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2,953,170

FEEDING SPOON

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Fig. 1

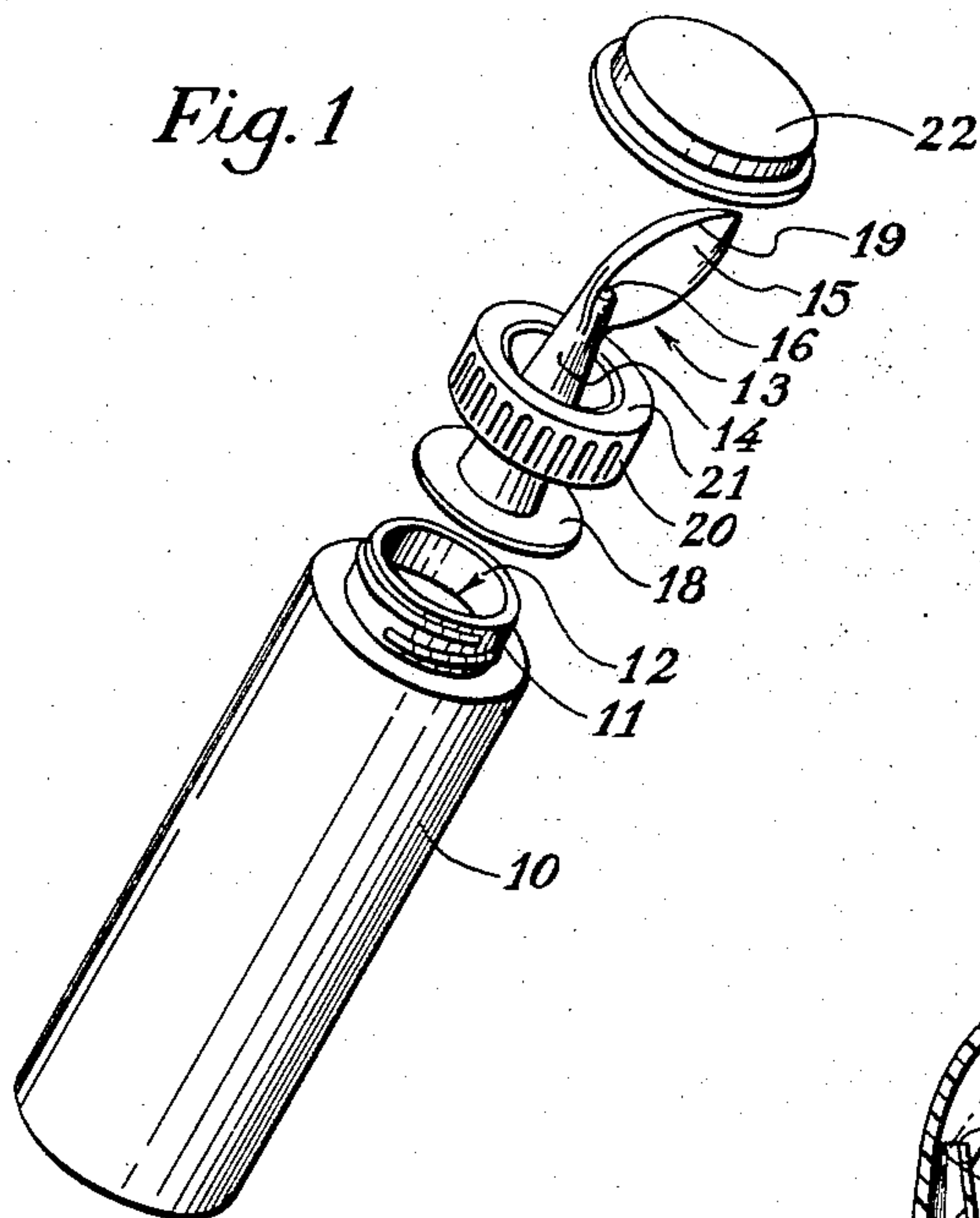


Fig. 3

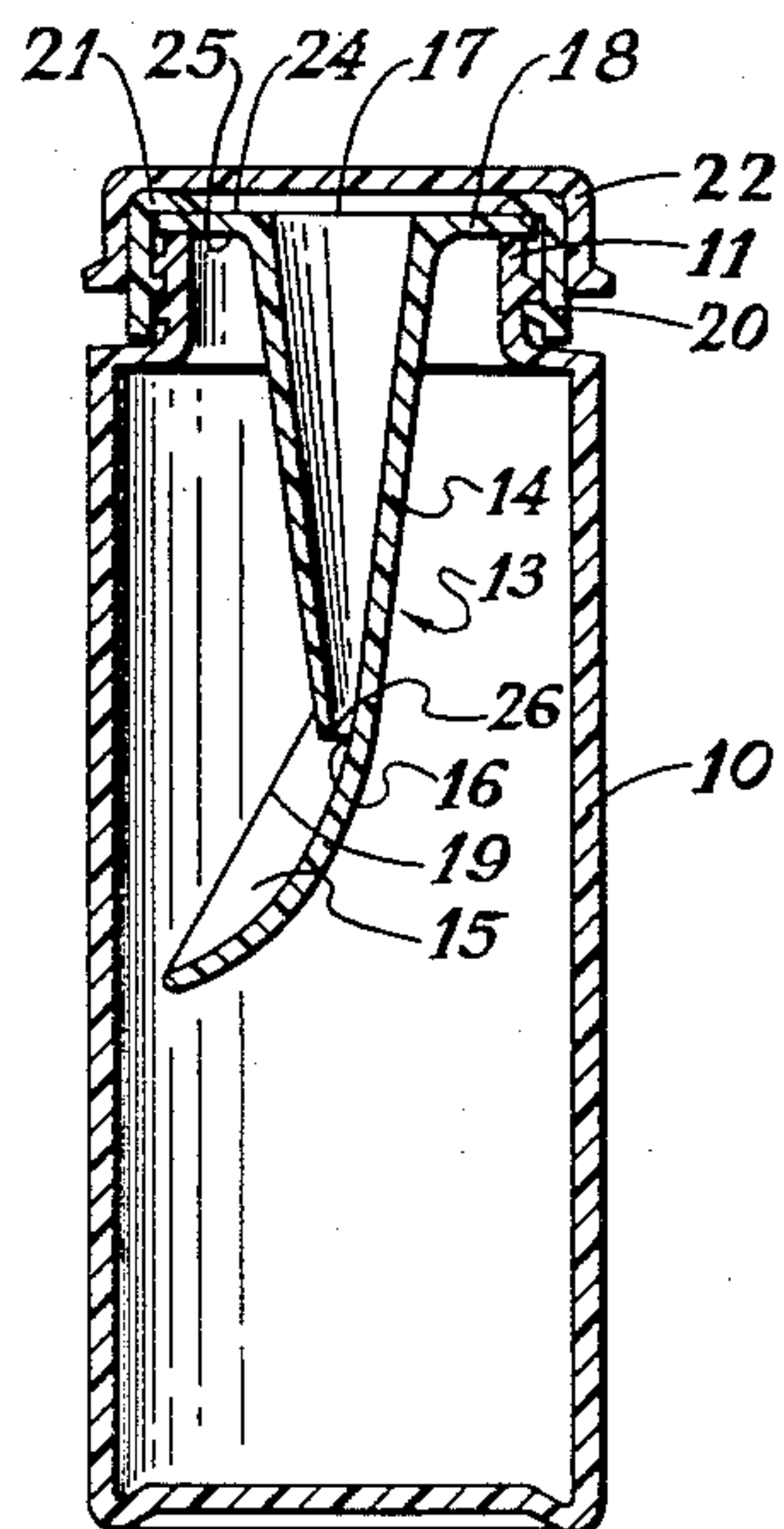
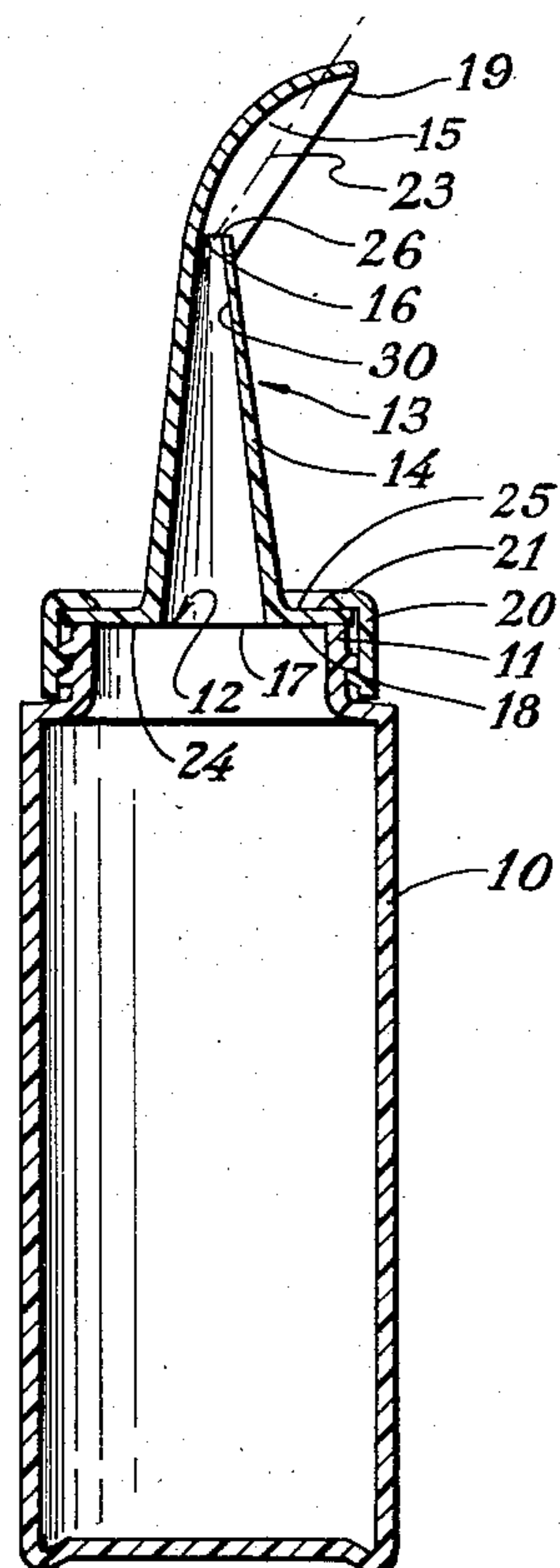


