

No. 686,264.

Patented Nov. 12, 1901.

F. J. COOPER.
WHEELBARROW FRAME.
(Application filed Apr. 27, 1901.)

(No Model.)

Fig. 1.

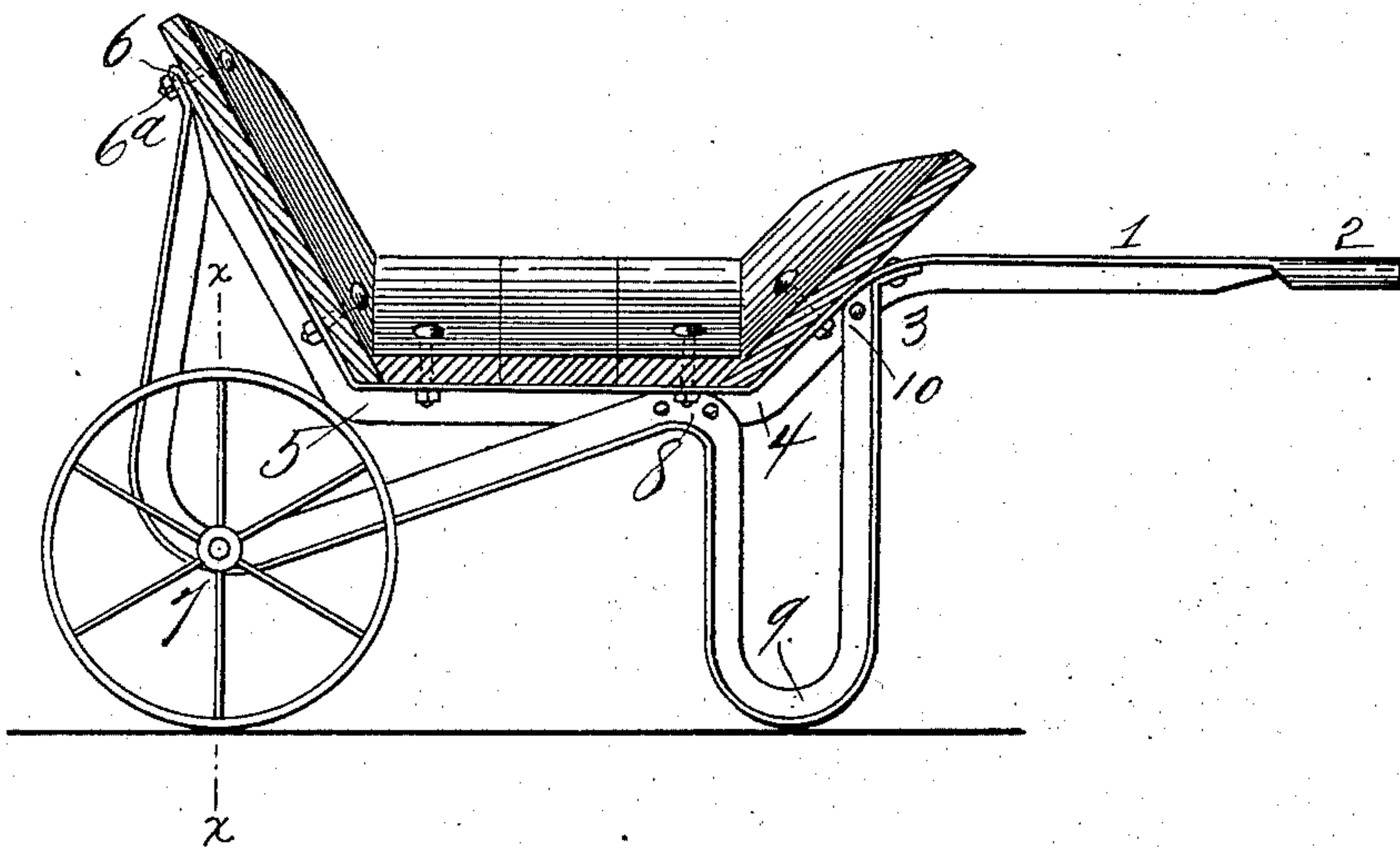
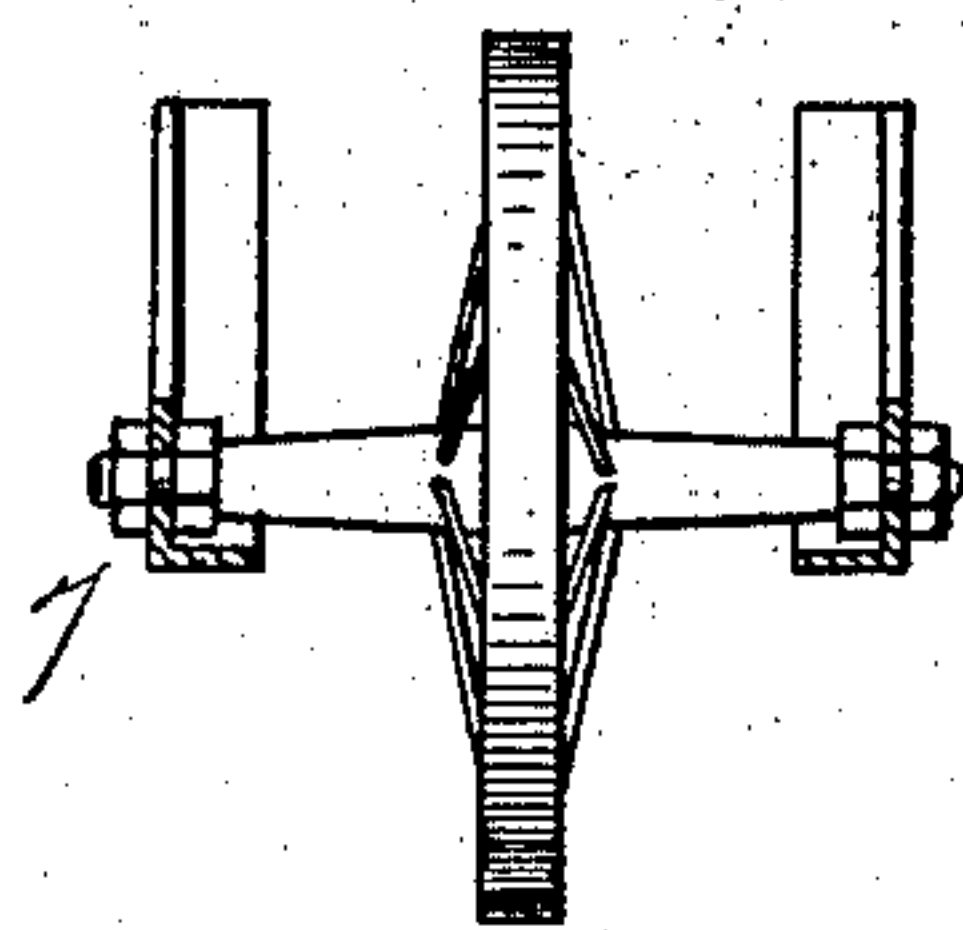


