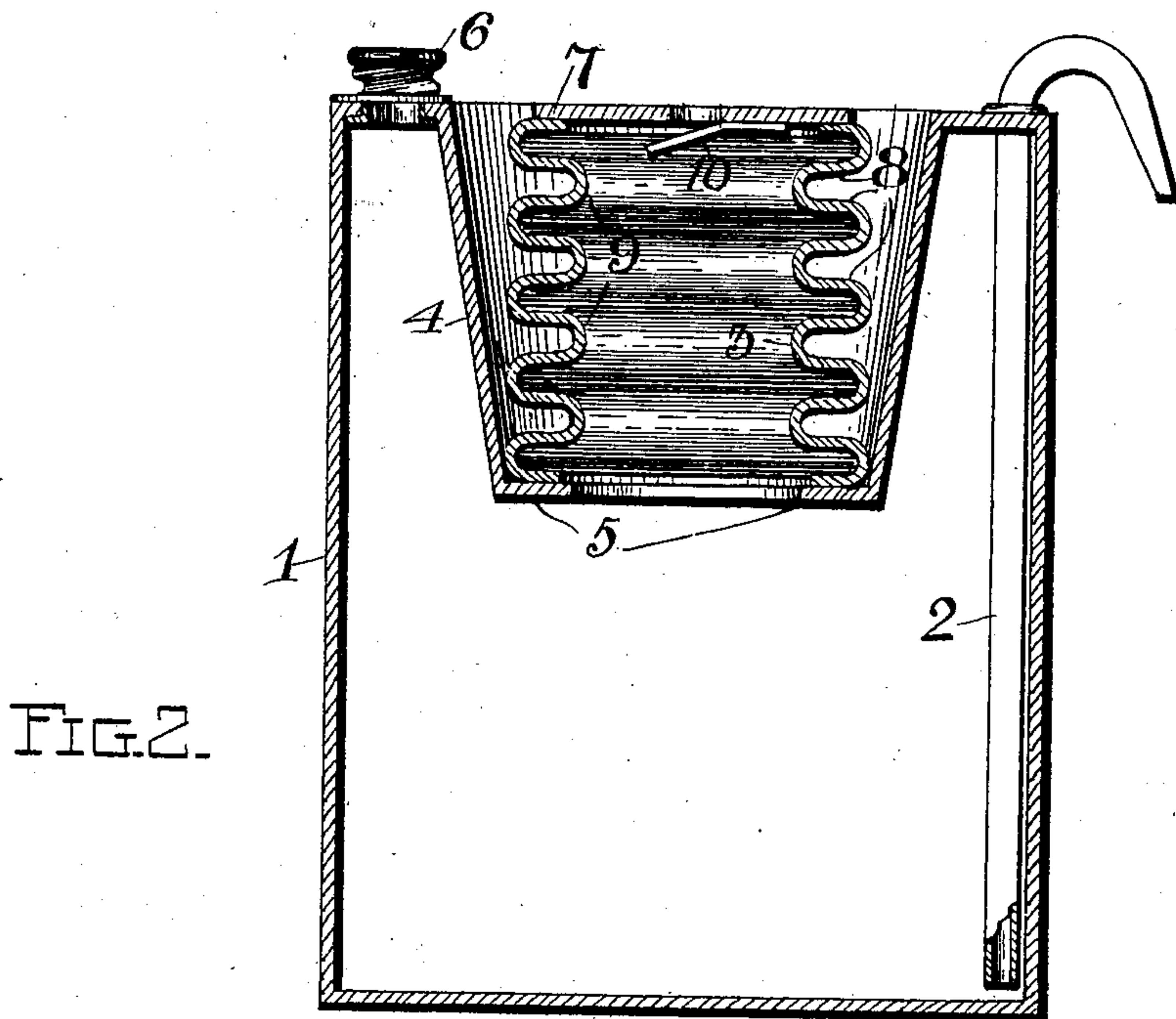
