

R. H. WILLIAMS.  
FEED REGULATOR.  
APPLICATION FILED OCT. 12, 1910.

993,134.

Patented May 23, 1911.

2 SHEETS—SHEET 1.

Fig. 1.

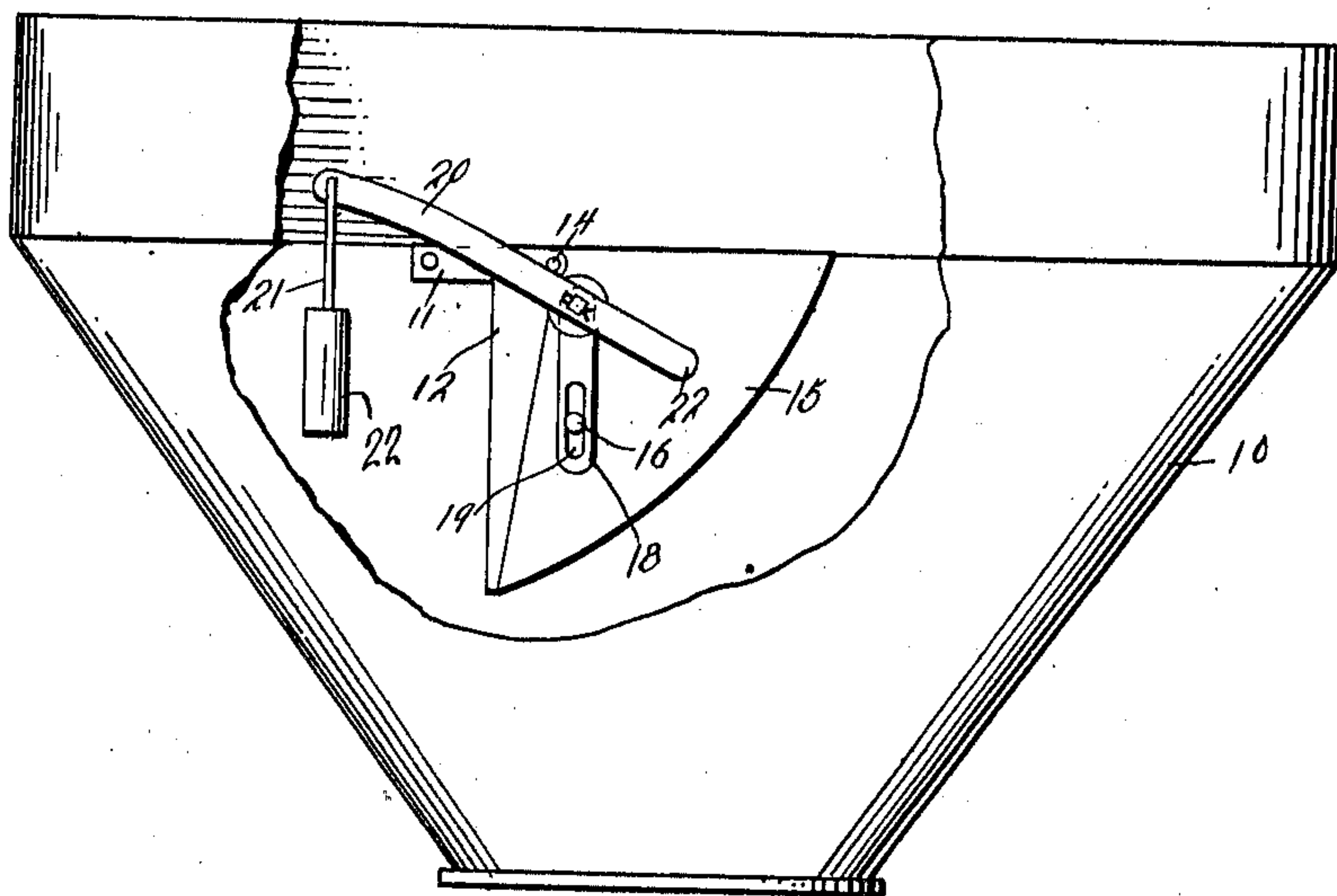
