No. 879,861. PATENTED FEB. 25, 1908.

J. FERGUSON.

WHEELBARROW.

APPLICATION FILED AUG. 9, 1907.

2 SHEETS—SHEET 1.

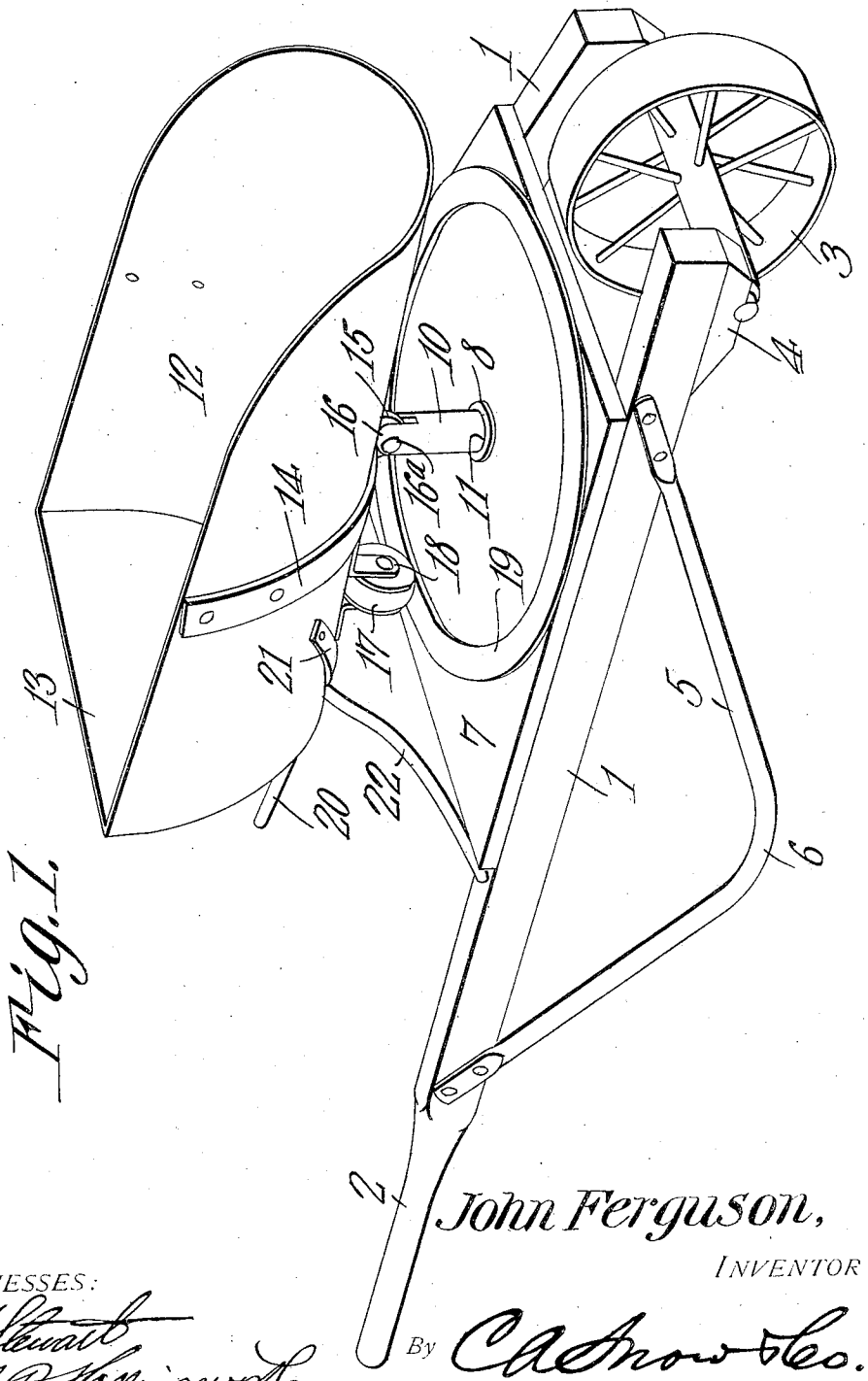

Fig. 1.

