

(No Model.)

D. B. CHERRY.
MANURE CARRIER.

No. 578,722.

Patented Mar. 16, 1897.

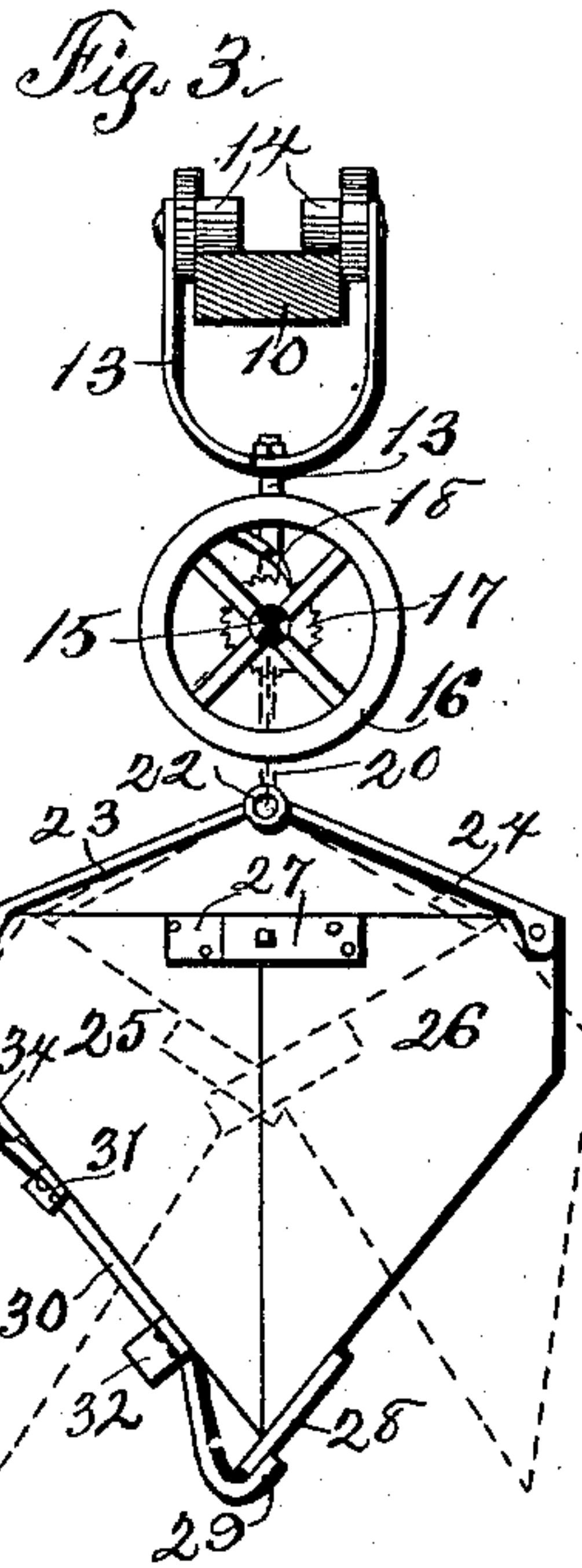
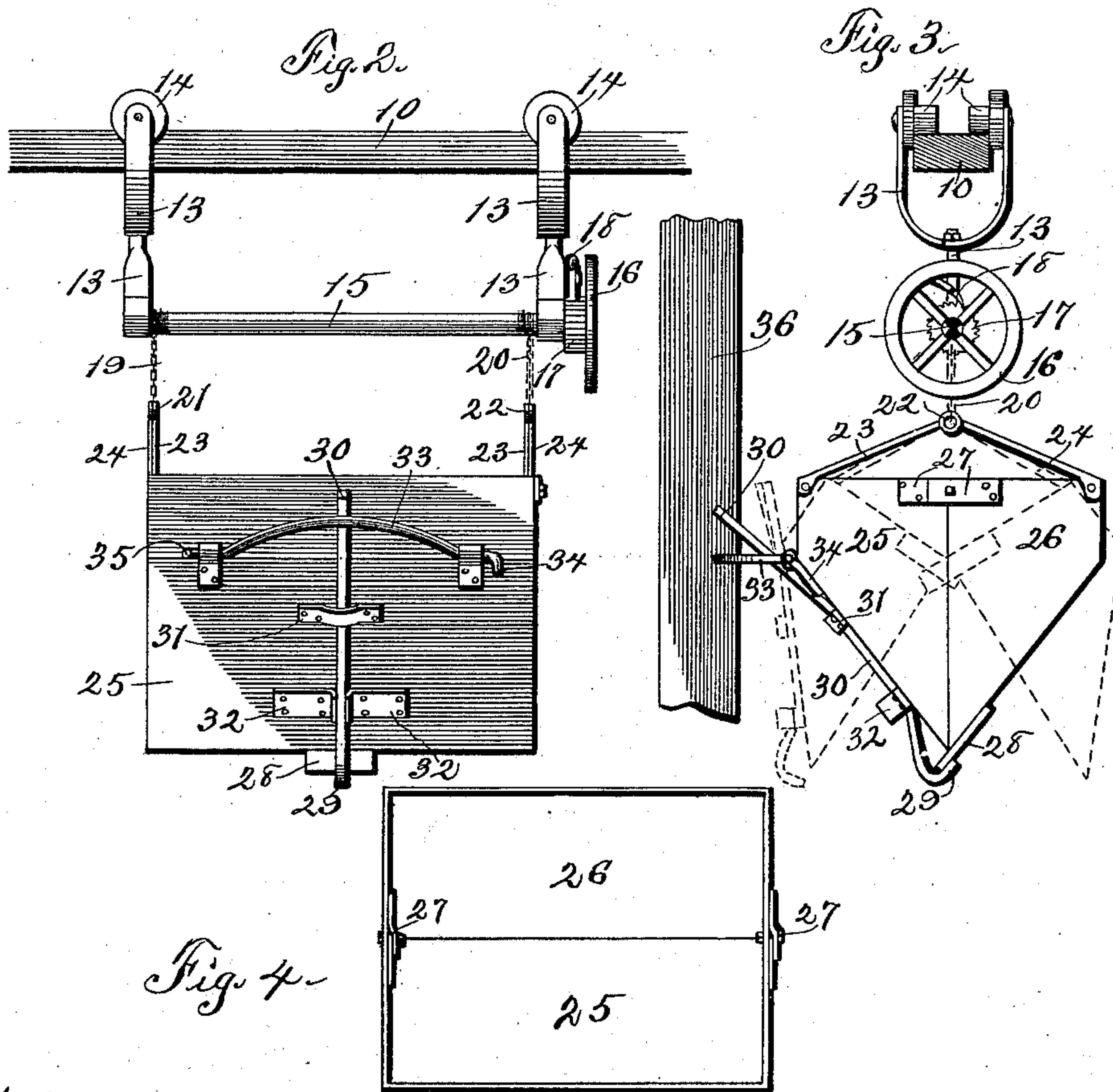
