and freely discharged.

My invention consists in a seamless metallic wheelbarrow-tray whose sides and ends meet in curves and gradually curve from the top downward into the bottom.

In the accompanying drawings, Figure 1 is a perspective view of a wheelbarrow embodying my invention. Fig. 2 is a longitudinal section of the tray, taken on the line $x\,x$ of Fig. 1. Fig. 3 is a transverse section of the tray, taken on the line $y\,y$ of Fig. 1. Fig. 4 is a view of the blank from which the tray is made.

Referring to the drawings, A represents the frame of the wheelbarrow; B, the wheel, and C the tray secured on the frame in any suitable manner.

In the manufacture of the tray I take a blank of metal, D, of the form shown in Fig. 4, and by means of suitable machinery bend or stamp it up into the form shown in the drawings—that is to say, so that the sides and ends meet in curves and gradually curve from the top downward into the bottom. This is the strongest possible shape that can be given a metal tray, for it will be understood that if either side or end or any portion thereof is subjected to unusual pressure, the strain will, on the principle of an inverted arch, be transmitted to the bottom, and thence distributed to the other portions of the tray.

The form of my tray is clearly illustrated in Figs. 1, 2, and 3; but it may be here remarked that it is essential to a ready comprehension of my invention that Figs. 2 and 3 should be read together, as neither one of the sections alone is adequate. For instance, Fig. 2 would correctly illustrate the tray longitudinally, yet the sides might slope down to the bottom, and this would not appear; but when Fig. 3 is read with Fig. 2 it will be readily seen that the sides as well as the ends curve gradually from the top down to the bottom.

Heretofore in the manufacture of wheelbarrow-trays from a single blank of metal the sides and ends have been made to slope to the bottom, forming almost a sharp angle therewith, while the upper edge of the tray has been provided with a rim, as a means for giving rigidity to the metal. By this construction the tray must be stamped up from comparatively heavy metal to prevent the sides and ends from breaking down under heavy pressure, for, as they simply stand at an angle to the bottom, the latter affords but little, if any, support.

My invention differs from the above-mentioned construction in this, that instead of sloping the sides and ends I curve them outward from the upper edge down into the bottom, and therefore, as the sides and ends meet in curves, and as they also curve into the bottom, the structure has the form of an arch on a line drawn from any given point to a point directly opposite. It will thus be evident that by my invention the tray can be made of light metal and with a raw edge—in other words, without a strengthening rim or flange—and yet be sufficiently strong to meet the requirements, and by dispensing with the rim or flange considerable metal is saved.

Another valuable feature of my invention is that the inner surface of the tray presents no angles, by reason of which the tray may be readily and thoroughly freed of its contents, even if of a plastic or sticky nature, as moist clay.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A seamless metallic wheelbarrow-tray whose sides and ends meet in curves and gradually curve from the top downward into the bottom, substantially as described, and for the purposes stated.

2. A seamless raw-edge wheelbarrow-tray whose sides and ends meet in curves and gradually curve from the top downward into the bottom, the entire tray being bent or stamped up from a single metal blank, substantially as described.

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

WILLIAM H. C. GOODE.

Witnesses:

GEO. B. TOLAND,

W. E. KILBORN.