(No Model.)

W. H. STEVENS.

WHEELBARROW.

No. 264,967. Patented Sept. 26, 1882.

Fig. 1.

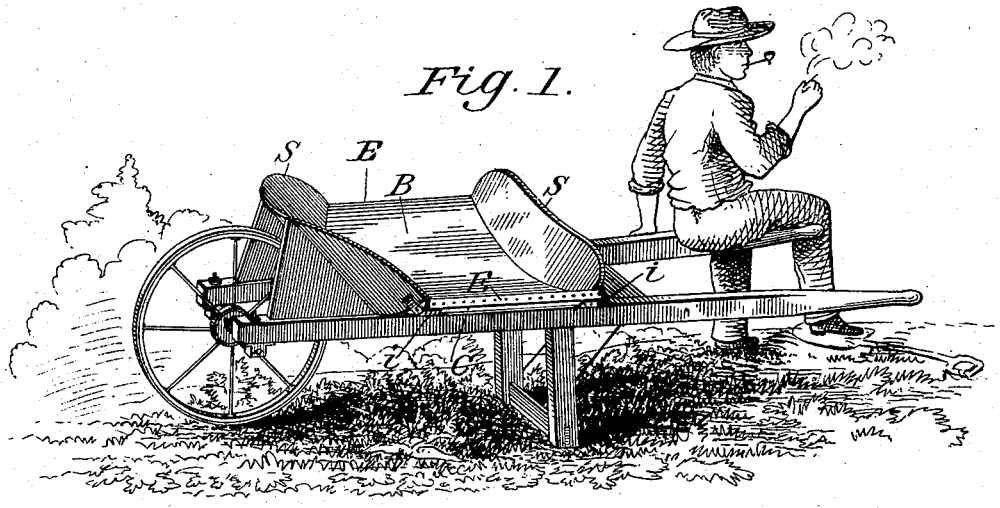


Fig. 2.

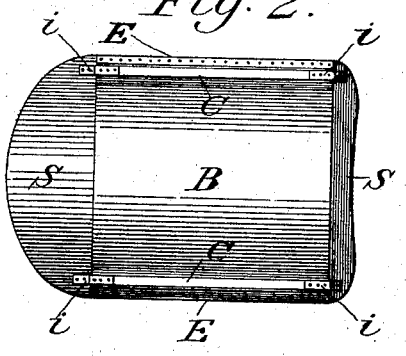


Fig. 4.

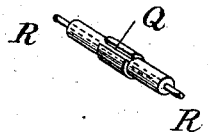
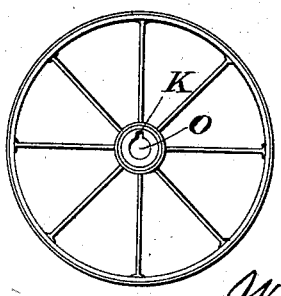


Fig. 3.



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UNITED STATES PATENT OFFICE.

WILLIAM H. STEVENS, OF COLDWATER, MICHIGAN.

WHEELBARROW.

SPECIFICATION forming part of Letters Patent No. 264,967, dated September 26, 1882.

Application filed May 26, 1882. (No model.)

To all whom it may concern:

Be it known that I, WM. H. STEVENS, of Coldwater, in the county of Branch and State of Michigan, have invented new and useful Improvements in Wheelbarrows, of which the following is a specification.

The nature of my invention relates to improvements in the construction of wheelbarrows of the class known as "railroad-barrows," and has for its object to combine great strength and durability with facility of construction.

The invention consists chiefly in the construction of the tray and also in the wheel, as is more fully hereinafter set forth, and indicated in the claims.

Figure 1 is a perspective view; Fig. 2, a bottom view of the tray. Fig. 3 is a side elevation of the wheel. Fig. 4 is a perspective view of the wheel-shaft or gudgeon removed from the wheel.

In the drawings, S S represent the sides of the tray, which are constructed of wood, bent and formed into the proper shape to receive the bottom B, which is a plate of sheet-iron, and is attached to the sides S S with nails or screws, the ends E E being turned over and attached with nails or screws to the cleats C C, which may be of wood, and are fastened at their extremities to the sides S S, giving support and rigidity to both the sides and bottom plate.

i i i i are strips of thin iron, which may be fastened with nails, screws, or bolts to the cleats C C and sides S S, more securely holding them together and in place. Other cleats, with or without the supporting-straps of iron, may be added when it may be deemed necessary to give additional strength to the tray.

The wheel, Fig. 3, is constructed in the usual manner, with the hub and rim of cast-iron and the spokes of wrought-iron rods, and with a wrought-iron tire shrunk about the rim; but instead of a solid hub extending on either side of the wheel, with wrought-iron extensions, forming the journal on which the wheel turns, as such wheels are usually constructed, there is a circular opening, O, with a key-seat, *k*, through the center of the hub, formed by setting a core of proper form in the mold before casting to receive the shaft or gudgeon, Fig. 4, which is of cast iron, and is cast of proper size to nicely fit the opening O in the hub of the wheel, and with a key-seat, *q*, to match the key-seat *k*, by which a key may be driven to secure it when in place, said shaft or gudgeon having a wrought-iron rod, *r*, extending from end to end through the center and projecting at either end, forming the journal on which the wheel turns, said rod being placed in the mold before casting, and the fluid metal being formed about it. It is obvious that wheels of this construction may also be used with other wheelbarrows than those of the railroad variety.

I will now proceed to mention some of the advantages of constructing wheelbarrows with the improvements above indicated.

By reason of the rapid consumption of the timber throughout the country it is becoming difficult to readily procure timber of sufficient width and excellence and free of defects from which to construct the bottoms of the trays, while the sides, being of much less width, may be more readily procured; also, there is great waste by reason of the checking and splitting of the bottom boards. Then on account of the exposure to the weather which wheelbarrows are usually subjected to, the bottoms of wooden trays soon become checked, warped, and split, and soon become worthless, while iron bottoms would retain their form and would be more durable and serviceable, while the waste and labor incident to the bending and forming the wooden bottoms would be avoided. Also, in constructing wheels as above described much labor and expense would be avoided, for the reason that the depth of the flasks required in which to form the mold for the wheel when cast in sections, as above described, would be so much less than they would when cast in the usual manner, all in one entire piece, therefore avoiding the handling of a much greater quantity of sand in forming the molds, besides being able to secure more perfect results. Then in shipping they could be much more closely packed by being shipped with the two parts separated, thereby securing lower rates of transportation.

What I do claim, and desire to secure by Letters Patent, is—

1. A wheelbarrow having a tray with wooden

sides and a sheet-iron bottom and supporting cross-cleats, constructed substantially as described.

2. The combination of the wooden sides S S with the sheet-iron bottom B and the supporting cross-cleats C C.

3. A wheelbarrow having an iron wheel with a hub cast with a circular opening, O, and key-seat *k*, and a cast-iron shaft or gudgeon cast separately, and with a wrought-iron rod extending through the center from end to end, and with key-seat *q* to match, to be connected and secured in position by a key.

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