

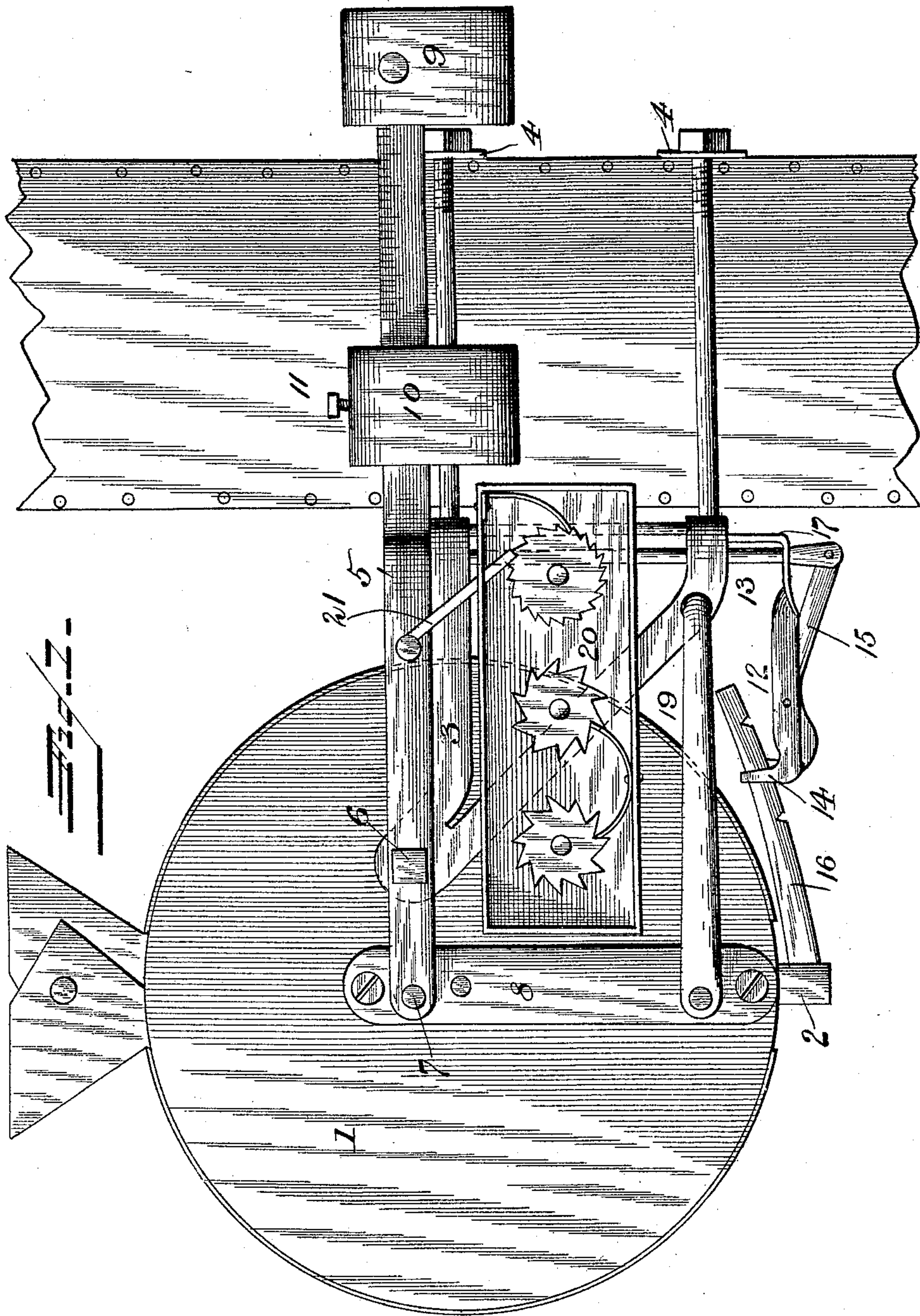
(No Model.)

2 Sheets—Sheet 1.

G. K. HOLBINE.
GRAIN MEASURER AND REGISTER.

No. 543,483.

Patented July 30, 1895.



