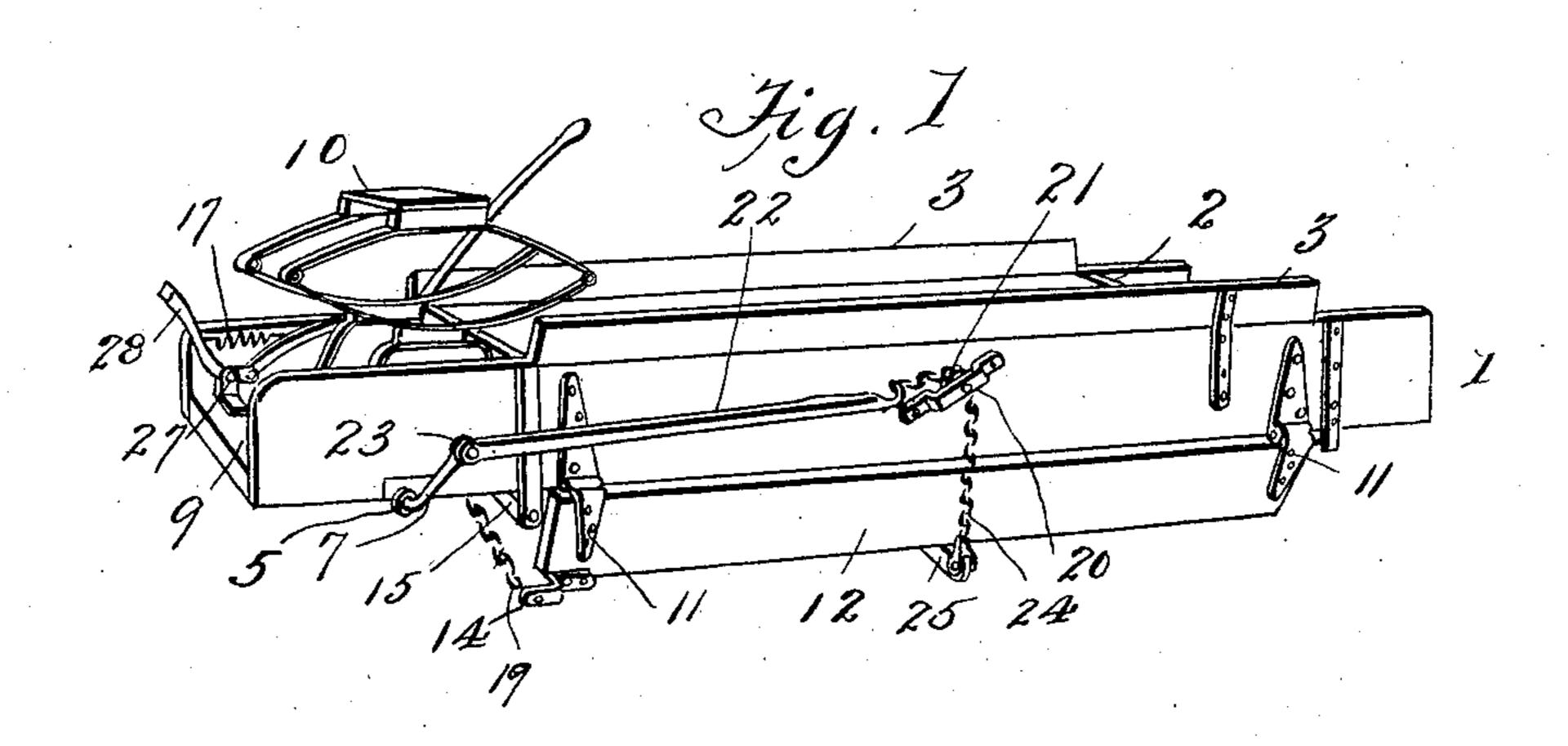
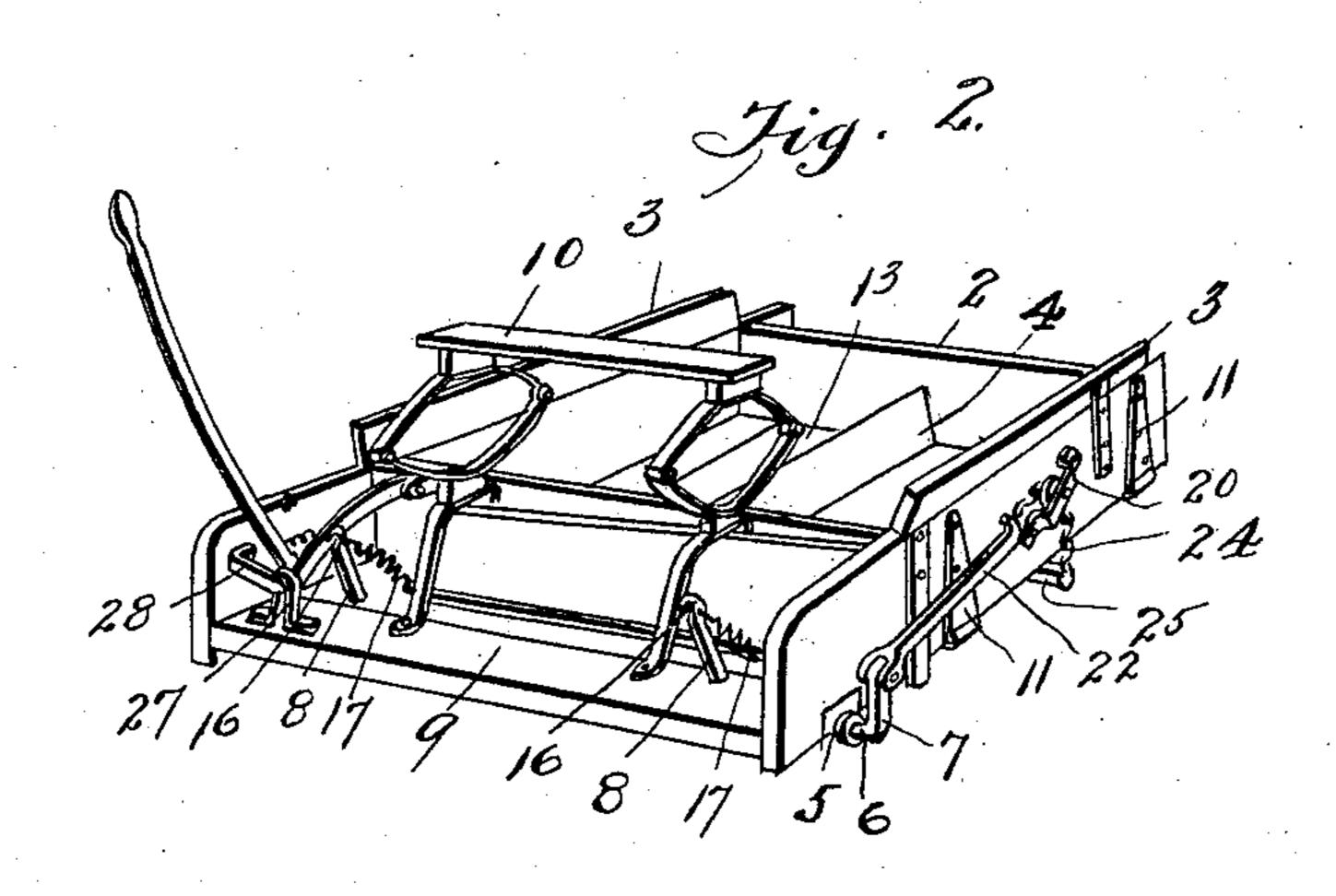