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2 SHEETS—SHEET 2.

Fig. 2.

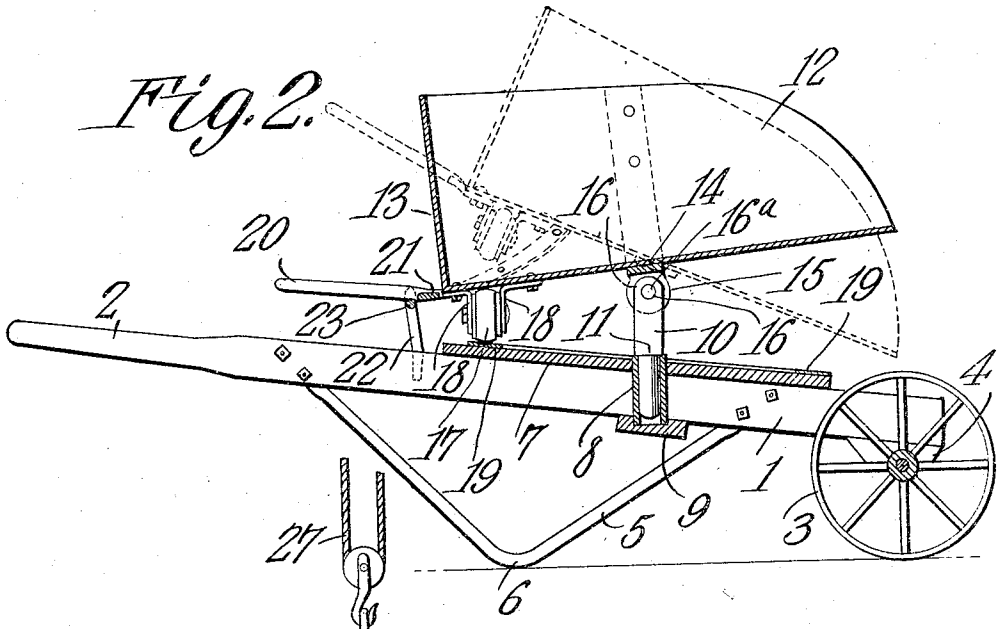


Fig. 3.

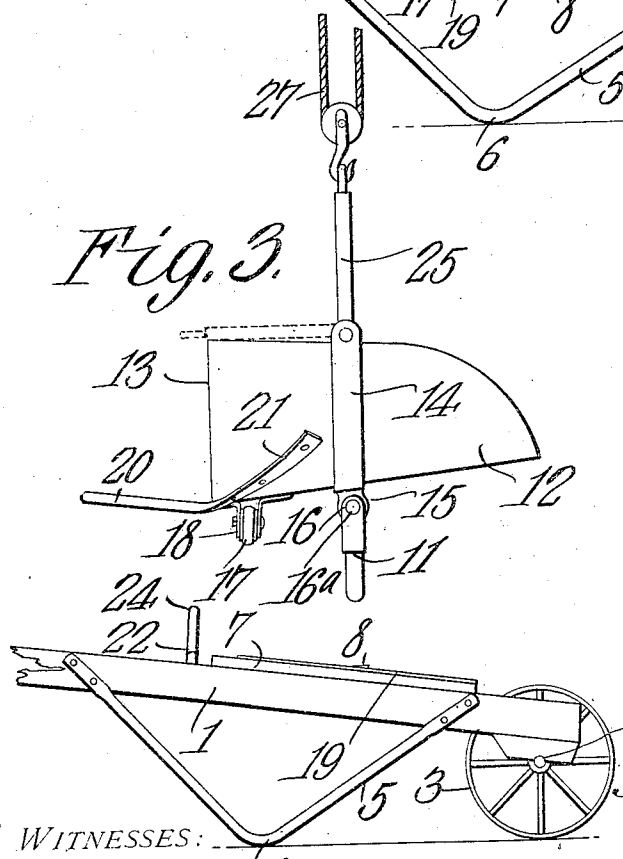
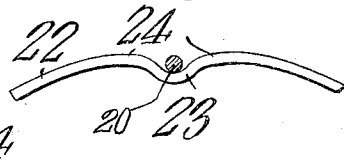


Fig. 4.