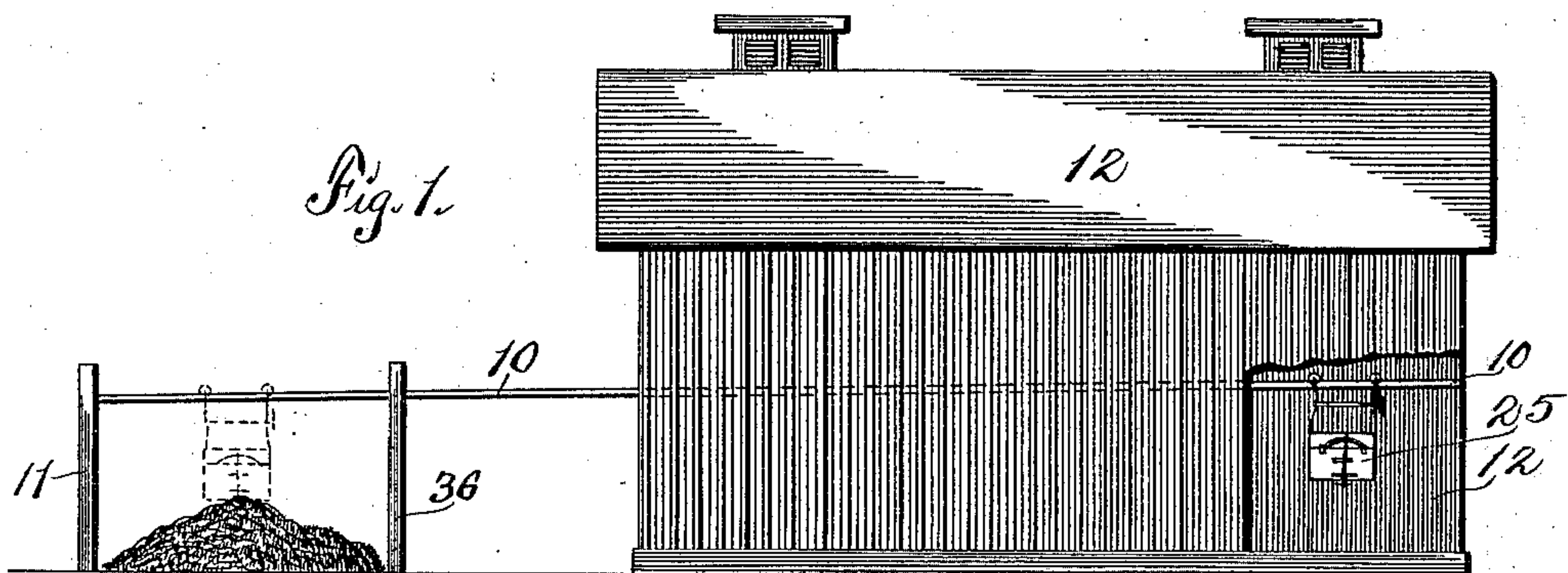
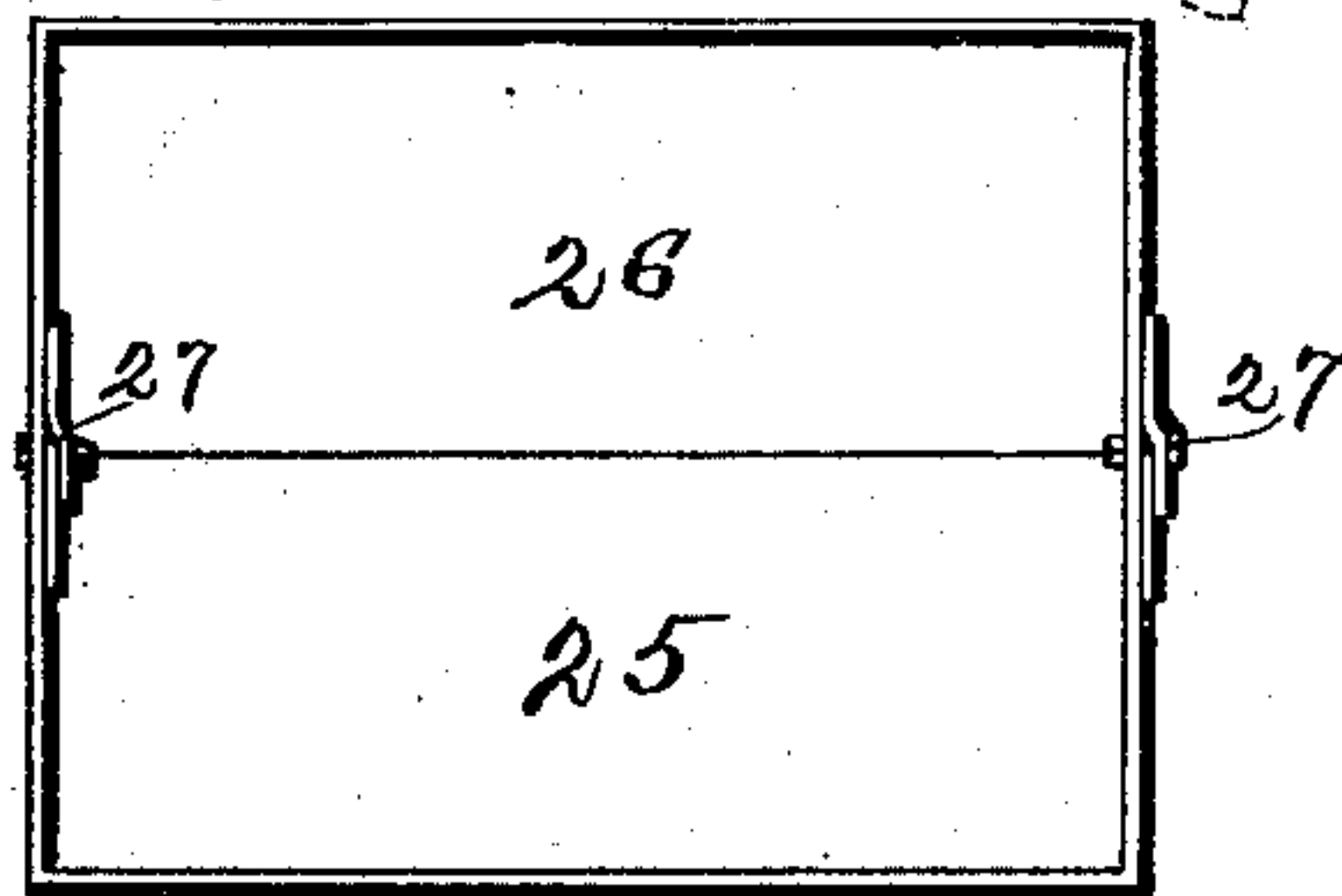


