Another Glass Cap and Jar Inspired by William B. Fenn

by Barry L. Bernas

Easy to Open, Easy to Close

Between April 2nd, 1904 and April 16th, 1906, William Beach Fenn submitted eight requests to patent a closing device for jars, cans and what he described as other vessels. During the same period, he asked the United States Patent Office to register his ideas for a sealing ring to be used on jars and a machine to exhaust air from preserving vessels among other things.

Seven of the eight applications for a closure dealt with a gasket or cap made of some kind of fibrous material that was positioned between the inner or outer top part of the container and the inner or outer skirt of the cover. Likewise, each concept used a combination of projections, threads or lugs somewhere on the container's finish or cap as a means to hold the composition sealing device in place.

One of these ideas, number 802,383, used a cap

> "…composed of fibrous material saturated with a preservative material consisting of paraffin or other material …"

It was threaded on its inner skirt to seal along the jar's threaded outer finish. Not surprising, this innovation was granted a patent on October 24th, 1905.[1] By itself, this model of cover seemed to be just another adaptation of patents 802,381; 843,670 and 843,740. It was that but it may have been more.

The principle of a threaded area on the outer finish of a jar with a liner in between it and the thread on the inner skirt of a cap has been seen before. Specifically, it was on the closure conceived by William B. Fenn and patented on May 3rd, 1904.[2] I think Mr. Fenn used the protection afforded by patent 802,383 to his benefit once more. This time, his technique of a composition gasket instead of a rubber tube was employed by the Illinois Glass Company on their replica of the SIMPLEX in a diamond embossed packing vessel which they called the Sunshine jar.

Glass Cap

The all glass cap that I think went with the Sunshine jar from Illinois Glass is

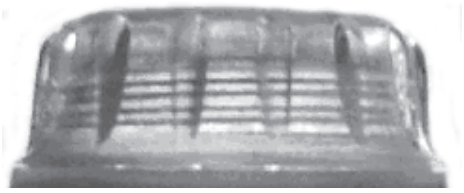


Figure 1

pictured in **Figure 1**. The depiction appears to match the advertisements for this container contained in the 1908 and 1911 product catalogs from the Illinois Glass Company.

The cap in Figure 1 has a domed crown motif. Being $^{15}/_{16}$th of an inch tall, it has fourteen inverted, tear drop shaped grippers around its outer skirt. Near the bottom edge on the same wall, there is a $^{1}/_{8}$th inch in height, semicircular band. The cover's top surface has a one tiered circular design without any markings on it. On the sealer's inner surface, a $^{3}/_{16}$th inch wide, flat, circular ledge begins at the inner skirt. At its innermost point, a $^{1}/_{16}$th inch in length vertical drop occurs. This results in a 1 ½ inches in diameter circular area which can have a flat, concave or convex surface and can be embossed (I.G.Co/I.G.CO. in a diamond) or be unembossed. See **Figure 2** below for the marked version.

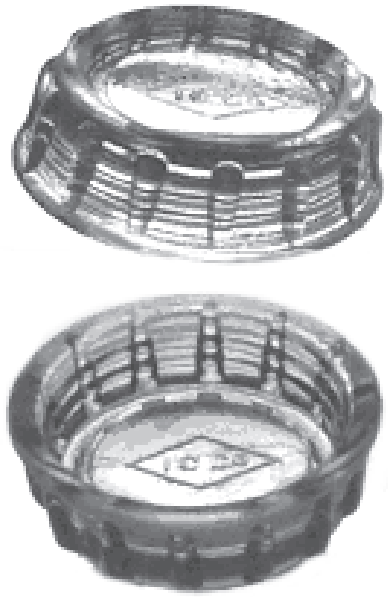


Figure 2

The top picture shows the outside of the glass cap while the bottom has an inside look.

The 1908 product catalog from the Illinois Glass Company provided the data for how this cover sealed. Of note, it wasn't on the jar's shoulder. Here is how the drafter of the brochure described the firm's Sunshine Preserve Jar.

