Jan. 10, 1950 A. PROVITOLA ET AL 2,494,199

FOLDING WHEELBARROW

Filed March 19, 1947

Fig 1

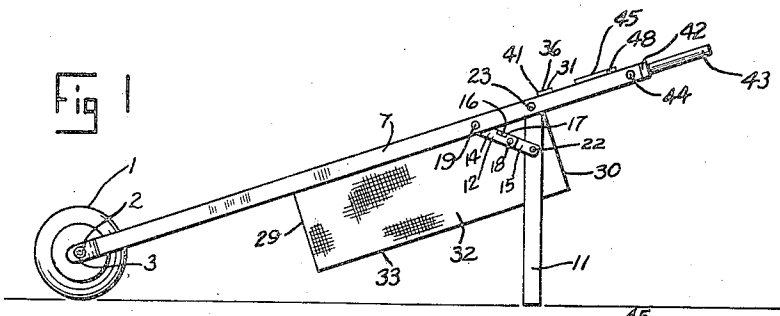


Fig 2

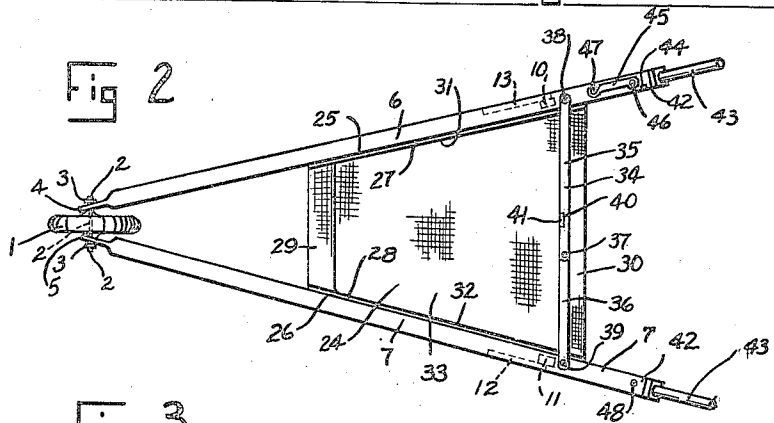


Fig 3

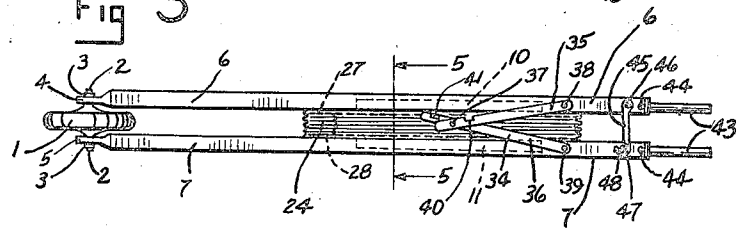


Fig 4

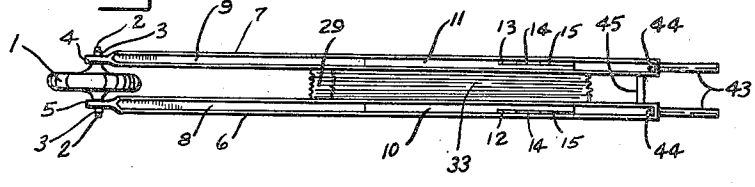


Fig 5

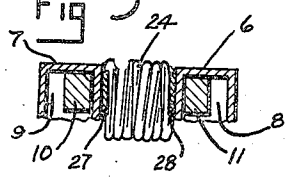
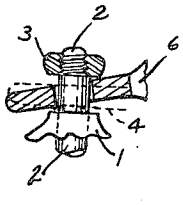


Fig 6



ANTHONY & ANNA T. PROVITOLA
INVENTORS

BY Paul A. Talbot.

ATTORNEY

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FOLDING WHEELBARROW

Anthony Provitola and Anna T. Provitola,
Brooklyn, N. Y.

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2 Claims. (Cl. 280—35)

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Our invention relates to a wheelbarrow having a foldable carrier and movable handle bars and legs to permit our wheelbarrow to be carried when not used as a wheelbarrow.

Among the purposes and objects are to provide a wheelbarrow which may be folded up and carried or stored in compact form.

Another object is to provide a light, compact wheelbarrow which can be carried in compact form as on a train or bus, then unfolded for use in carrying parcels etc.

An object is to provide a light compact carrier.

Still another object is to provide handle bars which are inverted channels for housing the legs when not in use.

We accomplish these and other objects by the construction herein described and shown in the drawing which forms a part of this, our disclosure.

In the drawing:

Fig. 1 is a side elevational view of our wheelbarrow when unfolded and ready to use.

Fig. 2 is a top plan view.

Fig. 3 is a top plan view showing our wheelbarrow folded up for carrying or storage.

Fig. 4 is a bottom plan view.

Fig. 5 is a section at 5—5, Fig. 3.

Fig. 6 is a detail of the axle securing means showing one of the handle bars as when in use in full lines and as when folded in broken lines.

