March 1, 1938. W. A. BRIMM 2,110,059

VALVE

Filed Feb. 16, 1937

Fig. 1.

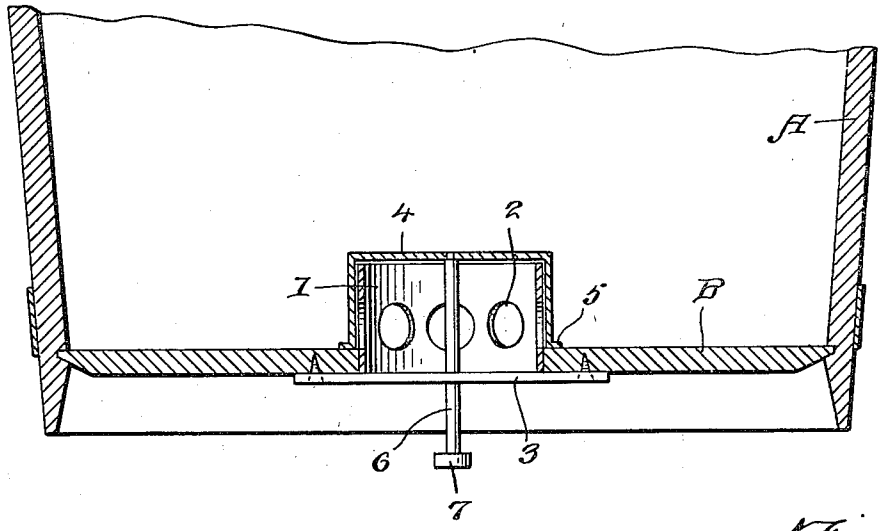


Fig. 3.

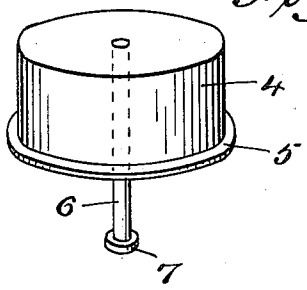


Fig. 2.

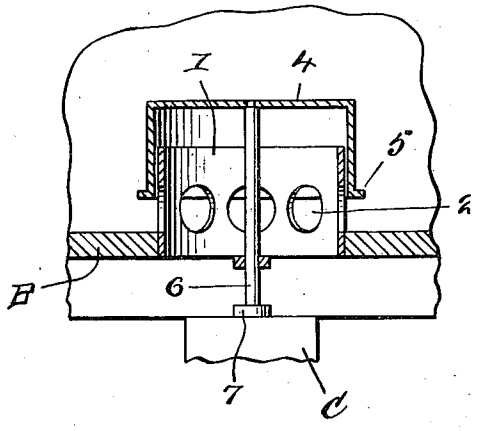
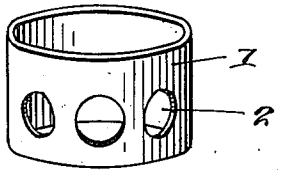


Fig. 4.



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VALVE

Wade A. Brimm, Pleasant Shade, Tenn.

Application February 16, 1937, Serial No. 126,088

1 Claim. (Cl. 294—69)

This invention relates to valves, and its general object is to provide a valve which is primarily designed for use with a well bucket, for the purpose of automatically filling the latter when the bucket is lowered in to the water of the well and when the bucket is raised to the surface will discharge its contents, such as for instance within a chute or the like leading from the well platform, to a trough, tank or the like, therefore it will be seen that by the use of my valve, with the buckets, water can be handled in an easy and expeditious manner, with minimum effort on the part of the user.

A further object is to provide a normally closed valve for attachment to and through the bottom of a container, such as a well bucket, and which is automatically opened when the container is placed upon suitable supporting means.

Another object is to provide a valve of the character set forth, that is simple in construction, inexpensive to manufacture, easy to apply to any type of container or bucket, and is extremely efficient in operation, use and service.

This invention also consists in certain other features of construction and in the combination and arrangement of the several parts, to be hereinafter fully described, illustrated in the accompanying drawing and specifically pointed out in the appended claim.

In describing the invention in detail, reference will be had to the accompanying drawing wherein like characters denote like or corresponding parts throughout the several views, and in which:

Figure 1 is a sectional view illustrating my valve applied to the bottom of a well bucket, with the valve in closed position.

Figure 2 is a similar view with the valve in open position.

Figure 3 is a perspective view of the working parts of the valve.

Figure 4 is a similar view of the valve body.

Referring to the drawing in detail, the letter A indicates a well bucket, and B the bottom thereof, and while I have illustrated my valve applied to a well bucket of the wooden type, it will of course be understood that it can be applied to any type of bucket or container, for use for any suitable purpose.

The bottom B is provided with an opening that is preferably arranged centrally therethrough, and within which is fixed the body 1 of my valve, the body being of hollow cylindrical formation, with open upper and lower ends to present a ring-like structure, as clearly shown in Figure 4, and is provided with a plurality of openings 2 arranged therein about the circumference thereof. The lower end of the body 1 is flush with the under surface of the bottom B and the body is of a height to extend a considerable distance within the bucket, with the openings disposed within the latter, as shown.

Bridging the opening of the bottom for disposal diametrically thereof, is a cross strip 3 which is secured to the under surface of the bottom by screws or the like as shown, and the body is preferably fixed to the cross strip by being welded or otherwise secured thereto, so that the body will be held firmly within the opening, as will be apparent.

The movable valve member which is indicated by the reference numeral 4 is in the form of an inverted cup of a size to loosely fit about the body, and is provided with an annular flange 5 extending outwardly from the lower edge thereof, for engaging the inner surface of the bottom B, when the valve member is seated or closed, as shown in Figure 1, and when so arranged the skirt of the valve member closes the openings.

Secured to and depending centrally from the upper wall of the valve member is a pin 6 which is slidably mounted through the cross strip 3, and has a head 7 for the lower end thereof, to facilitate movement of the valve member from the closed position of Figure 1, to the open position of Figure 2.

In the use of my valve with a well bucket, it will be obvious that when the bucket contacts the water in the well, the water will open the valve member and allow the bucket to be filled through the openings 2. When the bucket is drawn above the surface of the water, the pressure of the water within the bucket will close the valve and hold the same accordingly, as shown in Figure 1. The valve is opened by disposing the head of the pin 6 against some object indicated by the letter C in Figure 2, and which may be any suitable means for supporting the bucket, or a block or the like within a chute, leading from the well platform to a trough. In any event, such engagement will open the valve member and discharge the contents of the bucket therefrom, through the openings.

It is thought from the foregoing description that the advantages and novel features of the invention will be readily apparent.

It is to be understood that changes may be made in the construction and in the combination and arrangement of the several parts, provided that such changes fall within the scope of the appended claim.

What I claim is:

A valve for a well bucket, comprising a hollow cylindrical body provided with open upper and lower ends and mounted in and through the bottom of the bucket, said body having fluid passage openings therein circumferentially thereof and arranged within the bucket, an inverted substantially cup-shaped valve member slidably fitting the body for vertical movement thereon to cover and uncover the openings thereof, an outwardly extending annular flange formed on the lower end of the cup-shaped member to seat upon the bottom of the bucket, a cross strip bridging the lower end of the body, a pin secured to and depending from the upper wall of the cup-shaped member and slidably mounted through the cross strip, a head on the lower end of the pin, and said pin being of a length to extend below the lower edge of the bucket for the head to engage suitable means for raising the cup-shaped member to uncover the openings and allow the contents of the bucket to flow therefrom through the body.

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