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Stretch Glass has patterns and optics, too!

By Cal Hackeman

Depression era glassware is well known for its patterns and optics. It is unusual to find a set of glassware from this time period which doesn't have some form of design in the glass. Certainly, there is some "plain" Depression-era glassware by Cambridge and others which is simply colored glassware, but "Book 1" depression-era glassware typically includes a pattern or an optic, as does the vast majority of other glassware from this period. An individual piece of depression-era glassware can usually be easily identified by these optics and patterns. Inclusion of patterns in glassware dates to much earlier periods of glass production. Stretch Glass, or Iridescent Stretch Glass, as it is sometimes called, is usually thought to be the exception to the rule when it comes to glass with patterns because much of it is plain, smooth, and without a pattern. In Part one of this article we will explore the circumstances leading up to, and influencing, the design of stretch glass. In Part two we will look at the many optics and patterns which made their way into stretch glass, rescuing it from being "pattern-less" while preserving its beauty and consumer appeal.

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The definition of stretch glass, created in 1974-75 by the founders of The Stretch Glass Society is as follows: "IRIDESCENT STRETCH GLASS is press- or blown-molded glass **which generally has little or no pattern** and is sprayed with a metallic salt mix while hot. **In some rare instances, iridescent stretch glass also includes glass with an all-over pattern** which was included in the manufacturers' lines of stretch glass at the time of production. When finished, this hand-made glass will either have a cobweb iridescent (otherwise referred to as stretch marks) or a plain iridescent effect and is velvet or shiny in luster."

Thus, the definition of stretch glass acknowledges that there is some stretch glass with patterns, but also sets the stage for collectors to be aware of the lack of patterns on most stretch glass. As we will see in this article, there is a significant amount of stretch glass which has optics or patterns, but they do not distract from the basic beauty of the iridized glass. Before we look at those optics and patterns, let's look at why stretch glass is more often "plain."

To understand the evolution of glassware, one needs to look at what was happening in the world at large when the glassware was being made. It is especially important to consider the impact of the changing tastes of the consumers who bought glassware for their own use and for gift giving. Designers and others who influence what we like (or don't like) when it comes to interior design, furniture, fabrics and accessories also play a role in influencing what producers create. While we could begin our discussion with the glass produced by ancient artisans, in this article we will focus primarily on the events and changing tastes in Europe and the United States which influenced several periods of glass production including those when stretch glass was made. Stretch glass did not just "happen" – it was conceived and produced in response to various factors in the early 1900s.

Long before Depression-era glassware was produced, there were many other types of glassware which included patterns. Boston and Sandwich glass in the 19th century included extraordinary patterns, especially on their Lacy Sandwich glass. Early American Pressed Glass (EAPG) continued the trend in the late 19th and early 20th centuries with thousands of patterns which have been carefully cataloged and identified by researchers throughout the 20th & 21st centuries. Contemporary researchers such as Paul J. Kirk, Jr. of Cleveland, OH, continue that research and publish books which contain extensive identification of patterns of EAPG not previously known. His recent book, Homestead Glass Works: Bryce, Higbee & Company, 1879-1907, is such an example. In this book he identifies pattern names and numbers not previously known and shows examples of the items in these and other patterns produced by Bryce, Higbee & Company. As more research is done, more information is available to help us identify more glassware. This is a continuing process thanks to dedicated researchers and publishers.

During the Victorian Era (1837-1901) ornate designs and finishes obscured the actual materials used to make furniture, china, glassware, etc.

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The excesses of The Gilded Age were consistent with those of the late Victorian Era. During this time nearly all glassware had patterns, some such as those on brilliant cut glass were quite elaborate.

At the same time, other forms of glass were often covered with decorative materials such that the glass was not visible.

In the 1850s, the Arts & Crafts Movement began in Europe. It gained momentum during the later years of the Victorian Era, but it was not until Queen Victoria died in 1901 that this movement became more dominant in England and it was embraced even later in the United States.

This movement was born out of displeasure by leading designers of these excessively ornate designs and artificial qualities of materials used to make things during the Victorian Era. The leaders of the Arts & Crafts Movement believed that ornaments "must be secondary to the thing decorated," that there must be "fitness in the ornament to the thing ornamented", and that wallpapers and carpets must not have any patterns "suggestive of anything but a level or plain." They did not criticize industrial methods of production, but they believed that the materials used in production should be emphasized, not hidden under coatings of gold, silver or iridescence. They also felt the talents of the worker should be evident in the final product.

Carnival glass, introduced in 1907,was consistent with the Victorian Era and the Gilded Age styles and consumer tastes. It replaced the mostly colorless pressed and cut glass. Carnival glass made more extensive use of colored glass and added the element of iridescence, a salt-acid solution which was sprayed on the hot glass to give it a shiny, rainbow-like appearance.

