

The SIMPLEX (within an elongated diamond) Embossed and Unembossed Series of Packers' Jars

By Barry L. Bernas

Introduction

On July 21, 1902, William Beach Fenn entered into a written agreement with John Pratt Elkin. One clause in this contract required Mr. Fenn to invent a glass jar, patent it and assign the rights for it to the Republic Glass Manufacturing Company of Moosic, Pennsylvania. This firm was co-owned by both gentlemen.

About nine months later, William B. Fenn showed Mr. Elkin a sample of the jar he had developed. He referred to his concept as "the Simplex jar." This container was targeted at the packers of prepared foods and condiments.¹

Honoring his word, Mr. Fenn proceeded to secure a patent for his idea.² However, the jar wasn't the subject. Instead, it was the sealing mechanism and an all-glass screw-cap which was the focus of his innovation.³ Nevertheless, a specially designed vessel was needed to make his invention function properly. It is this container that will be subject of this article.

"The Simplex Jar"

Known by several names,⁴ the jar which took William B. Fenn's May 3, 1904 patented closure was by no means similar to the standard Mason style of container that was marketed for home canning. For one thing, the mouth of the container was either narrower than or wider than the usual fruit jar opening. For another, it sealed along the side of the threaded area instead of on the shoulder or lip. And finally, this packing jar came in sizes selected for marketing commercially prepared foods usually found on grocery store shelves vice

the preservation of fruits or vegetables by homemakers. **Figure 1** shows a depiction of this jar from an early promotion.⁵

Sizes

At this juncture, I'd like to introduce the various capacities of the embossed

and unembossed containers identified by name in footnote i. This information was extracted from a Perfection Glass Company advertising circular and wares brochure and a Hazel-Atlas Glass Company catalog.⁶

Perfection officials stated their employees were capable of turning out a jar {SIMPLEX (arched), "SIMPLEX", "SIMPLEX JAR" (within an elongated diamond), SIMPLEX within an elongated diamond with letters conforming to the limits of the diamond) or SIMPLEX (within an elongated diamond)} in 9, 10, 12, 14, 16, 18, 20, 26 and 32-ounce sizes. Later, Hazel-Atlas officers offered the same style of cylindrical container (SIMPLEX "ALL GLASS" JARS) in 8, 10, 12 and 15-ounce capacities. A paneled, 9-ounce version was also available from this firm.⁷

If you look in *Red Book No. 9* under numbers 2632-2634 you will see this vessel listed in one-third pint (5 1/3-ounces), half-pint (8-ounces), pint (16-ounces) and quart (32-ounces) sizes.⁸ Between the capacities advertised by the two glass manufacturers and the actual examples shown later in this article, you will see that many more sizes of this packing jar remain undiscovered or just unreported.

Special Design Features

Mr. Fenn's patent application provided for two finish styles on "the Simplex jar." Both threaded regions were

"...of sloping or conical form..."

One had a raised thread that merged into the container's neck while the other had an indented groove or what William B. Fenn called a

"...female thread."

Either of these features was used in conjunction with a threaded rubber packing ring, the sloping or conical interior side wall of the all glass cover and the raised thread on the inner skirt of the screw cap to achieve a seal.⁹

As far as I've been able to determine, only the first or raised and merging thread type of finish was produced. The threaded area on this container had no side seams in it. The absence of them permitted a better airtight closure when the rubber packing tube was screwed down onto the thread.

The finish on this type of packing jar also had a vertical and noticeably reinforced neck. The patent submission didn't mention this feature. Nevertheless, pattern makers probably recommended it to prevent any surface cracking within the finish associated with the stress that accompanied the tightening or untightening processes. Regardless of why it was added to the container's finish, this attribute was distinctive. At a minimum, it immediately identified a jar which could be sealed by the Fenn patented, 1904 registered screw type of cover. Look for this trait in all of the jar photographs that follow.

Observations

Before moving on, I'd like to make some observations about the SIMPLEX series of jars that have been reported.

The first thing to take note of is that not all of the advertised sizes have been found. It stands to reason the more popular models would have been made in higher amounts. This probably accounts for their presence today over other versions which haven't been discovered.

Another item to bring up concerns the capacity of this style of container. One would think it should be easy to state the volume of any of these vessels. However, when I was tabulating the volumetric capability of each SIMPLEX example from my collection, I noticed the jar could be classified differently depending upon which standard point was used as a reference.

