

(No Model.)

B. J. DOWNS.
VESSEL FOR LIQUIDS.

No. 301,576.

Patented July 8, 1884.

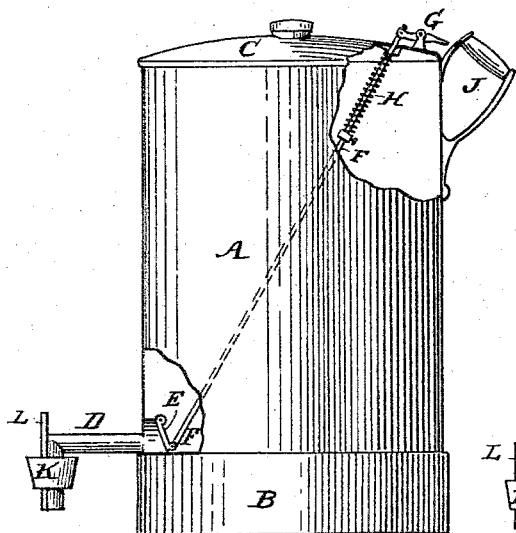


Fig. 1.

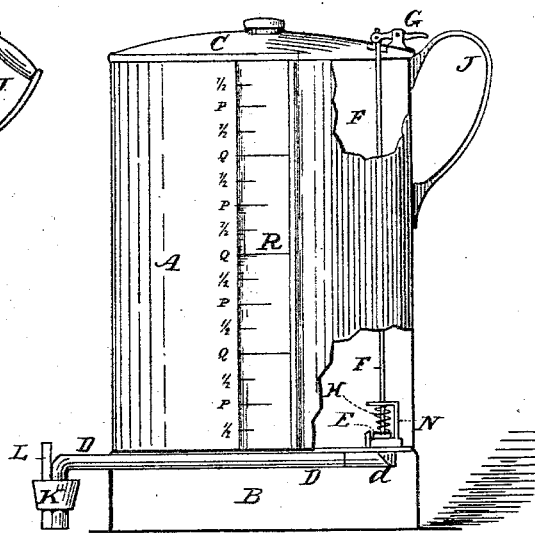


Fig. 2.

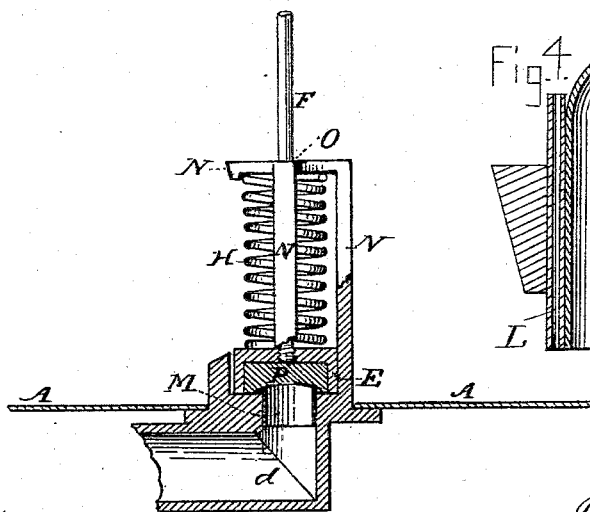
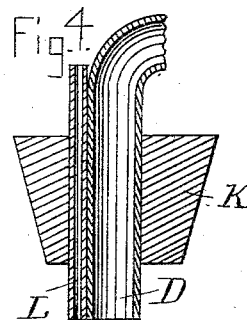


Fig. 3.



Witnesses
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UNITED STATES PATENT OFFICE.

BENJAMIN J. DOWNS, OF WEST SOMERVILLE, ASSIGNOR TO TIMOTHY D. BAKER, TRUSTEE, OF BOSTON, MASSACHUSETTS.

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SPECIFICATION forming part of Letters Patent No. 301,576, dated July 8, 1884.

Application filed January 17, 1884. (No model.)

To all whom it may concern:

Be it known that I, BENJAMIN J. DOWNS, a citizen of the United States, residing at West Somerville, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Vessels for Liquids; and I do hereby declare that the same are fully described in the following specification and illustrated in the accompanying drawings.