Originally intended to brighten up dark Victorian-era homes, carnival glass was still being made and sold into the 1920's and 1930's. This bright, colorful glassware was made not only in the United States,

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but in Europe, India, Australia and elsewhere in the world. As consumer interest in carnival glass diminished, the producers of it over-estimated the market demand and found themselves with significant excess-inventory. This excess glass was ultimately sold to the operators of carnival games, who gave it away as prizes. From this comes the name "carnival glass."

By the early 1900s, the Arts & Crafts Movement was in full swing in the US. As buyers' interest waned in carnival glass, they were introduced to a new type of glass. What we call stretch glass today was originally introduced to consumers in 1912 by The Imperial Glass Company, which produced light shades with a "crizzled" affect. In 1916 & 1917 Northwood and Fenton, respectively, introduced extensive lines of stretch glass in a host of colors. Eventually 6 additional glass companies would produce stretch glass: Central Glass Works (Wheeling, WV), Diamond Glass-Ware Company (Indiana, PA), Jeanette Glass Company (Jeannette, PA), Lancaster Glass Company (Lancaster, OH), United States Glass Company (at Factory K – King Glass, Pittsburgh, PA and Factory R – Tiffin Glass in Tiffin, OH) and Vineland Flint Glass Works (Vineland, NJ). This is when "Rainbow Glass," today known as Iridescent Stretch Glass or just Stretch Glass was 'born.' This new, not previously produced, "Rainbow" or "Florentine Ware" Glass was different from anything else on the market at the time, partly because of the lack of pressed or cut patterns in the glass. It included optics to a limited degree but many of the items were smooth or plain, which is to say there were no patterns or ornamentation on the glass except for the iridescence.

At this time the glass companies also changed the iridizing process so that the iridescence was not shiny, as it had been in carnival glass, but had a soft glow of rainbow colors. And, unlike carnival glass where the color of the glass was nearly hidden behind the shiny iridescence, now the color of the glass was highly visible. These changes were in response to changing consumer tastes, which were being influenced by the Arts & Crafts Movement in America. The 'new' glass was created to appeal to designers and consumers.

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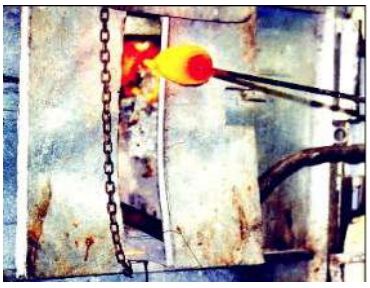
Stretch glass has the precise qualities advocated by the Arts & Crafts Movement: the ornamentation is secondary to the "thing;" the materials – in this case, glass - used in production are emphasized and the talents of the worker producing the item are evident in the final product.

Thus, in stretch glass, the color of the glass – more than the color of the iridescence - is evident. Much of stretch glass is truly handmade glass, albeit from a form which was initially produced using industrial glass blowing and pressing. It is considered 'handmade glass' because there is a significant amount of re-shaping that is done to the molded glass.

To fully understand how stretch glass gets its look and shape, let's review the process for making stretch glass. The production process is similar to that followed for most molded glass (in contrast to blown glass, which is quite different) except that now an iridescent spray is added. Re-shaping of the glass is also done in some cases but this is not unique to stretch glass as hot glass has been re-shaped by skilled artisans for centuries. However, the re-shaping of stretch glass has a unique effect on the final look and feel.

The process of making stretch glass is:

- A mold is created to produce the desired item. The molds have at least two parts, the mold for the exterior of the item and the plunger – the part of the mold which is lowered into the hot glass to push the glass against the exterior mold. The plunger creates the open area in a bowl or other item.
- the mold is set up to allow for the pressing of glass in the mold



- Taking a gather of molten glass from the pot. A metal rod is rotated in the molten glass until the correct amount of glass is gathered. This gather is taken to the nearby press.

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- The molten glass is allowed to drip into the mold. As soon as the proper amount of glass has dropped into the mold, it is cut off with a large scissors-like tool. This usually leaves a "cutoff mark" in the final product which many call a "straw mark."

- The mold with molten glass is shoved under the press plunger and the plunger is lowered into the mold. This forces the glass into all the parts (foot, handles, etc.) of the mold.

- The plunger is raised, the mold top is removed and the mold is opened. Tongs are used to remove the molded piece of glass and place it to a cooling area.

- After a brief cooling to firm up the foot, the piece is then taken to a person holding a “snap.” The snap is a metal rod that has a round clamp located on the one end. When the other end of the rod is pushed down on the floor, the clamp jaws open. The foot of the glass piece is placed inside. The piece is now “snapped up.”