For instance, of the twenty-four containers I compared in the 10-ounce category, each had an 8-ounce capacity at the shoulder parting line and a 10-ounce volume when filled to the lip. How does one group these containers? Are these specimens 8 or 10-ounce jars?¹⁰

After thinking about this issue for several weeks, I finally concluded the complete capacity of the container was most likely used to advertise the jar.¹¹ This would allow the buyer to know how much material the vessel could contain if it was filled to the lip.¹²

My third observation centers on the threaded region on each container. Two styles have been identified. **Figure 2** has a

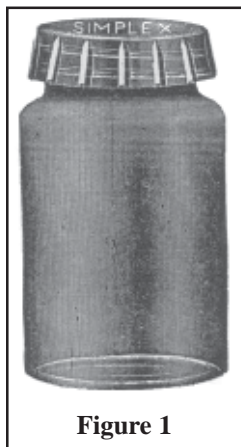
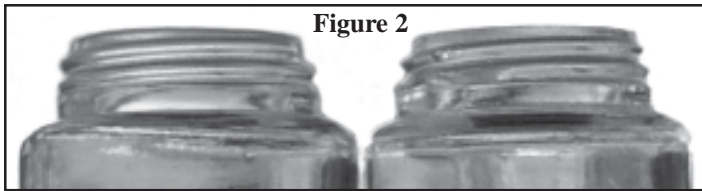


Figure 1

**Figure 2**

picture of each one.

On the left, the thread on this jar starts at the lip and proceeds down and around this region until it merges into the top of the container's neck. Throughout the course of this movement, the protruding semicircular form is clearly distinct and intact. Between the lines of the thread is a depressed area flush with the outer finish. For discussion purposes, I've called this example a complete thread or Style I.

The right-hand model has the same thread starting point. It rotates down and around this region for a turn and a fifth more or less. At this point, the top portion of the thread becomes quarter circular and continues around the finish until it combines with the jar's neck. Conversely, the bottom segment becomes flat; completely filling the void between the outside of the thread and the outer finish until it joins the neck. This version is my self-named flat thread or Style II.

Before I move on, there is a fourth observation to bring out about this style of packing jar. I've found no definitive evidence to say with any certainty where an item was made. The possible candidates are the Sterling,¹³ Perfection and Hazel-Atlas Glass companies. I'm convinced the jars that follow were made by these firms. I just don't know where any individual example was manufactured. Perhaps with more time and data analysis, this issue will become clearer.

Jar Measurements

For the following sections, I examined and measured each SIMPLEX (within an elongated diamond) embossed or unembossed model in my collection.¹⁴ The assemblage of data about each group should enable anyone to identify whether their jar has already been reported.

9-Ounce Models

The number of samples for the nine ounce category was only five jars.

Their height without a screw cap ranged between 4 ⁵/₈ and 4 ¹¹/₁₆ inches. The preponderant (4) were 4 ¹¹/₁₆ inches tall. Around the center of the jar's outer body, the diameter of four of the five containers in this assembly was 2 ¹/₂ inches. The odd one measured 2 ⁷/₁₆ inches along the same line. The thickness of the side wall on this small selection of jars remained a constant. Each had a ¹/₈ of an inch density. **Figure 3** has a picture of a representative sample of a 9-ounce version.

As you would assume, the weight of the five vessels minus their covers varied as well. The "gathering boy" scooped out between 8 and 8 ¹/₂-ounces of molten metal to make the five containers in this group.

The finishes on the 9-ounce specimens had the below measurements. At the top, the outer diameter of the lip was 1 ³/₄ inches for four specimens and 1 ¹³/₁₆ inches for the other. The threaded area was ⁷/₁₆ inch in length across the board. All of the merging threads were ¹/₈ inch wide. One Style I and four Style II threaded region variants were noted. Below the sealing area was the neck. On every example, it was ³/₁₆ inch in length and between

2 and 2 ¹/₁₆ inches in exterior diameter.

Moving on to the next part of the SIMPLEX jar, the shoulder length on all the examples in this group was ¹/₄ of an inch. For the most part, body measurements were 3 ⁹/₁₆ inches (3). However, two examples were also noted with side walls that were 3 ¹/₂ inches long.

There was no circular plate mold impression on the front or reverse side of any jar in this section; although, each of the models did have embossing on the front. The markings consisted of the word SIMPLEX surrounded by an elongated diamond. The height of this geometric form was a standard 1 ¹/₄ inches. Its width was normally 1 ¹¹/₁₆ inches. The only difference encountered was a 1 ³/₄ inches wide example on one specimen. The size of the capital letters in the word SIMPLEX was a uniform ¹/₄ inch. A capital letter "Y" comprised the middle component of the character "M" in the term SIMPLEX on each of the five samples in this congregation of vessels.¹⁵

The last part of the container was its base. The majority or four of the bottoms tallied ¹/₄ inch in length. The deviant was ³/₁₆ inch. Each base was of the cup bottom mold variety¹⁶ and had a ⁵/₈ inch in diameter valve mark in the center. There was no number on base of any 9-ounce example.

10-Ounce Models

The sample size for this grouping was twenty-four jars. This vessel capacity was probably one of the most popular in the SIMPLEX series.