> "The closure of the jar is effected {*sic* - affected} by screwing the glass cap down over a muslin disc, which has been treated with a special wax preparation suited to the contents…"[3]

Once again, William B. Fenn's idea of using a packing ring, this time made out of a composition material, between the threaded outer finish of the container and the threaded inner skirt of the sealer was in production.[4]

Container

Since the screw cap for the Sunshine jar is a good match for an earlier Fenn patented sealer,[5] would the jar have the same qualities as well?

Finish

Figure 3 has a picture of the finish on what I believe is a Sunshine jar.

Figure 3

The threaded region is canted inward from the neck to the lip. On this seamless surface is a continuous thread that increases in outward diameter as it descends before merging into the top of the neck. The vertical neck protrudes from the finish, giving it a reinforced appearance. In all aspects, the finish on the Sunshine jar matches that seen on another Fenn conceived container - the SIMPLEX in a diamond embossed model.[6]

Looking closer at this region, the $^{5}/_{8}$th inch finish has remarkably standard measurements on the three examples I

examined. On the $^{7}/_{16}$th inch in length, seamless and slanting threaded area, there was a $^{1}/_{8}$th inch wide continuous thread on each model.[7] The neck is $^{3}/_{16}$th of an inch long, vertical by design, with side seams on it. The outer diameter of this part ranged from 2 to 2 $^{1}/_{8}$th inches.

Body and Base

The overall height (minus a screw cap) of the three Sunshine jars I've inspected was a consistent 5 $^{1}/_{4}$th inches. One of the three models had no discernable shoulder parting line. The other two had one so a $^{1}/_{4}$th inch shoulder could be computed on them. Each specimen had a post bottom mold base configuration. Since this style of under side had the bottom parting line on the bearing surface, a measurement for either a body or base length couldn't be calculated. On the front of every model was a plate mold impression with an outer diameter of between 1 $^{7}/_{8}$th and 1 $^{15}/_{16}$th inches. All three examples had a valve mark and number within it on underneath side of the base. The circular depression was 1 or 1 $^{1}/_{8}$th inches in diameter. The numeral inside was a 10 in a block font. Their standard volumetric measurements were ten fluid ounces at the shoulder parting line and twelve when filled to capacity. Of note, the write-up for this vessel in the Illinois Glass Company catalog for 1911 indicated their Sunshine jar had a 10-ounce capacity.[8]

The design and cylindrical shape of what I maintain is the Sunshine jar aligns with an earlier Fenn developed container - the SIMPLEX in a diamond marked model. The only difference between the two is the base style. On the SIMPLEX embossed example, the majority of the samples (37 of 39) I closely looked at had a cup bottom mold type of base. However, the three versions discussed in this article came with the post bottom variety.

In response to my earlier posed question -

"…would the jar (Sunshine) have the same qualities as well?"

- I would say it does with one exception.

Catalog Depiction and Production Model

As I said previously, a Sunshine jar appeared in the 1908 and 1911 catalogs from the Illinois Glass Company. **Figure 4** shows an extract of it from the latter edition on the top. Under it is a photograph of one of my three samples that I opine is the production model for the electrotype on the top. Their profiles speak for themselves. I'm convinced the pictured model is an actual example of the advertised Sunshine jar. What do you think?

Sunshine

Figure 4

Coincidence or a Planned Action

After factory employees from the Perfection Glass Company reduced their output for the SIMPLEX in a diamond marked screw cap and packing jar, hands from the Hazel-Atlas Glass Company took up the slack and started producing both around 1906. Based on a Hazel-Atlas advertisement and product catalog; both items continued to be turned out by Hazel-Atlas workers until at least 1908.[9] Was it a coincidence that the Illinois Glass Company managers brought out their "knock off" Sunshine container in the same year that Hazel-Atlas officials dropped their SIMPLEX version? Or was there prior coordination between both firms? Did William B. Fenn have a plan to capitalize on his lost May 3rd, 1904 patent by introducing officers at the Illinois Glass Company to his older concept with a patented new twist? The likelihood of this situation happening by chance appears to me to be remote. The line up of these two events seems too natural to be anything other than a plan being executed. But then again, who knows for sure. I wish I knew the answers to these questions and others that come to mind.