Similar reference characters refer to similar parts throughout the several views of the drawing and in the specifications which bear reference thereto.

Our invention may be made in several sizes for a toy wheelbarrow, for shopping, and picnicking, and where it is desirable to carry the wheelbarrow on a train, bus, or for storage where space is limited, as in apartments. While light in construction, when unfolded and ready for use, our wheelbarrow is capable of carrying substantial weights which would be too bulky or heavy to carry otherwise.

The advantages characterizing wheelbarrows generally over other hand operated carriers are well known and apply to the foldable device herein disclosed. The construction, however, is preferably made lighter when compared with an ordinary wheelbarrow of like size.

In these specifications, we have not attempted to show all possible modifications but rather to describe in detail, a preferred embodiment so that one skilled in the art to which this invention pertains may more easily follow the construction. After a study of this disclosure, modifications

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may suggest themselves to suit some of the many uses for which our invention is peculiarly adapted. Such modifications may be made without departing from the principles which underly our invention which is set forth in the appended claims.

The preciseness of the detailed description and the preciseness of the drawing are not intended to limit the scope of our invention, but rather illustrate a preferred construction embodying the principles underlying our invention.

Referring to the drawings, we have shown the wheel 1 having an axle 2 on which the wheel rotates. Swingingly secured to the axle at each side of the wheel and between the wheel and the nuts or other enlargement for the axle securing means 3, we have provided the flattened or narrow apertured ends 4 and 5 of the handle bars 6 and 7 which are preferably formed of a channel or inverted U bar, the interiors 8 and 9 of which serve to house the legs 10 and 11 as well as the lock latch links 12 and 13, each comprising the swingable elements 14 and 15, the element 14 being notched at 16 to receive the stop extension 17 of the element 15 which is swingingly secured by the pivot 18 to the element 14 which is swingingly secured to the inside of the handle bars by the pivots 19. The element 15 is pivotally secured to the leg 10 or 11 by the pivot 22 so that when the elements are in substantial axial alignment, the legs are swung on the pivots 23 to extend downwardly below the handle bars to support the wheelbarrow when at rest.

Between the handle bars 6 and 7, we have provided the flexible receiver 24 which may be of fabric and secured along the top edges 25 and 26 by the reinforcing members 27 and 28 which may be inserted in the hem seams of the edges 25 and 26 or otherwise. The reinforcing members are secured to the sides of the handle bars which face each other.

The receiver is preferably provided with the flexible front end wall 29 and rear end wall 30 and the side walls 31 and 32 and bottom 33 to receive parcels, etc., when the wheelbarrow is opened up for use and is folded neatly between the handle bars when the wheelbarrow is folded for carrying or storing, or not in use as a wheelbarrow.

The handle bars are held apart during use by the foldable cross spreader 34 comprising the swingable links 35 and 36 which are secured to each other by the pivot 37; and to the handle bars 6 and 7 by the pivots 38 and 39. The link 35 is preferably notched at 40 to receive the stop 41

secured to and projecting above the link 36 to limit the links from swinging substantially beyond their axial alignment when the handle bars are spread apart for use as shown in Fig. 2 of the drawing. The links are swung out of axial alignment as shown in Fig. 3 when the wheelbarrow is folded up.

At the ends 42 of the handle bars, we have provided the handles 43 which may be made of wood or other suitable material and secured to the handle bars by the pins or other suitable securing means 44.

To hold and secure the handle bars together as in Figs. 3 and 4, we have provided the swinging latch 45 pivoted at 46 to the handle bar 6 and notched at 47 to engage the pin 48 secured to the handle bar 7.

The material, size and number of the parts and the uses for which our device is applied, may vary to suit the conditions and requirements. Small sizes having simplified parts may be used as toys, while the larger, more expensive models may serve to carry heavy loads, yet when not in use, may be folded in to compact space.

Having thus described a preferred embodiment of our invention, what we claim as new and desire to secure by Letters Patent is set forth in the claims to follow.

We claim:

1. In a wheelbarrow having a wheel and receiver and handle bars disposed substantially

alongside said receiver, axle means for said wheel and means swingingly securing said axle means to said handle bars, said handle bars being hollow, and legs swingingly secured to said handle bars to contain said legs when not in use.

2. In a wheelbarrow having a wheel and receiver and handle bars disposed substantially alongside said receiver, an axle for said wheel and means swingingly securing said axle to said handle bars, said handle bars being hollow and open at the under side, and legs swingingly secured to and within said handle bars and means for holding said legs from swinging when in use swingingly secured within and foldable with said legs within said handle bars.

ANTHONY PROVITOLA.
ANNA T. PROVITOLA.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
117,085	Lawrence	July 18, 1871
541,760	Kellar	June 25, 1895
705,406	House et al.	July 22, 1902
913,487	Fleischman	Feb. 23, 1909
1,242,418	Booth	Oct. 9, 1917
2,422,331	Bates	June 17, 1947