

(No Model.)

3 Sheets—Sheet 1.

C. BERNHARDT.  
CHUTE WAGON.

No. 605,535.

Patented June 14, 1898.

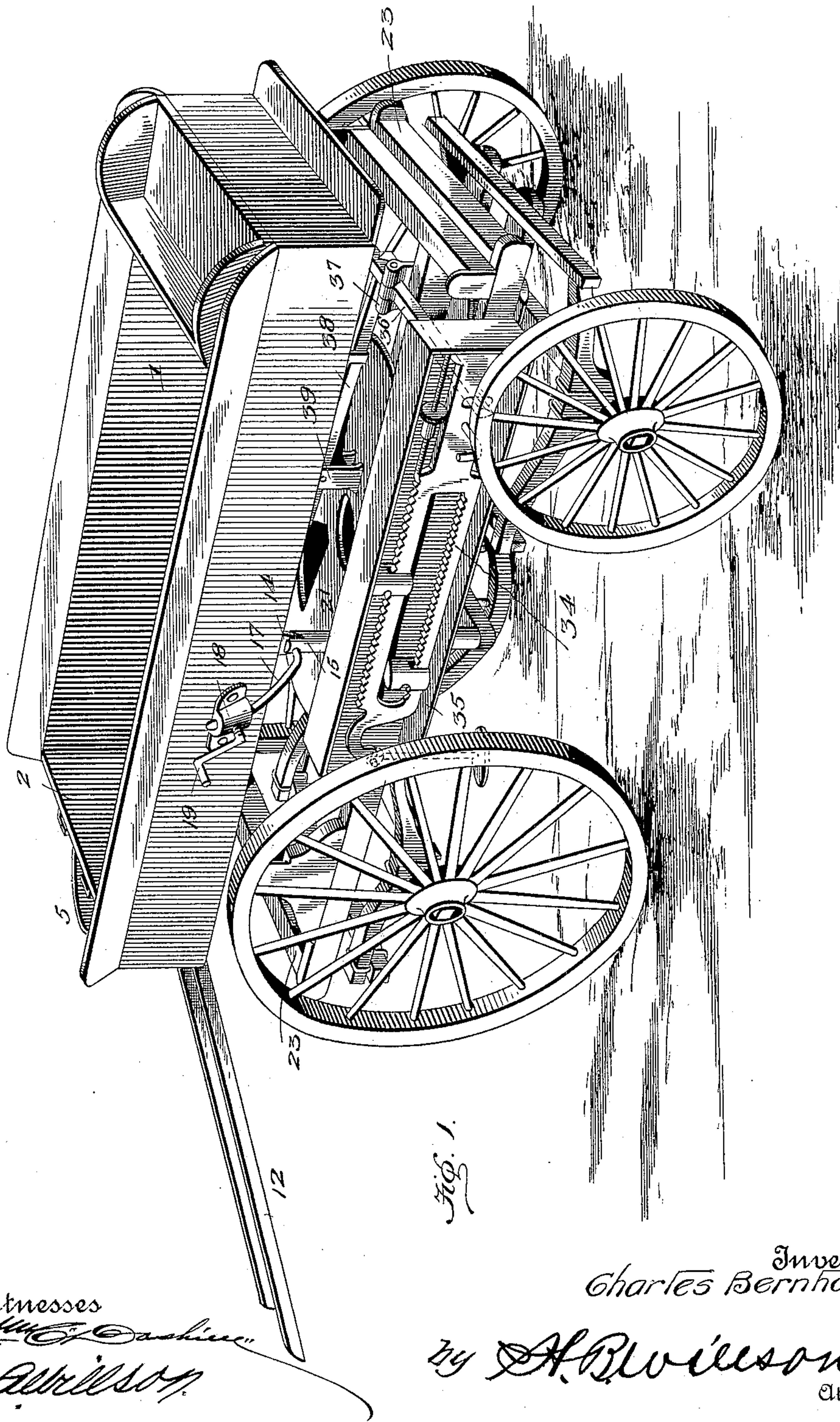


Fig. 1.