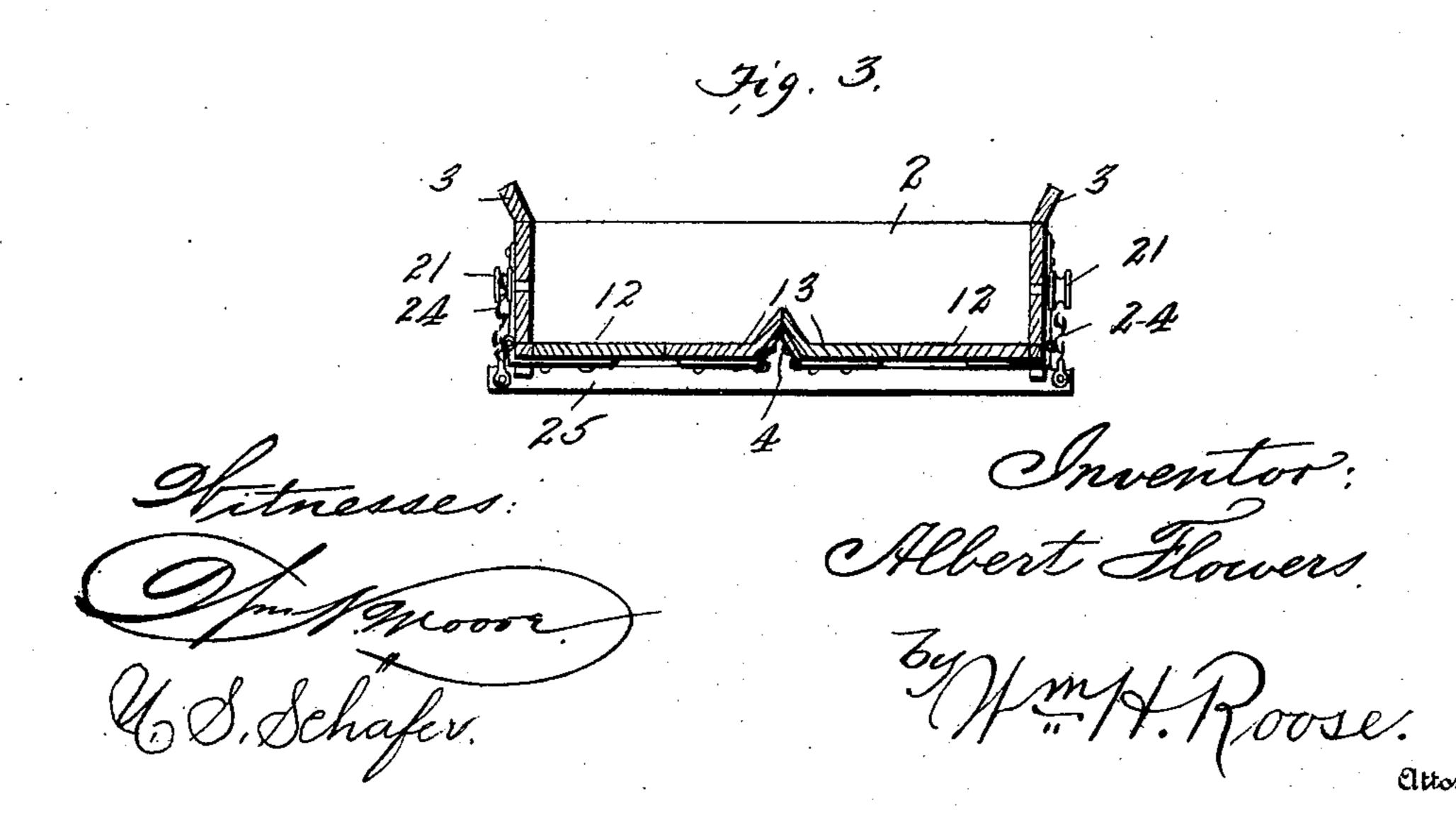
## A. FLOWERS. DUMPING WAGON. APPLICATION FILED JUNE 30, 1906.