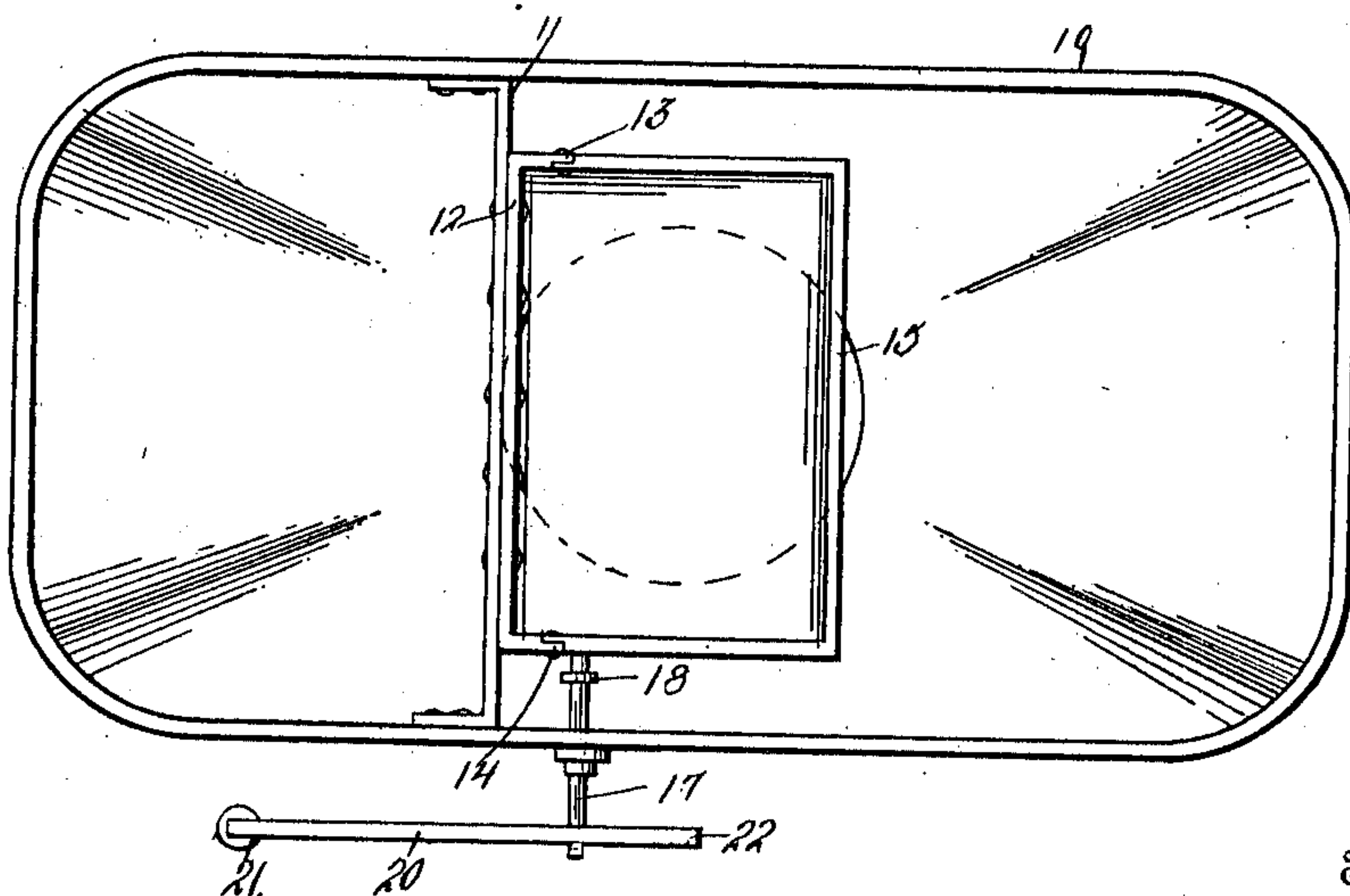


Fig. 2.



Witnesses  
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2 SHEETS-SHEET 2.