The height of the uncapped cylindrical containers ranged between 4 ⁵/₈ and 4 ³/₄ inches. Twenty were 4 ¹¹/₁₆ inches tall. Of the other four, three were 4 ⁵/₈ inches tall and the last one came in at 4 ³/₄ inches. Around the mid-section of the jar's body, the outer diameter of every one of my containers was measured at 2 ¹/₂ inches. The thickness of the jar's side wall remained a constant. Each of the twenty-four, 10-ounce models was ¹/₈ inch in density. See **Figure 4** for a photograph of one of the jars under this category.

The weight of the 10-ounce vessels minus their covers varied. This was undoubtedly due to the differing amounts of molten glass

**Figure 3****Figure 4**

taken from the furnace by the “gathering boy” and placed into the mold on the semiautomatic machine for pressing and blowing the container. Although the eye and feel of the worker was refined over time, he gathered between $6\frac{3}{4}$ and $8\frac{3}{4}$ ounces of metal to make the containers in my database.

The measurements for the finish components were also fairly constant. For example, there were only two dimensions for the outer diameter of the jar’s mouth. These were the same as those noted on the 9-ounce versions – $1\frac{3}{4}$ (14) and $1\frac{13}{16}$ (10) inches.¹⁷ The length of the threaded area on twenty containers was $\frac{7}{16}$ of an inch. For the other four, two were $\frac{3}{8}$ inch and two were $\frac{1}{2}$ inch. All threads were $\frac{1}{8}$ inch wide and merged into the vessel’s neck. By far and away, the flat thread variant (20) outdistanced the complete thread style (4) by a five to one margin. The neck on every 10-ounce example was $\frac{3}{16}$ inch in length and between 2 and $2\frac{1}{16}$ inches in outer diameter.

Moving on to SIMPLEX jar’s body section, the shoulder length of all but one of the jars in this group was $\frac{1}{4}$ inch. The lone dissimilar model had a $\frac{3}{16}$ inch measurement. Sixteen measurements of $3\frac{9}{16}$ inches were noted for the area between the shoulder and bottom parting lines. In addition to these, two other tallies were also seen. Seven jars had sides that measured $3\frac{1}{2}$ inches in length. One other came in at $3\frac{7}{16}$.

The front or back sides of the 10-ounce jar’s body had no indication of a plate mold being used on any specimen within this grouping. Each one did have embossing on the front which consisted of the word SIMPLEX surrounded by an elongated diamond. The height of the geometric form was usually $1\frac{1}{4}$ inches for twenty-two of the twenty-four specimens. Two versions of $1\frac{3}{16}$ inches were seen as well. The width of the same design was $1\frac{11}{16}$ inches on twenty-two examples. The only difference encountered was a $1\frac{5}{8}$ inches wide model seen on two samples. The size of the capital letters in the word SIMPLEX was a uniform $\frac{1}{4}$ inch. A capital letter “Y” comprised the middle component of the character “M” in the term SIMPLEX on each sample in this congregation of vessels.

The majority or twenty of the bases on jars under this heading tallied $\frac{1}{4}$ inch in length. Ones of $\frac{3}{16}$ (1) and $\frac{5}{16}$ (3) of an inch were also found. The base on all twenty-four containers was of the cup



Figure 5

bottom mold variety and had a $\frac{5}{8}$ inch in diameter valve mark in the center. There was no number on the underneath side of any of the 10-ounce examples.

12-Ounce Models

Unfortunately, I’ve a smaller cross section of jars to review in this grouping. Instead of twenty-four as was seen in my second assembly, only five have been found for this section. More examples are needed in order to form a better statistical basis; however, for now this meager listing will have to suffice.

The SIMPLEX containers without covers in this section were between $5\frac{1}{8}$ (3) and $5\frac{3}{16}$ (2) inches tall. Their diameters ranged from $2\frac{9}{16}$ (2) up to $2\frac{5}{8}$ inches (3). A standard thickness of $\frac{1}{8}$ inch was seen throughout all five vessels. **Figure 5** has a picture of a 12-ounce model.

Being made by a part hand and part machine process, you would expect the weights of these jars to be somewhat different and they were. Weights of the uncapped models ranged from $8\frac{1}{4}$ to $8\frac{3}{4}$ ounces.

Inspecting the finish area, I found the mouth of the 12-ounce SIMPLEX containers to have two outer diameters. Four of the vessels had a $1\frac{13}{16}$ inches distance across while the other was $1\frac{3}{4}$ inches.¹⁸ The threaded section of each of the five vessels was $\frac{7}{16}$ inch long. Wherever present, the merging thread had a constant width of $\frac{1}{8}$ inch across the five examples. Three of the four models had finishes similar to the right side example in Figure

2. The fifth jar’s threaded area resembled the left-hand version. The neck of every container came in at $\frac{3}{16}$ inch in length with either a 2 or $2\frac{1}{16}$ inches diameter.