Fig. 2



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FEEDING SPOON

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1 Claim. (Cl. 141-18)

This invention relates to a spoon feeding device and more particularly to a device of this type having novel means for attaching a hollow stemmed spoon to a squeezeable container alternatively in either an inside or outside position.

Spoon feeding devices generally comprise a bottle or container for holding viscous ingredients such as baby food. These containers are made of a resilient material, such as plastic, to enable squeezing and have an opening at one end. A spoon having a hollow stem is also provided. The hollow stem has one open end in communication with the bowl of the spoon. Another open end is situated over the bottle opening so as to be in communication therewith. Further means is usually provided to attach the spoon to the bottle.

To operate the device the container is held tilted above the spoon and the ingredients flow into the spoon by gravity. If the ingredients' viscosity is such that it does not flow through the hollow stem naturally, merely squeezing the bottle initiates the flow.

Generally, the means provided for attaching the spoon to the bottle allows the spoon to be securely positioned only outside of the bottle. This outside position is, of course, the operative position. However, when the device is not being used, as thus constructed, it is undesirably bulky and irregularly shaped so that it does not facilitate ready storage. Furthermore, the bowl of the spoon and the open stem end in communication therewith are both in an exposed position. Consequently, contamination of the bowl and of the interior of the device and any ingredients therein by foreign matter entering through the exposed open end is possible. In addition, the container must be maintained in an upright position to prevent spilling of the ingredients therein.

The present invention features a spoon feeding device having means to eliminate these undesirable characteristics. By virtue of the novel means comprising the present invention, the spoon may be secured within the container when the device is not being used, as well as being positioned in the conventional outside position when use is required. When the spoon is situated in the inside position the device is considerably more compact. Consequently storage is more readily facilitated.

Furthermore, securing the spoon inside the bottle not only removes the bowl and open stem end from their exposed positions, but also enables emplacement of a cap over the container opening, thus completely enclosing the interior thereof, and effectively eliminating the possibility of contamination by foreign matter. In addition, with the cap emplaced, the likelihood of spilling of the liquid ingredients within the container is substantially eliminated.

Therefore, it is a primary object of this invention to provide a spoon feeding device having means for securely attaching a hollow stemmed spoon to an open-end container alternatively in either an inside or an outside position.

A further object of this invention is to provide a spoon

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feeding device which is compact and readily storable when immediate use is not required.

Another object is to provide a spoon feeding device which is not susceptible to contamination and can be maintained in a sanitary condition when not needed for immediate use.

Still another object is to provide a spoon feeding device having means for substantially eliminating spilling.

Other objects and advantages are inherent in the structure claimed and disclosed, and will become apparent to those skilled in the art from the following detailed description in connection with the accompanying drawings wherein:

Fig. 1 is an exploded perspective view of the spoon feeding device.

Fig. 2 is a vertical sectional view of the spoon feeding device with the spoon in an outside position.

Fig. 3 is a vertical sectional view of the spoon feeding device with the spoon in an inside position.

