

T. Kendall,
Bottle Stopper,
N^o 11,895. *Patented Nov. 7, 1854.*

Fig. 1.

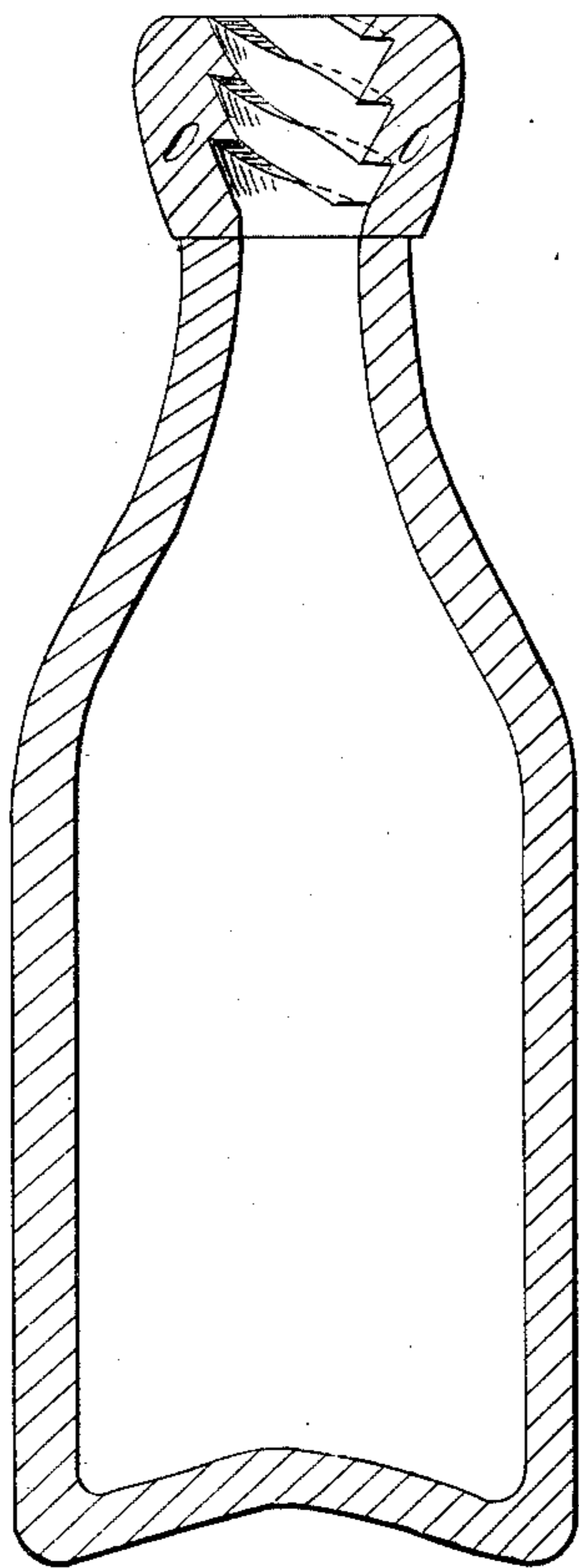


Fig. 3.

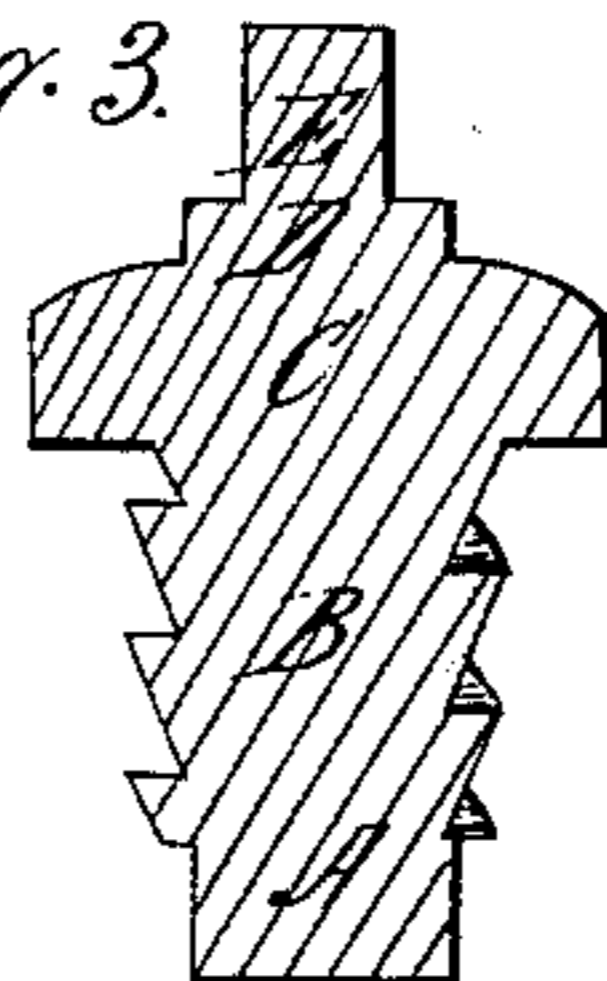


Fig. 2.