Turning to the body of the jar, the length of shoulder was always $\frac{1}{4}$ inch. For the curved side walls, the top to bottom calculations were mostly 4 inches (4) with one exception. This odd version came in at $4\frac{3}{16}$ inches.

I didn’t detect the use of a plate mold on any of the five containers. All models were embossed. The following data sets comprised the measurements to the alleged trademark - SIMPLEX (within an elongated diamond): diamond height - $1\frac{1}{4}$ inches on four examples, the other was $1\frac{5}{16}$ inches; diamond width - $1\frac{11}{16}$ inches and letter size $\frac{1}{4}$ inch. Four of the five examples had the letter “Y” as the middle segment of the character “M” in the word SIMPLEX. The deviant showed the capital letter “V” in this position.

Each of the five specimens had a cup bottom mold base that was either $\frac{1}{8}$ (1) or $\frac{1}{4}$ (4) inch long. The valve mark remained a constant $\frac{5}{8}$ inch, regardless of the length of the base. Four of the jars had no number inside the circular machine feature. The other had the numeral 4 within this ring.¹⁹

13-Ounce Model

The sample in this category consists of only one container.

Without a cover, this cylindrical jar was $5\frac{7}{8}$ inches tall. Its outer diameter, like some of its 12-ounce mates, measured $2\frac{5}{8}$ inches. The thickness of the side wall on this example was $\frac{1}{8}$ inch of an inch. **Figure 6** has this model displayed.



Figure 6

The weight of this uncapped 13-ounce specimen was 10 $\frac{1}{4}$ -ounces.

At the apex of its finish, the mouth on this lone vessel had an outer diameter of 1 $\frac{3}{4}$ inches.²⁰ For the threaded segment, the length of it came in at $\frac{7}{16}$ inch. The complete thread was $\frac{1}{8}$ of an inch wide throughout. It merged into the jar's neck. The last component of the finish was $\frac{3}{16}$ inch tall with an outer diameter of 2 inches.

The body section comes next. It starts off with a curved shoulder length of $\frac{1}{4}$ of an inch. I computed the side wall measurement to be 4 $\frac{7}{8}$ inches.

Upon inspection, I couldn't find any trace of a circular plate mold on the body of this singular example of a SIMPLEX (within an elongated diamond) embossed jar. The word – SIMPLEX – was cut into the mold with $\frac{1}{4}$ inch tall letters. The dimensions of the surrounding diamond form were: height – 1 $\frac{1}{4}$ inches and width – 1 $\frac{3}{4}$ inches. A capital letter “V” was in the middle between the side posts of the third alphabetical character in the word SIMPLEX.

On this 13-ounce version, the cup bottom mold style of base was $\frac{1}{8}$ of an inch in vertical height. In the center of the underneath segment was an $\frac{11}{16}$ inch in diameter valve mark with the number 5 inside of it.²¹

14-Ounce Models

For this grouping, my survey encompassed nine containers.

All of the uncapped jars in this series but one had a length of 5 $\frac{15}{16}$ inches. The lonely outsider example was only $\frac{1}{16}$ inch smaller (5 $\frac{7}{8}$). Horizontal distance across the center of these containers varied between 2 $\frac{5}{8}$ (7) and 2 $\frac{11}{16}$ (2) inches. The side wall thickness of all of the 14-ounce capable models was $\frac{1}{8}$ of an inch. See **Figure 7**.

As expected, there was a swath of weights among these uncapped specimens. These ranged from 9 to 11 $\frac{1}{4}$ -ounces.

The mouth on the containers in this section was either 1 $\frac{3}{4}$ (3) or 1 $\frac{13}{16}$ (6) inches across the outside wall at the lip.²² Each threaded area had a length of $\frac{7}{16}$ inch. On it, the merging thread was a constant $\frac{1}{8}$ of an inch in width. Two of the nine examples were Style I. The remaining seven showed the Style II feature. Below the threaded area was the neck. All of the vessels had a $\frac{3}{16}$ inch length for this part of the jar. Outer diameters for this segment measured between 2 and 2 $\frac{1}{16}$ inches across



Figure 7

the center.

Between the base of the neck and the shoulder parting line, the curved shoulder on each of the nine containers was $\frac{1}{4}$ of an inch. For the vertical side wall of the body, this part of the 14-ounce SIMPLEX grouping showed the most divergent measurements. Four models were 4 $\frac{3}{4}$ inches in length. Three came in at 4 $\frac{13}{16}$ inches. One was 4 $\frac{7}{8}$ inches. And the last

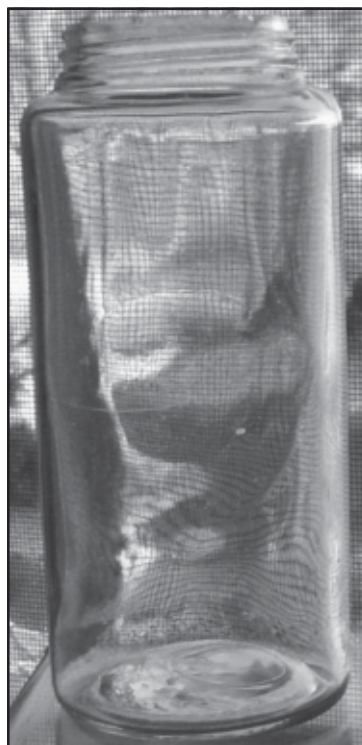


Figure 8

sample measured 5 inches.