Referring to Fig. 1, the numeral 10 indicates a bottle or container having an externally threaded neck 11 with a top opening generally indicated at 12. Container 10 is made of a resilient material such as plastic so as to be readily squeezeable. The numeral 13 generally indicates spoon means comprising a hollow conical stem or tubular portion 14 and a bowl 15; extending angularly therefrom. Hollow stem 14, as indicated in Figs. 2 and 3, has two open ends 16, 17. Open end 16, at the narrowest extreme of conical stem 14, is in communication with bowl 15 of spoon 13. Open end 17, at the broadest extreme of stem 15, has a flange 18 extending outwardly therefrom. Flange 18 is adapted to engage the top of neck 11 when spoon means 13 is positioned either outside of container 10 in the manner shown in Fig. 2 or within container 10 in the manner shown in Fig. 3. An internally threaded cylindrical collar 20 engages externally threaded neck 11 so as to secure spoon means 13 to container 10 in either of the positions shown in Figs. 2 and 3 wherein the axis of stem 14 is substantially co-linear with the axis of container 10.

When spoon means 13 is attached to container 10 in the manner shown in Fig. 2, open end 17 of hollow stem 14 is in communication with opening 12 in container neck 11 and open end 16 and bowl 15 are outside of container 10. This is the operative position for spoon means 13.

Bowl 15 is inclined from stem 14 at an angle which enables spoon means 13 to be placed within container 10 in the manner shown in Figure 3.

When spoon means 13 is in the outside or operative position (Fig. 2), a surface 24 of flange 18 engages neck 11. When spoon means 13 is in the inside position (Fig. 3), an opposite surface 25 of flange 18 engages neck 11. Flange 18 has a diameter greater than that of neck 11; consequently, it completely overlaps neck 11 as shown in Figs. 2 and 3. The inner diameter of cylindrical collar 20 is greater than the diameter of flange 18. Consequently collar 20 will fit around flange 18. At one end of cylindrical collar 20 is an inwardly extending flange 21. The inner periphery of flange 21 of collar 20 has a diameter less than the diameter of flange 18. Consequently flange 21 will engage flange 18 when collar 20 is fitted around flange 18. When spoon means 13 is in the inside position (Fig. 3), flange 21 will engage surface 24 of flange 18. When spoon means 13 is in the outside position (Fig. 2), flange 21 will engage the opposite surface 25 of flange 18.

Bowl 15 is inclined with respect to stem 14 so that when bowl 15 is held horizontally in a feeding position, hollow stem 15 and container 10 are inclined upwardly therefrom, thus enabling gravity flow of ingredients from container 10 through stem 14 to bowl 15. When so held, the top edge 19 of bowl 15 lies in a plane above a parallel

plane 23 passing through the uppermost point 26 of the interior surface 30 of hollow stem 14 at opening 16. Consequently when the level of liquid in bowl 15 reaches that of the latter plane 23, air cannot enter container 10 and the natural flow of liquid into bowl 15 ceases. Therefore, the level of liquid in bowl 15 resulting from natural flow is maintained lower than bowl edge 19.

When spoon 13 is in the inside position (Fig. 3), a cap 22 of any conventional type and having an inner diameter greater than the outer diameter of collar 20 fits over collar 20 so as to cover hole 17 in stem 14.

It is to be understood that the specific embodiments of the invention shown in the drawings and described above are merely illustrative of several of the many forms which the invention may take in practice and are not to be construed as limiting the scope of the invention defined in the appended claim which is to be interpreted as broadly as possible in view of the prior art.

I claim:

A device for spoon-feeding fluids or semi-fluids, said device comprising a container of a relatively large diameter body formed of plastic material and having a thin resiliently yieldable circumferential wall adapted to be deformed manually while in use to effect discharge of its contents, said container having an open end and terminating at said open end in an externally threaded neck portion, spoon means having a hollow conical stem and a bowl extending angularly therefrom, said hollow stem having a first open end in communication with said bowl and a second open end, said spoon means having flange means extending outwardly around said second open end, the outer periphery of said flange means being of a shape and dimension for completely overlapping the open end of said externally threaded neck portion of the container, an internally threaded cylindrical collar having two open

ends and having an inner diameter slightly greater than said diameter of said flange means on said spoon means and having circular flange means extending inwardly at one open end with an inner diameter slightly smaller than said diameter of said flange means on said spoon means, said collar being effective when assembled with the spoon means and the container to retain the spoon means in fully assembled condition with the container, in either one of two positions with the axis of said hollow stem being substantially co-linear with the axis of the container, in one of said positions said spoon means will be disposed entirely within the interior of the container and in the other of said positions, said spoon means will be disposed so as to extend from the neck portion of said container and in direct communication with the interior of the container, said first open end of said stem lying substantially below the open periphery of said spoon bowl when the spoon means are assembled for feeding position with said container and said spoon bowl is disposed substantially horizontally whereby said fluid in said bowl is maintained below said upper periphery, and a cap having an inner diameter greater than the outer diameter of the cylindrical collar fitting over said cylindrical collar when the spoon means are disposed within the container to fully cover and seal the container.

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