Fig. 3

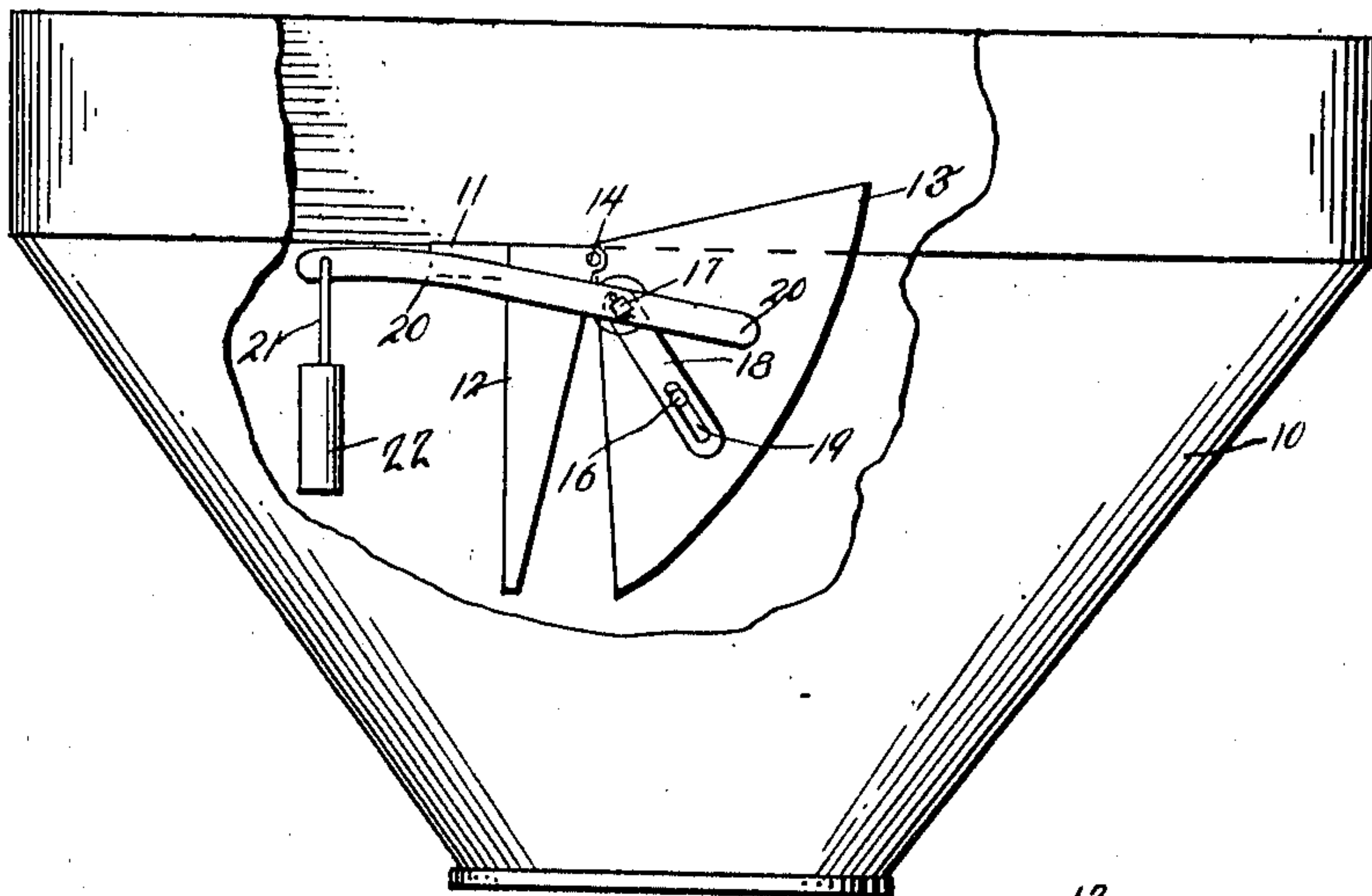


Fig. 4

