

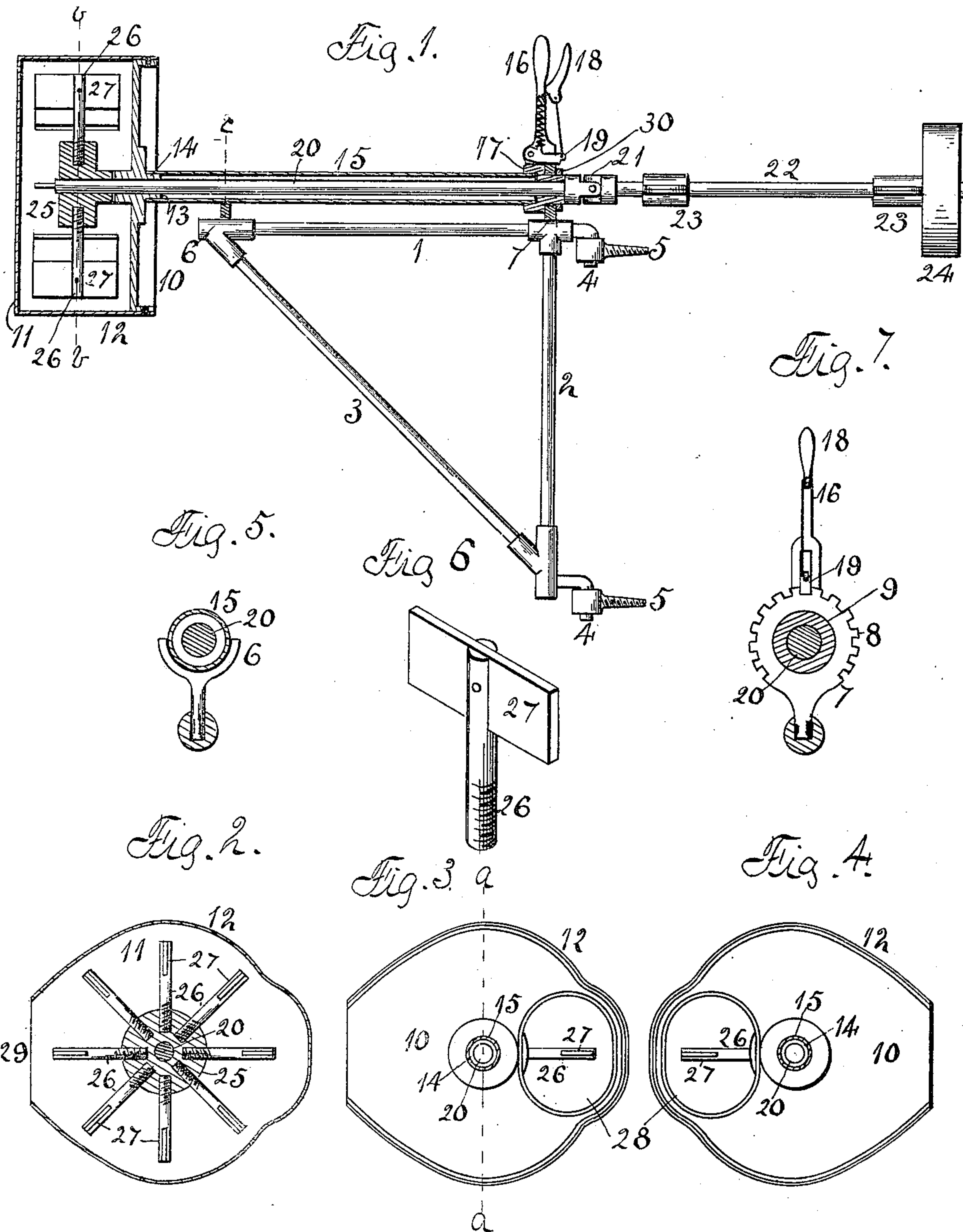
No. 667,626.

Patented Feb. 5, 1901.

A. HYLAND.  
GRAIN LOADER.

(Application filed Oct. 2, 1900.)

(No Model.)



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# UNITED STATES PATENT OFFICE.

ARTHUR HYLAND, OF CHERRY VALLEY, ILLINOIS.

## GRAIN-LOADER.

SPECIFICATION forming part of Letters Patent No. 667,626, dated February 5, 1901.