The invention relates to vessels for liquids; and it consists in the improved construction hereinafter pointed out and claimed.

In the drawings, Figure 1 is an elevation of a vessel provided with my improvements; Fig. 2, a like view illustrating also the measuring-gage. Fig. 3 is an enlarged detail of the valve preferred. Fig. 4 is a section through the end of the cock, conical collar, and vent-pipe.

A is the body of the vessel, and B the base or foot thereof. C is the cover, and D the discharge-tube for drawing off the contents of the vessel. E is a valve or gate formed, as shown in Fig. 3, to close or open the passage. F is a connecting-rod, having at its upper end a pivoted lever, G, for opening the valve, and a spring, H, to close it. J is a handle, and, for convenience in working the valve, the lever and handle are located in close proximity. The cock or faucet at its outer end is provided with a frusto-conical collar, K, against which the mouth of a can, jug, bottle, or lamp being filled may be pressed, so as not to allow the escape of the odors or fumes of the liquid being drawn. This feature is particularly advantageous in vessels containing coal-oil, naphtha, benzine, &c. A vent-tube, L, rises through this collar adjoining the outer end of the cock, permitting the escape of air from the vessel being filled, and serving as a signal when it is full.

The valve and connected parts shown in Fig. 3 may be more particularly described. A special object in its construction is cheapness, and I have so arranged the parts as to reduce the amount of labor and make a close fit. The connecting-rod, F, runs about vertically from the valve E to the lever G. I form in one casting (which protrudes through the bottom

of the vessel and is soldered thereto) the inner part, *d*, of the discharge-tube D, a cage, N, for the spring, and a guide, O, for the connecting-rod. This cage consists simply of two or more vertical bars, between which the spring H is placed, and the guide O is a perforated cross-piece connecting these bars at the top. The connecting-rod extends through this perforation and along the axis of the spring, and is screwed into or otherwise attached to the valve. The valve is an inverted cup filled or faced with packing P, and it is raised by the rod F and lever G against the resistance of the spring. The seat *m* for the packing of the valve is simply a section of tubing inserted at the upper end of the pipe *d*, and soldered in position so as to project very slightly. The yielding valve or its packing P seats itself upon this projecting edge and effectually prevents any leakage. By disconnecting the lever and rod and unsoldering the casting *d* from the bottom the rod, valve, packing, seat, guide, and spring may all be removed from the bottom of the vessel together.

With my devices for drawing the liquid from the bottom of the vessel, I provide for measuring it by sight as it flows, and delivering it without the employment of a funnel or any intermediate vessel. The cylindrical body A is provided with a transparent panel or gage, R, graduated from the top downwardly to indicate one-half pints, pints, quarts, and gallons, so that any desired quantity may be drawn off through the pipe D directly into the purchaser's jug, can, or pitcher, and the flow instantly stopped by the valve and spring without disturbing the containing-vessel or requiring it to be tipped forward for delivery, and tipped back vertically to determine when enough has been delivered, as would be the case were the liquid poured out from the top. The pitcher or vessel A has a flat base, so that it will stand in upright position. The lower end of the discharge-tube must not extend below the line of the base of the vessel, to interfere with the stability of the vessel when placed on a table or shelf. The vessel must stand upright on its base in order that the gage may register the measurement with accuracy.

It is obvious that my apparatus will be very

convenient for dealing out such liquids as molasses, having, as usually sold, a tendency to adhere to the measure and funnel used; or such as milk, where the measures are liable to become sour or soiled; or such as coal-oil, vapors of which are so penetrating and inflammable. It is also admirably adapted as a substitute for beer-pitchers, since drawing from the bottom avoids the froth which would be poured from the top.

I claim as my invention—

In combination with the body of a vessel having a flat base, the pipe D, extending

through the side thereof and secured to said vessel, and having inward projection, *d*, and tubular valve-seat *m*, the spring-valve with elastic face, which closes against said valve-seat, and a valve-rod extending inside the vessel from the valve to the vicinity of the handle, substantially as described.

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

BENJAMIN J. DOWNS.

Witnesses:

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E. A. PHELPS.