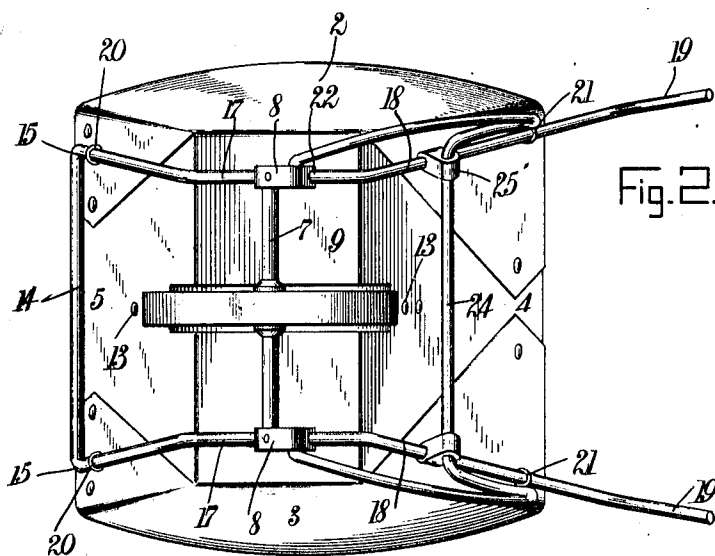
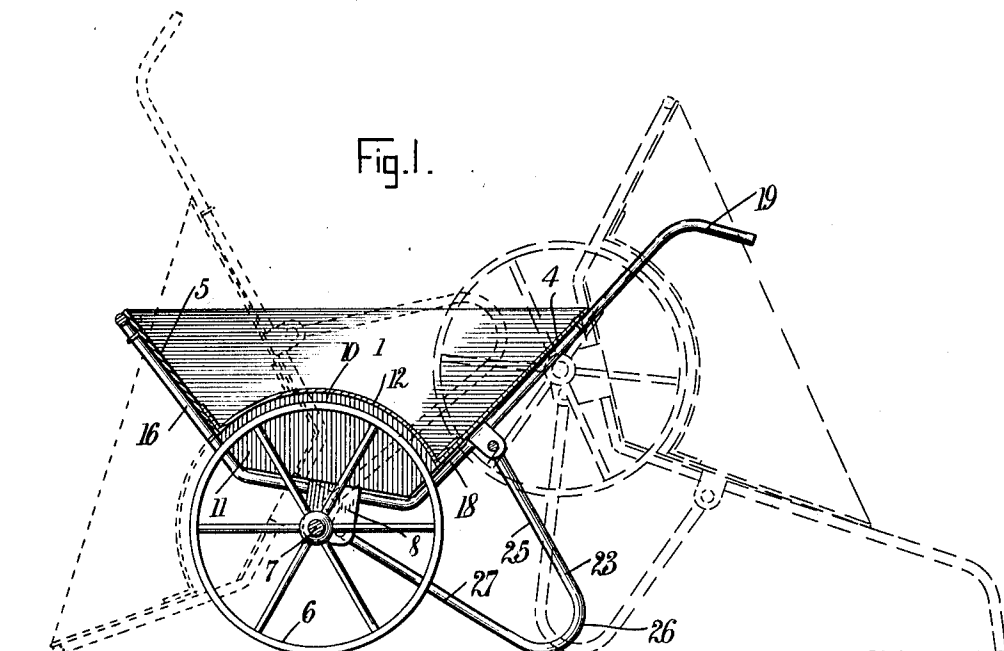


1,031,454.



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UNITED STATES PATENT OFFICE.

JACOB A. LAWRENCE, OF VALPARAISO, INDIANA.

WHEELBARROW.

1,031,454.

Specification of Letters Patent.

Patented July 2, 1912.

Application filed September 26, 1911. Serial No. 651,323.

To all whom it may concern:

Be it known that I, JACOB A. LAWRENCE, a citizen of the United States, and a resident of Valparaiso, in the county of Porter and State of Indiana, have invented a new and Improved Wheelbarrow, of which the following is a full, clear, and exact description.

The present invention relates to wheelbarrows and it has for its object to produce a wheelbarrow of simple form and so constructed that it may be quickly turned within a limited space to change its course of travel and further to facilitate the dumping of the barrow and to protect the wheel which supports the same.

A further object is to produce a wheelbarrow which is capable of having an uninterrupted forward dumping movement and also to protect and strengthen the hopper more particularly at its forward end so as to receive and resist the blow and impacts incident to the dumping operation.

Reference is to be had to the accompanying drawing constituting a part of this specification, in which similar characters of reference denote corresponding parts in all the views and in which—

Figure 1 shows a central longitudinal section through a wheelbarrow embodying the invention; and Fig. 2 shows an under side plan view.