Witnesses

*Wm. C. Ashie*  
*J. A. Wilson*

Inventor  
Charles Bernhardt

by *A. B. Wilson & Co.*  
Attorneys

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Fig. 2.

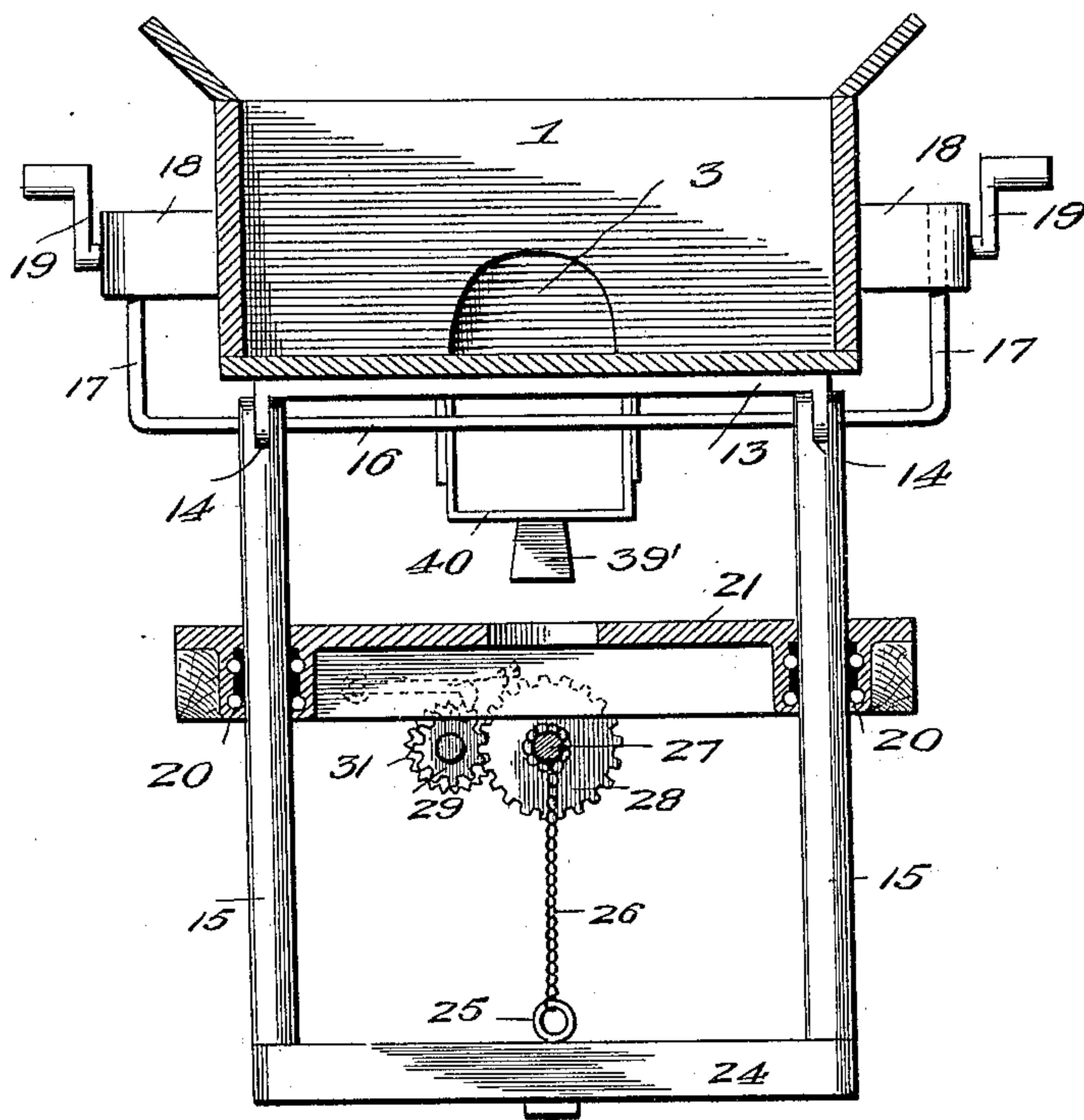
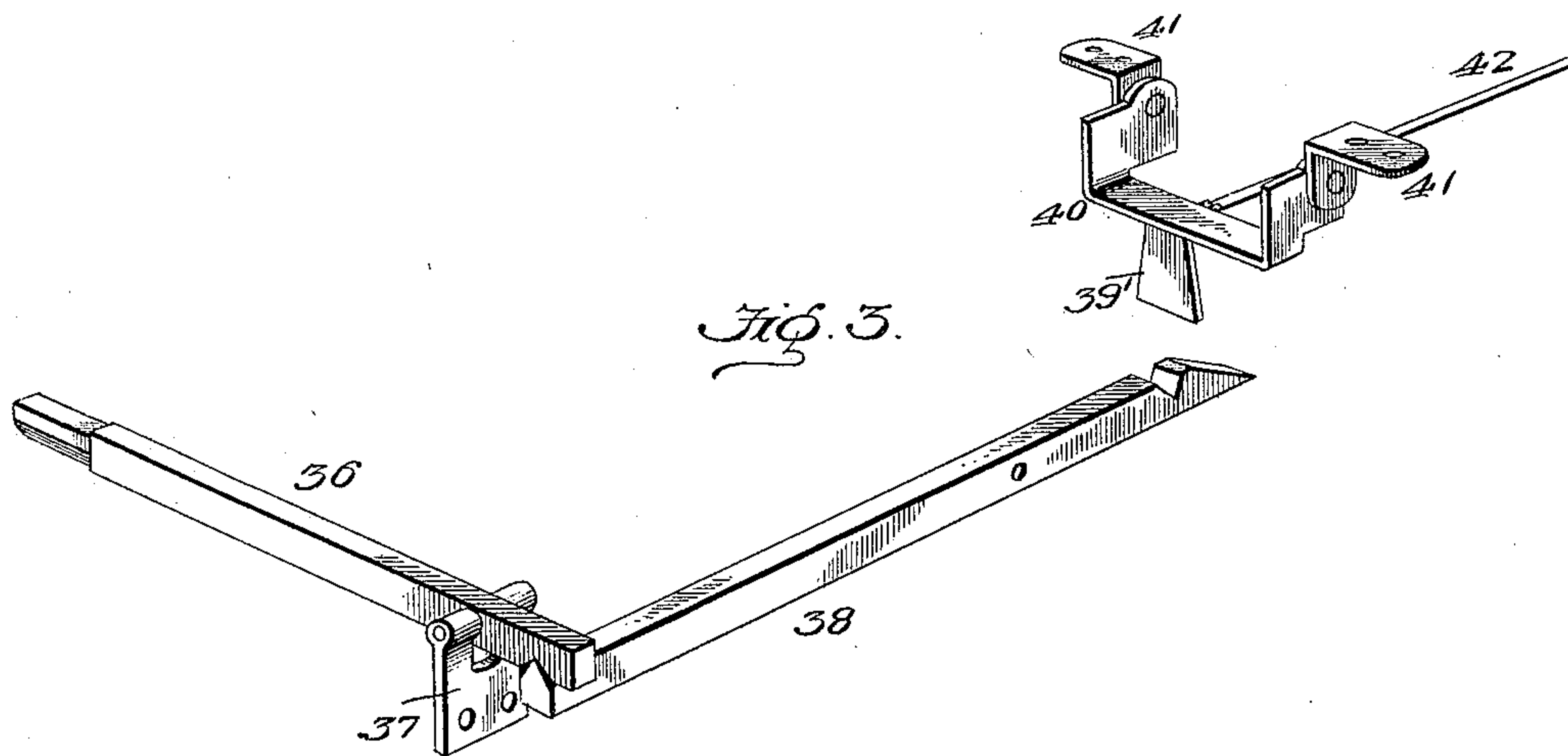


Fig. 3.



