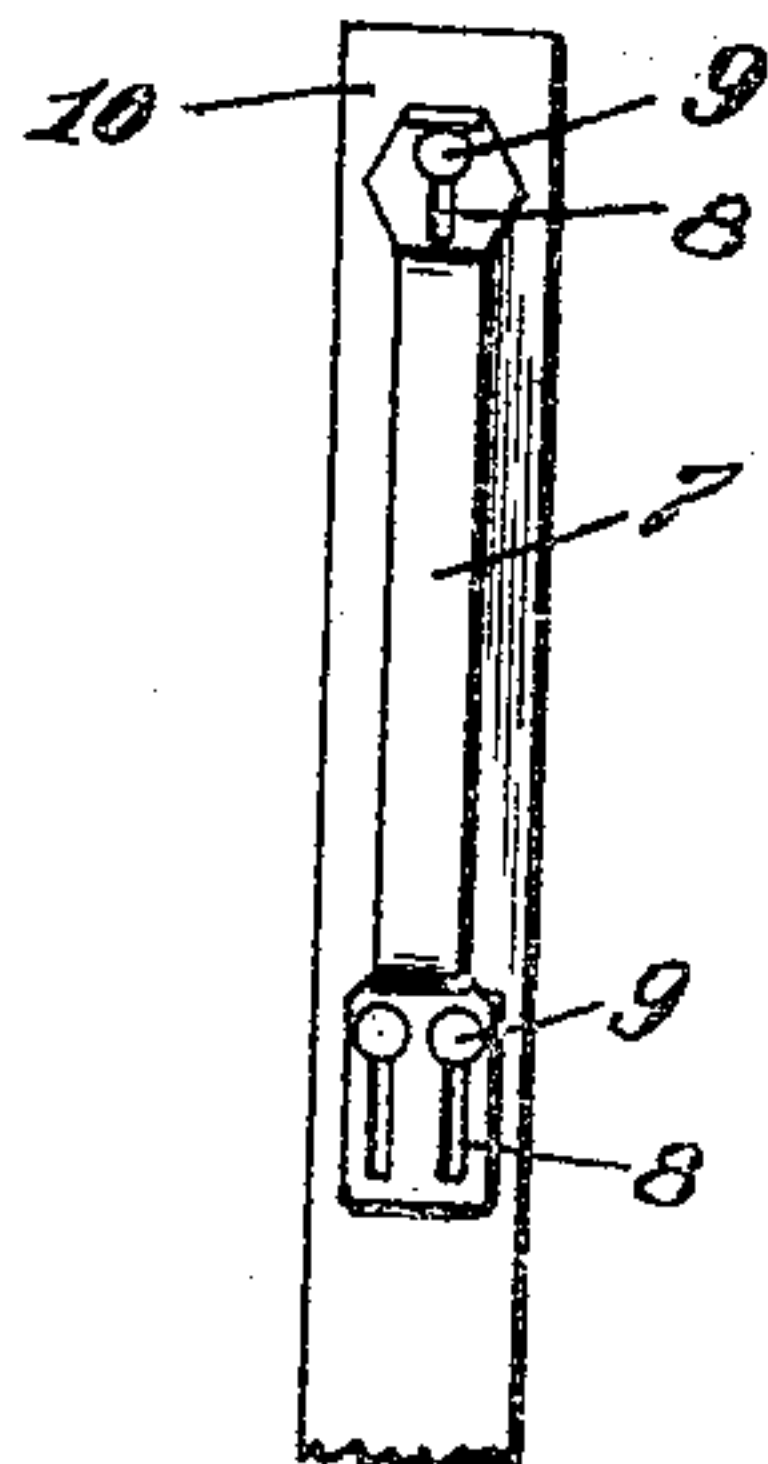
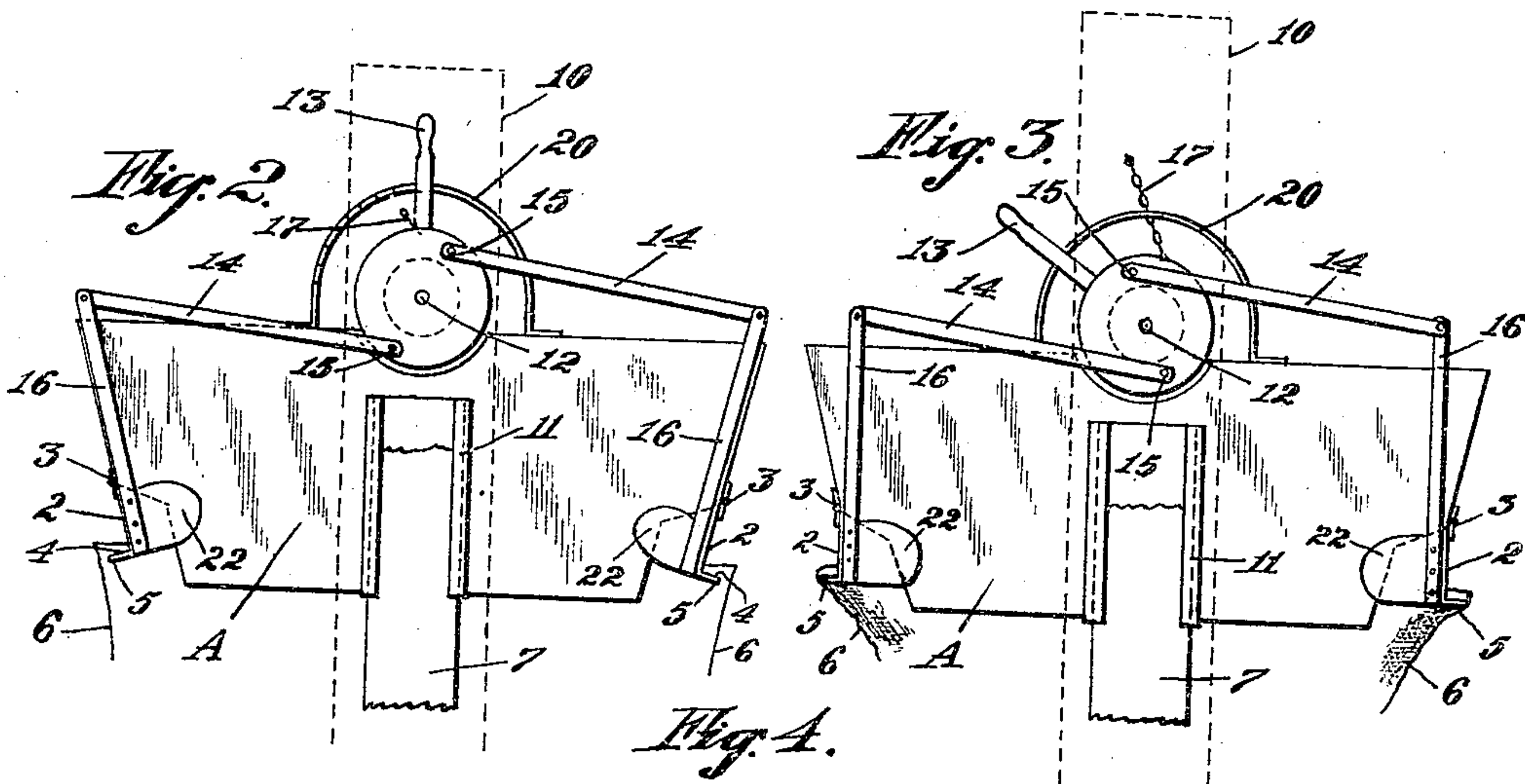