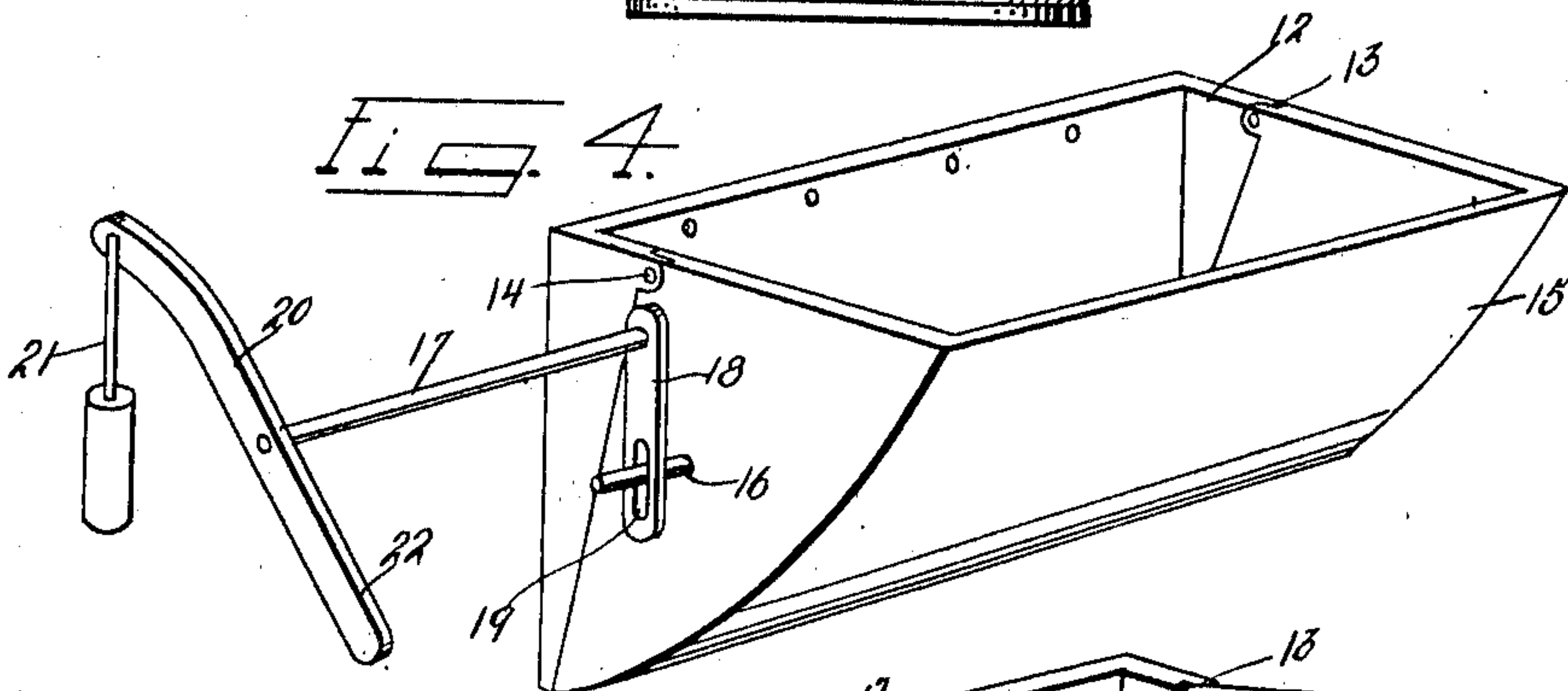
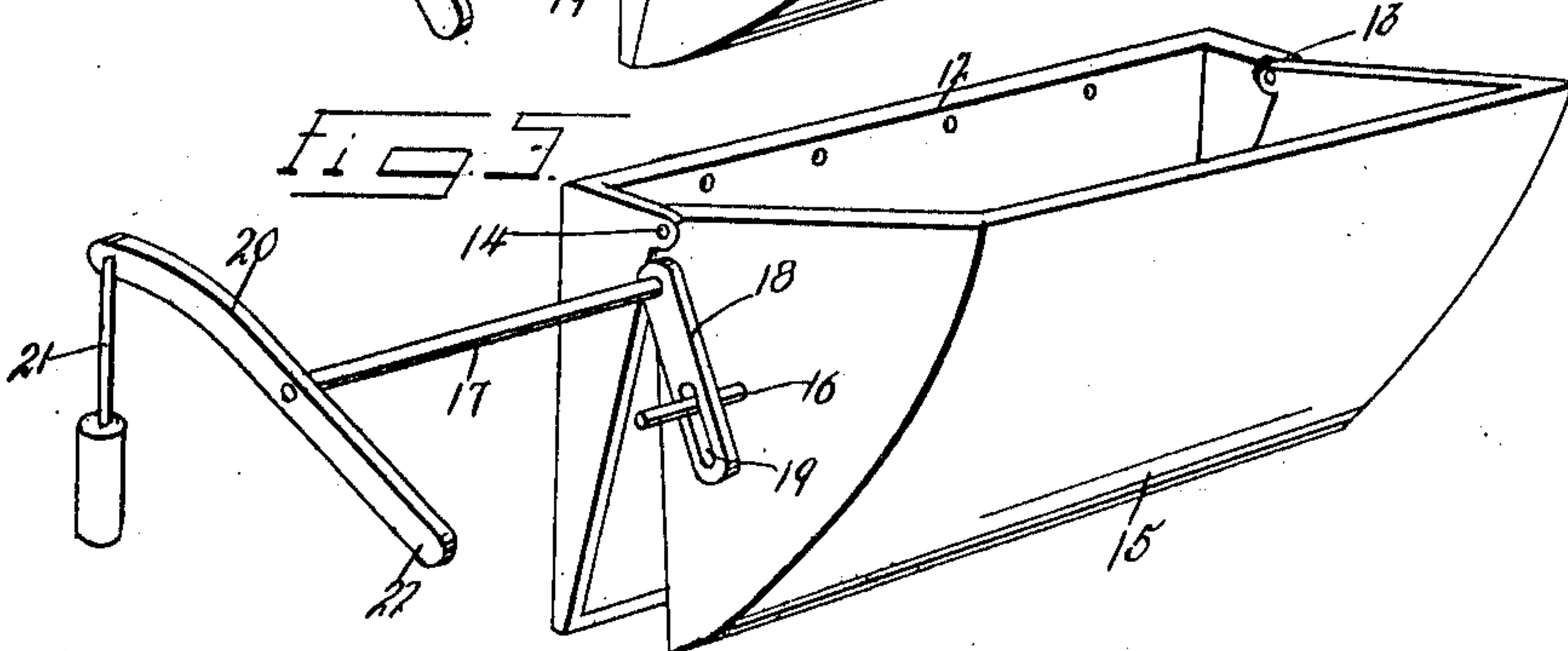