Witnesses

*Wm. C. Ashieen*  
*J. L. Wilson*

Inventor  
*Charles Bernhardt*  
By *A. B. Wilson & Co.*  
Attorneys.



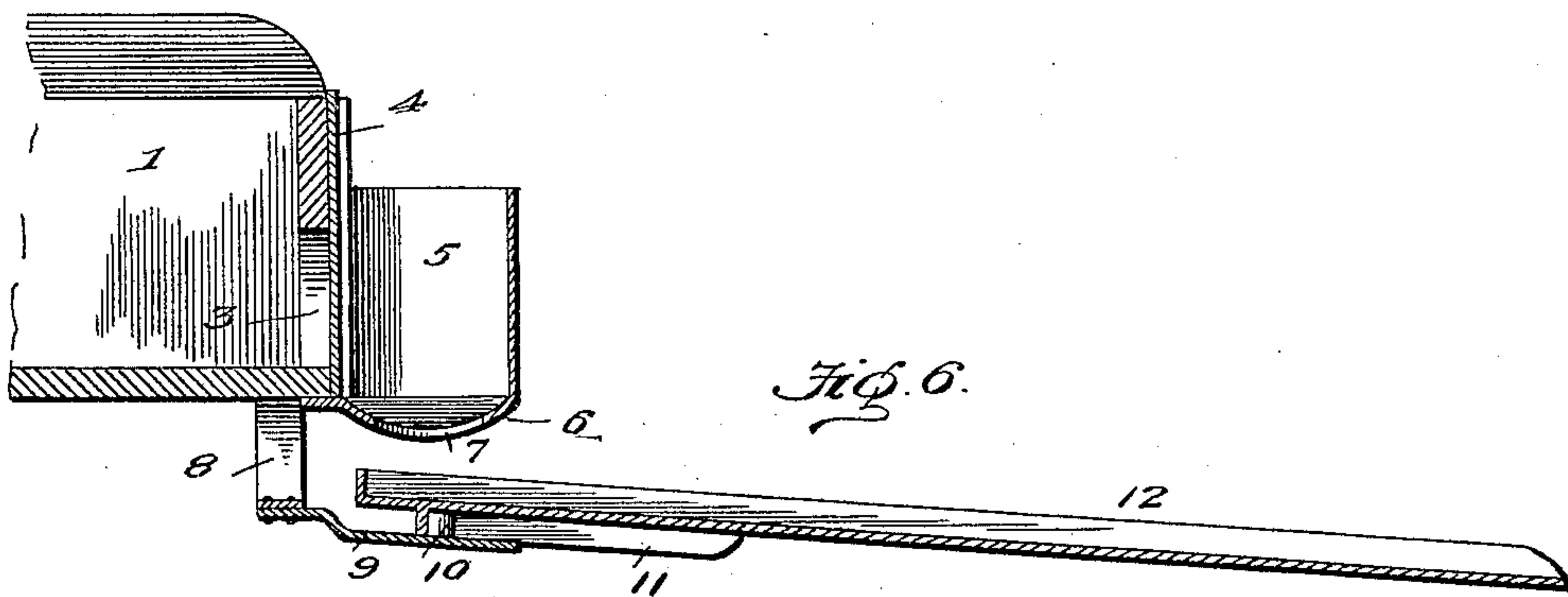
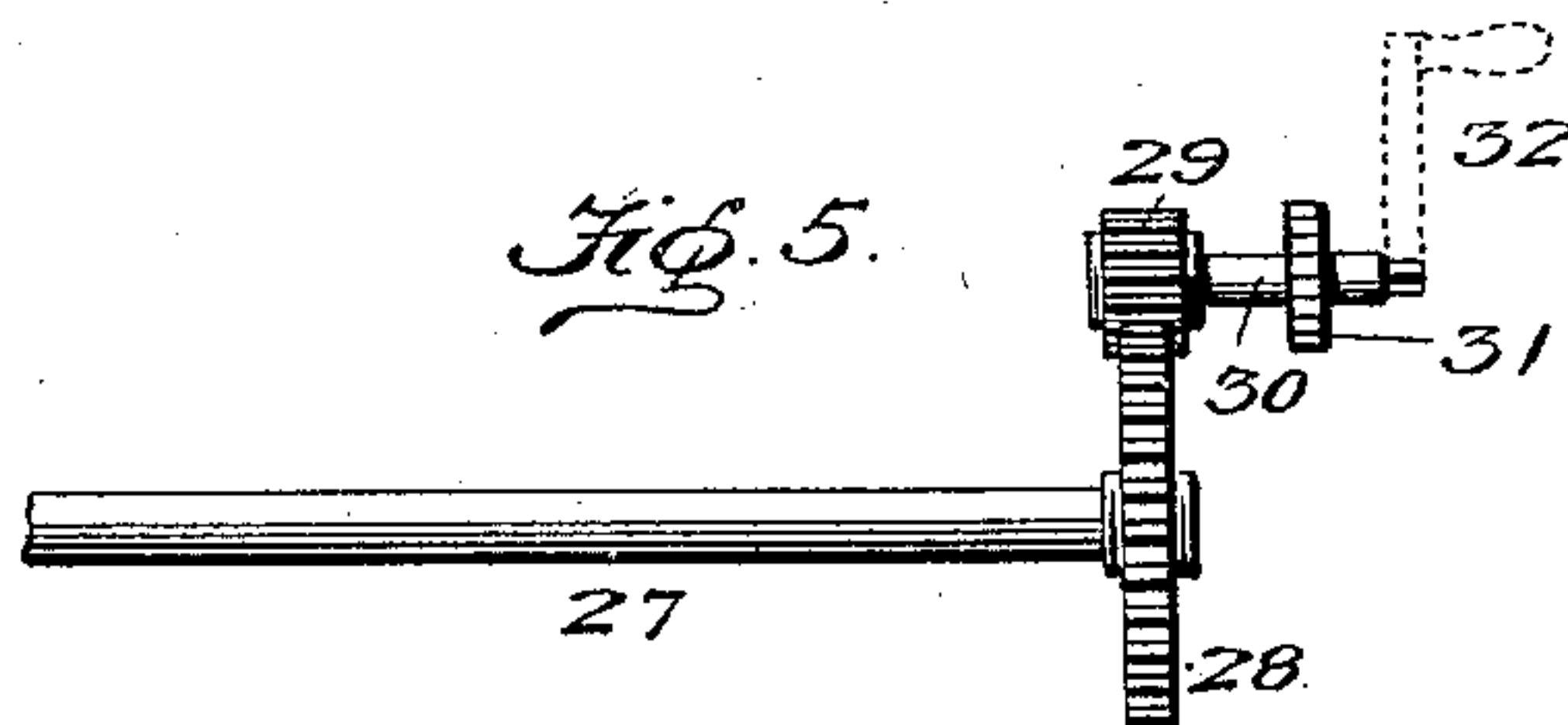
