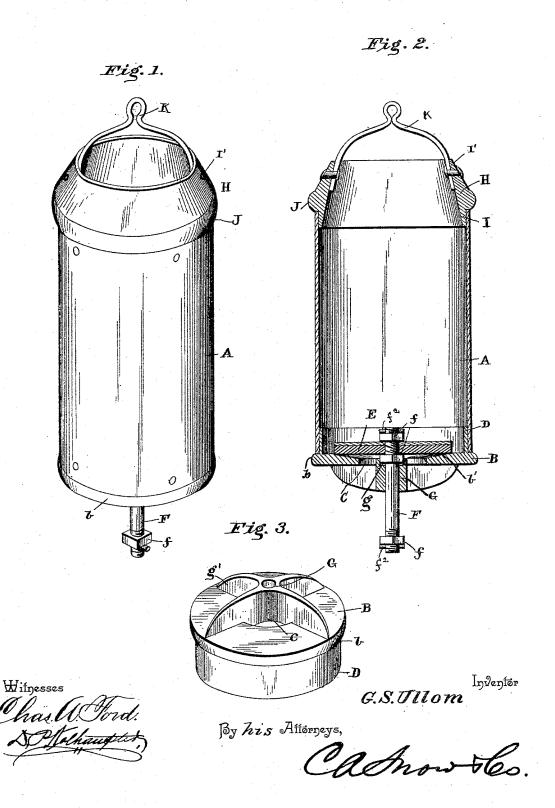
## G. S. ULLOM. WELL BUCKET.

No. 490,052.

Patented Jan. 17, 1893.



## UNITED STATES PATENT OFFICE.

GEORGE S. ULLOM, OF POMONA, KANSAS.

## WELL-BUCKET.

SPECIFICATION forming part of Letters Patent No. 490,052, dated January 17, 1893.

Application filed March 15, 1892. Serial No. 424, 986. (No model.)

To all whom it may concern:

Be it known that I, George S. Ullom, a citizen of the United States, residing at Pomona, in the county of Franklin and State of Kansas, have invented a new and useful Well-Bucket, of which the following is a specifica-

This invention relates to well buckets; and it has for its object to provide an improved to valved bottom for well buckets adapted for use in bored wells, which bucket shall be particularly durable and protected from undue wear, while at the same time being so constructed as to be easily repaired.

With these and many other objects in view which will readily appear as the nature of the invention is better understood, the same consists in the novel construction combination and arrangement of parts hereinafter more 20 fully described, illustrated and claimed.

In the accompanying drawings:—Figure 1 is a perspective view of a well bucket constructed in accordance with this invention. Fig. 2 is a vertical longitudinal sectional view 25 of the same. Fig. 3 is a detail in perspective

of the bottom. Referring to the accompanying drawings; A represents the cylindrical body of the well bucket open at top and bottom, and inclosed 30 at the bottom by the valved bottom B. The said bottom B has a central valve opening C, and an upwardly extending flange D which fits in the lower end of the body A, and is riveted or otherwise suitably secured therein. 35 The rim b of the bottom B is preferably rounded and projects beyond the sides of the body A so as to protect the same from undue wear in working through the well tubing. The said bottom B is further provided directly around the valve opening C with the valved seat b', which receives the valve disk E, working thereover and inside of the upwardly extending flange D of the bottom. The disk valve E is removably secured to the upper end 45 of a reciprocating valve stem F by means of the clamping nuts f, working on the upper threaded end of the valve stem, and thus allows the said valve to be easily removed when worn out. The said valve stem extends be-50 low the valve opening C and works through

the winged valve guide G upon the bottom of

lower end below said guide a limiting nut f'which limits the upward movement of the valve. Keys or pins  $f^2$  prevent the nuts f and 55 f' from unscrewing. The valve guide G extends into the valve opening C nearly flush with the valve seat b', and is countersunk as at g on its upper side to receive the nut under the valve disk, and said valve guide is 60 also provided with the superficial beveled wings or ribs g', which project below the bottom of the bucket at right angles to each other, and serve to cause an easy entrance of the bucket into the water and to strengthen the 65 bottom. It will be readily seen that the manner in which the valve stem is arranged, allows it to be easily removed as already noted, while the general construction of the bottom, described, provides a strong and durable, yet 70 efficient valved bottom for well buckets. The upper open end of the cylindrical body A receives the ring cap H. The said ring cap H is provided with a downwardly extending flange  $\overline{I}$ , which fits into the top end of the bucket and 75 is securely riveted or otherwise suitably secured therein. The said cap is of one single piece and is further provided with an upwardly extending inwardly beveled or cone shaped portion I', which on account of the 80 inward bevel thereof prevents the bucket from catching on any inturned tubing or other obstructions in the well, and also provides means so that if necessary an additional cone can be placed thereon to avoid such obstruc- 85 tions. At the meeting point of said cone portion and the flange I, the cap H is provided with a projecting rounded rim J which projects beyond the sides of the bucket and prevents undue wear upon the body of the bucket go in working through the well tubing. The ordinary bail K is fastened to the inside of the cap H, as illustrated.

It is thought that the construction and advantages of the herein described well bucket 95 bottom and cap are apparent without further description.

Having thus described my invention, what I claim and desire to secure by Letters Pat-

In a well bucket, the combination with the cylindrical body; of the disk bottom having a central valve opening, an upwardly extendthe bottom, and further carries at its extreme I ing flange removably secured in the lower end of said body, and having upon its under side radially extending superficial wings crossing the said disk bottom, and provided with a central valve guide terminating at its upper 5 end in a recessed seat, which end projects into said valve opening above the plane of the underside of the disk bottom, a valve stem working through said guide perforation and provided with a limiting nut at its lower end, a 10 valve disk removably engaging the upper end of the valve stem and working over said valve opening, and clamping nuts engaging the up-

per end of the valve stem above and below said valve disk, the lower of which nuts is adapted to rest within said recessed seat in said valve guide, substantially as set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in

the presence of two witnesses.

GEORGE S. ULLOM.

Witnesses:
HENRY DETWILER,
B. H. PASLEY.