In the drawing, 1 indicates the hopper which may be constructed of any suitable material, but which in the illustrated embodiment of the invention, is constructed of some suitable sheet metal bent to form. It is provided with the outwardly flaring sides 2 and 3, and the outwardly flaring ends 4 and 5, 4 being the rear end, and 5 the forward end.

The hopper 1 is supported upon a single wheel 6 connected to an axle 7 which turns in the brackets 8 upon the under portion of the hopper 1 and substantially centrally disposed with relation to the bottom 9 of the hopper. The wheel 6 is considerably larger than is ordinarily used in such devices, and in order to have the load contained in the hopper as low as possible in order to lower the center of gravity, there is provided in the bottom 9 of the hopper a recess or wheel housing 10 formed by the side plates 11, and a curved crown piece 12, the latter being secured at each of its ends as by the rivets 13 to the end walls 4 and 5 of the hopper 1.

This wheel housing 12 is of sufficient width to accommodate the periphery of the wheel and to permit its free revolution, and upon the inside of the hopper 1 forms somewhat of a partition or division, so that if desired a small load of material upon one side may differ from a small load upon the other.

In order to strengthen the hopper, it is supported upon a frame work comprising a forward cross bar 14 which is bent at 15 and then downwardly forming the side braces 16 for the front end 5 of the hopper. From the side bars 16 it passes beneath the bottom 9 of the hopper in the form of parallel rods 17, and thence passes upwardly beneath the rear end 4 of the hopper in the form of the diverging brace rods 18 which are continued upwardly beyond the top edge of the hopper and rearwardly in the form of handles 19. This strengthening frame is secured to the hopper in any suitable or convenient manner as by means of staples 20 and 21 which embrace the members of the frame and pass through the hopper, being clenched or otherwise secured at their inner ends, also the side bars 17 beneath the bottom 9 of the hopper pass through bearings 22 formed in the brackets 8.

In order to support the hopper while being loaded, it is provided with the supporting props 23 which may be conveniently formed as shown in the drawing of a single metallic rod having the centrally disposed cross bar 24 which is supported by brackets 25 mounted upon the rods 18, and thence bent downwardly and rearwardly as shown at 25 and by means of the large rounded bends 26 extended forward in the form of braces 27, the ends of which are connected to the brackets 8.

It will be noted that the position of the wheel with relation to the center of gravity of the hopper is such that the load will be distributed, the greater portion being at the rear of the axle, so that while being loaded and at rest, the hopper will be supported in the position shown in Fig. 1 by the props 23, also by reason of the relative position of the props 23 and the wheel, the wheelbarrow may be quickly rolled over the floor by giving it a push in the direction in which it is desired it shall go, and this without the necessity of raising or tilting the hopper upon its axle.

As shown in dotted lines in Fig. 1, the wheelbarrow may be quickly tilted or tipped

for unloading either in a forward or rearward direction. When tilted in a rearward direction, the props 23 act as the fulcrums about which the loaded hopper moves. In 5 tilting in a forward direction, all that is necessary to do is to exert a sudden upward lift upon the handles 19 so as to throw the center of gravity to the front of the axle 7, whereupon a releasing of the handles 19 will 10 cause the hopper of the barrow to assume the position as shown in dotted lines at the left in Fig. 1. It is of course understood that in this dumping operation the shock of the impact of the forward edge of the hopper 15 against the ground will be borne by the brace rod 14 which will protect the body of the hopper from damage and injury. It will be further noted that by placing the wheel at substantially the central portion of the 20 hopper, said wheel is in a protected position and in such position that the manipulation of the wheelbarrow is materially facilitated.

Having thus described my invention, I 25 claim as new and desire to secure by Letters Patent:

1. A wheelbarrow comprising a hopper, a wheel upon which said hopper is supported, located at the central part of the hopper and

projecting at its periphery within the body 30 of the hopper, and a frame for bracing and strengthening said hopper, comprising a front cross bar and substantially parallel bracing and strengthening bars connected to 35 said cross bar extending beneath the hopper, upwardly inclined at each end and provided with handles at their rear ends.

2. A wheelbarrow comprising a hopper, a wheel upon which said hopper is supported, 40 located at the central part of the hopper and projecting at its periphery within the body of the hopper, a frame for bracing and strengthening said hopper, comprising a 45 front cross bar and substantially parallel bracing and strengthening bars connected to said cross bar extending beneath the hopper, upwardly inclined at each end and provided 50 with handles at their rear ends, and a bent rod forming props for the hopper, secured thereto and extending rearwardly and downwardly in an inclined direction.

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

JACOB A. LAWRENCE.

Witnesses:

EDGAR GUY OSBORNE,
ALEX A. LAWRENCE.