- The snapped up piece is taken to the “glory hole.” The glory hole is an opening in the furnace into which snapped up piece is placed. This is where it is reheated to the point where it will easily take the “doping” process.

- The reheated, snapped up piece is sprayed with a metallic salt(s) that forms the iridescent surface characteristic of carnival and stretch glass. The piece is rotated rapidly to get an even coating on the inside, the outside or both. This process is called doping.

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- The doped piece is again placed in the glory hole. This is where stretch glass and carnival glass differ. Carnival glass is shaped and then doped, where Stretch glass is doped and then shaped. During the re-heating process the glass and the iridescence expand at different rates producing the initial look of stretch glass. The reheating also changes the appearance of the iridescence on the glass from a solid shiny look to a transparent 'onion skin' appearance. As the iridescence is more transparent, this allows the color of the glass to be more evident.

- The reheated piece is now shaped. This shaping causes the stretch marks to enhance the iridescent surface.

- All pressed glass pieces have to be placed in an annealing furnace, called the "lehr." The lehr keeps the glass at a high temperature and slowly cools it. This releases internal stress which causes cracks if the glass is allowed to cool too quickly.

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Bowls, coming out of the mold simply as round bowls, were flared, crimped, ruffled and in some cases completely flatten to become a plate.

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Vases endured the same "torcher," taking on many different final shapes. One of the more interesting 'modifications' was the swinging of a vase or other object while the glass was hot. This caused the vase to elongate and a "swung" vase was created. Here we see a Concentric Ring flower pot which was 'swung' into a vase.

Swinging glass to create 'swung' vases was not new; we find examples of glass produced by this process at least as early as the 1800s, but the use of the technique during the stretch glass early period of production (1912 to the mid-1930s) produced some extraordinary stretch glass vases.

This process is much different than the more mechanized process used to produce Depression-era glassware, where little or no re-working was done to any of the molded pieces.

As mentioned earlier, stretch glass was consistent with the characteristics which the Arts & Crafts Movement's leaders advocated. Stretch Glass was just what designers and consumers were looking for and it was a successful product offering for most of the companies which made it.

Stretch glass would continue to be made for approximately the next 20 years until it went out of vogue in the 1930s (probably because it became too expensive to make and sell at a profit due to the Great Depression). The nine companies would produce stretch glass in over 50 colors ranging from black to white and including the entire color spectrum. They would provide consumers with over 100 different items ranging from bowls and plates to vases, candleholders, cologne bottles, lemon servers, cigarette boxes and a host of other specialty items. Much of the stretch glass produced at this time is "plain" – without a pattern, but there were also pieces made with patterns.

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Many years later, in the 1970s, The Fenton Art Glass Company – the only surviving glass company from the original 9 that produced stretch glass – would make some samples of stretch glass. There were very limited quantities of these produced and they were only available to members of The Stretch Glass Society and the Fenton family.

Note that they are "plain" aka without any pattern. This is the beginning of the "Late Period of Stretch Glass Production" which would continue until Fenton ceased glassmaking ca. 2010.

In 1980, for Fenton's 75th Anniversary, the color Velva Rose, a pink stretch glass from the 1920s, was revived, stretch glass was 'officially' back in the Fenton line and it was advertised in its catalogs.

Most of the stretch glass made from 1980 until 2011 will have a pattern in the glass and the Fenton logo in whatever form was being used at the time the piece of stretch glass was produced. The inclusion of patterns on stretch glass during the Late Period was in response to consumer preferences and was influenced by contemporary designers.

During the late period of production, Ruby, Celeste Blue and the previously mentioned Velva Rose from the original colors would be reissued and more colors would be used to keep stretch glass relevant to the changing color preferences of consumers.

Five of the nine companies which made stretch glass incorporated optics or patterns into some of their stretch glass.

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We will be looking at patterns and optics in stretch glass by Diamond, Fenton, Imperial, Northwood and US Glass in part 2 of this article.

Except for Northwood, these are familiar glass companies to most Depression-era collectors because they later produced Depression-era glassware. The remaining four producers of stretch glass: Central, Jeanette, Lancaster and Vineland did not incorporate patterns in their glassware but, in some cases, used other decorations on their stretch glass.

Some of the patterns and optics we will examine were only made in the early period of stretch glass production, others were only made during the late period of stretch glass production and a few were made in both.

In the continuation of this article in the next issue of News and Views we will look at the specific patterns and optics which appear in stretch glass. There are over 50 of these from the early period of stretch glass production and over 25 additional ones from the late period of stretch glass production.

Photos by Dave Shetlar, past co-President and 'official' photographer of The Stretch Glass Society. Thank you, Dave!