No. 869,939. PATENTED NOV. 5, 1907.

M. G. SHUMWAY.

LITTER CARRIER.

APPLICATION FILED DEC. 7, 1906.

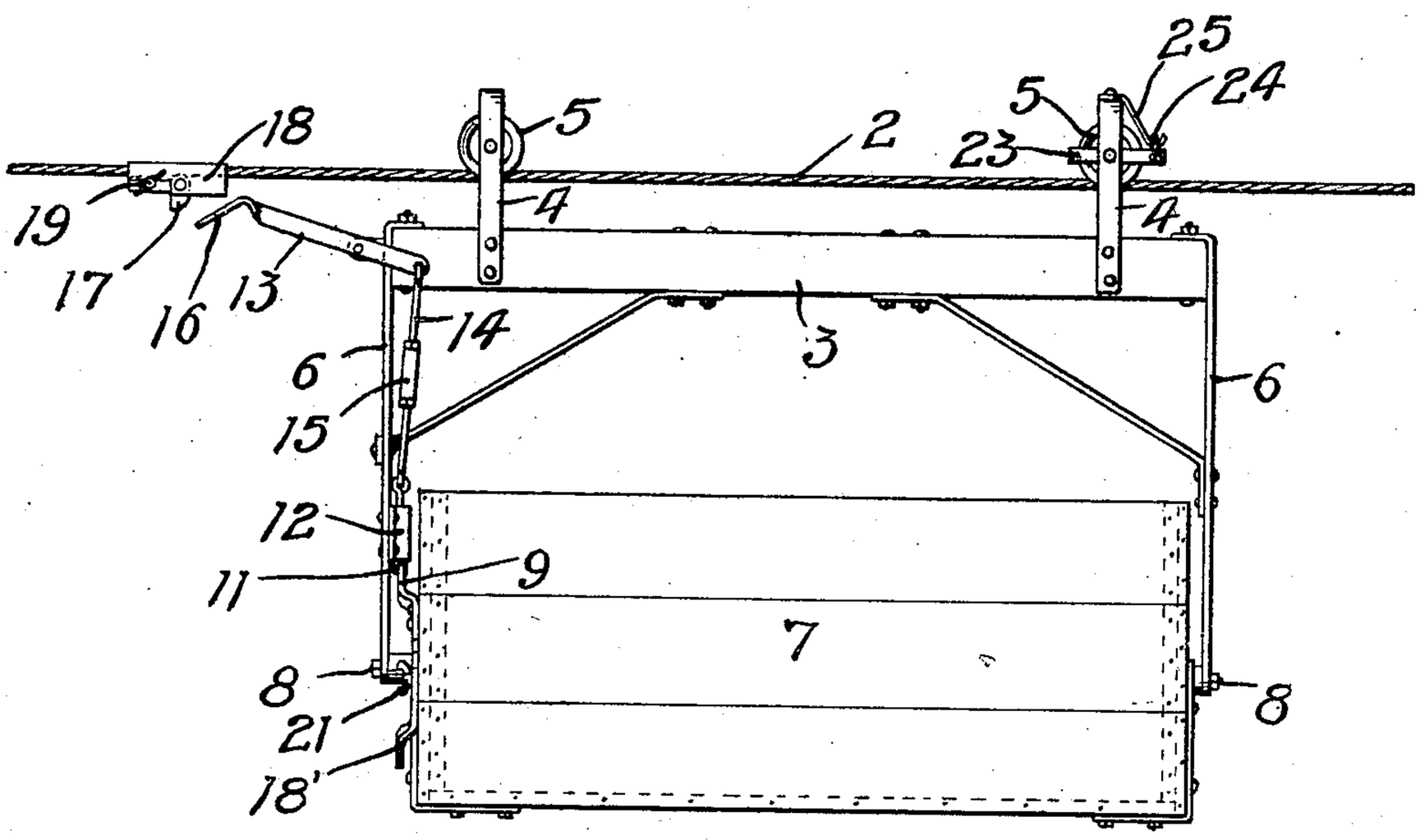

Fig 1.

