

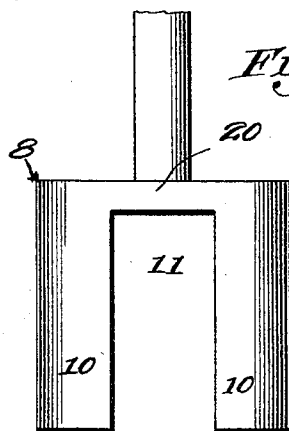
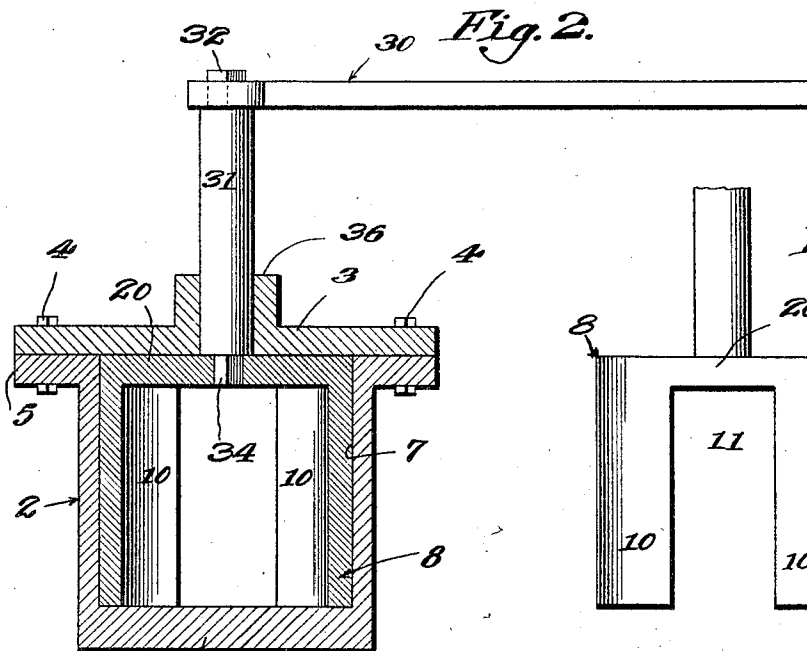
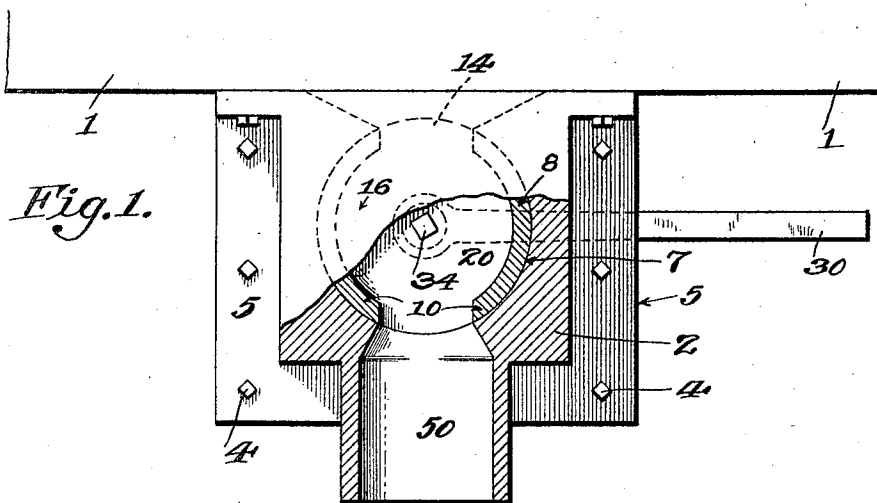
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J. E. DEMPSEY

GATE VALVE

Filed March 4, 1920



WITNESSES 16

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UNITED STATES PATENT OFFICE.

JOSEPH EDITH DEMPSEY, OF ACME, OKLAHOMA.

GATE VALVE.

Application filed March 4, 1920. Serial No. 363,298.

To all whom it may concern:

Be it known that I, JOSEPH E. DEMPSEY, a citizen of the United States, and resident of Acme, in the county of Grady and State of Oklahoma, have invented certain new and useful Improvements in Gate Valves, of which the following is a specification.

This invention relates to gate valves especially adapted for application to grain bins and the kettles of plaster mills, and the like.

In the accompanying drawings:

Figure 1 is a bottom plan view of the improved valve applied, parts being broken away.

Figure 2 is a vertical sectional view through the valve.

Figure 3 is a fragmentary side elevation of a cylindrical valve embodied in the invention.

In the drawing, the numeral 1 designates a container for grain or the like or the container may be in the nature of a kettle used in plaster mills.

The improved gate valve is generally designated by the numeral 2 and it consists principally of a top or closure 3 secured in position by means of fastening devices 4, the said fastening devices 4 being extended through the edge portion of the closure 3 and laterally projecting flanges 5 at the top of the casing.

In carrying out the invention the casing is provided with a cylindrical chamber 7 to snugly and rotatably receive a cylindrical valve 8. The cylindrical valve consists principally of a pair of arcuate wings or sections 10 having their edges arranged in spaced relation to define oppositely located openings 11 for the passage of material.

In carrying out the invention the casing is provided with a suitable opening 14 to communicate with the chamber 7 and to communicate with an opening in the container so that by an adjustment of the valve 8 the movement of the material may be controlled. It will be seen that by positioning one of the arcuate wings 10 across the opening or port 14 the discharge of material is cut off.

On the other hand when one of the open-

ings 11 is arranged in registration with the opening 14 the free discharge of material is permitted.

Attention is directed to the fact that the arcuate wings 10 have their edges spaced throughout and the lower ends of the wings are flatly mounted upon the bottom 16 of the casing.

Also the top of the cylindrical valve 8 is in the nature of a flat disk 20 which flatly abuts the closure 3. By reason of this construction the accumulation of lime, grain or other material in the valve as the result of continued use of the valve is prevented. That is to say material is not allowed to lodge in the valve and interfere with the operation of the same.

The cylindrical valve 20 may be manually operated by a handle 30 connected to a stem 31 as indicated at 32 and the lower portion of the stem 31 is squared and connected to the top 20 of the valve as indicated at 34. The top or closure 3 may be provided with a boss 36 to rotatably receive the lower portion of the stem 31.

It is understood, of course, that the valve is capable of a variety of applications and in this connection it is noted that the valve may be applied to a cylindrical container and the attaching face of the valve casing may be concaved. Also, the discharge spout 50 of the device may be either straight or inclined.

I claim:

The combination with a casing having a cylindrical chamber formed with oppositely arranged openings, extending to the bottom wall of the casing, of a valve rotatable in said cylindrical chamber and having spaced depending arcuate wings, the edges of which are arranged in spaced relation to form passages adapted for communication with said openings, said passages being extended out through the end of the valve, the upper end of said casing being provided with a laterally projecting flange, a closure secured to said flange and flatly abutting the adjacent side of said valve, and an operating member connected to said valve.

JOSEPH EDITH DEMPSEY.