

L. E. BALTZLEY.
LIQUID FEEDING DEVICE.
APPLICATION FILED APR. 16, 1915.

1,220,929.

Patented Mar. 27, 1917.

Fig. 1.

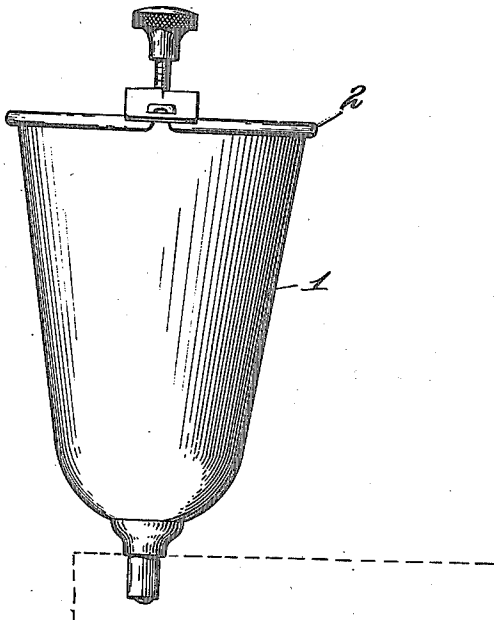


Fig. 2.

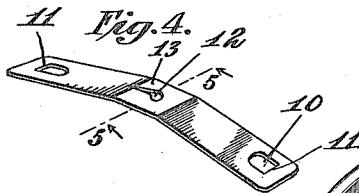
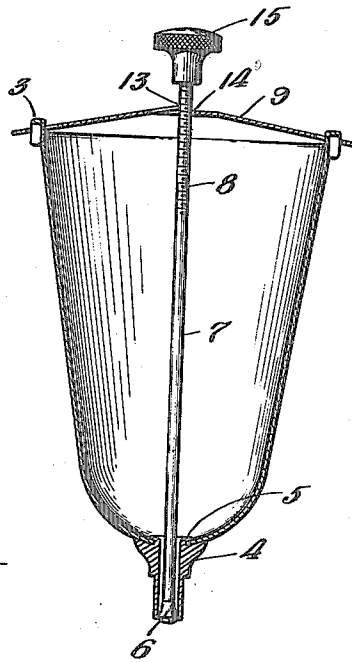


Fig. 3.

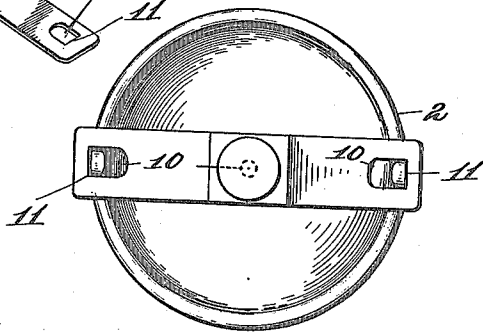
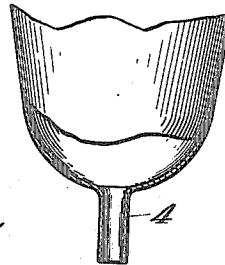


Fig. 5.



Fig. 6.



Attest:
[Signature]

Inventor:
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Ref M. Houghton Atty

UNITED STATES PATENT OFFICE.

LOUIS E. BALTZLEY, OF WEEHAWKEN, NEW JERSEY, ASSIGNOR TO EDWARD D. FARMER, TRUSTEE.

LIQUID-FEEDING DEVICE.

1,220,929.

Specification of Letters Patent.

Patented Mar. 27, 1917.

Application filed April 16, 1915. Serial No. 21,700.

To all whom it may concern:

Be it known that I, LOUIS E. BALTZLEY, a citizen of the United States, residing at Weehawken, in the county of Hudson and State of New Jersey, have invented certain new and useful Improvements in Liquid-Feeding Devices, of which the following is a specification.

This invention relates to liquid feeding devices and comprises a container having fluid delivering means at one end, a valve for regulating the size of the opening in said delivering means, a threaded stem carrying the valve and leading to the upper portion of the container, a spring supporting member through which the stem is threaded, and a handle for operating the same to lower and raise the valve.

This feeding device is particularly useful as an oil dropper to be used for olive oil and the like in preparing salad dressings. It is provided with tubular delivering means adapted to fit a hole in the top of a culinary beater and to be maintained in place by such tubular delivering means whereby the operator may have both hands free, one to operate the handle of the valve stem and the other to operate the handle of the beater. In preparing mayonnaise dressing the best results are obtained when, particularly at the beginning of the operation, the oil is fed to the substance that is to be mixed in very small amounts. The oil should be fed drop by drop and should be thoroughly mixed with the other substance in the beater. After thorough mixing of these small quantities of oil and other substance the oil may be fed to it at a somewhat more rapid rate, and it is advantageous to gradually increase the feed of the oil. Toward the last of the operation it is not disadvantageous to allow the oil to flow freely into the substance being mixed. The article of the present invention serves admirably to feed the oil as required.