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JOHN FERGUSON, OF CRESTON, ILLINOIS.

WHEELBARROW.

No. 879,861. Specification of Letters Patent. Patented Feb. 25, 1908.

Application filed August 9, 1907. Serial No. 387,864.

To all whom it may concern:

Be it known that I, JOHN FERGUSON, a citizen of the United States, residing at Creston, in the county of Ogle and State of Illinois, have invented a new and useful Wheelbarrow, of which the following is a specification.

This invention relates to a wheel-barrow of that type which are provided with a removable dumping hopper pivoted to the barrow frame.

The main object of the invention is to provide a wheel-barrow, having a flat platform mounted on the side beams, each of which beams has a handle at one end and a bearing at its opposite end for the wheel journal. Upon the barrow frame which is of well known construction is pivotally mounted a scoop shaped hopper adapted to turn on a horizontal and vertical axis to enable the contents to be dumped on any side of the barrow frame desired.

A further object of the invention is to provide means for bodily lifting the hopper and its contents from the barrow by any suitable elevating mechanism, such for instance as a block and fall, and conveying the loaded hopper to some point inaccessible to a wheelbarrow.

With these and other objects in view the invention consists of the novel construction, combination and arrangement of parts hereinafter described and definitely claimed.

In the accompanying drawings: Figure 1 is a perspective view of the wheel-barrow complete. Fig. 2 is a vertical longitudinal sectional view through the center of the same. Fig. 3 is a view illustrating the means employed for raising the hopper from the barrow frame when it is to be carried to a distance. Fig. 4 is a detail view illustrating the means used to hold the hopper in normal position.

Similar numerals of reference indicate the same parts in all the figures.

The wheel-barrow, which may be of ordinary construction, comprises two side beams 1, provided with handles 2 and converging from said handles forwardly where they are mounted on a wheel 3 journaled in bearings 4 on said side braces 1. Legs 5 of any approved form are applied to said side braces 1 for supporting the barrow, those here shown consist of a bent section of a metal bar flattened on its ends and fastened by bolts to the braces 1, the bent portion 6 forms a foot of the leg.

Rigidly attached to the top side of the side braces 1 is a flat platform 7, through which passes at about its center a vertically disposed sleeve 8, the lower end of said sleeve supported by a cross beam 9 fastened to the under side of the side beams 1. The sleeve 8 forms a socket of vertical bearing for the standard 10 shouldered at 11 to rest on the upper end of the sleeve 8 and support the weight of the hopper 12 pivoted to the upper end of said standard 10.

The hopper 12 is made by preference of sheet metal somewhat in form of a scoop, that is to say, the body is semi-cylindrical in shape, open at the top, with a flat back plate or end 13 perpendicular to the bottom of the hopper and an open front, with curved sides as clearly shown in the drawings. Near the longitudinal center of the hopper 12 it is provided with a band 14 to increase the strength and rigidity of the hopper and to prevent its contents from spreading it laterally, the band extending circumferentially around the hopper. The band or brace 14 has a lug 15 extending downwardly from its under side and is embraced by the upper forked end 16 of the standard 10 and pivoted thereto by a pin 16^a. As thus constructed it will be noted that the hopper may be turned horizontally on the standard 10 to any position on either side or to the front of the barrow as desired, and in a vertical direction upon the horizontal pivot pin 16^a. To support the rear and heavier part of the hopper 12 a roller 17 is mounted in a suitable bearing 18 bolted to the under side of the hopper and travels on a track 19 attached to the top of the platform 7. For the purpose of operating the hopper a handle 20 is supplied. This consists of a straight, rearwardly projecting portion to be grasped by the hands when the hopper is to be tipped or moved on its vertical axis and the forked inner ends 21 of which latter are bolted to the bottom of the hopper. To retain the hopper in its normal position a rod 22 is fastened at its ends to the side braces 1 having at its center a depressed portion 23 on a higher elevation than the side braces 1, the rod 22 curving downwardly from the said de-

