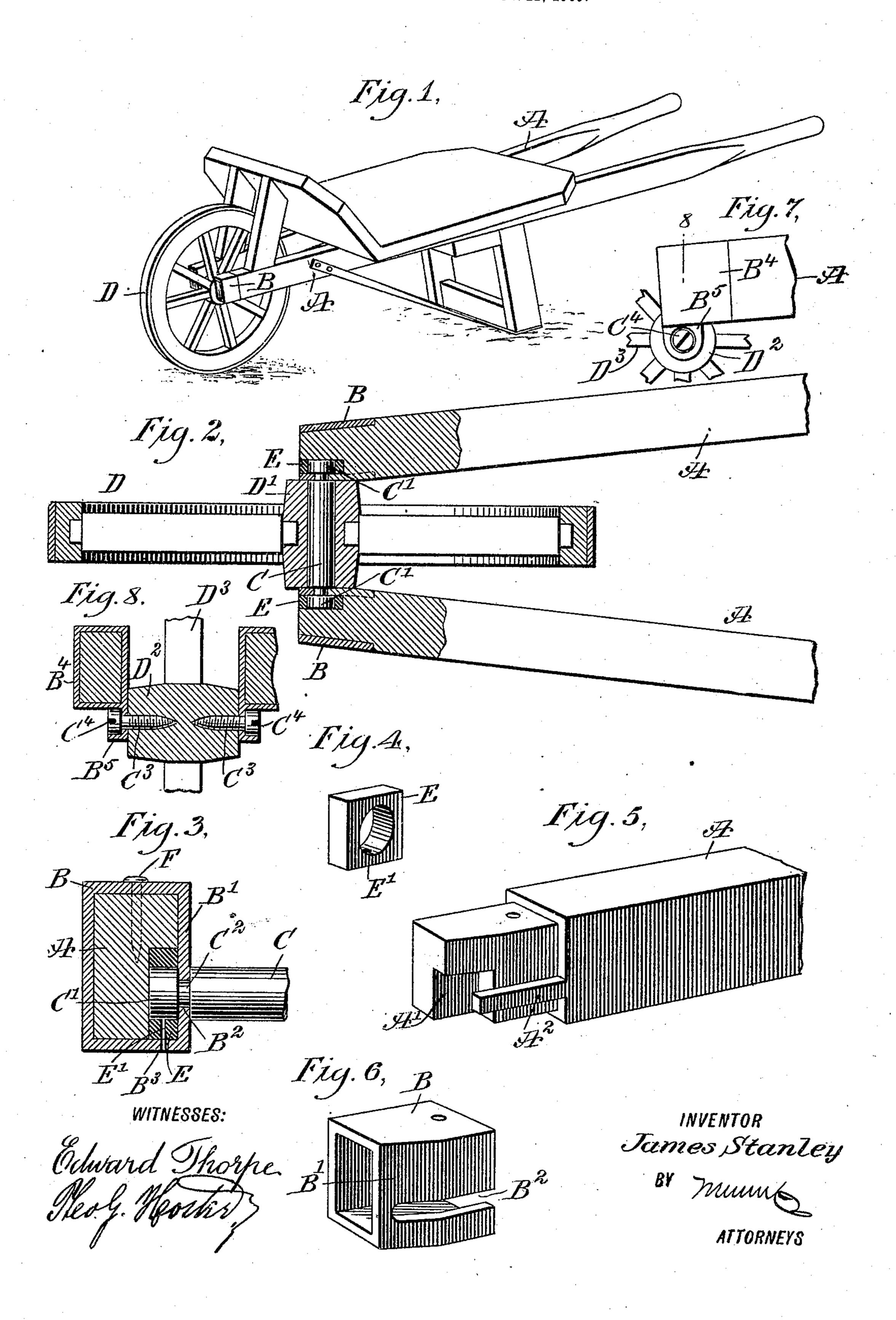
J. STANLEY.
WHEELBARROW BEARING.
APPLICATION FILED JAN. 12, 1905.



