N. P. ARNOLD.

COLLAPSIBLE BUCKET.

APPLICATION FILED FEB. 5, 1916.

1,208,445. Patented Dec. 12, 1916.

Fig. 1.

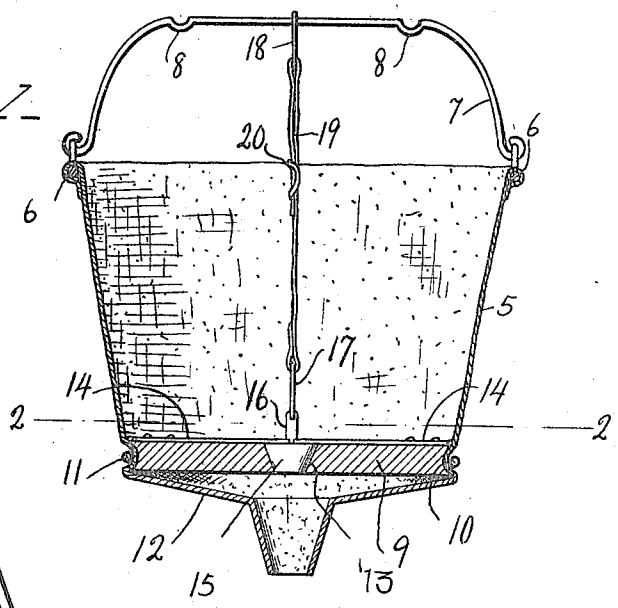


Fig. 3.

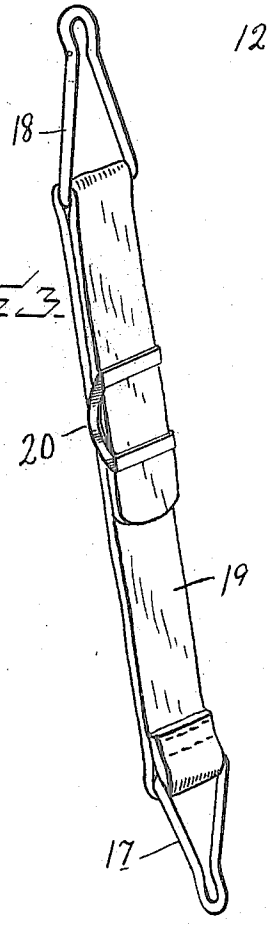
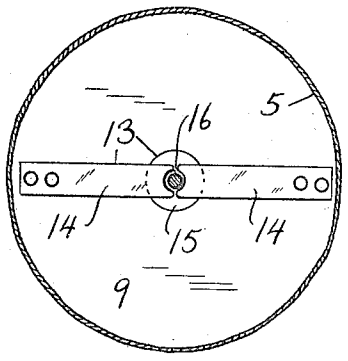


Fig. 2.



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COLLAPSIBLE BUCKET.

1,208,445. Specification of Letters Patent. Patented Dec. 12, 1916.

Application filed February 5, 1916. Serial No. 76,492.

To all whom it may concern:

Be it known that I, NORVILL P. ARNOLD, a citizen of the United States, residing at Rector, in the county of Clay and State of Arkansas, have invented certain new and useful Improvements in Collapsible Buckets, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to an improved collapsible bucket and has for its primary object to provide a bucket primarily designed for use by automobilists for the purpose of conveniently filling the radiator with water, said bucket being so constructed that it may be very compactly folded or collapsed so that it will occupy a minimum of space upon the vehicle body.

It is another and more particular object of the invention to provide a bucket or receptacle having a flexible collapsible body wall, preferably of canvas, said body wall being provided at its lower end with a funnel extension, a bottom for the bucket and means for clamping the body wall thereto, said bottom being provided with an opening, a valve normally closing said opening, a bail for the bucket, and means connected to said valve and adjustable upon the bail whereby the valve may be removed from its seat to release the water.

It is a further general object of the invention to provide a device of the above character which is of great convenience in practical use, positive and reliable in its operation, and may be manufactured at relatively small cost.

With the above and other objects in view, my invention consists in the novel features of construction, combination and arrangement of parts to be hereinafter more fully described, claimed and illustrated in the accompanying drawing, in which,

Figure 1 is a vertical sectional view of a collapsible bucket constructed in accordance with the preferred embodiment of my invention; Fig. 2 is a horizontal section taken on the line 2—2 of Fig. 1; and Fig. 3 is an enlarged perspective view of the flexible connection between the valve member and the bail or handle of the bucket.

Referring in detail to the drawing, 5 designates the body wall of the bucket, preferably constructed of canvas or other like flexible material which may be reinforced at its upper end by a wire ring 6 arranged in a turned-over hem on the edge of the bucket wall. To this wire ring, the ends of a bail 7 are loosely connected, said bail having curved end portions and a straight medial portion. Bends are formed in the wire bail at the opposite ends of the medial portion thereof to provide notches, indicated at 8, for a purpose to be later explained.