The invention has for its objects the provision of an oil feeding device capable of use as above pointed out and also the provision of an extremely simple, inexpensive and practicable oil dropper.

According to the present invention I have provided a container preferably of stamped metal and somewhat funnel shaped. To one end of this I attach a tubular delivering

device of a size adapted to fit a hole in the top of a culinary beater. The upper edge of the container is provided with a flange or ear and a removable resilient stem-supporting member. This member preferably has openings near opposite ends, the outer edges of the openings serving to engage the body of the container under the ears. The spring is curved and is such shape the said edges of opposite openings are spaced apart a distance corresponding to the diameter or width of the container at the point of attachment. The holes in such member are large enough to fit over the ears of the container. When the spring member is flattened the edges are spread apart a distance greater than the diameter or width of the container at the point of attachment. The result is that this member may be placed in position or removed merely by flattening it by slight pressure. The spring supporting member is split at a point substantially directly above the tubular delivering means and one edge of the split portion is raised slightly above the other edge such a distance that the two edges may engage different portions of the threaded stem. The stem is provided with a valve at one end seating in the said tubular delivering means, with a screw thread at its upper end engaging the split edges of the spring member and with a knurled handle. To raise or lower the valve in the tubular member it is only necessary to turn the handle in the proper direction. When it is desired to feed oil at a somewhat rapid rate the operator should press the handle downwardly. The spring member will give to the extent of such pressure and the stem will lower the valve in the tubular member, and the oil will flow out at a somewhat freer rate. When it is desired to allow the oil to flow very freely the handle is pressed downwardly to such an extent as to flatten the spring member, spread its extremities and allow the spring member together with the handle and valve to be removed entirely from the container. There are at least three methods of regulating the flow. Very fine adjustment of the opening in the tube may be had by turning the handle. A somewhat larger opening may be made by pressing the handle downwardly and the valve may be entirely removed by pressing the han-

dle downwardly to a further extent and removing the handle, its supporting member together with the valve.

In the accompanying drawings Figure 1 is a side elevation of the liquid feeding device. Fig. 2 is a vertical section showing the rod and valve in elevation. Fig. 3 is a top plan view. Fig. 4 is a perspective of the spring supporting member. Fig. 5 is a section of Fig. 4 along line 5—5, and Fig. 6 is a modification of the lower end of the device.

Referring to the drawings, reference numeral 1 indicates the funnel shaped container having the flange 2 and the ears 3 projecting therefrom. The top of the container is normally open. At the bottom it is provided with the fluid delivering throat 4. This may be brass or steel riveted to the body as is shown at 5. If desired however the throat may be a continuation of the body of the container as is shown in Fig. 6. The body of the container is preferably made of aluminum or other light metal. This throat should advantageously be made of a hard metal, as soft metal would soon be bent out of shape.

Valve 6 normally seats in the end of the throat 4. It is a cone valve which is arranged to gradually enlarge the cross sectional flow area of the throat when the valve is pressed downwardly. The valve is supported in place by a stem or rod 7 screw threaded at this upper end 8 and passing through the resilient supporting member 9. This member is made of light spring arch shaped metal. It is provided at either extremity with an opening 10 having edges 11. In its arch shape the edges are about the

same distance apart as the width or diameter of the container at this upper portion. Downward pressure upon the middle of this arched spring member will of course spread the edges 11 apart. To place the spring member in position the edges 11 are spread apart by downward pressure upon the middle of the spring member and the holes 11, which are larger than the ears 3 of the container are placed over such ears. When released from pressure the inherent resiliency of this member causes it to assume its arched form and the edges 11 are therefore brought into contact with the body of the container under the ears. In order to provide for adjustment of the screw rod in this spring member I split it as is shown at 12. One edge 13 is elevated slightly above the edge 14 a distance corresponding to one thread on the rod. The rod is provided with a rigidly fastened knurled thumb nut or handle 15. The operation is obvious from the foregoing.

What I claim is:

A liquid delivering device comprising a container having at its upper end means for holding a rod supporting member, liquid delivering means at its lower end, a valve in said delivering means, a threaded rod attached to said valve, a movable arch-shaped resilient rod-supporting member bridging the top of the container and engaging the said holding means at the upper end and having a threaded opening through which the rod extends, and a handle on said rod.

In testimony whereof, I affix my signature.

LOUIS E. BALTZLEY.