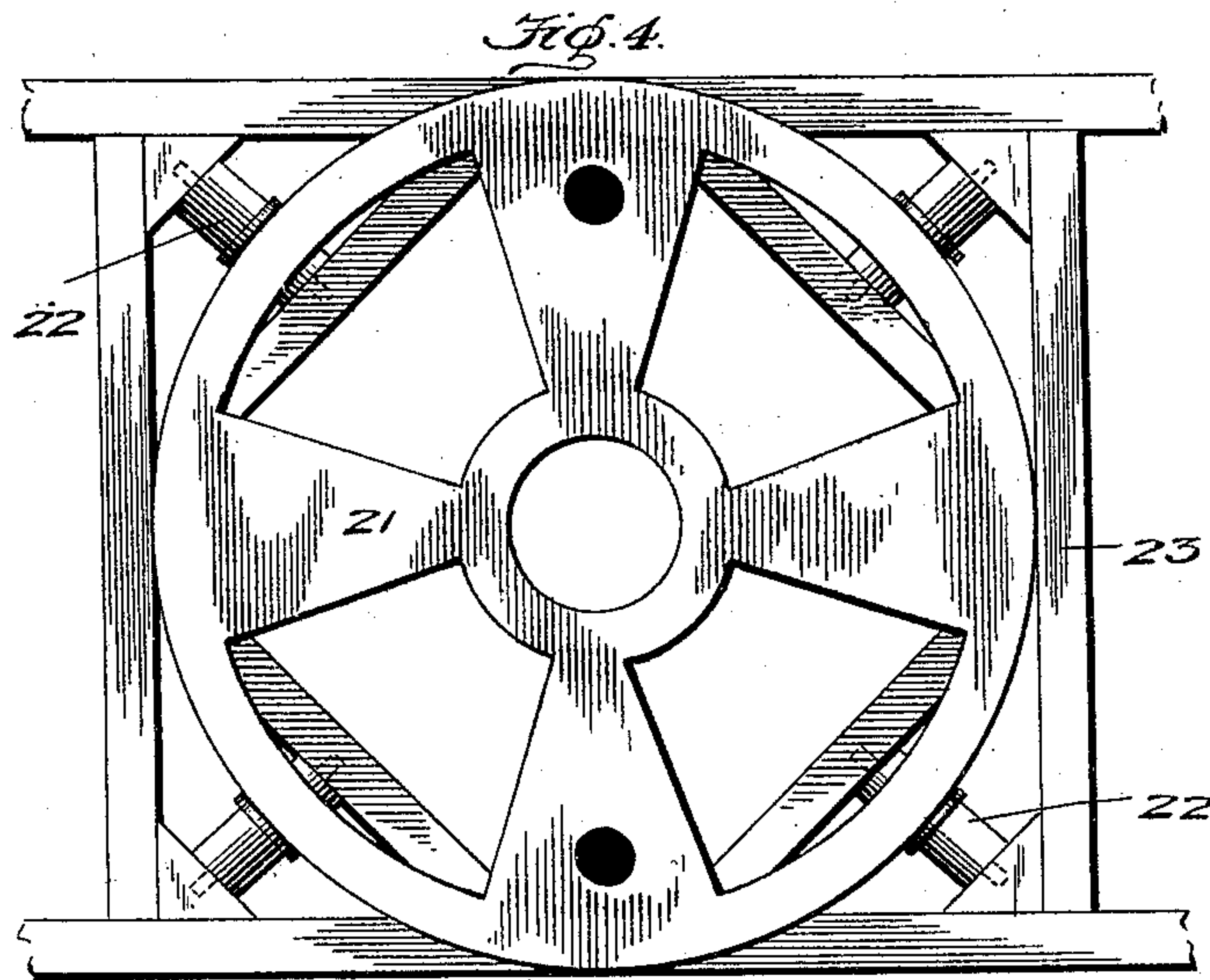
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*Wm. O. Ashiee*  
*J. A. Wilton*