The bucket is provided with a wood bottom 9 having a groove 10 in its periphery to receive a clamping ring 11 which tightly holds the flexible body wall in connection with the bottom 9. The body wall of the bucket is formed with a tapering funnel-shaped extension 12 to extend below the bucket bottom 9, and this bottom is centrally provided with a tapering opening 13 to release the contents of the bucket into said funnel. In the upper surface of the bottom 9, the leaf springs 14 are countersunk and securely fixed to said bottom at their outer ends. 15 designates a valve member normally closing the opening 13, and held in such position by the inner free ends of the springs 14 which bear upon the upper face of the valve. These inner ends of the springs are notched or forked to accommodate the outwardly extending valve stem 16.

To the valve stem 16, a substantially triangular wire loop 17 is loosely attached and a similar loop 18 is slidable upon the medial portion of the bail 7. A flexible strip of canvas or other suitable material 19 connects the loops 17 and 18 and one end of this flexible strip is adjustably connected to the body of the strip by means of a buckle 20, whereby the slack in the strip may be taken up and its length properly adjusted.

In the use of my improved bucket, the same is filled with water or other liquid, the valve 15 being held tightly closed by means of the springs 14. In order that a water-tight closure may be effected, this valve is preferably formed of hard rubber. When it is desired to release the water from the bucket, the canvas strip 19 is pulled upwardly and the valve 15 thus disengaged from its seat against the action of the springs 14. At the same time, the loop 18 is shifted longitudinally upon the bail 7 and engaged in one of the notches 8 in said bail so that the valve will be held in its open position and will not be again drawn into engagement with its seat by the suction of the water flowing out through the opening

13. The lower end of the funnel-shaped extension 12 is engaged in the filling nozzle of the radiator or other reservoir which it is desired to fill, so that the water, as it escapes from the bucket, will pass through said funnel and into the radiator. After using the bucket, the flexible walls of the bucket body and the funnel may be collapsed upon the bottom 9 and the bail folded so that all parts are compactly arranged. The bucket may now be packed or stored in a relatively small space in any convenient part of the vehicle body.

From the foregoing description, taken in connection with the accompanying drawing, the construction, manner of use and several advantages of the device will be clearly and fully understood.

My improved collapsible bucket is serviceable and convenient for use by motorists, but can obviously be also advantageously employed for various other purposes. The buckets can be constructed in various sizes and of different capacities and, while I have shown and described the preferred construction and arrangement of the several elements, it is to be understood that the device is susceptible of considerable modification therein and I, therefore, reserve the privilege of adopting all such legitimate changes as may be fairly embodied within the spirit and scope of the invention as claimed.

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

1. A bucket of the character described having a collapsible body wall and a rigid bottom provided with a central opening, a bail or handle for the bucket, a valve to close the opening in the bucket bottom, and means connected to the valve and adjustable upon the bail to engage means on the bail whereby the valve is retained in an open position.

2. A bucket of the character described having a collapsible body wall and a rigid bottom provided with a central opening, a bail or handle for the bucket, a valve to close the opening in the bucket bottom, means connected to the valve and adjustable upon the bail to engage means on the bail whereby the valve is retained in an open position, and means normally acting to yieldingly hold said valve in its closed position.

3. A bucket of the character described having a collapsible body wall and a rigid bottom provided with a central opening, a bail or handle for the bucket, a valve to close the opening in the bucket bottom, and flexible means connected to said valve and adjustable upon the bail whereby the valve may be held in its open position.

4. A bucket of the character described having a collapsible body wall and a rigid bottom provided with a central opening, a bail or handle for the bucket, a valve to close the opening in the bucket bottom, flexible means connected to said valve and adjustable upon the bail whereby the valve may be held in its open position, and means fixed to the bottom of the bucket normally acting to yieldingly hold the valve in its closed position.

5. A bucket having a flexible body wall and a tapering flexible funnel-shaped extension on one end, a rigid bottom for the bucket, means for clamping the wall of the bucket above said extension to the outer edge of said bottom, said bucket bottom being centrally provided with an opening, a valve to close said opening, and means for opening said valve to permit the water to escape from the bucket into the funnel-shaped extension thereof.

6. A bucket having a flexible body wall and a tapering funnel-shaped extension on one end, a rigid bottom for the bucket, means for clamping the wall of the bucket to the outer edge of said bottom, said bucket bottom being centrally provided with an opening, a valve to close said opening, means for opening said valve to permit the water to escape from the bucket into the funnel-shaped extension thereon, a bail attached to the other end of the body wall of the bucket, and flexible means connected to the valve and adjustable upon said bail to hold the valve in its open position and permit the water to escape from the bucket into the funnel-shaped extension thereon.

7. A bucket having a flexible body wall and a tapering funnel-shaped extension on one end, a rigid bottom for the bucket, means for clamping the wall of the bucket to the outer edge of said bottom, said bucket bottom being centrally provided with an opening, a valve to close said opening, means for opening said valve to permit the water to escape from the bucket into the funnel-shaped extension thereof, and leaf springs fixed to the bottom of the bucket and coöperating with said valve to normally hold the same in its closed position.

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

NORVILL P. ARNOLD.

Witnesses:
F. M. KIMBERLY,
HENRY MORRIS.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."