Findings

In my opinion, the cover and container described in this article comprise the actual model of a Sunshine jar marketed by the Illinois Glass Company. It was the one which took its heritage from the May 3rd, 1904 and October 24th, 1905 patents granted to William B. Fenn.

If you have any information you want to share about the Illinois Glass Company's Sunshine jar or would like to discuss my findings in greater detail, please don't hesitate to contact me. *BLB*

Endnotes

[1] *Fruit Jar Patents Volume III 1900-1942*, compiled by Dick Roller, Phoenix Press, Chicago, Illinois, 1996, pgs. 180-182; 184-186 and 188-190. Although the top part of the finish has a grooved portion for the containers depicted in the patent application, the underlying principle seen on patent number 802,381 remains true for 802,383 as well. This salient concept has the outer finish on the jar and the inner skirt of the cover achieving a seal by means of a gasket in between made of composition material. The other five patent references are as follows. United States Patent Office. William B. Fenn, of Sheepshead Bay, New York. Closure Device for Glass Jars and Other Vessels. No. 810, 736. Specification of Letters Patent. Patented Jan. 23, 1906. Application filed December 23, 1904, Serial No. 238,052; United States Patent Office. William B. Fenn, of Sheepshead Bay, New York. Closure Device for Bottles, Jars, and Other Vessels. No. 816,720. Specification of Letters Patent. Patented April 3, 1906. Application filed June 19, 1905. Serial No. 265,946; United States Patent Office. William B. Fenn, of Sheepshead Bay, New York. Closure Device for Jars, Bottles, and Similar Vessels. No. 831,271. Specification of Letters Patent. Patented Sept. 18, 1906. Application filed December 15, 1905, Serial No. 291,861; United States Patent Office. William B.

Continued on Page 57

a person from Troy.

The bottle is from a retooled mold of an S-17-A Crystal Spring bottle which was owned by C.R. Brown from about 1870-89. Brown sold the Crystal Spring to another Crystal Spring Company, but apparently kept the mold. Then he had the word "Crystal" peened out and replaced with "Bethesda." This is plainly visible on the bottle.

In 1984 or 1985 the owner of this bottle got in touch with Bernie Puckhaber, the Saratoga collector who started our Saratoga Collectors Club about this same time. Bernie referred the owner to Gerry who went to Troy and bought the bottle. He had it cleaned by Wilber Grill in 1985 and in his collection until June of 2003.

Up to this time, it is the only specimen known to exist. This does not seem possible, but until another one shows up, this is it, and I feel my responsibility and am proud to be the present guardian of such a rare piece. There is no known pint bottle although there was one advertised as such.

The original Bethesda Water received many awards. In recent years, the resurgence in bottled water once again opened a big market, and in 1986, the firm bottled more than 400,000 gallons a month.

The Bethesda Spring continues to flow clear and clean at the same rate it did when it was first discovered. I highly recommend that those interested in this spring's history read the article previously mentioned by John M. Schoenknecht.

Howard J. Dean

Reference:

Tuckers Collectors Guide to the Saratoga Type Mineral Water Bottles, Published by Donald & Lois Tucker, Inc., 1986.