All of the nine examples in this assemblage of containers didn't show evidence of a plate mold on the front or back surface of the jar's body. One third of the samples were embossed on the front. Of these versions, the letters in the word SIMPLEX were $\frac{1}{4}$ inch high. The diamond heights varied from 1 $\frac{1}{4}$ (2) to 1 $\frac{5}{16}$ (1) inches. Widths of the same trait also showed differences. These went from 1 $\frac{11}{16}$ (2) to 1 $\frac{3}{4}$ (1) inches across the geometric form. Two of the three showed a large “V” as the center part of the “M” in the word SIMPLEX. The other had a capital “Y.”

Every one of the bases in this grouping was of the cup bottom mold variety. Lengths of this part had the following fractional inch ranges: $\frac{1}{8}$ (1), $\frac{3}{16}$ (1), $\frac{1}{4}$ (4) and $\frac{5}{16}$ (3). Two outer diameter dimensions for the valve mark were also noted. These were: $\frac{5}{8}$ and $\frac{11}{16}$ of an inch. Eight of the nine containers had no other markings on their bases. The singular standout had the number 3 within the machine induced circular ring.²³

15-Ounce Model

Regrettably, the sample size for this group was a single example.

Without a cover, this cylindrical jar was 5 $\frac{15}{16}$ inches tall. Its outer diameter measured 2 $\frac{11}{16}$ inches around the central section of its body. The thickness of this specimen's side wall was a $\frac{1}{8}$ inch. **Figure 8** has a photograph of this model.

The weight of this uncapped 15-ounce capacity container was 9 $\frac{3}{4}$ -ounces.

At the lip, the mouth on this vessel had an outer diameter of 1 $\frac{7}{8}$ inches.²⁴ In the next portion of the finish, the length of the threaded segment came to $\frac{7}{16}$ inch. The Style I kind of thread was $\frac{1}{8}$ of an inch wide throughout and merged into the jar's neck. The last component of the container's first part was $\frac{1}{8}$ inch tall with an outer diameter of 2 $\frac{1}{16}$ inches.

The subsequent section of the 15-ounce model was its body. It started off with a curved shoulder whose length could not be determined because there was no discernable shoulder parting line. This missing segment also hindered the computation of a side wall measurement.

Unlike the previously described SIMPLEX jars in this article, this unembossed specimen had a 1 $\frac{15}{16}$ inches in diameter plate mold mark on its front.²⁵

There were other differences witnessed on this jar. Instead of a cup bottom mold

style of base, this one sported a post bottom mold motif. Of course, this variation doesn't have a bottom parting line so the length of the base cannot be tabulated. Another dissimilar trait was the diameter of the value mark in the center of the underneath segment. It was 1 inch across with the number 12 inside of it.²⁶

The least seen Style I kind of thread, absence of a shoulder and bottom parting line, a plate mold mark, a post bottom mold type of base and a larger diameter value mark differentiate this unembossed example of a SIMPLEX series jar from all others up to this point.

16-Ounce Models

As was the case with other groups, there is a dearth of examples in this section. So far, I've been able to find only six jars to compare.

Two of the uncovered models were 5 ⁷/₈ inches tall. The remainder came in 1 ¹/₁₆ of an inch taller or at 5 ¹⁵/₁₆ inches. Across their mid-section, the outer diameter of five of the containers was 2 ⁷/₈ inches. The sixth specimen had a distance around of 2 ¹⁵/₁₆ inches. Strangely, the thickness of the side wall was either 1 ¹/₈ (3) or 3 ¹/₁₆ (3) of an inch. **Figure 9** has a representative example of this jar.

Similar to its lower capacity counterparts, the weight of each uncapped vessel in this category varied between 10 ³/₄ and 12-ounces. Ironically, four



Figure 9

samples weighed in at the latter weight. Unless this was a lucky coincidence, some sort of gob feeding device may have been added to the semiautomatic manufacturing process when these versions were pressed and blown.

