June 7, 1927. 1,631,333

B. PRIVAT

GARDEN WHEELBARROW

Filed Jan. 16, 1926

Fig. 1

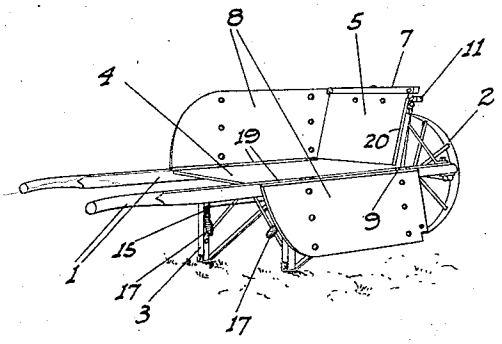


Fig. 2

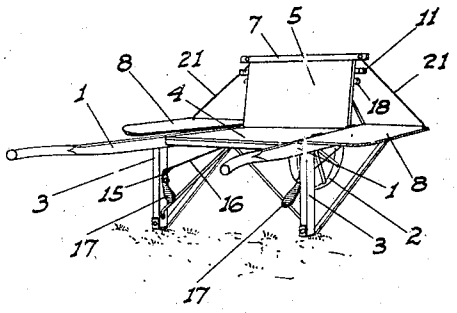


Fig. 3

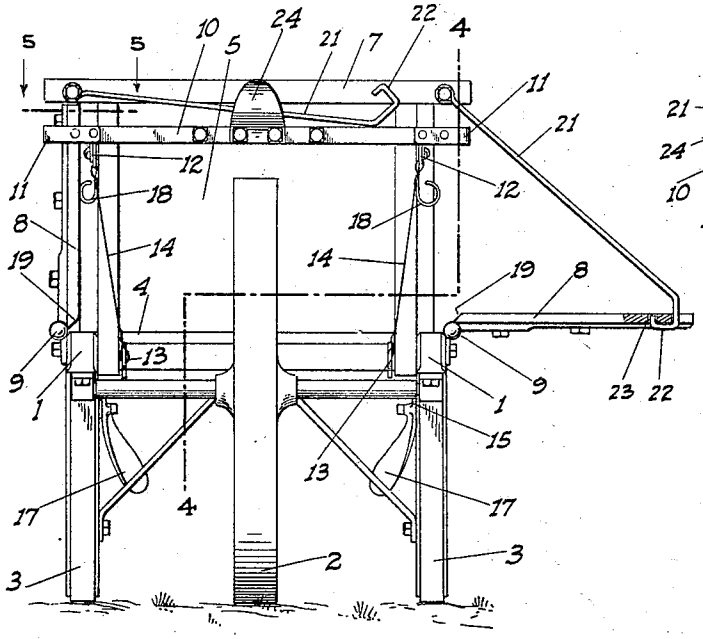


Fig. 4

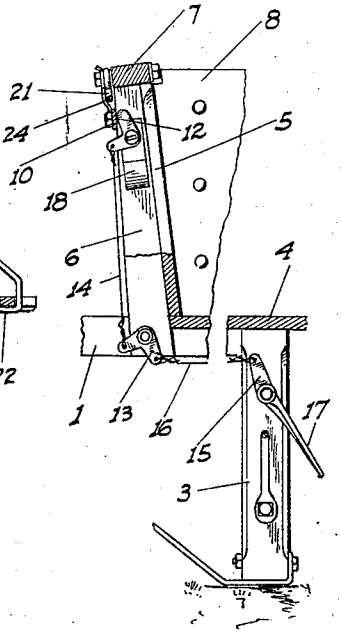
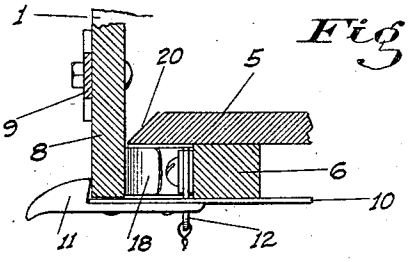


Fig. 5



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UNITED STATES PATENT OFFICE.

BERNARD PRIVAT, OF STOCKTON, CALIFORNIA.

GARDEN WHEELBARROW.

Application filed January 16, 1926. Serial No. 81,689.

This invention relates to improvements in wheelbarrows, and particularly to a type especially designed for the use of landscape gardeners and similar workers, being adapted to be accommodated to their many different kinds of work.

The principal object of my invention is to provide a wheelbarrow whose sides are permanently connected to the wheelbarrow rather than being detachable, as usual, and yet are arranged to be instantly lowered selectively and at will by a single simple operation. Considerable time and effort are thus saved when dumping a load over the use of an ordinary wheelbarrow with which a side-board must first be removed and laid to one side; and when the wheelbarrow is tipped over the other side usually drops off.

Another object is to provide means for enabling the sides to be held when desired in horizontal alinement with the bottom of the wheelbarrow so as to form a relatively wide supporting surface for carrying hay, brush, and similar light yet bulky material.

A further object is to provide a means for enabling the sides to be lowered so arranged that it can be instantly operated by the feet without having to let go the handles of the wheelbarrow.

A further object of the invention is to produce a simple and inexpensive device and yet one which will be exceedingly effective for the purpose for which it is designed.

These objects I accomplish by means of such structure and relative arrangement of parts as will fully appear by a perusal of the following specification and claims.

In the drawings similar characters of reference indicate corresponding parts in the several views.

Fig. 1 is a perspective view of the wheelbarrow showing the right side-board lowered.