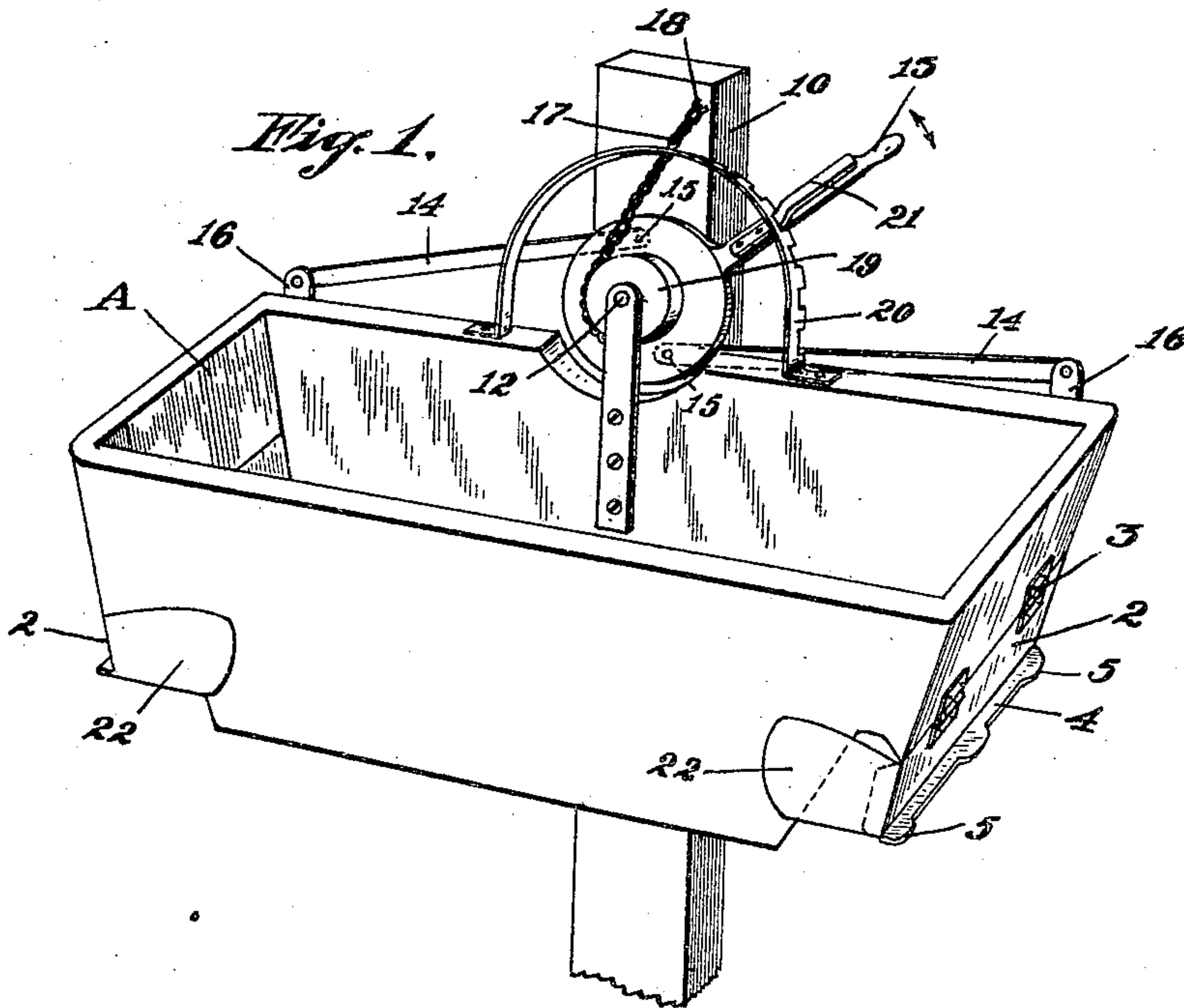