Fig. 4.



Witnessed:

R. G. Orwig
W. J. Sankey

David B. Cherry
By J. C. Sweet Atty.

UNITED STATES PATENT OFFICE.

DAVID B. CHERRY, OF KNOXVILLE, IOWA.

MANURE-CARRIER.

SPECIFICATION forming part of Letters Patent No. 578,722, dated March 16, 1897.

Application filed June 15, 1896. Serial No. 595,715. (No model.)

To all whom it may concern:

Be it known that I, DAVID B. CHERRY, a citizen of the United States of America, and a resident of Knoxville, in the county of Marion and State of Iowa, have invented a new and useful Manure-Carrier, of which the following is a specification.

The object of my invention is to provide improved means for containing and conveying manure or other waste from a stable or building to a point of deposit within or outside of said building.

My invention consists in the construction, arrangement, and combination of parts hereinafter set forth, pointed out in my claims, and illustrated by the accompanying drawings, in which—

Figure 1 is a side elevation of the complete device in the position required for practical use. Fig. 2 is a detail side elevation of the receptacle and a portion of the track and the elevating devices. Fig. 3 is an end elevation of the elements shown in Fig. 2, the dotted lines indicating the relative positions of the parts during the operation of dumping. Fig. 4 is a plan of the receptacle detached from the other devices.

In the construction of the device as shown the numeral 10 designates a track supported on brackets (not shown) and posts 11, the said brackets being mounted within the stable 12 and the posts arranged in a row outside of the said stable.

Mounted upon the track 10 are traveling hangers 13, provided with rollers 14, resting and traveling upon said track, the hangers depending therefrom and supporting in their lower portions a horizontal shaft 15. The hangers are each provided with a swivel-joint at or near their centers, whereby in the travel of said hangers on the track the upper and lower portions thereof may have some relative torsional freedom.

Mounted upon one end of the shaft 15 is a hand-wheel 16, adapted for manual actuation to rotate said shaft.

Mounted upon the shaft 15, between the hand-wheel 16 and the adjacent hanger, is a ratchet-wheel 17, which is designed for engagement by a gravity-operated pawl 18, fulcrumed on said hanger, by means of which wheel and pawl the shaft is locked against a

reverse movement. That portion of the shaft 15 between the hangers serves as a drum, and there is fixed thereto and arranged for winding thereon chains 19 20, the opposite ends of which chains are respectively secured at points 21 22 to the joint between straps 23 24, the outer ends of which straps are secured to opposite corners of a receptacle.