Fig. 5



Witnesses

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# UNITED STATES PATENT OFFICE.

RICHARD H. WILLIAMS, OF NEW RICHMOND, WISCONSIN.

## FEED-REGULATOR.

993,134.

Specification of Letters Patent.

Patented May 23, 1911.

Application filed October 12, 1910. Serial No. 586,697.

*To all whom it may concern:*

Be it known that I, RICHARD H. WILLIAMS, a citizen of the United States, residing at New Richmond, in the county of St. Croix, State of Wisconsin, have invented certain new and useful Improvements in Feed-Regulators; and I do hereby 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.

This invention relates to an attachment for sacking scales.

The object of the invention resides in the provision of an attachment for sacking scales adapted to catch a portion of the grain passing through the hopper of the scales and to subsequently deliver the grain thus caught by the attachment at the termination of the filling of the sack.

A further object of the invention resides in providing means operable from without the hopper of a sacking scale, whereby the grain caught by the attachment in its passage to the sack may be released therefrom at any desired moment.

With these and other objects in view, the invention consists in the details of construction and in the arrangement and combination of parts to be hereinafter more fully described and particularly pointed out in the appended claims.

In describing the invention in detail, reference will be had to the accompanying drawings, wherein like characters of reference denote corresponding parts in the several views; and in which,

Figure 1 is a front elevation of a sacking scale with the attachment associated therewith; one side of said hopper being broken away so as to expose the attachment to view, and the latter being shown in closed position; Fig. 2, a plan view of what is shown in Fig. 1; Fig. 3, a view similar to Fig. 1, with the attachment in open or discharging position; Fig. 4, a detail perspective view of the attachment in closed position; and, Fig. 5, a detail perspective view of the attachment in open position.