F. C. VONDERAHE, JR.
SACK HOLDER.
APPLICATION FILED JUNE 11, 1909.

945,646.

Patented Jan. 4, 1910.



WITNESSES;

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FREDERICK C. VONDERAHE, JR., OF OREGON CITY, OREGON.

SACK-HOLDER.

945,646.

Specification of Letters Patent.

Patented Jan. 4, 1910.

Application filed June 11, 1909. Serial No. 501,603.

To all whom it may concern:

Be it known that I, FREDERICK C. VONDERAHE, Jr., citizen of the United States, residing at Oregon City, in the county of Clackamus and State of Oregon, have invented new and useful Improvements in Sack-Holders, of which the following is a specification.

This invention relates to a device for mechanically holding sacks while being filled.

The invention consists of the parts and the construction and combination of parts as hereinafter more fully described and claimed, having reference to the accompanying drawings, in which—

Figure 1 is a perspective view of the invention. Fig. 2 is a rear view in elevation with the supports broken away. Fig. 3 is a view similar to Fig. 2, showing the device in the operative position. Fig. 4 is a detail in elevation of the support and guide.

A is a hopper of suitable size, shape and material, preferably having converging ends and front, and with the ends provided with two lower hinged sections 2, each section being hinged to the hopper along its upper edge, at 3, and carrying a flange 4 at its lower edge which has outwardly extended, round, smooth protuberances 5 for gripping and holding the sack, represented at 6. These hinged sections 2 are adapted by suitable means to move inwardly and outwardly simultaneously and oppositely, and to coact as grippers or jaws, when expanded, to hold the sack, and when contracted, to release the sack and allow the same to be removed after filling. The hopper is suitable suspended for vertical motion, and appropriate means are provided whereby the hopper will be elevated when the filled sack is released from the holder; all as will be shortly described.

An appropriate form of support for the hopper is here shown, and comprises a suitable vertical guide 7 having lengthwise extending slots 8 through which bolts 9 are passed to provide means for an adjustable attachment of the device to any suitable support, represented at 10. The hopper has suitable guide flanges 11 engaging the sides of the guide 7 and adapted to hold the hopper and also to permit a free sliding movement vertically on the guide.

Fulcrumed to the back of the hopper, at 12, is a hand lever 13, and two links 14 are pivoted each at one end, as represented at