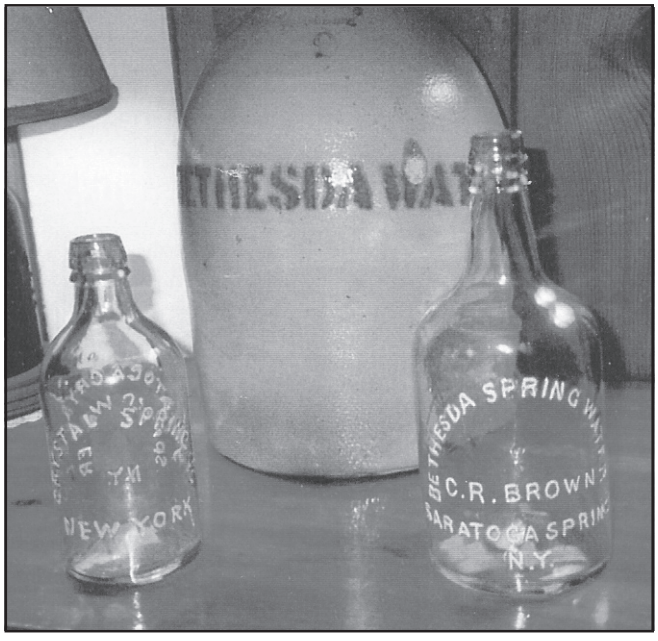
March 1, 2005 - Now for the rest of the story.

Since I had John Schoenknecht's address, I decided to contact him and send him a copy of this article.

This I did, and his response was: "I was surprised and pleased to receive your letter today. I'm glad you enjoyed the article I wrote so long ago. It inspired me to write a book! I am enclosing a copy of it for you. — As you can tell, I GREATLY expanded the article on Bethesda. I even traveled to Paris and met Dunbar's great great grandson there!"

Imagine my surprise to receive the book, "The Great Waukesha Springs Era 1868-1918" by John M. Schoenknecht, a beautiful soft-cover, 322-page history of the Waukesha, Wisconsin springs.

Now I can really recommend this book to all who are interested - isn't it amazing what comes out of the woodwork if you look? Thanks, John, for a good job for our hobby.



Another Glass Cap and Jar Inspired by William B. Fenn

Continued from Page 55.

Fenn, of Columbus, Ohio. Closing Device for Vessels. No. 843,670. Specification of Letters Patent. Patented Feb. 12, 1907. Application filed March 28, 1906, Serial No. 308,383 and United States Patent Office. William B. Fenn, of Columbus, Ohio. Ring for Sealing Jars and the Like. No. 843,740. Specification of Letters Patent. Patented Feb. 12, 1907. Application filed April 16, 1906. Serial No. 311,904.

[2] This sealing technique was used on the all grass screw cap which sealed the SIMPLEX in a diamond and FLACCUS BROS. STEERS HEAD FRUIT JAR (smooth lip) embossed packers' ware. However, just after the patent was issued to Mr. Fenn, he lost the rights to it to the Republic Glass Manufacturing Company of Moosic, Pennsylvania. This circumstance probably convinced William B. Fenn to modify his original idea, gain a new patent for the revamped concept and seek revenue from it by having another glass making firm produce and market it.

[3] Illinois Glass Company catalog dated 1908, pg. 303. This information was graciously provided to me by Bill Lindsey of Klamath Falls, Oregon.

[4] The first use was on the SIMPLEX in a diamond packers' container which was made to the specifications of a May 3, 1904 patent. The next was also on a jar used by packers. It was patented on October 24, 1905.

[5] The one made to the May 3, 1904 patent.

[6] Although not believed to be of Fenn design, the smooth lipped jar used by the Flaccus Brothers of Wheeling, West Virginia, the one marked on the front with the inscription FLACCUS BROS. STEERS HEAD FRUIT JAR, also had the same kind of finish construction.

[7] The thread wasn't fully formed on all of my examples. Only one had a thread of the semicircular shape throughout. On the other two, the semicircular style of thread stopped at about one and one-fifth turns. At this point, the bottom one-fourth piece of the thread became flat while the remaining topside one-fourth part was still quarter-circular. This configuration was maintained until the modified thread merged into the top of the neck.

[8] Illinois Glass Company catalog dated 1911, pg. 218. Perhaps, the number 10 on the under side of the base was a reference to the jar's capacity.

[9] *Perfection Glass Company, One of Many Glass Houses in Washington, Pennsylvania*, Barry L. Bernas, 239 Ridge Avenue, Gettysburg, Pennsylvania, 17325, 2005, pgs. 32-46.