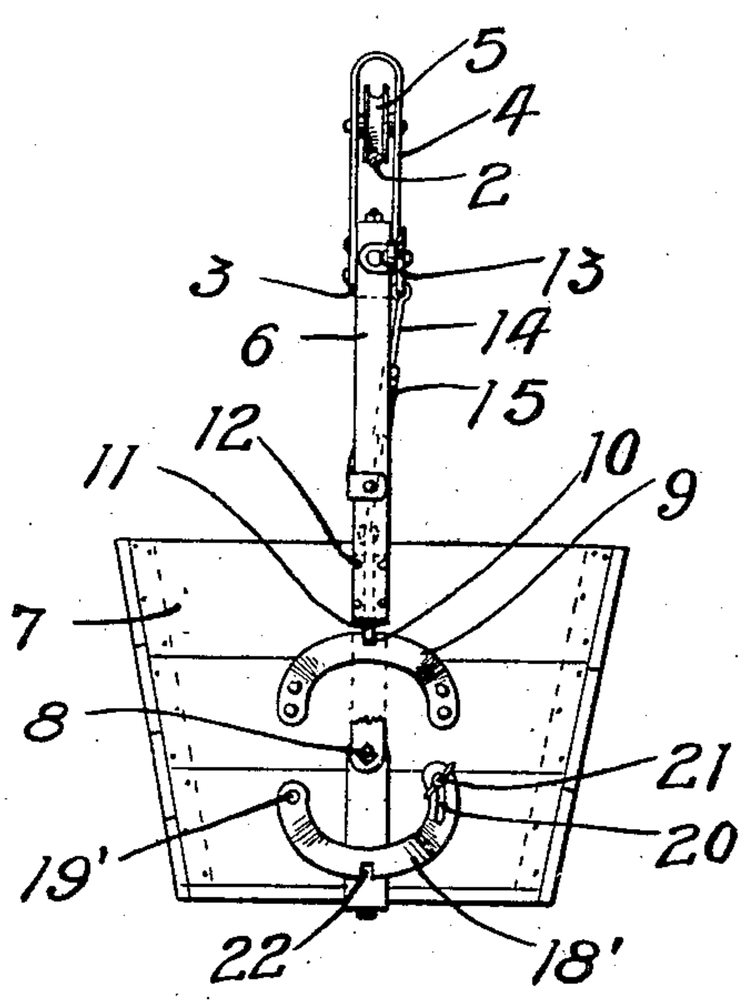

Fig 2.

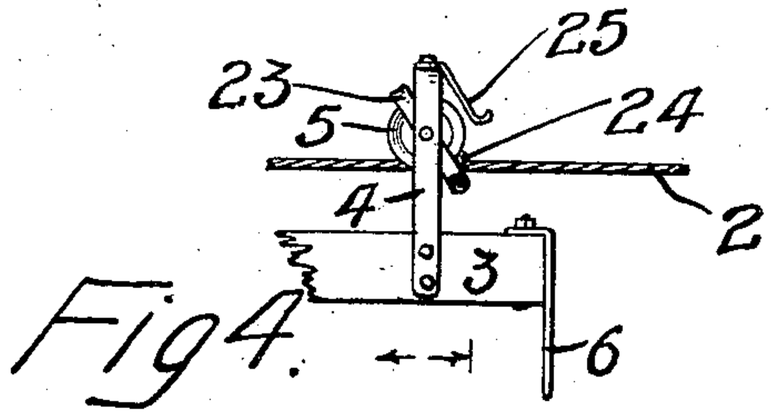

Fig 4.

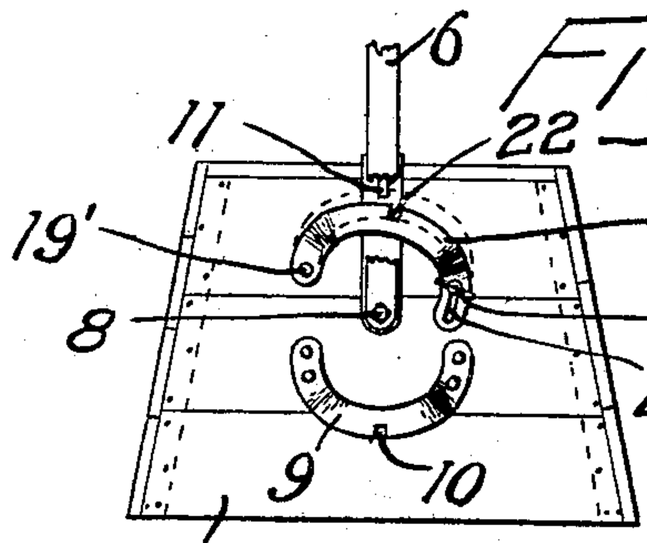

Fig 3.

WITNESSES

C. M. Walstrom

C. S. Hanson.

INVENTOR

MARSHALL G. SHUMWAY

BY Paul & Paul

HIS ATTORNEYS

UNITED STATES PATENT OFFICE.

MARSHALL G. SHUMWAY, OF FARMINGTON, MINNESOTA.

LITTER-CARRIER.

No. 869,939. Specification of Letters Patent. Patented Nov. 5, 1907.

Application filed December 7, 1906. Serial No. 346,792.

To all whom it may concern:

Be it known that I, MARSHALL G. SHUMWAY, of Farmington, Dakota county, Minnesota, have invented certain new and useful Improvements in Litter-Carriers, of which the following is a specification.

My invention relates to elevated carriers adapted to automatically discharge their loads at any desired point in the line of travel and the primary object of my invention is to simplify and improve the locking latch mechanism employed with devices of this kind, and also to provide certain novel attachments in connection with the pivoted receptacle.

The invention consists generally in various constructions and combinations, all as hereinafter described and particularly pointed out in the claims.

In the accompanying drawings, forming part of this specification, Figure 1 is a side elevation of an elevated carrier embodying my invention. Fig. 2 is an end view of the same. Fig. 3 is a detail view showing the receptacle tilted. Fig. 4 is a detail view showing a retarding or locking device provided in connection with the carrier.