Starting with the first part of the finish, the outer diameter of the lip on four of the SIMPLEX containers in this grouping were 1 ¹⁵/₁₆ inches. The other two showed a distance across of 2 inches.²⁷ For the threaded region, its length was a constant 1/2 inch per each rendition. Each thread was 1/8 inch wide and merged into the top of the neck. Every specimen had a threaded area resembling the right-hand photo in Figure 2. Unlike previous kin, three containers showed a 3 ¹/₁₆ inch long neck while the remaining examples were 1/4 of an inch. The outer diameter of the same part was either 2 ³/₁₆ (3) or 2 ¹/₄ (3) inches across.

The curved shoulder was a standard 1/4 inch in length among all containers within this section. For the side wall, this vertical area of the 16-ounce jar's body measured 4 ¹³/₁₆ inches in length for any member.

All of the six examples in this assembly didn't show any evidence of a plate mold on the front or back surface of the jar's body. However, every one of the samples was embossed with the design - SIMPLEX (within an elongated diamond). The letters in the word SIMPLEX were 1/4 inch high for two of the six samples. For the other four, these characters had a 5 ¹/₁₆ of an inch height. The vertical size of the diamond form varied from 1 ⁵/₁₆ inches for five models to 1 ³/₄ inches for the last one. Widths of the same trait showed no differences. Each distance across the center of the diamond was 1 ⁷/₈ inches. All six editions had a large "Y" as the center part of the "M" in the word SIMPLEX.

Every model had a cup bottom mold design as its base. Heights of the last part of the container were equally split. Three jars had a 13 ¹/₁₆ of an inch vertical length while the others showed a 1/4 inch version. A 5 ¹/₈ inch valve mark was on five of the vessels. The lone oddity showed an 11 ¹/₁₆ of an inch circular machine mark. None of the candidates had a number embossed on their underneath side.

33-Ounce Model

Only one example has been found for this category.

Coverless, this cylindrical jar was 6 ⁷/₈

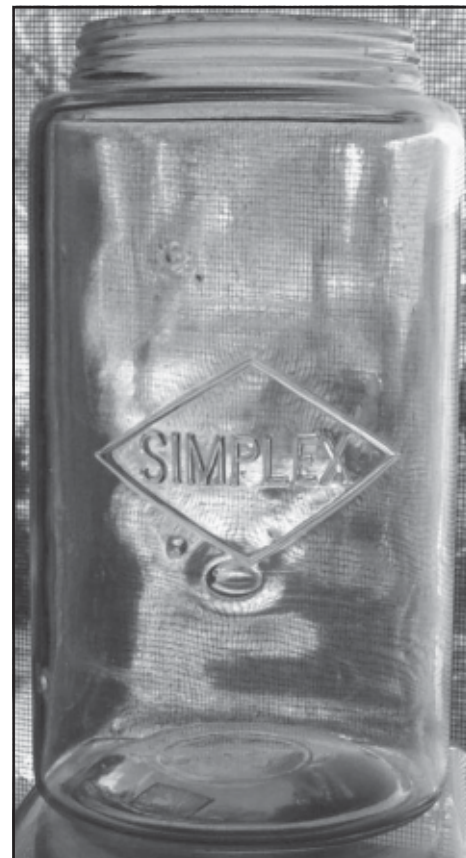


Figure 10

inches tall, 3 ¹³/₁₆ inches in outer diameter and 3 ¹/₁₆ of an inch in thickness. **Figure 10** has a photograph of this model.

The weight of this uncapped 33-ounce capacity container was 18 ¹/₂-ounces.

At the tip of the lip, this vessel had an outer diameter of 2 ¹⁵/₁₆ inches.²⁸ In the next portion, the length of the threaded segment was 3 ¹/₈ of an inch. The complete thread on this segment was 1/8 inch wide and merged into the jars neck. The last component was 1/8 inch tall and carried an outer diameter of 3 ¹/₁₆ inches.

The subsequent section of this quart plus model was its body. It started off with a curved shoulder whose length was 1/4 inch. Due to the side seams ending at the bearing surface, a body length couldn't be determined.

Unlike the majority of its prior cousins, this example of a SIMPLEX packing container had both a plate mold outline (2 ⁵/₈ inches in diameter)²⁹ and embossing within it on the front of the jar. The large letters in the word SIMPLEX were 7 ¹/₁₆ of an inch in height. The elongated diamond form was 1 ¹¹/₁₆ inches tall and 2 ¹/₂ inches wide. A capital "V" formed the middle segment of the letter "M" in the prominent trademarked word.

The base on this model was of the post

bottom mold variety. Inside of the bearing surface was a $1\frac{3}{8}$ inches in diameter valve mark with the number 32 embossed within it.³⁰

This container also had characteristics similar to the unembossed 15-ounce example. The design differences separate these two jars from the others described previously.

Summary

When I started this discussion about the SIMPLEX series of packing jars, I indicated Perfection Glass advertised nine sizes and the Hazel-Atlas firm promoted four cylindrical and one paneled container with different capacities. After presenting my database information, I now feel confident that the 9, 10, 12, 14, 16 and 32-ounce models pitched by Perfection have been identified. The samplings from my files may also take care of the 10, 12 and 15-ounce editions from the Wheeling, West Virginia based glass business as well. How the 13-ounce version fits into the mix is a mystery at this point.