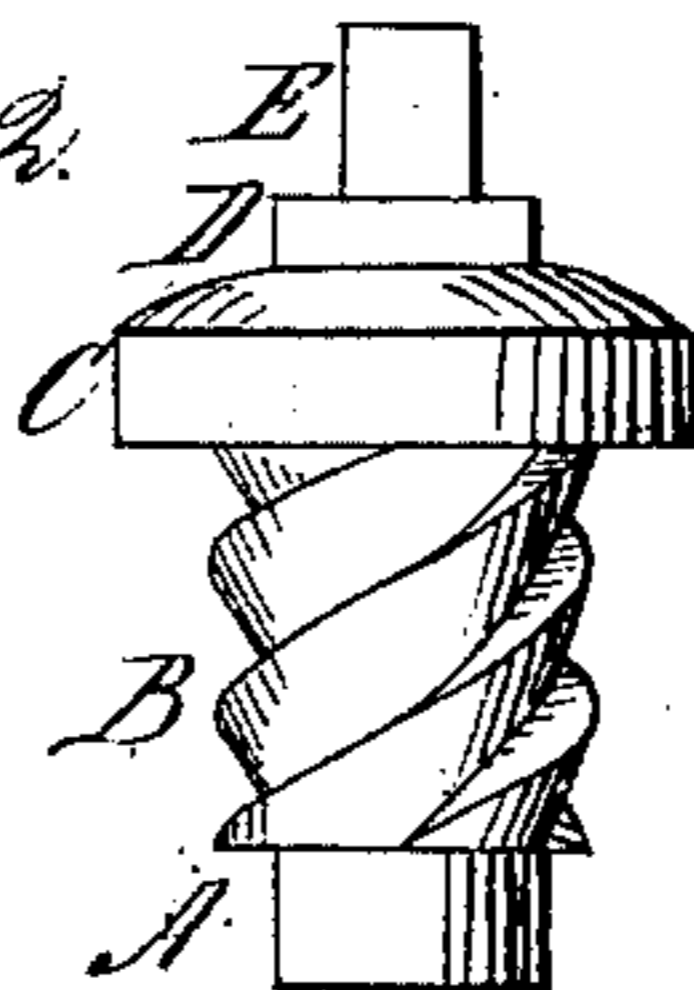
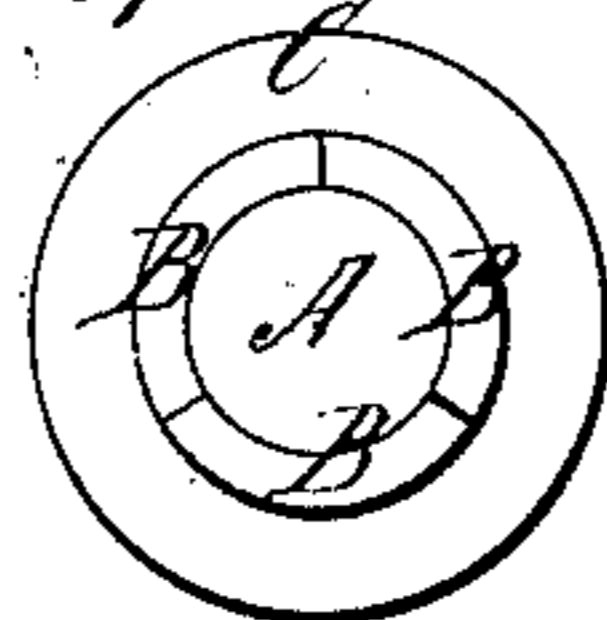


Fig. 4.



UNITED STATES PATENT OFFICE.

THOMAS KENDALL, OF SAN FRANCISCO, CALIFORNIA.

IMPROVEMENT IN BOTTLE-STOPPERS.

Specification forming part of Letters Patent No. 11,895, dated November 7, 1854.

To all whom it may concern:

Be it known that I, THOMAS KENDALL, of the city and county of San Francisco, in the State of California, have invented a new and useful Improvement in the Construction of Bottles, Jugs, and Jars, and particularly in such as are intended for the holding or confinement of liquors in their nature liable to gasify or to fermentation, of which the following is a specification.

My discovery or invention is called "Kendall's Groove-Necked Bottles."