Witnesses
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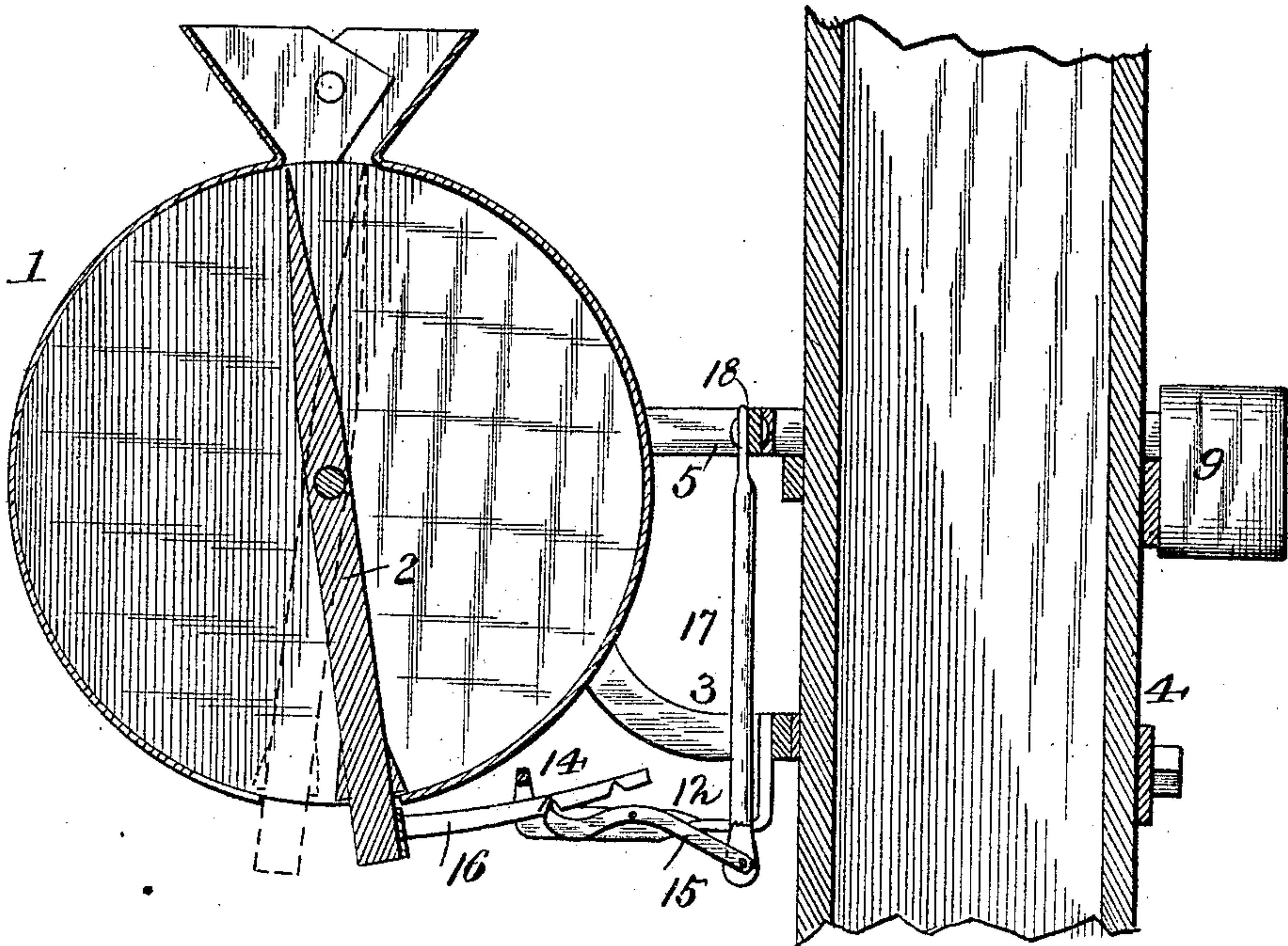