Near the front of this article, I also mentioned that *Red Book No. 9* carried the SIMPLEX jars in four sizes. Clearly, two of the four entries have been verified.³¹ In addition, other sizes have now been thoroughly documented for inclusion in subsequent updates to this superb reference document.

With the previous information serving as a backdrop, there are still other sizes of this vessel in undisclosed locations, waiting to be found and documented. According to my count, at the very least an 8, 9 (paneled), 18, 20 and 26-ounce SIMPLEX style of container still needs to be reported, photographed and measured. While you are out and about, keep an eye peeled, as they say, for these missing jars. Your pin money account could potentially grow larger if you are lucky enough to find one!

BLB

Endnotes:

ⁱ Originally called "the Simplex jar," this container acquired other names over time. These were: Simplex Packing Jar, The Simplex, "Simplex" Fruit Jar, SIMPLEX (arched), "SIMPLEX", "SIMPLEX JAR" (within an elongated diamond), SIMPLEX (within an elongated diamond with letters conforming to the limits of the diamond), SIMPLEX (within an elongated diamond) and finally, SIMPLEX "ALL GLASS" JARS.

ⁱⁱ Water was used to compute the fluid ounce capacity of each SIMPLEX (within an elongated diamond) embossed or unembossed packing jar. While examining several of the twenty-four containers, I also determined their dry capacity along with a filled weight. I undertook these last two measurements to see if the results revealed anything further about these jars. Regrettably, they didn't.

ⁱⁱⁱ I never came across a jar with any of the other names listed in footnote 1.

^{iv} The middle component of the "M" in the name SIMPLEX could be a capital "Y", a capital "V" or a small letter "v." The significance, if any, of this mold peculiarity remains undetermined.

^v On the cup bottom mold style of base, there are no side seams after the bottom parting line. The post bottom mold kind has the side seams terminating at the bearing surface on the underneath part of the base.

^{vi} The 9-ounce and 10-ounce capacity SIMPLEX (within an elongated diamond) marked or unmarked jars took the same size of screw cap.

^{vii} The 9, 10 and 12-ounce SIMPLEX (within an elongated diamond) embossed and unembossed jars took the same size of all glass screw cap.

^{viii} This was the first numbered base on a 9, 10 or 12-ounce SIMPLEX (within an elongated diamond) inscribed or unmarked similar style of container. The number is $\frac{5}{16}$ of an inch tall. It is interesting to note that this model has the capital letter "V" as the middle component of the letter "M" in the word SIMPLEX.

^{ix} The 9, 10, 12 and 13-ounce SIMPLEX (within an elongated diamond) embossed and unembossed jars took the same size of all glass screw cap.

^x This was the second numbered base seen on a 9, 10, 12 or 13-ounce SIMPLEX (within an elongated diamond) inscribed or unmarked similar style of container. The number is $\frac{5}{16}$ of an inch tall. It is interesting to note that the other base numbered 12-ounce model and this one had the capital letter "V" as the middle component of the letter "M" in the word SIMPLEX.

^{xi} The 9, 10, 12, 13 and 14-ounce SIMPLEX (within an elongated diamond) embossed and unembossed jars took the same size of all glass screw cap.

^{xii} This was the third numbered base seen on a 9, 10, 12, 13 or 14-ounce SIMPLEX (within an elongated diamond) inscribed or unmarked similar style of container. This

number is $\frac{5}{16}$ of an inch tall. It is interesting to note that the other numbered 12 and 13-ounce models and one of the two examples under this heading had the capital letter "V" as the middle component of the letter "M" in the word SIMPLEX. Why the other "V" model was numbered isn't known.

^{xiii} The 9, 10, 12, 13, 14 and 15-ounce SIMPLEX (within an elongated diamond) embossed and unembossed jars took the same size of all glass screw cap.

^{xiv} This is the first jar noted with this marking on it.

^{xv} This was the fourth numbered base seen on a 9, 10, 12, 13, 14 or 15-ounce SIMPLEX (within an elongated diamond) inscribed or unmarked similar style of container. The number is $\frac{5}{16}$ of an inch tall.

^{xvi} The 16-ounce SIMPLEX (within an elongated diamond) embossed jars took a different size of all glass screw cap than their 9, 10, 12, 13, 14 and 15-ounce compatriots. This is the second size of screw cap noted.

^{xvii} The 33-ounce SIMPLEX (within an elongated diamond) embossed jar took a different size of all glass screw cap than its 16-ounce or 9, 10, 12, 13, 14 and 15-ounce compatriots. This is the third size of screw cap noted.

^{xviii} This is the second jar within the whole SIMPLEX series that showed a plate mold outline on its front.