2 SHEETS-SHEET 1.

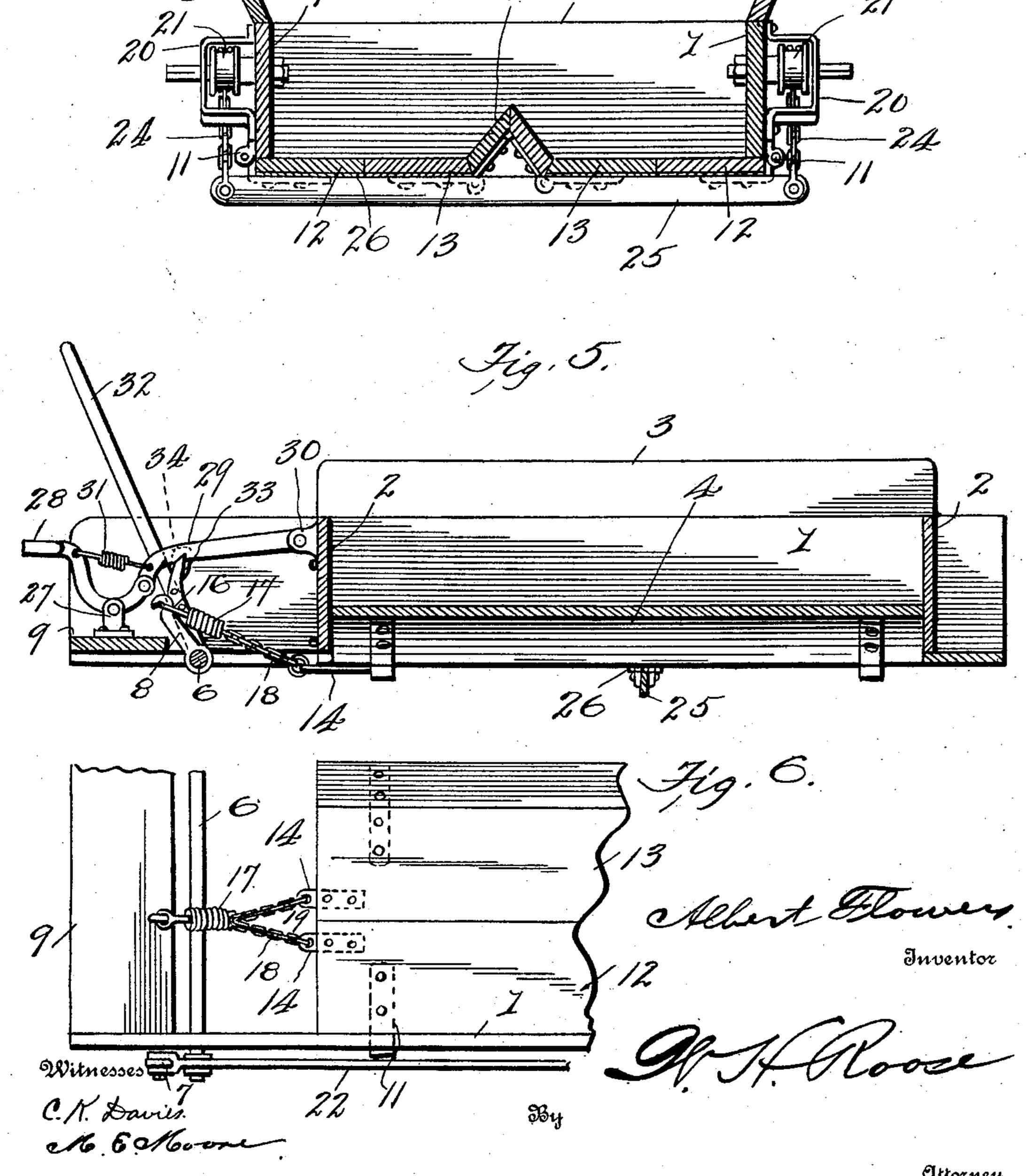






## A. FLOWERS. DUMPING WAGON. APPLICATION FILED JUNE 30, 1906.

2 SHEETS—SHEET 2.



## UNITED STATES PATENT OFFICE.

ALBERT FLOWERS, OF CAMDEN, OHIO.

## DUMPING-WAGON.

No. 861,023.

Specification of Letters Patent.

Patented July 23, 1907.

Application filed June 30, 1906. Serial No. 324,188.

To all whom it may concern:

Be it known that I, Albert Flowers, a citizen of United States, residing at Camden, in the county of Preble and State of Ohio, have invented certain new 5 and useful Improvements in Dumping-Wagons, of which the following is a specification.

My invention relates to improvements in dumping wagons, and refers to a particular form of wagon body having a bottom adapted to swing downward to free

10 the wagon of its contents.

The object of the invention, is to provide a wagon which may be operated with ease and precision to dump material at any desired point, and to provide efficient means for operating the dumping mechanism.

Another object of my invention, is the provision of a wagon of simple, durable and inexpensive construction which will be thoroughly practical and reliable.

With these objects in view, my invention consists of a wagon body formed with an internal central ridge, 20 panels hinged to said ridge and the sides of the body to form a bottom, means for lifting the panels and closing the bottom, means for sustaining the panels closed, and means for simultaneously operating the lifting and supporting means.

My invention further consists of a dumping wagon embodying certain other novel features of construction, combination and arrangement of parts substantially as disclosed herein.

Figure 1, is a perspective view of my improved dump-30 ing wagon taken from the side, the bottom thereof being in the open position. Fig. 2, is a like view from the front end, the bottom shown closed. Fig. 3, is a transverse sectional view of the wagon body. Fig. 4, is a similar view on an enlarged scale to more fully illus-35 trate the parts. Fig. 5, is a central longitudinal sectional view of the wagon body, and, Fig. 6, is a top plan view of the forward portion of the wagon body with parts broken away.

In the drawings: The numeral 1, designates the side 40 boards of the wagon body, 2, the end gates, and 3, the flaring upper boards or guards to the sides. A ridge or shed 4, of inverted trough shape, extends the length of the wagon body from end gate to end gate.

Journaled in bearings 5, on the lower side, at the 45 front end of the body, is a transverse shaft 6, provided at either end with a rocker arm 7. Smaller rocker arms 8, are also mounted on the shaft, and extend upward in front of the forward end board. A foot board 9, is carried in the front end of the body, and mounted 50 over the foot board, partially supported thereby, and partly by the end board, is a spring seat 10.