pression 23 toward each end of said rod. Within this depression 23 the operating handle 20 rests when the hopper is in normal position. When returning the hopper to position the handle 20 rides up the inclined sides of the rod 22 and passing over the slightly elevated portion 24 drops into the notch 23 and holds the hopper secure in its normal position.

In the operation of the invention thus far described, the wheel-barrow is trundled about and loaded in the usual manner. It is then wheeled to its destination and after approaching the dumping spot as near as possible, the handle 20 of the hopper is grasped by some person and the hopper turned on its horizontal axis until its mouth or forward end overlies the point where its contents are to be emptied, the handle is then raised and the material in the hopper slides therefrom to the ground.

It sometimes happens that wheel barrows containing materials, the ultimate destination of which is beyond the reach of a wheeled vehicle, as for instance, when the hopper contains bricks, mortar and other building material. In such cases instead of wheeling the material from the place of storage to a point as near its destination as possible, and then unloading the material to be again reloaded on elevators or in receptacles to be carried by hand to the place of deposit, the arrangement illustrated in Fig. 3 has been devised. It will there be seen that the band 14 around the hopper 12 is extended above the sides sufficiently far to form a bearing for a bail 25, which under ordinary conditions will assume the position indicated by dotted lines in said figure, that is to say lying against the sides and back plate 13 of the hopper, and out of the way, when the hopper is to be loaded and unloaded. Now, when the wheel-barrow is used for transporting building materials as heretofore mentioned, it is wheeled in position below a suitable lifting device 27, the bail 25 hooked thereon and the loaded hopper raised and transported wherever its contents are needed. An empty hopper will then be placed on the wheel-barrow frame and the wheel-barrow be immediately taken back to the place of storage and reloaded.

Having thus described the invention what is claimed is:—

1. A wheel-barrow comprising a frame, a vertically disposed socket bearing secured to said frame, a circular track fixed to said frame concentric to the axis of said socket, a standard mounted to rotate in said socket, a hopper pivotally attached to said standard on an axis at a right angle to that of the standard, and a roller attached to the hopper and adapted to run on said track and support a part of the superposed weight.

2. A wheel-barrow comprising a frame, a platform thereon and a vertically disposed socket attached to said platform, a standard mounted to turn in said socket bearing, a hopper connected to said standard by a horizontal pivot and a roller supporting the rear end of said hopper.

3. A wheel-barrow comprising a frame, a platform thereon, and a vertically disposed socket attached to said platform, a standard mounted to turn in said socket bearing, a hopper pivoted to said standard and adapted to turn in a vertical plane, a roller attached to and upholding the rear end of said hopper, an operating handle attached to said hopper and means attached to the frame of the wheel-barrow for holding said hopper in normal position.

4. A wheel-barrow, comprising a frame, a platform thereon and a vertically disposed socket attached to said platform, a cross brace attached to the under side of the barrow frame and supporting the lower end of the said socket, a track attached to the upper side of the platform, a standard pivotally mounted in said socket, a hopper provided with a central strengthening band and a lug on the under side of said band pivoted to the upper end of said standard, a roller attached to the rear of the hopper and adapted to travel on said track, and means for operating said hopper and locking it in normal position.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

JOHN FERGUSON.

Witnesses:
WILLIAM H. ROWE,
MARTIN KENNEDY.