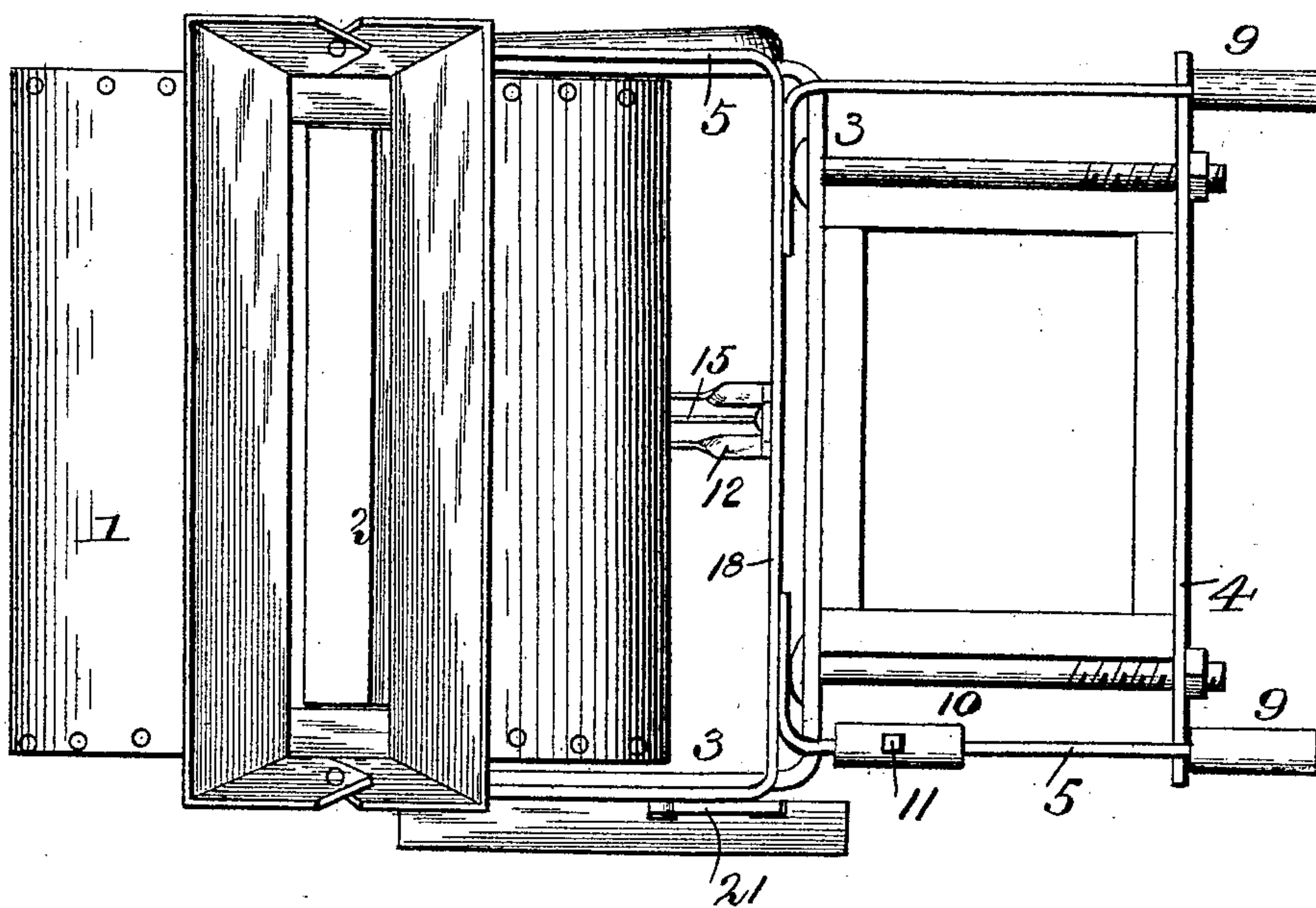
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2 Sheets—Sheet 2.