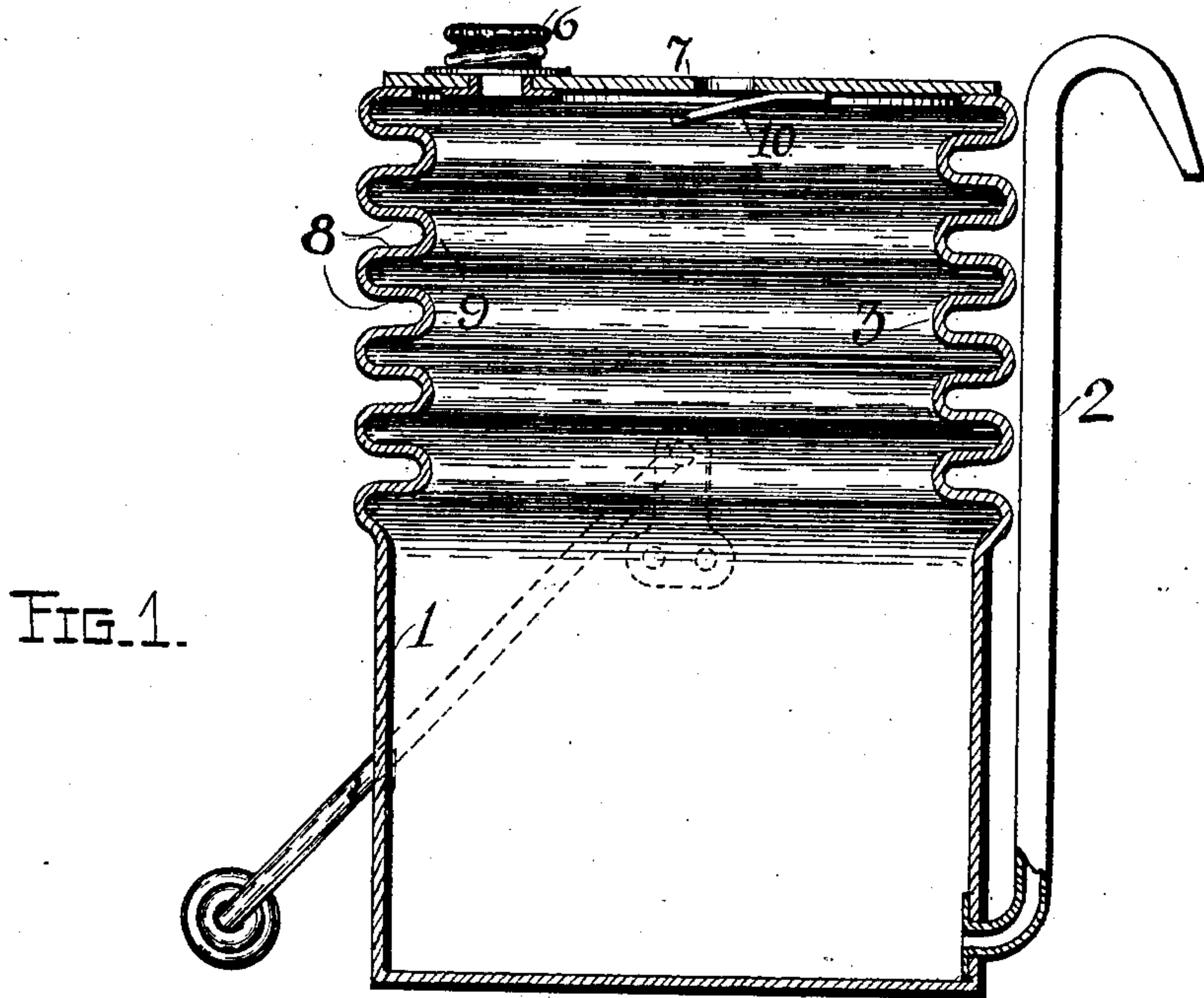