Fig. 2.



WITNESSES:

David C. Walter
L. E. Brown

INVENTOR:

Frank J. Cooper,
By his Atty. Howard Hall

UNITED STATES PATENT OFFICE.

FRANK J. COOPER, OF TOLEDO, OHIO, ASSIGNOR TO THE TOLEDO STEEL WHEELBARROW COMPANY, OF TOLEDO, OHIO.

WHEELBARROW-FRAME.

SPECIFICATION forming part of Letters Patent No. 686,264, dated November 12, 1901.

Application filed April 27, 1901. Serial No. 57,668. (No model.)

To all whom it may concern:

Be it known that I, FRANK J. COOPER, a citizen of the United States, residing at Toledo, in the county of Lucas and State of Ohio, have invented certain new and useful Improvements in Wheelbarrow-Frames; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

My invention relates to a wheelbarrow-frame composed of metal, preferably steel; and its object is to provide a frame which consists of two pieces only and which shall be light, strong, and inexpensive. I accomplish these results by means of the devices hereinafter described and shown, and illustrated in the accompanying drawings, in which—

Figure 1 is a central vertical longitudinal sectional elevation thereof; and Fig. 2, an end view of a portion of the frame, showing the manner of mounting the wheel and illustrating the shape of the frame-pieces in transverse section.

Like numerals of reference indicate like parts in both views.

In the drawings, 1 is a bar of metal L-shaped in transverse section, which at one end is shaped into cylindrical form, as at 2, to form a handle. There are two of these pieces placed side by side at opposite sides of the barrow, and the description of one piece will answer for both. The bar is bent, as at 3, downwardly at an obtuse angle. The bar is next bent at an obtuse angle, as at 4, from whence it runs in a horizontal direction to 5. Here it is bent to run upwardly to the point 6. At this point an angular piece is cut from the vertical web or flange of the bar of metal to permit the piece to be bent backwardly upon itself at an acute angle. From the point 6 the piece proceeds downwardly almost vertically to a point about the height of the axle of the wheelbarrow-wheel above the ground, as at 7. Here the piece proceeds backwardly or toward the handle and upwardly to a point

8 near the bend 4, at which place the vertical web of the piece lies in two parallel planes side by side and in contact with each other. From the point 8 the piece proceeds downwardly to the ground, where it is given a U-shaped bend, as at 9. Thence the piece proceeds upwardly to near the bend 3, where it ends and where the vertical webs lie side by side and in contact with each other, as at 10. The inclined portion of the piece thus bent lying between the points 3 and 4 forms a support and brace for the wheelbarrow-tray at its side next the operator, and the portion of the frame lying between the bends 5 and 6 forms a support and brace for the opposite side of the wheelbarrow-tray. The downwardly-projecting portion having the bend 9 forms a leg for the support of the barrow. A bolt passing through the wheelbarrow-tray and through the doubled portion of the frame-piece, as at 6^a, secures the tray in place at this point and, with the same bolt, gives rigidity to the frame. At the points 8 and 10, where the vertical web of the frame-piece is doubled side by side, bolts passing through the parts which lie side by side and in contact with each other hold the various bent portions in fixed relation with each other. Bolts passing through the tray and through the horizontal webs of the frame-pieces secure the tray and the frame-pieces in fixed relation to each other. At the bend 7 the vertical webs of the frame-pieces are bored horizontally for the reception of the spindle or axle of the wheel which supports the barrow. It will be seen that thus with two strips of like angle-bars the handles, the front and back braces for the tray, the wheel-braces, and the legs have been formed and that by reason of the angular shape in transverse section of the strips of metal of which the frame is composed a maximum of vertical, longitudinal, and transverse rigidity and strength is attained with a minimum of weight.

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

1. A wheelbarrow-frame comprising two strips of angle-iron, L-shaped in transverse section, having the bends 3 and 4 which form

rear tray-braces, the bends 5 and 6 which form the front tray-braces, the bends 7 and 8 which form wheel connections, and the U-shaped bends 9 which form the legs of the frame.

5 2. In a wheelbarrow-frame a strip of angle-iron, bent in round shape as at 2, having the bends 3 4 5 6 7-8 and 9, the vertical web of

said piece being bent into and secured in parallel relation with itself, as at 8 and 10. 10

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

FRANK J. COOPER.

Witnesses:

C. W. F. KIRKLEY,
L. E. BROWN.