The receptacle is formed in two sections 25 26, which sections are joined at the top thereof by hinges 27, the sections when so joined forming a hopper-bottomed receptacle having the line of demarcation between the said sections in a vertical plane directly beneath the points 21 22 and in alinement with one side of the shaft 15. Fixed to the outside of one side of the section 26 is a plate 28, adapted to be engaged by a hook 29, mounted on the lower end of a lever 30, which lever is fulcrumed at 31 to the outer surface of one side of the section 25, the lower end portions of said lever being confined between guides 32. A bail 33 is fulcrumed on the outer surface of one side of the section 25 and incloses the upper portion of the lever 30, which bail is provided with arms 34 35, on the opposite sides thereof, which arms extend outwardly relative to each other at right angles to said bail and in planes at right angles to each other, the arm 34 being normally in contact with the side of the section 25 when the receptacle is closed.

A post 36 is located adjacent to the track at a point near to the dumping-ground, with which post the bail 33 automatically contacts in the travel of the receptacle from the stable to the dumping-ground, such contact resulting in compression of the bail toward the receptacle and a consequent oscillation of the lever upon its fulcrum. The oscillation of the lever 30 releases the engagement between the hook 29 and plate 28, and immediately upon such release the weight of the contents of the receptacle separates the two sections of said receptacle and permits the precipitation of said contents upon the dump.

In the practical use of my device the receptacle is caused to travel, by manual propulsion of the hangers, into the stable and located at a convenient point to be filled. The ratchet-and-pawl mechanism is then released and the receptacle lowered into proximity

with the floor of the stable, at which point said receptacle may easily and conveniently be filled. After being filled, or otherwise ready for removal, the receptacle is elevated 5 by the rotation, manually, of the hand-wheel and shaft to a plane in proximity to said shaft, and is then caused to travel horizontally outside of the stable to a place of deposit along the line of the track 10 by manual operation or by reason of an inclined positioning of the track. In its travel to the place of deposit the receptacle is dumped by engagement of the post 36, and after being dumped the receptacle is manually rearranged for further 15 use.

It will be observed that by the aforesaid means a carrier is provided simple in construction and operation, cheap as to cost, and completely effective in the results of its use, 20 which saves labor, time, and trouble in the removal of deposits from stables, barns, and sheds and provides a useful article for use.

I claim as my invention—

1. A manure-carrier, comprising a track, 25 hangers depending from said track, which hangers are each formed in two sections swiveled together, a shaft rotatably mounted in said hangers, chains secured to and adapted to be wound upon said shaft, a receptacle 30 secured to the opposite ends of said chains, manually-operated devices for rotating said shaft, comprising a hand-wheel on one end of said shaft, pawl-and-ratchet mechanism interposed between said shaft and said hangers 35 whereby the shaft is held against reverse rotation, and means for dumping the contents of said receptacle comprising tripable lock mechanism on the receptacle and a post arranged adjacent to the line of travel of the 40 receptacle to engage the same.

2. A manure-carrier, comprising a track, hangers depending from said track and swiveled at their centers, and a receptacle depending from said hangers, which receptacle 45 is formed in two sections hinged together and is provided with a hopper-bottom, and means for locking said sections together comprising a hook 29 on one of said sections, a plate 28 on the other of said sections arranged to be engaged by the hook 29, a lever 30 carrying 50 said hook, the upper end of which lever is bent laterally from the receptacle; in combination with a post arranged adjacent to the path of travel of the receptacle and a bail 33 inclosing the upper outer projecting end of 55 the lever 30 and arranged to be engaged and oscillated by the said post to approximate the lever to the receptacle and release the hook from the plate 28, as set forth.

3. A manure-carrier comprising a track, 60 hangers arranged to travel upon said track, a receptacle formed in two sections hinged together and suspended from said hangers, an interlocking hook and plate arranged normally to engage and retain the sections of the 65 receptacle in close relations, a lever carrying said hook, a bail pivoted to the receptacle and embracing said lever, an arm 34 on said bail arranged to limit the downward movement thereof, an arm 33 on said bail arranged 70 to limit the upward movement thereof and a post set adjacent to the line of travel of the receptacle on the track so as to engage and move the bail upwardly whereby the lever is approximated to the receptacle and the interlocking hook and plate disengaged. 75

DAVID B. CHERRY.

Witnesses:

L. N. HAYS,
E. R. HAYS.