G. K. HOLBINE.
GRAIN MEASURER AND REGISTER.

No. 543,483.

Patented July 30, 1895.



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UNITED STATES PATENT OFFICE.

GOTTLIEB K. HOLBINE, OF EUSTIS, NEBRASKA.

GRAIN MEASURER AND REGISTER.

SPECIFICATION forming part of Letters Patent No. 543,483, dated July 30, 1895.

Application filed April 23, 1895. Serial No. 546,843. (No model.)

To all whom it may concern:

Be it known that I, GOTTLIEB K. HOLBINE, a citizen of the United States, residing at Eustis, in the county of Frontier and State of Nebraska, have invented certain new and useful Improvements in Grain Measurers and Registers; 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 grain measurers and registers.

The objects of the invention are to provide a device of this character which may be attached to a grain-elevator, which will accurately weigh and register the grain as the grain is discharged from the elevator into the hopper, and which shall be simple of construction, durable in use, and comparatively inexpensive of production.

With these objects in view the invention consists in certain features of construction and combination of parts, which will be hereinafter fully described and claimed.

In the accompanying drawings, Figure 1 is a side elevation of my improved grain measurer and register, showing it attached to the casing of a grain-elevator. Fig. 2 is a top view of the same. Fig. 3 is a longitudinal vertical sectional view showing in full lines the swinging partition of the hopper in one position and in dotted lines its other position.

In the drawings, 1 denotes the hopper, which in the present instance is cylindrical in form and centrally in which is pivoted a partition 2, the lower end of which projects a slight distance through an opening in the lower end of the hopper, while its upper end is flush with the opening in the top of the hopper.

3 denotes the supporting-brackets, which are secured to any suitable support, but which in the present instance is represented as the casing of the grain-elevator. These brackets are secured to the elevator by clips 4 or by any other suitable means.

Scale-beams 5 are pivoted to the brackets intermediate their ends, as shown at 6, and their inner ends are pivoted upon studs 7, which project from a plate 8, secured to the sides of the hopper. The outer ends of these

scale-beams are provided with weights 9, which serve to counterbalance the weight of the hopper, while the weights 10 are adapted to slide upon the scale-beams, which of course are suitably graduated and are adapted to determine the amount of grain to be weighed. These latter weights may be provided with set-screws 11, by means of which they will be prevented from accidentally slipping on the scale-beams. A slotted bar 12 is secured to the lower section 13 of the bracket and is provided with an upturned slotted end 14. Between the sides of this bar is pivoted a dog 15, one end of which is adapted to engage with the notched bar 16, which may be secured to the lower projected end of the partition and which slides through the upturned end of the slotted bar 12, while the other end of this dog is connected to a link 17, which has its upper end secured to the cross-bar 18 of the scale-beams. A rod 19 is pivoted to the bracket and to a stud at the lower end of the plate 8, and serves to prevent the hopper from rotating. A registering device 20 is secured to the bracket and is actuated by an arm 21, secured to one of the scale-beams. As this registering device may be of the usual and well-known construction, a further description of the same is not deemed necessary, as it in itself forms no part of my invention.

The operation of my device is as follows: The grain is conveyed by the elevator and is discharged into one of the compartments in the hopper formed by the partition. When a predetermined amount of grain is discharged into the hopper, the hopper will lower, which will cause the outer ends of the scale-beams to be tilted upward, which movement will raise the dog from the outer notch in the bar 16, and the weight of the grain on the partition will cause it to swing to the other side of the hopper and thereby allow the grain to be discharged through its lower end. The hopper then immediately rises and the grain will be discharged into the compartment at the other side of the hopper, and when the proper amount is emptied therein the same action will take place as before—namely, the hopper will lower, the scale-beams will be tilted upward, and the dog will be freed from the inner notch of the bar 16, allowing the partition to swing to the other side of the hop-

per. At each movement of the scale-beams the arm 21 will engage a pinion carried by one of the registering-wheels and will rotate the wheel one notch, in the usual and well-known manner.

The device is exceedingly simple and is strong in construction, and will accurately weigh and register the grain as it is discharged from the hopper.

Although I have described this invention in connection with a grain-elevator, I would have it distinctly understood that it may be supported in any manner I may desire and that the grain may be conveyed to the hopper in any other suitable way, without departing from the spirit of my invention.

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

1. The combination with a hopper, of a partition pivoted therein, scale beams pivoted to said hopper, supporting brackets pivoted to said scale beams, rods pivoted to the supporting brackets and to the hopper to prevent said hopper rotating, a notched bar secured to the

lower end of the partition, a pivoted dog to engage the notches in said bar, a link connecting the said dog to the scale beams, and a registering device actuated by the movement of the hopper, substantially as set forth.

2. The combination with a hopper, scale beams pivoted thereto, brackets pivoted to the scale beams, rods pivoted to the brackets and to the hopper, to prevent the rotation of the hopper, a notched bar secured to the lower end of the hopper, a slotted bar secured to the brackets and provided with an upturned slotted end, through which the notched bar moves and by which it is guided, a dog pivoted between the sides of the notched bar, a link pivoted to the dog and to the scale beams, a registering device actuated by the scale beams and clips for securing the brackets to the elevator frame, substantially as set forth.

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

GOTTLIEB K. HOLBINE.

Witnesses:

JACOB HAUSERMAN,
F. R. LAUNE.