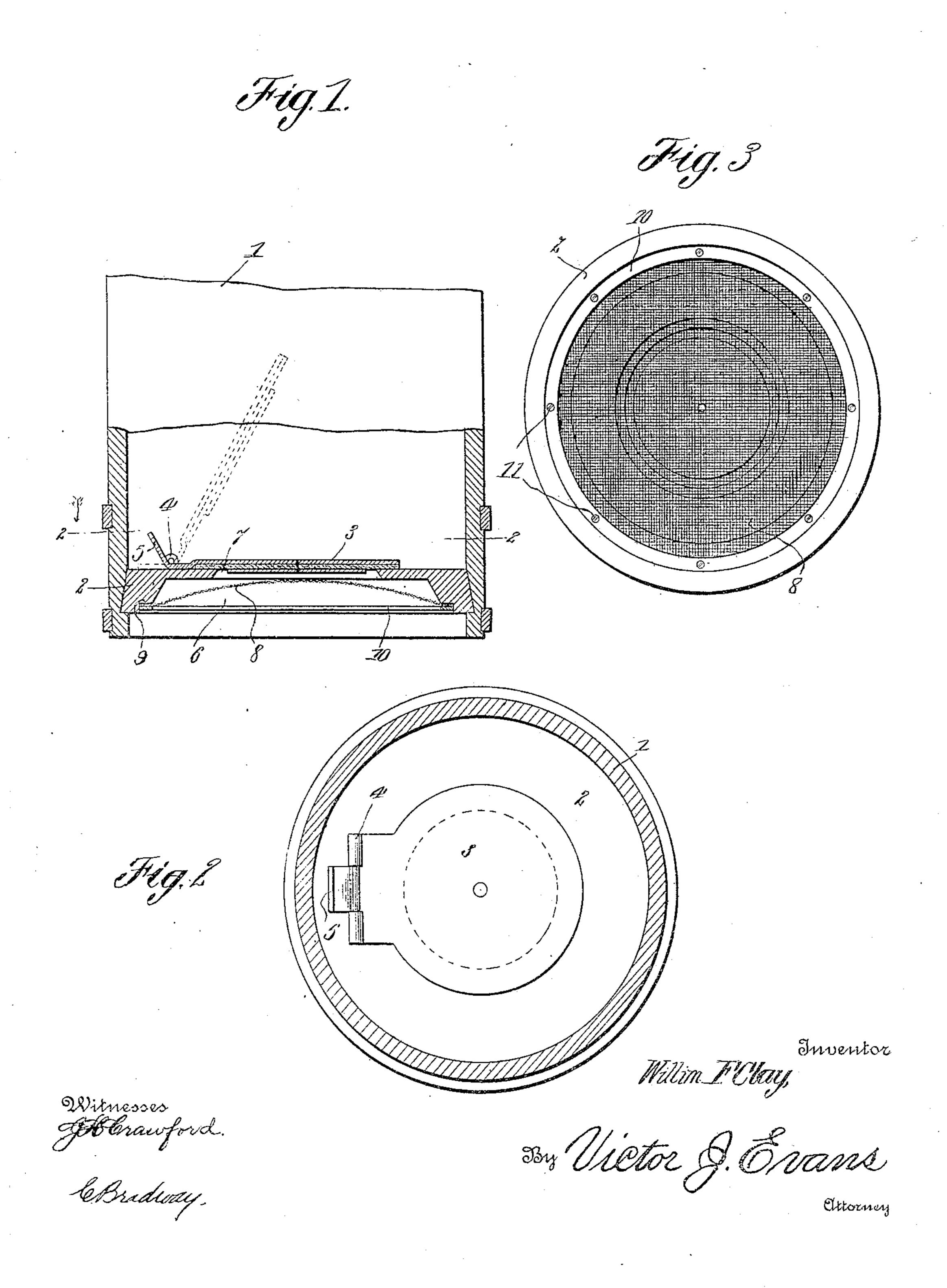
## W. F. CLAY. WELL BUCKET STRAINER. APPLICATION FILED APR. 19, 1910.