Fig. 2 is a similar view showing the side-boards fastened in a horizontal plane for hauling hay, brush or the like.

Fig. 3 is a front elevation of the wheelbarrow showing the right side-board closed and the left one opened and held against downward movement beyond a horizontal position.

Fig. 4 is a fragmentary vertical section of the wheelbarrow taken on the line 4—4 of Fig. 3, and showing the side catch releasing structure.

Fig. 5 is a fragmentary horizontal section taken on the line 5—5 of Fig. 3, and showing a latch for holding an adjacent side-board, against the front end portion.

Referring now more particularly to the characters of reference marked on the drawings, the numeral 1 denotes the usual transversely spaced frame and handle beams supported at their forward ends by a wheel 2 and at their rear ends by legs 3. Mounted on the frame is a fixed bottom board 4, and a front end board 5, the latter being rigidly held in position and braced by vertical beams 6 on the outside thereof, which beams are connected at their upper ends by a transverse beam 7. This arrangement is standard in various types of wheelbarrows and I do not alter the same in any way.

Projecting upwardly from the side beams 1 are side-boards 8 secured to said beams at intervals by hinges 9. The side-boards at their front ends normally abut against the vertical edges of the front board 5 and project somewhat ahead of the same, as shown in Fig. 5. A transverse spring strap 10, fixed centrally between its ends onto the front board 5, extends past the vertical beams 6 and carries on its outer ends fixed latches 11 arranged to engage the outer faces of the side-boards at their forward ends, and normally held in such engagement by the action of the spring strap 10.

Each latch is provided with an individual release mechanism to enable the same to be moved forwardly at will, so as to disengage the corresponding side-board. Each release mechanism comprises a dog in the form of a bellcrank 12 pivoted onto the adjacent beam 6, one end of the bellcrank being positioned to bear against the rear face of the strap 10. Another bellcrank 13 connected at one end to the free end of the bellcrank 12 by a wire 14 is mounted at the lower end of the beam 6 so that the other end of said bellcrank 13 is below the bottom board 4, as shown in Fig. 4.

A pivoted lever 15 is mounted on the inside of each leg 3. The upper end of this lever is connected to the bellcrank 13 by a pull wire 16, the lower end of the lever being enlarged as at 17 to form a foot pad.

The above described parts are so arranged that forward pressure on the pad 17 causes the upper end of the corresponding bellcrank 12 to be moved forwardly against the strap 10, causing the adjacent latch 11 to be

released from the corresponding side 8, allowing the latter to turn outwardly on its hinges and drop as in Fig. 1.

To impart initial movement to the side 8 after the latch has been released, I have mounted a spring 18 of suitable character between the beam 6 and the adjacent side-board 8, the spring being compressed when said side-board is engaged by the latch. After either side-board has been lowered, it is returned to its normal latch engaged position by hand or foot without having to manipulate the catch and release mechanism.

To prevent dirt from being squeezed between the edges of the side, bottom and top portions when said side-boards are moved up to a vertical position, the lower inner edges of the side-boards are beveled off as at 19, and the vertical inner edges of the front board 5 are similarly beveled as at 20.

Ordinarily when the latches 11 are released the side-boards drop unrestrained to a substantially vertical position opposite to their normal position. In order to prevent them dropping to this extent and to hold them level with the bottom board 4 when desired, I provide brace rods 21, one for each side-board, which brace rods are pivoted at their upper ends onto the forward face of the transverse beam 7. The opposite ends of these rods are formed with hooks 22 to engage seats provided therefor in the side-boards in transverse alinement with the rods, as shown at 23 in Fig. 3.

The brace rods are permanently mounted on the beam 7 and when not in use are folded over to lie in a substantially horizontal position alongside the beam 7, being then held against unfolding movement by a spring cradle 24 preferably mounted in fixed connection with the strap 10 centrally of its length.

From the foregoing description it will be readily seen that I have produced such a device as substantially fulfills the objects of the invention as set forth herein.

While this specification sets forth in detail the present and preferred construction of the device, still in practice such deviations from such detail may be resorted to as do not form a departure from the spirit of the invention, as defined by the appended claims.

Having thus described my invention what I claim as new and useful and desire to secure by Letters Patent is:

1. A wheelbarrow including fixed bottom and front end boards, side boards hinged along the bottom board and normally abutting against and extending ahead of the front end board, releasable latch means normally holding the side boards in such position; the lower horizontal edges of the side boards, and the vertical edges of the front end board being cut on an inward bevel to prevent dirt being squeezed between the parts when the side boards are moved upwardly to a front-end board engaging position.

2. A wheelbarrow including fixed bottom and front end boards, side boards hinged along the bottom board and normally abutting against and extending ahead of the front end board, individual latches engaging the front ends of the side boards when the latter are raised, a spring strap mounted onto the front end board and to which the latches are fastened, said strap acting to press the latches against the side boards, and individually operable release means for the latches acting against the strap adjacent the latches for moving the same forwardly and out of engagement with the side boards.

3. A wheelbarrow including fixed bottom and front end boards, side boards hinged along the bottom board and normally abutting against and extending ahead of the front end board, individual latches engaging the front ends of the side boards when the latter are raised, a spring strap mounted onto the front end board and to which the latches are fastened, said strap acting to press the latches against the side boards, pivoted dogs mounted in connection with the front end board and disposed rearwardly of the strap adjacent the latches and arranged for movement against the strap to press the same forwardly, and means for imparting such movement to the dogs individually mounted at the rear end of the wheelbarrow.

In testimony whereof I affix my signature.

BERNARD PRIVAT.