Inventor  
*Charles Bernhardt*

by *A. B. Wilson & Co.*  
Attorneys.



# UNITED STATES PATENT OFFICE.

CHARLES BERNHARDT, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR OF  
ONE-HALF TO JULIUS KAUFMANN, OF SAME PLACE.

## CHUTE-WAGON.

SPECIFICATION forming part of Letters Patent No. 605,535, dated June 14, 1898.

Application filed September 16, 1897. Serial No. 651,827. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES BERNHARDT, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Chute-Wagons; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in chute-wagons for the delivery of coal and the like; and the object is to provide a simple, convenient, and durable vehicle of this class.

To this end the invention consists in the construction, combination, and arrangement of the several parts of the vehicle, as will be hereinafter more fully described, and particularly pointed out in the claim.

In the accompanying drawings the same reference characters indicate the same parts of the invention.

Figure 1 is a perspective view of a chute-wagon embodying my invention. Fig. 2 is a transverse section. Fig. 3 is a detached view of the scale-levers. Fig. 4 is a plan view of the turn-table. Fig. 5 is a similar view of the rear end of the elevating-shaft. Fig. 6 is a longitudinal section of the rear end of the wagon and the detachably-pivoted delivery-chute.

1 represents the body of the wagon, the tail-board 2 of which is provided with an orifice 3, controlled by a vertically-sliding gate 4.

5 represents a hopper communicating with said orifice 3 and provided with a concave bottom 6, having a discharge-opening 7.

8 represents a bracket fixed to the bottom of the vehicle, having a longitudinal arm 9, provided with a stud 10, which engages the V-shaped flange 11 on the bottom of the detachable chute 12, so that the chute may be adjusted to any point within the radius of a semicircle to conveniently discharge the contents of the wagon irrespective of the position of its body. When not in use, this chute is detached and carried in any convenient manner by the wagon.

13 represents a transverse yoke fixed about midway to the bottom of the body, and its de-

pending ears 14 14 are pivoted in the bifurcated upper ends of the parallel rods 15 15 by means of the shaft 16, the outer ends of which terminate in upwardly-curved arms 17 17, which engage the guide-brackets 18 18, fixed to the body sides, and they may be rigidly locked therein by means of the crank-screws 19 19.

The rods 15 15 have a vertical movement in the ball-bearing sockets 20 20 in the turntable 21, which has a horizontal bearing on the flanged radial rollers 22 22, journaled in the frame 23, and the lower ends of these rods are connected by a transverse bar 24, the center of which is provided with a screw-eye 25, from which a chain 26 extends to a longitudinal shaft 27, journaled in said frame. The outer end of this shaft terminates below the tail-board on one side of the hopper, and it is provided with a gear-wheel 28, which meshes with a pinion 29, fixed on a counter-shaft 30, provided with a ratchet-wheel 31 and crank 32 for raising the body of the wagon when the contents are to be discharged. A pawl 33 engages the ratchet-wheel 31 to retain the body in an elevated position.

34 represents an ordinary scale-beam suitably mounted in a case 35, fixed to one side of the wagon-body, and 36 represents a lever fulcrumed in the bracket 37, its longer arm engaging the scale-beam and its shorter arm in operative connection with the longitudinal lever 38, fulcrumed in a bracket 39, the opposite end of which projects into the path of an arm 39', fixed in a yoke 40, hinged between the brackets 41 41, fixed to the bottom of the body, the whole constituting the ordinary form of mechanism employed in a platform-scale.

42 represents a rod connected to the yoke 40 and extending to the rear of the vehicle, so that said yoke may be thrown out of operative connection with the scale-levers when not in use.

The operation is very simple, and it only requires that the body portion be brought to bear on the scale mechanism to ascertain the weight of the contents of the vehicle, and to discharge the same the body is elevated, as above described, and the proper inclination given by means of the crank-screws 19 19,



the chute 12 directed to the point where the contents are to be discharged, and the gate 4 raised, which permits the contents to fall by gravity on the chute and thence to the desired point.

Although I have specifically described the construction and relative arrangement of the several elements of my invention, I do not desire to be confined to the same, as such changes or modifications may be made as clearly fall within the scope of my invention without departing from the spirit thereof.

Having thus fully described my invention, what I claim as new and useful, and desire to secure by Letters Patent, is—

A vehicle, comprising the frame 23, the flanged rollers 22 horizontally mounted in

said frame, the turn-table 21 revolvably mounted on said rollers, the horizontal shaft 27 journaled in said frame, the parallel rods 15 20 15 having bearing in said table, the bar 24 connecting said rods, and the chain 26 connecting said bar and shaft 27, in combination with the body 1, centrally hinged to the upper ends of said rods, and means, as described, 25 for supporting said body in an inclined position, when elevated, substantially as and for the purpose set forth.

In testimony whereof I hereunto affix my signature in presence of two witnesses.

CHARLES BERNHARDT.

Witnesses:

H. J. ENNIS,

F. A. WILLSON.