This invention or improvement consists in this—viz., the neck of the bottle, jug, or jar is so formed or constructed that it will retain its cork or stopper without other fastening by wire, twine, or other material, as has heretofore been used. Furthermore, this cork or fastening applied to my invention can be drawn from the bottle with slight exertion by the hand, without the aid of the corkscrew or other instrument.

This invention will be of great utility, thus: By this construction of the neck of the bottle, jug, or jar, all the time heretofore expended in properly or securely confining the cork or stopper in the bottle by the aid of wire or twine is entirely saved, and at the same time a more reliable stopper is acquired. The confinement of the stopper by wire or twine, as has been the custom hitherto, has constituted a very material item of expense in the putting up of liquids in their nature gaseous or liable to fermentation. By this improvement in the neck of the bottle the time necessarily expended by older practice for such purpose is mainly saved.

The following is a full exemplification or description of said improvement or invention for which said KENDALL petitions that Letters Patent may be granted him:

For the better understanding of the exemplification, reference is made to the accompanying drawings, which drawings are made a part of this specification.

Figure 1 represents a longitudinal section of the bottle, jug, or jar, showing the plan of the improved groove or worm-neck. The letters O O show the plan of the grooves on the interior surface of the neck of the bottle or jar.

Fig. 2 represents a perspective view of the core, tap, or tool used in the manufacture or the forming the groove or worm on the in-

ner side of the neck of the bottle, jug, or jar. This core, tool, or tap may be of any desired size, and may be composed or formed of clay, stone, mineral, or such other material as may be most convenient to the manufacturer of the article. The core or tool, according to the drawings, is planned or constructed upon the following scale: The lower base of the tool is nine-sixteenths of an inch in diameter. At the lower base and for seven-sixteenths of an inch upward the tool is formed circular. At this distance from the base is formed or left a square shoulder. The section of the tool in the drawings comprised between its lower base and said shoulder is designated by letter A. This shoulder is made to project in the present scale on all sides beyond the cylindric base one-eighth of an inch, whereby the diameter at this shoulder is thirteen-sixteenths of an inch. In constructing the tool this shoulder, thus projected, extends upward or at its outward perimeter one inch. At this point is made another cylindrical shoulder, flange, or cap, which projects one-fourth of an inch farther from the center of the tool than did the lower or base shoulder. This second or upper shoulder is designated in the accompanying drawings by the letter C. This last-mentioned shoulder is constructed flat on its under or lower surface, except that the inner portion thereof, which meets the screw or worm, hereinafter described, is made at the line of intersection with the screw a little full, to give a small rotundity to the projecting edges of the inner bottle-neck. Section C in the case given is in thickness or space from the lower to the upper base one-fourth of an inch. The upper surface of section C is constructed in form of a dome, having an altitude three-sixteenths of an inch above the horizontal plane of the upper base, where it connects with a ferrule nine-sixteenths of an inch in diameter. At the top of the dome represented by section C rises a cylindric section seven-sixteenths of an inch in diameter, one-fourth of an inch in height, which section is represented in the plan as D. At this point is formed a tenon, for the purpose of affixing thereto any instrument most convenient for handling or using with facility the whole tool. This tenon may be of any size as may best suit the manufacturer of the bottle-neck E. Lastly, between sections A and C is placed section B, constitut-

ed of three parallel grooves or worms extending from section C to section A in the form of the screw. These grooves are one-eighth of an inch in depth and wind once around this section of the tool, and each groove or wire is beveled from the lower part of itself to the outer part of the next above parallel groove. All the grooves are cut or shaped a little dovetailing, so that when the neck of the bottle or other vase is molded or formed to the tool or pattern there will be in the neck of the complete bottle an edge which will hold the cork to its place. The cork, having been compressed, easily descends the neck of the bottle, meeting from this formation of the neck of the bottle with no obstruction in its downward progress; but once there, it expands from its own elasticity, so as readily to fill these grooves, and the wire of the grooves, formed as above, there confines it securely; nor can it escape, however great the upward pressure applied below, until external aid is furnished by unscrewing it.

Fig. 3 represents a longitudinal section of the core, tap, or tool represented perspectively by Fig. 2. Fig. 4 represents a transverse view of the same tool, Fig. 2, giving the relative diameters of the different sections A B C at their respective lower bases.

What I, said THOMAS KENDALL, claim as my invention, and desire to secure by Letters Patent, is—

The constructing of bottles, jugs, or jars with a tri-threaded screw in the neck of each for the purpose of holding safely the cork or stopper thereof, and the convenience of inserting or withdrawing the same, the threads of the said screw having the peculiar form and beveled surface indicated by the form of the core on which said bottle-necks are to be formed, and which is herein described.

THOMAS KENDALL.

Witnesses:

GEO. K. PLUTE,
OGDEN HOFFMAN, Jr.