

J. BEAN.
Wheelbarrow.

No. 217,978.

Patented July 29, 1879.

Fig. 1.

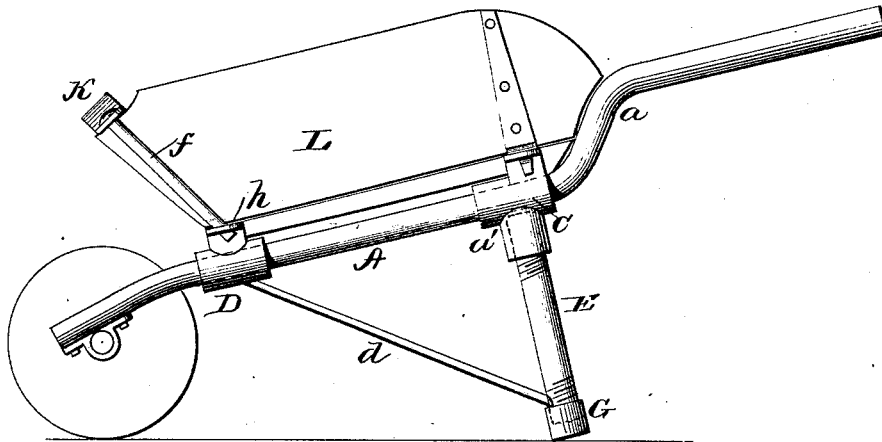
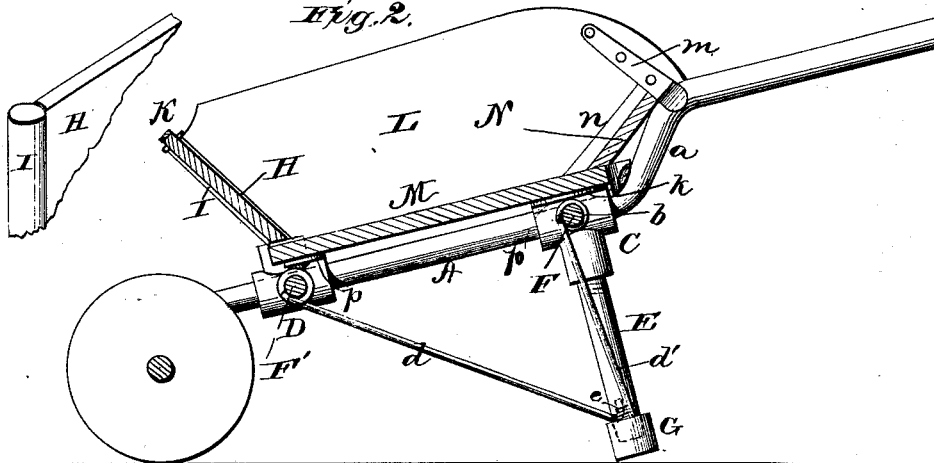


Fig. 2.



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JOHN BEAN, OF HUDSON, MICHIGAN.

IMPROVEMENT IN WHEELBARROWS.

Specification forming part of Letters Patent No. **217,978**, dated July 29, 1879; application filed May 10, 1879.

To all whom it may concern:

Be it known that I, JOHN BEAN, of Hudson, in the county of Lenawee, and in the State of Michigan, have invented certain new and useful Improvements in Wheelbarrows; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

The nature of my invention consists in the construction and arrangement of a wheelbarrow, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawings, in which—

Figure 1 is a side elevation of my improved wheelbarrow. Fig. 2 is a longitudinal section of the same.

A A represent the side pieces or bearers of the wheelbarrow, which are made of tubing, and each of a single piece, bent as shown at *a*, and forming at their rear ends the handles for manipulating the wheelbarrow.

At the front ends the side bearers, A A, are to be provided with suitable bearings for receiving the journals of the wheel. This may be constructed and arranged in any suitable or convenient manner.

On each side bearer, A, are placed two tubular couplings, C and D, which are slipped over the bearer, and held in place by means that will be hereinafter described.

The coupling C has a tapped boss or projection, *a'*, in the center on its under side, into which is screwed the tubular leg E. This leg, by being screwed into the coupling, acts and serves as a set-screw to hold the coupling in place on the side bearer, so that the same cannot be moved thereon without first loosening the leg.

On the inner side of each coupling C is a small tapped boss or projection, *b*, and into the same is screwed a rod, F, for connecting the two couplings. This rod also forms a set-screw for holding the couplings on the side bearers.

The couplings D D are connected and held

in place by a similar rod, F', as shown, thus completing the frame of the wheelbarrow.

Heretofore in using tubing for wheelbarrows it has been customary to have the tubing large enough to admit of being tapped and drilled, and yet have sufficient strength left. With my invention of making the side bearers of one piece, and having the couplings slip over the same, I am enabled to use pipe of considerably smaller diameter, and yet be fully as strong with less weight.

The tubular legs E are braced by means of rods *d d'*, the rods *d* running from the front couplings D, and the rods *d'* from the connecting-rod F to the lower ends of the legs, as shown. The lower ends of these braces are bent to form hooks *e*, which are inserted into holes in the legs E, and caps G are then screwed onto the lower ends of said legs up to and against the braces, whereby they are firmly secured and held in place rigidly.

In suitable bosses on the upper sides of the couplings D D are screwed round standards I I, between which the front board, H, of the barrow-body is placed, said board being concaved at its ends to fit on the standards.

A metal strap, K, is fitted over the upper edge of the board H and fastened to the tops of standards I I, the ends of said strap extending beyond the standards, and each end having a rod, *f*, passing through it and through a lug or plate, *h*, formed on or attached to the front coupling D, and leaving a space between said rod and the standard for the insertion of the front end of the side-board, L.

The rear end of the side-board is provided with a lip, *m*, which projects on the inner side of the side piece or side bearer, A, at the upper part of the bend *a*. The inner side of each side-board is further, near the rear end, provided with an inclined cleat, *n*, the lower end of which rests on the bottom M, said bottom being secured to lugs or plates *p p*, formed on or attached to and projecting inward from the couplings C and D.

N is an inclined tail-board supported on the rear end of the bottom M, and slid in between the cleats *n* and the bent portions *a* of the side bearers.

Having thus fully described my invention,

what I claim as new, and desire to secure by Letters Patent, is—

1. The combination of the tubular side bearers, A A, the couplings C C, movable thereon, and the legs E E, forming set-screws for holding said couplings, substantially as herein set forth.

2. The combination of the curved side bearers, A A, each made of a single piece of tubing, the couplings C C and D D, movable thereon, and the legs E E and rods F F', screwed into said couplings, and acting as set-screws to hold the same on the side bearers, substantially as herein set forth.

3. The combination of the leg E, braces *d* *d'*, and cap G, constructed in the manner and for the purposes herein set forth.

4. The board H, having its edges concaved or grooved, in combination with the standards I I and strap K, as and for the purposes herein set forth.

5. The side-board, L, provided with the lip *m* and cleat *n*, in combination with the side bearer, A, and bottom M, as set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 18th day of March, 1879.

JOHN BEAN.

Witnesses:

JAMES B. THORN,
T. W. TOLCHARD.