Application filed October 2, 1900. Serial No. 31,798. (No model.)

*To all whom it may concern:*

Be it known that I, ARTHUR HYLAND, a citizen of the United States, residing at Cherry Valley, in the county of Winnebago and State of Illinois, have invented certain new and useful Improvements in Grain-Loaders, of which the following is a specification.

The object of this invention is to construct a grain-loader which is supported by a frame having a pivotal connection with a stationary support, so that the grain-distributor can be adjusted to deliver the grain into any portion of the car, and in which the arms of the grain-distributing wheel are held by frictional contact, so that they may turn when they strike an obstacle, thereby saving the breakage of the parts.

In the accompanying drawings, Figure 1 is a vertical central section on dotted line *a*, Fig. 3. Fig. 2 is a vertical section on dotted line *b*, Fig. 1. Figs. 3 and 4 are side elevations of the casing supporting the grain-distributing wheel, showing the casing moved to distribute the grain in opposite directions. Fig. 5 is a vertical section on dotted line *c*, Fig. 1. Fig. 6 is an isometrical representation of one of the arms of the grain-distributing wheel. Fig. 7 is a partial section of the hand-lever for adjusting the grain-distributor casing.

A frame or crane composed of the horizontal bar 1, vertical bar 2, and diagonal brace-bar 3, joined together in any suitable manner, supports hooks 4, which have a pivotal connection with the screw-eyes 5. The screw-eyes have a connection with a stationary support, such as the outside of an elevator.

To the free end of the crane is pivotally supported a yoke 6, and to the inner end of the crane is secured a support 7, having its outer surface provided with teeth 8, and has a central perforation 9.

A casing containing the grain-distributing wheel is composed of one side 10, of cast material, and the other side 11 and rim 12, of sheet material, joined to the cast side. The cast side has a central opening 13 and a projection 14. A tube 15 has one end connected to the projection 14, and to its other end is connected a hand-lever 16 by its hub 17, having a recessed end receiving the tube. This hub has a central opening. The hand-lever supports a thumb-lever 18, which has

a connection with a spring-actuated dog 19. The support 7 is concentrically mounted on the hand-lever support, and the dog of the hand-lever engages the teeth of the support, and by means of the hand-lever the tube 15 can be adjusted and held at any point in its adjustment. A shaft 20 is located within the tube 15 and supported in the opening of the cast end of the grain-distributor and in the opening in the hand-lever support. A universal joint 21 forms a connection between this shaft and the main driving-shaft 22, supported by the boxes 23 and rotated by the pulley 24, having a belt connection with the driving power. The end of the shaft extending within the grain-distributor casing supports a distributing-wheel composed of a hub 25 and arms 26, the arms having a screw-threaded connection with the hub and each having a lengthwise slot, within which is located a blade 27, held in position by rivets.

With the parts in the position shown at Fig. 1 the casing containing the grain-distributing wheel is located within the car and the wheel is revolved in the desired direction. Grain is admitted into the casing through the opening 28 by a pipe connection with the bin in the elevator. The revolving wheel will throw the grain out through the end opening 29 and can be thrown at any angle, according to the position of the casing, which can be changed by the hand-lever and can be thrown over to fill the other end of the car. In supporting the device by the crane the grain-distributing wheel can be moved so that the grain will be thrown into the corners of the car.

By separating the universal-joint connection and removing the collar 30 the casing, tube, and shaft can be removed and the crane swung against the side of the building.

By holding the blades in their connection with the hub by frictional contact they will turn sidewise should a stone, brick, or other obstacle gain entrance into the casing, thereby preventing breakage of the blades.

I claim as my invention—

1. In a grain-loader, the combination of a casing provided with an inlet-opening and an outlet-opening, a tubular shaft connected with the casing, a support for the tubular shaft, means for adjusting the tubular shaft in connection with its support, a distributing-

wheel located within the casing, and a shaft connected with the wheel and located within the tubular shaft.

2. In a grain-loader, the combination of a  
5 casing provided with an inlet-opening and an outlet-opening, a tubular shaft connected with the casing, a support for the tubular shaft, the support provided with a toothed segment, the tubular shaft provided with a

hand-lever and dog, the dog adapted to engage the segment, a distributing-wheel located within the casing, and a shaft connected with the wheel and located within the tubular shaft.

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