In the drawing, 2 represents a cable designed to be suspended from the barn or any suitable place and extending from that point to the dump where the manure or litter around a cow stable or in horse stalls or pens, can be conveyed and discharged with a minimum amount of labor. The cable is arranged so that it is inclined upwardly from the barn to the dump, the carrier being propelled by giving it a quick shove or push when loaded and returning by gravity to the sender when empty.

The carrier which I prefer to provide comprises a bar 3 having brackets 4 thereon at each end wherein wheels 5 are journaled and adapted to rest upon the cable 2 and support the carrier. Hangers 6 depend from each end of the bar 3 and a receptacle 7 composed of wood or sheet metal, as preferred, has pivots 8 in the lower ends of the hangers 6 which allow the receptacle to swing back and forth and discharge its load and return to its filling position. One end wall of the receptacle has a plate 9 secured thereon, substantially semi-circular in form and provided in its upper edge with a notch 10. A spring actuated latch 11 is slidable in a guide 12 on the hanger 6 at that end of the carrier and is adapted to enter the notch 10 and lock the receptacle in its filling position. A trip lever 13 is mounted on the end of the bar 3 and has a rod 14 connecting it with the spring latch 11, a turn buckle 15 being provided in the rod for adjusting purposes. The lever 13 has a downwardly turned end 16 that is adapted to engage a stop 17 carried by a plate 18 that is adjustably mounted on the cable 2 by means of a thumb screw 19.

The stop 17, as indicated in Fig. 1, is pivoted on the plate 18 and has a beveled edge on one side that is engaged by the downwardly turned end 16 of the lever 13. As the lever rides on the stop it will be tilted on its pivot and will pass beyond the stop a sufficient distance to dump the load in the desired spot. On the return movement of the carrier the stop 17 will swing on its pivot and permit the unobstructed passage of the lever. The tilting of the lever will draw the latch 11 out of the notch 10 and the weight of the load will swing the receptacle to an inverted position.

The receptacle is so pivoted that when its load is discharged it will automatically swing back to its normal or filling position. It is desirable, however, to sometimes lock the receptacle in its dumping position or bottom up, and I therefore provide a plate 18′ pivoted at 19′ on one end of the receptacle and having a slot 20 and thumb screw connection 21 at its other end with said receptacle, whereby said plate can be adjusted back and forth on its pivot. A notch 22 is provided in the edge of said plate 18′ and adapted to receive the latch 11 when the receptacle is turned bottom up for the purpose of locking it in that position and preventing the preponderance of weight of the lower portion of the receptacle from swinging it back to its normal or filling position. This device for locking is utilized frequently when the operator is through with the carrier for the time being, and wishes to prevent the receptacle from filling up with water or snow while hanging on the cable and not in use.

Just before the carrier leaves the stable for the last time the operator will adjust the plate 18′, and the receptacle upon turning over to discharge its load will be locked in that position. It is also desirable at times for the carrier to remain at the dumping place instead of returning to the stable. A loop 23 is therefore mounted on one of the brackets 4 and a cord 24 or other flexible means connects the ends of the loop across the cable in the path of the carrier wheel. This cord is normally supported on a hook 25, but when the operator wishes the carrier to stay out on the cable by the dump he will disengage the cord from the hook 25 and allow it to drop down on the cable in the rear of the carrier wheel and form a stop therefor and prevent the carrier from returning by gravity to the stable after it has discharged its load.

I claim as my invention:—

1. The combination, with an elevated cable, of a carrier suspended thereon, a receptacle pivotally supported in said carrier and adapted to swing on its pivots to discharge its load, means for locking said receptacle in position to receive its load, and means whereby said receptacle may be automatically locked in its inverted or dumping position.

2. The combination, with an elevated cable, and a carrier adapted to travel thereon, of a receptacle pivotally supported in said carrier, a plate pivoted at one end on the end of said carrier and having an adjustable connection therewith at its other end, said plate having a notch in its edge, and a locking device arranged to enter said

notch and lock said receptacle in an inverted position when said plate is adjusted in a predetermined position, substantially as described.

3. The combination, with an elevated cable, of a carrier having a pivoted receptacle and brackets having carrying wheels mounted therein and adapted to travel on said cable, a loop mounted in one of said brackets and inclosing one of said wheels and a flexible means connecting the ends of said loop and extending transversely over said cable and adapted to form a brake to prevent backward movement of said carrier, substantially as described.

4. An elevated carrier comprising a carrier frame, a dump box, a curved keeper arranged at an end thereof, means adjustably securing said keeper, and a latch mechanism.

5. The combination, with an elevated way, of a carrier suspended thereon, a receptacle pivotally supported in said carrier and adapted to swing on its pivots to discharge its load, and means whereby said receptacle may be automatically locked in its inverted or dumped position.

In witness whereof, I have hereunto set my hand this 1st day of December 1906.

MARSHALL G. SHUMWAY.

Witnesses:

A. H. SPRUTE,

N. H. CROWELL.