

Oct. 11, 1966

A. SERAFINI

3,278,083

CONTAINER PIERCING DEVICE HAVING A POURING SPOUT

Filed Nov. 3, 1964

Fig. 1.

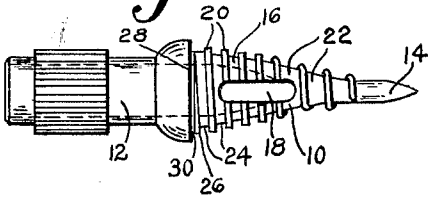


Fig. 2.

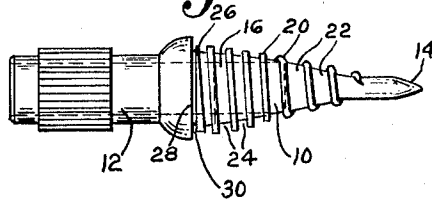


Fig. 3.

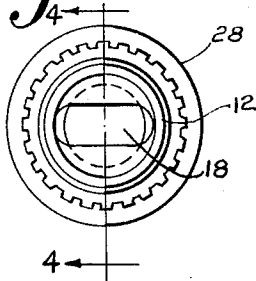


Fig. 4.

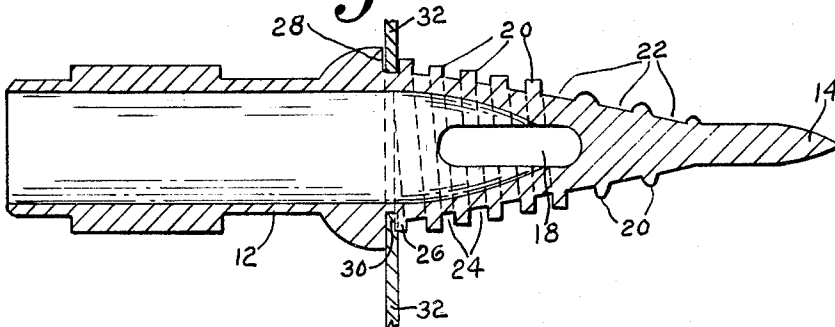
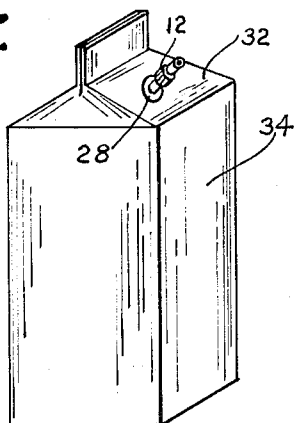


Fig. 5.



INVENTOR.
Angelo Serafini
BY *Harold E. Cole*
Attorney

1

3,278,083

CONTAINER PIERCING DEVICE HAVING A POURING SPOUT

Angelo Serafini, 33 Faywood Ave., Boston, Mass.
Filed Nov. 3, 1964, Ser. No. 408,505
1 Claim. (Cl. 222—91)

This invention relates to a dispensing spout through which to pour liquids such as milk, beverages, oils and other liquids.

One object of my invention is to provide a dispensing spout for use in penetrating a receptacle and tightly attaching itself to the latter, and in pouring position.

Another object is to provide such a spout that will effect penetration and attachment to a receptacle by a continuous movement consisting in first punching a hole in the receptacle and then continuing with a screw-threaded movement until my spout is securely fastened in place.

A further object is to provide such a spout that can easily be attached to a receptacle and removed therefrom, and which is sanitary, relatively small, so durable that it will last indefinitely.

The foregoing and other objects which will appear as the nature of the invention is better understood, may be accomplished by a construction and arrangement such as is disclosed by the drawing. The nature of the invention is such as to render it susceptible to various changes and modifications, and, therefore, I am not to be limited to the construction disclosed by the drawing, nor to the particular parts described in the specification; but am entitled to all such changes therefrom as fall within the scope of my claim.

In the drawing:

FIG. 1 is a side elevational view of my dispensing spout.

FIG. 2 is a side elevational view thereof; but turned 90 degrees from the position shown in FIG. 1.

FIG. 3 is a top plan view of said spout.

FIG. 4 is an enlarged, sectional view taken on the line 4—4 of FIG. 3, and with the addition of a portion of a container shown connected to my spout.

FIG. 5 is a perspective view of a receptacle showing my spout attached thereto in pouring position.

As illustrated, my dispensing spout has a penetrating portion 10 and a pouring portion 12 that is hollow or otherwise provides a passage therein.

Said penetrating portion 10 has an entry member shown as a pointed stud 14 that is preferably solid. From the latter a conical-shaped body portion 16 extends to said pouring portion 12 and has a laterally extending passage 18 therethrough that is preferably of oblong shape and communicates with said pouring portion 12.

Said body portion 16 is exteriorly screw-threaded as at 20, most of said threads preferably being the square type. The space 22 between each 360-degree thread portion is greater in width at the lower or outer half of said threaded body portion than the thickness of an adjoining screw-thread 20, and also greater than each space 24 at the upper or inner half portion.

The upper or final threaded portion 26 tapers in width towards the end thereof and finally terminates or merges with a flange 28 in said pouring portion 12. The pitch or slope between said final thread 26 and said flange 28 is less than that between said thread 26 and the next adjoining thread.

2

The space 30 left between the terminating half portion of said final thread 26 and said flange 28 becomes less in width as it approaches the end than the thickness of the material forming the container top 32 or any other attaching portion of said container 34. The latter is ordinarily formed of pasteboard or other yieldable material. The result is a compressed, tight fit between said thread 26 and said container 34, as shown in said FIG. 4, thus preventing any leakage of fluid when poured from the container.

To connect my dispensing spout, I force this point of said stud 14 through the container top 32 or any other desirable attaching part, such as a side, to pour from. When the threaded portion is reached the spout is forced through the container material by a screw-threaded action until the flange 28 firmly meets the outside surface of the container as shown in said FIG. 4. The material forming the container has been squeezed between said thread 26 and said flange 28 and compressed so that the union of the latter with my spout is complete and tight. The contents may be poured from the container as desired.

Said container may be formed of plastic or metal or other suitable material in which case the connection between the container and my spout can be made tight and leak-proof by turning my device up tight.

My device may be formed of metal or plastic or any firm material that will serve the purpose.

What I claim is:

A dispensing spout and a container piercing device comprising a pouring portion having a passage therein and a flange, a penetrating portion having a piercing portion at one end and a body portion extending from said piercing portion to the flange, said body portion having a passage extending laterally therethrough communicating with said pouring portion passage and having exterior screw-threads thereon, said body passage being wholly below the uppermost of said threads, said screw-threads comprising a plurality of threads at the lower half of the body portion and a plurality of said screw-threads at the upper half of the body portion, the pitch of the threads on the lower portion being greater than the pitch of the threads on the upper portion, said piercing portion having a pointed stud at its outer extremity and having a portion of uniform thickness inwardly of and adjoining said stud, the portion inwardly of and adjoining said latter portion being of continuous, conical shape and flaring towards and to the flange.

References Cited by the Examiner

UNITED STATES PATENTS

477,308	6/1892	McFarland	222—91
1,248,251	11/1917	Breaux	222—81 X
2,184,263	12/1939	Adler	222—91

FOREIGN PATENTS

675,333	12/1963	Canada.
679,540	2/1964	Canada.
673,546	1/1930	France.
3,243	12/1861	Great Britain.
185,108	10/1923	Great Britain.

ROBERT B. REEVES, *Primary Examiner.*

WALTER SOBIN, *Examiner.*