Referring to the drawings, 10 indicates the hopper of a sacking scale which has the opposite walls thereof connected by a bar 11. Secured to this bar 11 and depending therefrom is a section 12 of a receptacle having substantially the construction of a

clamshell bucket. Pivoted to the section 12 at 13 and 14 is another section 15, which is so arranged that the edges thereof may be moved into engagement with the adjacent edges of the section 12. The receptacle formed by the sections 12 and 15, as will be apparent, has its receiving end disposed toward the receiving end of the hopper 10. Owing to the preponderance of weight carried by the section 15, it will normally be positioned in contact with the section 12. Projecting from one end of the section 15 is a pin 16, and a shaft 17 is journaled in the wall of the hopper 10 adjacent the wall and parallel with the pin 16. The inner end of this shaft 17 carries an arm 18 provided with a slot 19, through which the pin 16 projects. The outer end of the shaft 17 extends exteriorly of the hopper and has secured thereto an operating lever 20 which carries at one end a pull cord 21, for the purpose of rotating the shaft 17. Said shaft 17 is connected to the lever 20 at a point intermediate its ends so as to form a counterbalancing arm 22, the weight of which assists in moving the section 15 into engagement with the section 12. A handle 22 is secured to the cord 21 for convenient manipulation.

In the use of sacking scales, it has been discovered that in the passage of the grain to the sack, the good grain travels faster than the lighter grain and as a result, becomes deposited in the base of the sack and leaves an inferior grain at the top of the sack. In the use of the attachment herein described, however, a certain portion of this heavy good grain is caught in the receptacle formed by the sections 12 and 15 so that when all the grain from one weighing of the scales has passed into a given sack, it is only necessary to pull the cord 21, which in turn will rotate the shaft 17 and cause the arm 18 to swing the section 15 of the receptacle into the position shown in Figs. 3 and 5, when the good grain in the receptacle will be discharged therefrom and pass into the sack as a final filling. After the receptacle formed by the sections 12 and 15 has been discharged as just described, the preponderance of weight carried by the section 15 and the equalizing arm 22 will serve to move said section 15 into engagement with the section 12 and thus close the receptacle.

From the foregoing description, it will be apparent that by the use of the attachment



a fair sample of the quality of the grain will always be apparent upon the opening of a sack.

What is claimed is:—

5 1. The combination with a hopper, of a receptacle mounted in said hopper with its receiving end disposed toward the receiving end of said hopper, said receptacle comprising a pair of pivotally connected sections,  
10 each of which is formed independently of the walls of the hopper; means for normally holding the adjacent edges of said sections in engagement with each other, and means for moving the adjacent edges of the sections  
15 out of engagement with each other.

2. The combination with a hopper, of a receptacle mounted in said hopper with its receiving end disposed toward the receiving end of the hopper, said receptacle comprising  
20 a pair of pivotally connected sections, each of which is formed independently of the walls of the hopper and one of which is rigidly secured within the hopper, a pin projecting from one end of the movable sections  
25 of the receptacle, a shaft journaled in the wall of the hopper, connections between said pin and said shaft whereby the rotation of

the shaft will shift the movable section of the receptacle into and out of engagement with the fixed section, and a lever secured  
30 to said shaft exteriorly of the hopper for rotating the shaft.

3. The combination with a hopper, of a bar connecting opposite sides of the hopper intermediate its intake and discharge ends,  
35 a receptacle supported by said bar and having its receiving end disposed toward the intake end of the hopper, said receptacle comprising a pair of sections one of which is fixed to the bar and the other having its  
40 upper end pivotally connected to the upper end of the first named section, whereby the lower end of the second named section is adapted to be swung toward and away from  
45 the first named section, and means operable exteriorly of the hopper for swinging said second named section.

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

RICHARD H. WILLIAMS.

Witnesses:

JOHN T. GRADY,

OWEN J. COUGHLIN.

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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."

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