UNITED STATES PATENT OFFICE.

JAMES STANLEY, OF NEW YORK, N. Y., ASSIGNOR OF ONE-HALF TO MAE E. PAYNE, OF NEW YORK, N. Y.

WHEELBARROW-BEARING.

No. 805,891.

Specification of Letters Patent.

Patented Nov. 28, 1905.

Application filed January 12, 1905. Serial No. 240,693.

To all whom it may concern:

Be it known that I, James Stanley, a citizen of the United States, and a resident of the city of New York, borough of Manhattan, in the slots extending from the rear ends of the slots extending from the rear ends of the ferrules to within a distance of the forward ends thereof, as plainly indicated in Fig. 2. Slots B² are formed on the inner walls of the ferrules B, the slots extending from the rear ends of the ferrules to within a distance of the forward ends thereof, as plainly indicated in Figs. 3 are distance, and a resident of the formed on the inner walls of the ferrules B, the slots extending from the rear ends of the ferrules to within a distance of the forward ends thereof, as plainly indicated in Fig. 2. Slots B² are formed on the inner walls of the ferrules B, the slots extending from the rear ends of the ferrules to within a distance of the forward ends thereof.

and exact description.

The object of the invention is to provide a new and improved bearing for wheelbarrows, hand-trucks, and other wheeled vehicles which is simple and durable in construction, cheap to manufacture, easy to apply, and arranged to produce an equal distribution of the load on both ends of the axle, to reinforce the forward ends of the frame-beams, to insure an easy running of the wheel, and to prevent the latter from falling out or being forced out of position.

The invention consists of novel features and parts and combinations of the same, as will be more fully described hereinafter and

then pointed out in the claims.

A practical embodiment of the invention is represented in the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate

corresponding parts in all the views.

Figure 1 is a perspective view of the improvement as applied to a wheelbarrow. Fig. 2 is an enlarged sectional plan view of the same. Fig. 3 is an enlarged cross-section of the improvement. Fig. 4 is a perspective view of one of the axle bearing-blocks. Fig. 35 5 is a perspective view of the front end of one of the side beams. Fig. 6 is a perspective view of one of the ferrules. Fig. 7 is a side elevation of a modified form of the improvement, and Fig. 8 is a cross-section of the same 40 on the line 8 8 of Fig. 7.

The converging side beams A A of the wooden wheelbarrow-frame are provided on their forward ends with metallic ferrules B B, arranged for receiving and holding the ends of the axle C of a wheel D, the end portions C' of the said axle being mounted to turn in bearing-blocks E, held within the ferrules and in recesses A', formed in the wood of the ends of the side beams A A, as plainly shown in Fig. 5. The forward portions of the inner faces B' of the ferrules B are arranged at right angles to the axis of the shaft C, so as to form bearing or rubbing surfaces for the ends

of the hub D' of the wheel to abut against, as plainly indicated in Fig. 2. Slots B² are 55 the slots extending from the rear ends of the ferrules to within a distance of the forward ends thereof, as plainly indicated in Figs. 3 and 6, and the said slots are engaged by the 60 reduced or angularly-grooved portions C² of the axle C to hold the axle against transverse movement in the ferrules B, it being understood that the terminals C' of the axle turn in the bearing-blocks E, as previously men- 65 tioned, the bearing-blocks abutting against the inner faces of the ferrules. Into the rear portions of the slots B² project tongues A², formed integrally on the ends of the side beams A or secured thereon, so as to close the 70 said slots clear up to the reduced or recessed portions C² of the axle. By the arrangement described parallel bearing or rubbing surfaces are formed on the inner or opposite faces of the ferrules for the ends of the hub D' of the 75 wheel D to rub against, and the axle is free to revolve in the bearing-blocks, and the axle is held against transverse movement, as described, to equally distribute the load to both ends of the axle to prevent the axle from be- 80 coming disconnected from the ferrules when the wheelbarrow is moved forward or backward or when dumped sidewise.