15, eccentric to the fulcrum 12, and these links extend in opposite directions and each connects with an arm 16 which is rigid with a hinged clamp jaw section 2. Consequently it will be seen that by rocking the lever 13 in one direction, motion is communicated through the connections 14—16 to the sections 2 to move them simultaneously in and out to grip or to release the sack. Also, in order to lift the holder simultaneously with the release of the sack, so that the filled sack can be easily removed from beneath the holder, I provide a chain or strap or other suitable flexible connection 17 having one end connected to the hub of lever 13 and the other connected to a fixed part of the support 10 at a point represented at 18. Consequently when the lever 13 is rocked in one direction it wraps the chain 17 around this hub or drum 19 of the lever and causes the hopper to slide up on the guide 7. This movement of the lever is the same movement that draws the hinged sections inwardly to release the sack. Turning the lever in the opposite direction allows the hopper to drop down again by gravity to its original position. The length of the chain and the position of the guide 7 on support 10 are such that when the lever is thrown over to expand the gripping sections 2 to hold the sack, the latter will have its bottom just resting on the floor, or ground, or platform, or scale, or wherever else the device is applied, so that no excess weight will come on the holder. When the sack has been filled through the opening provided by the hopper, the lever is rocked in the other direction to release the sections 2 from the sack and raise the hopper out of the way, so that the filled sack can be easily removed.

In order to hold the operating lever 13 at any suitable point, a segmental rack 20 is provided concentric with the pivot 12, and the lever has a spring pawl 21 adapted to engage the notches in the rack.

On each side of and at the corners of the hopper are metal shields 22 to prevent the grain or seed from spilling out between the hopper and the hinged sections 2; these shields being fastened to the sections and moving with them on the inside of the sack.

The operation of the apparatus is manifest from the foregoing description.

The hopper is easily removed from its rest on the guide 7 to be shipped or stored when not in use.

In this holder the mouth of the sack is put around on the outside of the holder or hopper and at the bottom thereof; consequently there is no chance for the spilling of the contents, and the mouth of the sack is held at its fullest opening and may be filled to the very top, as the parts are so beveled that the grain or other substance to be sacked cannot lie in the edges to be pinched, or to interfere with the holder in performing its work.

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

1. A sack holder consisting of a hopper having rigid ends, said ends provided with lower hinged sections and each of said sections being hinged to the hopper along its upper edge, said sections carrying sack holding means, means for expanding and contracting the sack holding means, and means for raising and lowering the hopper simultaneously with the operation of said sack holding means.

2. In a sack holder, the combination of a hopper having rigid ends, hinged sections in the lower part of said ends having their upper edges hinged to the lower edge of the ends, sack holding means carried by the sections, a lever for raising and lowering the hopper, and connections between the lever and said sack holding means for operating the latter.

3. In a sack holder, the combination of a hopper having hinged oppositely-moving sack-gripping sections, means for operating said sections to grip or release the sack, and means connected with the grip operating means for raising and lowering the hopper, said last-named means including a lever and a flexible connection between a fixed point of support and said lever.

4. In a sack holder, the combination of a hopper having sack-holding means, a lever for operating said sack-holding means to cause them to release and grip the sack, and means including a windable member having one end secured to a fixed point and the other end connected with the lever for raising and lowering the hopper, said last-named means including a lever and a flexible connection between a fixed point of support and said lever.

5. In a sack holder, the combination of a hopper having rigid ends, said ends provided with lower hinged sections and each of said sections being hinged to the hopper along its upper edge, a lever connected with the sections for expanding and contracting the sack-holding means, said sections having oppositely extending sack-gripping flanges

with rounded protuberances, and means for raising and lowering the hopper simultaneously with the operation of the sack-holding means.

6. In a sack-holder, the combination of a hopper having rigid ends, said ends provided with lower hinged sections and each of said sections being hinged to the hopper along its upper edge, a lever connected with the sections for expanding and contracting the sack-holding means, said sections having oppositely extending sack-gripping flanges with rounded protuberances, shields carried by the sections and operative over the corners of the hopper to prevent the escape of the contents of the hopper outside the sack when the sack is in position on the holder, and means for raising and lowering the hopper simultaneously with the operation of the sack-holding means.

7. In a sack holder, the combination of a hopper suitably mounted for vertical sliding movement, said hopper having rigid ends, said ends having cooperating oppositely acting hinged sack-holding sections in the lower portion of said ends and hinged along their upper edges to the hopper, a lever for operating said sections, and means for causing the hopper to rise simultaneously when the sections are drawn together to release the sack, said last-named means including a hub on the lever and a windable connection extending from said hub to a fixed point.

8. In a sack holder, the combination of a hopper suitably mounted for vertical sliding movement, said hopper having cooperating oppositely acting hinged sack-holding sections, a lever for operating said sections, and means for causing the hopper to rise simultaneously when the sections are drawn together to release the sack, said last-named means including a flexible connection between a fixed point of support and said lever.

9. In a sack holder, the combination of a hopper suitably mounted for vertical sliding movement, said hopper having cooperating oppositely acting hinged sack-holding sections, a lever for operating said sections, and a chain suitably anchored at one end and having the other end connected with the lever whereby on the oscillation of the lever the hopper is raised simultaneously with the movement of the sections to release the sack.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

FREDERICK C. VONDERAHE, JR.

Witnesses:

BERTHA LONG,
JOS. E. HEDGES.