W. ECKERT.
Wheelbarrow.

No. 199,698. Patented Jan. 29, 1878.

Fig: 1.

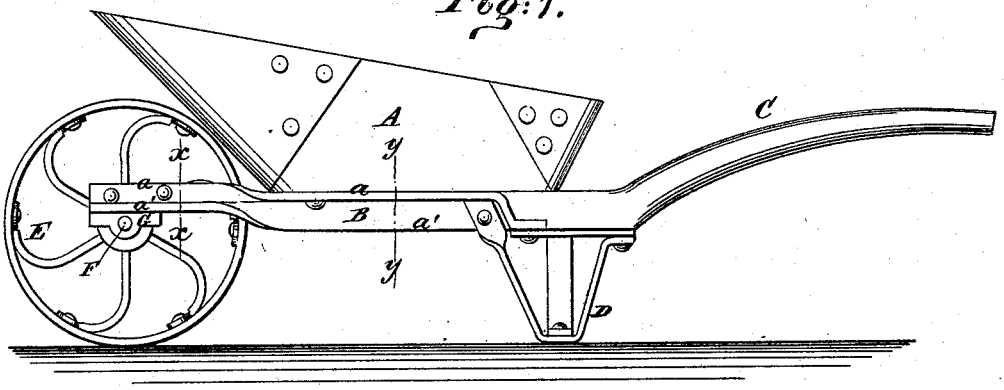


Fig: 2.

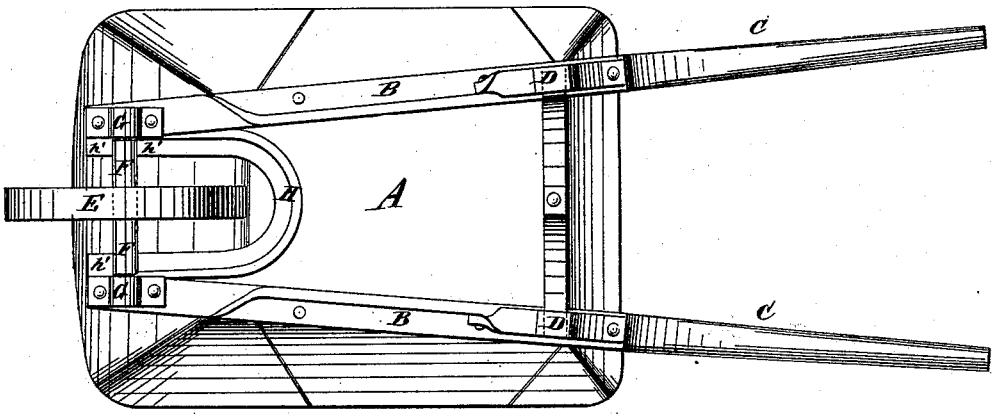


Fig: 3.

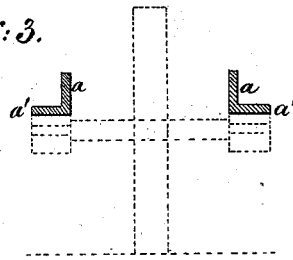
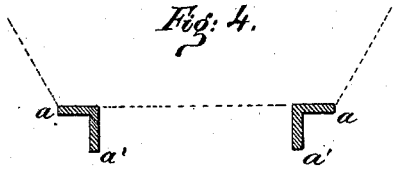


Fig: 4.



WITNESSES:

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UNITED STATES PATENT OFFICE.

WILLIAM ECKERT, OF JERSEY CITY, NEW JERSEY.

IMPROVEMENT IN WHEELBARROWS.

Specification forming part of Letters Patent No. **199,698**, dated January 29, 1878; application filed November 9, 1877.

To all whom it may concern:

Be it known that I, WILLIAM ECKERT, of Jersey City, in the county of Hudson and State of New Jersey, have invented a new and Improved Wheelbarrow, of which the following is a specification:

The object of my invention is to provide an improved construction that will reduce the weight and cost, while increasing the strength, of wheelbarrows.

The invention consists in making the side bars each of one continuous piece of angle-iron, twisted about one-fourth of a turn at its forward end, in such a manner as to present one of its flanges for the reception of the bearings of the wheel, and the other for the support of the box or body of the barrow, and attaching separate wooden handles to the rear end of said bars.

It also consists in the combination, with the said angle-bars, of a brace, also formed of an angle-bar, connecting together their forward ends and curved around the wheel.

In the accompanying drawings, Figure 1 represents a side view of my improved wheelbarrow. Fig. 2 is a view of the under side of the same. Figs. 3 and 4 are detail sections on the lines *x x* and *y y*, respectively.

Similar letters of reference indicate corresponding parts.

A is the box of the wheelbarrow. B are the side bars; C, the handles; D, the legs; E, the wheel; F, its shaft; and G, the bearings for the said shaft. H is the curved angle-bar brace.

In order to reduce the weight and increase the strength of the wheelbarrow, I make the side bars B each of one bar of angle-iron, twisted at *b'* one-fourth of a turn, so that its flange *a* (which for the greater part of the bar B is horizontal and supports the box A at one side) becomes vertical forward of the box, and the flange *a'*, which is vertical under the box A, becomes horizontal forward of the same, as shown in Figs. 3 and 4. To the said horizontal forward part of the flange *a'* I attach the bearings G for the journals of the shaft F of the wheel E.

To the vertical forward flanges *a*, on the inner side of each, I attach, by bolts or rivets, the ends *h'* of the brace H, which is also made of a bar of angle-iron, and curved, as seen in Fig. 2, to give room for the wheel E.

Instead of forming the handles C of iron, in one piece with the bars B, as is usual, I make them of wood to decrease their weight, and attach them to offsets formed on the rear ends of the side bars B.

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

1. The side bars B, each formed of one continuous bar of angle-iron, twisted one-fourth of a turn, as shown, in order to present its flanges *a a'*, each in its turn, in a horizontal position for the support of the box A and the wheel-shaft bearings G of a wheelbarrow, in the manner and for the purpose substantially as specified.

2. The curved angular bar-iron brace H, in combination with the twisted side bars B, substantially as and for the purpose specified.

WILLIAM ECKERT.

Witnesses:

CHAS. BAECHLERFF,

JOHOM FÄHRLEIN.