Screws, nails, or similar fastening devices F are employed for securing the ferrules B in 85 place on the forward ends of the beams A, it being understood that the forward ends of the beams are preferably reduced to receive the ferrules for the latter to be flush with the sides, top, and bottom of the beams.

The bottom of each bearing E is provided with an aperture E', registering with an aperture B' in the ferrule B to allow grit and other matter to discharge from the bearing with a view to keep the bearing clean.

In the modified form shown in Figs. 7 and 8 the ferrules B⁴ are each provided with a depending integral bearing B⁵, engaged by the axle on the hub D² of the wheel D³, the said wheel-axle being in the form of right-hand 100 and left-hand lug-screws C³, screwing in the hub D² and having their shanks extending through apertures in the bearings B⁵, the heads C⁴ of the screws C³ fitting the bearings to turn therein.

Having thus described my invention, I

claim as new and desire to secure by Letters Patent—

1. A wheelbarrow having converging side beams, ferrules at the converging ends of the said side beams, provided with slots on the inside walls, the slots extending from the rear ends of the walls to within a distance of the front ends, and a wheel having the ends of its hub adjacent to the said inside walls, the axle of the wheel being formed with annular recesses near its ends, to engage the said slots.

2. A wheelbarrow having converging side beams, ferrules at the converging ends of the said side beams, provided with slots on the inside walls, the slots extending from the rear ends of the walls to within a distance of the front ends, a wheel having the ends of its hub adjacent to the said inside walls, the axle of the wheel being formed with annular recesses nearits ends, to engage the said slots, and apertured bearing-blocks held in the ferrules and

engaged by the end portions of the said axle.

3. A wheelbarrow having converging side beams, ferrules at the converging ends of the said side beams, provided with slots on the inside walls, the slots extending from the rear ends of the walls to within a distance of the front ends, a wheel having the ends of its hub adjacent to the said inside walls, the axle of the wheel being formed with annular recesses near its ends, to engage the said slots, and apertured bearing-blocks held in the ferrules and engaged by the end portions of the said axle, the said blocks abutting against the inner faces of the said inside walls.

4. A wheelbarrow having converging side beams, ferrules at the converging ends of the said side beams, provided with slots on the inside walls, the slots extending from the rear ends of the walls to within a distance of the front ends, a wheel having the ends of its hub adjacent to the said inside walls, the axle of the wheel being formed with annular recesses

near its ends, to engage the said slots, and apertured bearing-blocks held in the ferrules 45 and engaged by the end portions of the said axle, the said blocks abutting against the inner faces of the said inside walls and fitting into recesses formed in the ends of the said side beams.

5. A wheelbarrow having converging side beams, ferrules at the converging ends of the said side beams, provided with slots on the inside walls, the slots extending from the rear ends of the walls to within a distance of the 55 front ends, a wheel having the ends of its hub adjacent to the said inside walls, the axle of the wheel being formed with annular recesses near its ends, to engage the said slots, and tongues on the said side beams, extending 60 into the entrance ends of the said slots.

6. A wheelbarrow having a ferrule on the forward end of each diverging side beam, the ferrule having a rubbing-face for the wheel-hub, the said rubbing-face standing at a right 65 angle to the axis of the wheel-axle, and the inner ferrule-wall carrying the said rubbing-face having a longitudinal slot extending from the rear end of the ferrule forwardly, to within a distance of the forward end of the 70 ferrule.

7. A wheelbarrow having side beams, provided with tongues, ferrules on the forward ends of the side beams, and having longitudinal slots into which the tongues of the side 75 beams project, and a wheel having the ends of its axle projecting through the slots of the ferrules.

In testimony whereof I have signed my name to this specification in the presence of 80 two subscribing witnesses.

JAMES STANLEY.

Witnesses:

CHAS. S. TAYLOR, WM. F. ANGUS.