979,380.

Patented Dec. 20, 1910.



## UNITED STATES PATENT OFFICE.

WILLIM F. CLAY, OF WILLIS, TEXAS.

## WELL-BUCKET STRAINER.

979.380.

Specification of Letters Patent.

Patented Dec. 20, 1910.

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To all whom it may concern:

Be it known that I, William F. Clay, a citizen of the United States, residing at Willis, in the county of Montgomery and State of Texas, have invented new and useful Improvements in Well-Bucket Strainers, of which the following is a specification.

This invention relates to well buckets for pumps and has to do more particularly with

10 a head for the bottom of the bucket.

The invention has for one of its objects to provide a combined head and strainer whereby the water entering the bucket during the downstroke thereof will be strained, the pump being especially useful in those localities where it is necessary to strain the water after it has been drawn.

Another object of the invention is the provision of an extremely simple, inexpensive and reliable well bucket having a novelly constructed head for the bottom thereof forming a support for the strainer and flap

valve.

With these objects in view, and others as will appear as the description proceeds, the invention comprises the various novel features of construction and arrangement of parts which will be more fully described hereinafter and set forth with particularity in the claim appended hereto.

In the accompanying drawings, which illustrates one embodiment of the invention; Figure 1 is a sectional view of a well bucket having the combined head and strainer applied. Fig. 2 is a horizontal section on line 2—2, Fig. 1. Fig. 3 is a bottom plan view

with the head removed.

Similar reference characters are employed to designate corresponding parts through-

out the several views.

Referring to the drawing, 1 designates an ordinary well bucket used in connection with a driven well and in the bottom of the bucket is fitted a head 2 which may be fitted into the bucket or otherwise secured in place. The top of the head is perfectly flat and adapted to seat thereon as the flap valve 3 which swings on a hinge 4 to open and closed position, the opening movement of the valve being limited by a lug 5 arranged

at the hinge to strike the head or bottom of the bucket when the valve is fully opened. The head or bottom 2 is provided with a chamber 6 in its bottom and at the top of the chamber is a port 7 through which the 55 water passes to the bucket. In this chamber is an upwardly dished wire netting or equivalent diaphragm 8 which forms a strainer that prevents material contained in the water from entering the bucket. The 60 conical strainer 8 has its edge secured to an annular shoulder 9 on the head or bottom 2 by means of a ring 10 which is secured in place by fastenings 11. By having the strainer hollow on its under side, there is 65 less likelihood of matter collecting thereon to prevent free passage of water through the meshes. In the use of the device, the water passes freely through the strainer and holds the valve open during the downstroke 70 of the well bucket and on the upstroke the valve will automatically close and lift the water. In this manner, the water discharging from the pump will be free from foreign matter so that it can be used without further 75 straining.

From the foregoing description taken in connection with the accompanying drawings, the advantages of the construction and of the method of operation will be readily 80 apparent to those skilled in the art to which the invention relates, and while I have described the principle of operation of the invention, together with the device which I now consider to be the best embodiment 85 thereof, I desire to have it understood that the device shown is merely illustrative and that such changes may be made when desired as are within the scope of the claim.

I claim—

A well bucket comprising a body, a disk-shaped bottom of tapering form fitted in the body, said bottom having a chamber extending from the under to the upper side, the wall of the chamber being formed with an 95 annular shoulder adjacent the under face of the said bottom, an upwardly-dished strainer disposed in the chamber and having its peripheral edge bearing against the shoulder, a retaining ring of substantially 100

the same diameter as the strainer and engaging the under side thereof at the periphery, fastenings passing through the ring and strainer and entering the said bottom for securing the strainer in place wholly on the bottom, a valve mounted on the bottom and adapted to seat on the top surface thereof to permit water to pass upwardly

in the bucket during the down-stroke there-

of and to close on the up-stroke.

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

WILLIM F. CLAY.

Witnesses:

D. E. CLAY, C. W. WAYDE.