No. 762,299.

PATENTED JUNE 14, 1904.

W. M. FULTON.
RECEPTACLE FOR LIQUIDS.
APPLICATION FILED MAR. 4, 1903.

NO MODEL.



Witnesses

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WESTON M. FULTON, OF KNOXVILLE, TENNESSEE.

RECEPTACLE FOR LIQUIDS.

SPECIFICATION forming part of Letters Patent No. 762,299, dated June 14, 1904.

Application filed March 4, 1903. Serial No. 146,170. (No model.)

To all whom it may concern:

Be it known that I, WESTON M. FULTON, a resident of Knoxville, Tennessee, have invented a new and useful Improvement in Receptacles for Liquids, which invention is fully set forth in the following specification.

This invention relates to receptacles for liquids, and more particularly to that class of receptacles which are provided with means for forcing out or ejecting the liquid when it is desired to withdraw it from the receptacle.

The object of the invention is to provide a vessel of the character described which shall be simple in construction and operation, cheaply manufactured, and durable.

With this object in view the invention consists of a receptacle for liquids provided with a discharge conduit or opening, a portion of the walls of said receptacle being collapsible and composed of sheet metal or equivalent material, preferably elastic, and arranged in corrugations whose folds are made up of substantially parallel annular portions normal to the line of collapse, said annular portions being connected by curved portions struck on either simple or compound curves. Such collapsible portion of the wall of the receptacle may be either integral with the body of the receptacle or may be formed separate therefrom and rigidly secured thereto in any way that will secure a hermetic joint. An inwardly-opening valve may, if desired, be provided either in the top wall of the collapsible portion or in the upper part of the main receptacle; but this is not necessary in all cases, as reliance may be placed upon the discharge-conduit for the admission of air upon the expansion of the collapsible portion.

Certain mechanical expressions of the inventive idea involved are shown in the accompanying drawings, which are designed merely as illustrations to assist in the description of the invention and not as defining the limits thereof.

In said drawings, Figure 1 is a vertical section of a receptacle, such as a kerosene-oil can, embodying the invention, and Fig. 2 is a like view of another form of oil or kerosene can.

Referring to the drawings, 1 is any suitable receptacle for liquids, and 2 is a discharge conduit or pipe having its lower end opening into the can near its bottom, from which point the pipe 2 extends up to and preferably slightly above the top of the receptacle 1 and thence has its discharge end extended outward and downward. The main portion of the walls of the receptacle 1 may be composed of any suitable material, as tin or other sheet metal, and the collapsible portion 3 is made of yielding and preferably elastic material, sheet metal—such as tin, brass, or iron—being particularly adapted for the purpose. The walls of the main portion of the receptacle 1 and the collapsible portion 3 of the walls may be, and in most cases are, made of the same material. Thus in Fig. 1 the main body of the receptacle 1 and the collapsible portion 3 are shown as composed of a continuous integral piece of sheet metal, the collapsible portion 3 constituting merely an upward extension or portion of the receptacle. In Fig. 2 the construction is somewhat different, the top of the receptacle 1 being formed with a depression 4, within which the collapsible portion 3 rests and by which it is supported. Obviously the walls of the depression 4 and the collapsible portion 3 might be formed of a continuous sheet of metal, as in Fig. 1; but, as here shown, the collapsible portion 3 rests upon and is hermetically secured to an inwardly-projecting annular ledge 5. Any suitable opening for filling the receptacle may be provided, as the opening closed by the cap 6, on the top of the receptacle. As here shown, this capped opening is on the rigid end wall 7 of the collapsible portion; but this particular location is not essential. In both Figs. 1 and 2 an inwardly-opening valve 10 is shown for the admission of air to the interior of the receptacle; but this valve may be omitted in many instances and reliance placed upon the discharge-conduit for this purpose.

The collapsible portion of the walls of the receptacle is composed of substantially parallel portions 8, approximately normal to the collapsible line of the structure, said parallel portions being connected by curved portions

9, here shown as struck on simple curves, though compound curves might be employed without affecting the operation of the structure. By the use of such a collapsible structure the liability to crack and rupture, which would occur if angular corrugations were employed, is eliminated.

The operation of the device is as follows: The receptacle being filled or partially filled with liquid, a portion of which it is desired to withdraw, pressure is applied to the rigid end wall 7 of the collapsible portion compressing the air within the receptacle, which air reacts upon the surface of the liquid within the receptacle and forces it up into and out of the discharge-pipe 2.

Having thus described the invention, what is claimed is—

1. A collapsible vessel composed of rigid end walls connected by lateral walls, a portion of said lateral walls being elastic and collapsible and a portion being non-collapsible.

2. A collapsible vessel composed of rigid end walls connected by lateral walls, a portion of said lateral walls being elastic and collapsible and a portion being non-collapsible, and a discharge-conduit.

3. A receptacle for liquids, a portion of whose walls is collapsible, combined with a non-collapsible portion, the walls of said collapsible portion being composed of parallel portions substantially normal to the line of

collapse and connected by curved portions or sections.

4. A receptacle for liquids composed of rigid end walls connected by lateral walls which lateral walls are integrally formed of resilient metal and have a portion thereof collapsible and another portion thereof non-collapsible.

5. A receptacle for liquids composed of rigidly-connected collapsible and non-collapsible lateral portions, said collapsible portion being closed by a rigid end wall.

6. A receptacle for liquids composed of integral collapsible and non-collapsible portions, the walls of said collapsible portion being formed of a series of substantially parallel portions normal to the line of collapse with curved portions connecting said parallel sections.

7. A receptacle for liquids having rigid end walls and lateral walls a portion of whose surface is collapsible, said collapsible portion being composed of resilient sheet metal, and one of said end walls having an inwardly-opening valve, and a discharge-conduit connected to said receptacle.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

WESTON M. FULTON.

Witnesses:

J. T. GRITMAN,

L. D. DILLON.