Pivoted to the lower edges of the side boards by means of hinges 11, are the two outer doors or panels 12, and likewise hinged to the edges of the dividing ridge, 55 is a pair of inner doors 13, adapted to coöperate with the

outer doors and form a tight bottom to the wagon bed.

Secured to the forward free corners of the doors, are the offset brackets 14, and transverse bars 15, secured to the underside of the wagon body, form abutments for 60 the ends of the doors.

Attached to the inner rocker arms 8, by means of the links 16, are the strong spiral springs 17, to the lower ends of which are secured the chains 18, formed with forked ends 19, to engage and be secured in, the brack- 65 ets 14, on the meeting edges of the adjacent doors.

Rotatably mounted in the brackets 20, on the sides of the wagon body, are the rollers 21.

Links or connecting rods 22, formed with bifurcated ends 23, are pivoted to the outer rocker arms 7, and to 70 the rear ends of the rods, are connected the chains 24, which pass over the rollers 21, and have secured to their lower ends, the supporting bar 25. This bar passes transversely beneath the wagon bed and serves to support the bottom boards when in the closed position. 75 Friction plates 26, are carried by the boards to prevent the bar from wearing or cutting the boards.

At one side of the foot board, is mounted a standard or bracket 27, and journaled therein, is a foot lever 28. A rack bar 29, formed with teeth on its lower edge, is 80 pivoted in a bracket 30, on the end gate, and is pivotally connected at its forward end, with the lower extended end of the foot lever. A tension spring 31, is connected between the upper portion of the foot lever, and the rack bar, and exerts its tension to draw the foot 85 lever backward, thereby forcing the front end of the rack bar, downward.

Mounted upon the rocker shaft, at a convenient distance from the end thereof, is the operating lever 32, and on the shaft adjacent the lever, is located a dog 33, 90 adapted to engage the rack. Guard plates 34, are carried by the dog or may be formed integral therewith, which engage the sides of the rack bar and prevent displacement of the dog therefrom.

To close the wagon bottom, the hand lever is pushed 95 forward until the dog engages the proper notch on the rack, and the spring on the foot lever, locks the rack in engagement with the dog. The wagon is then ready to receive a load. When the load is to be dumped, pressure on the foot lever raises the rack bar from engage- 100 ment with the dog, thereby releasing the rocker shaft and rocker arms, and allowing the bottom boards to swing downward. In the closing of the bottom boards, the rocker arms and connections are so adjusted that the boards are lifted by the chain and spring connec- 105 tions, and when entirely closed, the springs yield until the supporting bar is drawn up to engagement with the bottom boards. The ridge in the wagon bed, promotes the flow of the material in the dumping operation, and serves to keep the load properly ballasted.

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From this description taken in connection with the drawings, it will be evident that I have provided a dumping wagon which accomplishes all the objects herein set forth, and is entirely practical and durable.

I claim:

1. The combination with a wagon body having a dividing ridge, of doors hinged to the ridge and wagon body, a rocker shaft journaled in the body, yieldable connections from said shaft for closing the doors, and means also operated from the shaft for supporting the doors closed.

2. In combination with a wagon body, two pairs of hinged doors forming the bottom thereof, of a rocker shaft journaled in the body, a plurality of rocker arms on the shaft, yieldable connections from the rocker arms for closing the doors, connections to other rocker arms for supporting the doors, closed, and means for locking the shaft with the doors closed.

3. In a dumping wagon, the combination with a wagon body having a dividing ridge, coöperating doors hinged to the ridge and wagon body, of a shaft journaled transversely in the wagon body, a plurality of rocker arms on

the shaft, yieldable connections from rocker arms to close the doors, a bar adapted to support the doors closed, connections, from other rocker arms to said supporting bar, and a rack and foot lever for locking the parts closed.

4. A wagon body having a longitudinal shed therein, coöperating doors hinged to the shed and to the sides of the body, a rock shaft journaled at the forward end of the body, rocker arms on the ends of said shaft and at intermediate points, yielding connections from the intermediate rocker arms to the doors, links pivoted to the end rocker arms, supporting rollers on the sides of the wagon body, a transverse supporting bar, chain connections between the links and bar, a lever for rocking the shaft, means for locking the rock shaft, and means for releasing said lock- 35 ing means.

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

ALBERT FLOWERS.

Witnesses:

EDGAR STEPHEN, EDWARD MARSHALL.