^{xix} This was the fifth numbered base seen among the 9, 10, 12, 13, 14, 15 or 16-ounce SIMPLEX (within an elongated diamond) inscribed or unmarked style of container. Unlike the other base numbered specimens, the digits on this edition are $\frac{7}{16}$ of an inch tall. It is interesting to note that the other base numbered models less the unembossed model and this one had the capital letter "V" as the middle component of the letter "M" in the word SIMPLEX.

^{xx} The half pint or 8-ounce model still needs to be located. Since neither Perfection nor Hazel-Atlas officials promoted a one-third pint ($5\frac{1}{3}$ -ounce) container, I have my doubts whether an example will ever be available for measuring and photographing.

¹ District Court of the United States, for the Western District of Pennsylvania, Docket No. 2339.

² *Fruit Jar Patents Volume III 1900-1942*, compiled by Dick Roller, Phoenix Press, Chicago, Illinois, December 1996, pgs. 154-156.

³ For more details about this screw cap, please consult the following book and/or

article. *Perfection Glass Company, One of Many Glass Houses in Washington, Pennsylvania*, Barry L. Bernas, 239 Ridge Avenue, Gettysburg, Pennsylvania, 17325, 2005, pgs. III-XVIII. *Cataloging Process for the Fenn-Designed, 1904 Patented, Screw Cap*, Barry L. Bernas, *The Guide To Collecting Fruit Jars Fruit Jar Annual Volume 10 - 2005*, Jerome J. McCann, 5003 W. Berwyn Avenue, Chicago, Illinois, 60630-1501, pgs. 4-20.

⁴ District Court of the United States, for the Western District of Pennsylvania, Docket No. 2339.

⁵ There is also an undistributed and undated pamphlet from the Republic Glass Manufacturing Company that has sizes for the Simplex Packing Jar and/or The Simplex container entered in it. This circa February to May 1903 booklet had the capacities of 10, 12, 14, 16, 20, 26 and 32-ounces listed for this container. For more details and/or a reproduced copy of this brochure, please see the following reference. *Perfection Glass Company, One of Many Glass Houses in Washington, Pennsylvania*, Barry L. Bernas, 239 Ridge Avenue, Gettysburg, Pennsylvania, 17325, 2005, pgs. XXXVIII-XL.

⁶ District Court of the United States, for the Western District of Pennsylvania, Docket No. 2339 and 1908 *Catalogue of the Hazel-Atlas Glass Company*, reprinted by Dick Cole, Minnetrista, 1200 North Minnetrista Parkway, Muncie, Indiana, 2004, pg. 41.

⁷ *The Collector's Guide to Old FRUIT JARS Red Book 9*, Douglas M. Leybourne, Jr. P. O. Box 5417 North Muskegon, MI 49445, pg. 345.

⁸ *Fruit Jar Patents Volume III 1900-1942*, compiled by Dick Roller, Phoenix Press, Chicago, Illinois, December 1996, pg. 155.

⁹ In the trailing two references, I used the fill or shoulder parting line instead of the full up point at the lip to classify the volume of the SIMPLEX jars. This led to an alternative conclusion as to what size of all glass screw cap fit onto which container. *Cataloging Process for the Fenn-Designed, 1904 Patented, Screw Cap*, Barry L. Bernas, *The Guide To Collecting Fruit Jars Fruit Jar Annual Volume 10 - 2005*, Jerome J. McCann, 5003 W. Berwyn Avenue, Chicago, Illinois, 60630-1501, pgs. 13-14 and *Evolution of the SIMPLEX in a Diamond All Glass Screw Cap*, Barry L. Bernas, awaiting publication in *The Guide*

To Collecting Fruit Jars Fruit Jar Annual.

¹⁰ *Fruit Jar News Clearing House*, Dick Roller, *Old Bottle Magazine*, November 1977, pg. 19 and *Ibid*, December 1977, pg. 16. Mr. Roller addressed the same issue in the above two references. When these columns were published, an industry standard had been set, according to Mr. Bill Brantley of the Ball Corporation. He indicated "...the industry standard requires that the capacity of a jar when filled to the brim must be at least equal to the stated capacity of the jar." This information influenced my choice.

¹¹ The Simplex packing jar was first mentioned in a June 11, 1903 report contained in *Crockery and Glass Journal*. I believe it was made at the works of the Sterling Glass Company in Washington, Pennsylvania and marketed by the Perfection Manufacturing Company of the same location. For more information, please look through the following two articles. *The First SIMPLEX Screw Cap*, Barry L. Bernas, *Bottles and Extras*, Winter 2006, pg. 30 and *Perfection, Another Glasshouse in A Glass Town*, Barry L. Bernas, *Bottles and Extras*, Spring 2005, pgs. 56-58.



Tradecard courtesy of Melissa Milner, Johnson City, Tenn.