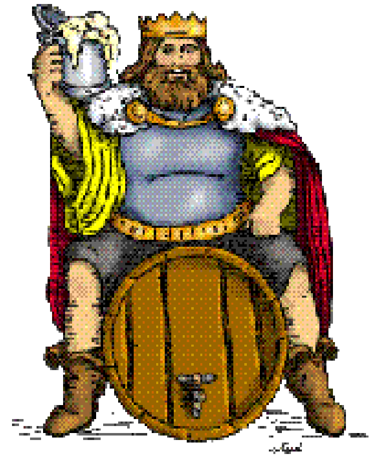
Gambrinus Gazette



Norm Paratore – Editor
SLRShooter@yahoo.com

April 2023
Facebook: Gambrinus Stein Club

President's Minute

Hello fellow Gambrinus members. First order of Business is to thank Allan and Ita Fogel for all their hard work in leading the Chapter for multiple years and terms. They were central to the success of three mini conventions. They also have worked hard supporting SCI conventions. We are very thankful to have them as members of our chapter. I would also like to thank Mark Maceira who served as Treasurer.

Our meeting schedule is taking shape for the next year. Our format will be three meetings in member's homes and one at a restaurant. The advantage of meeting in member's homes is a more relaxed atmosphere and being able see different member's collections. Every meeting will have a speaker giving a talk on some aspect of collecting. Members are also encouraged to bring a piece from their collection to share with the group. I want to encourage all members to attend the meetings and, if you can, invite a friend or two to join us.

We are also planning several "outings" this year. We have scouted out several sites and restaurants. We will have the date and agenda for our first outing at the May meeting. These outings will not replace our quarterly meetings.

I look forward to seeing everyone at the May meeting. I am the speaker and will talk about the "Mystery of the Konigsbacher"….

If anybody has any questions or wants to give input or ideas, please give me a call. 240-848-0306

Thank you,
Eric Salzano

Gambrinus May 2023 meeting information

Sunday, May 21
Y'all Come!

Welcome arrival for unpacking and setting up steins at 12:30 pm. This includes informal chatting etc., followed by lunch at 1:00.

Lunch will be Bar-B-Q and rolls for sandwiches, baked beans, coleslaw, chips, mixed fruit, and treats for dessert. BYOB – Bring your own Beverage. Bill will have a supply of ice.

Please call or email no later than Sunday, May 14th to confirm and let him know who and how many are coming, which will assist in planning. His email is WIWEINIG@GMAIL.COM and cell phone is 301-717-8994.

Then the business meeting, followed by the talk, show and tell, and Bill's walk through. Based on attendance we may do this in two parts😎.

Bill advised me that there will be two drawings but to be eligible you must bring a recent find (Bring and Brag) or just something from your collection as "Show and Tell". If you want to bring steins for sale, please bring your own table. (no six footers please).

Directions:
Take I-495 (Washington Beltway) to I-66 and travel west on I-66 (past Gainsville) to Exit 40, Haymarket.

Upon exiting take 15 South. Go approximately 4 miles and turn right onto Rt. 29.

Follow Rt. 29/15 toward Warrenton.

Turn right at Rt. 1045 at the stone entrance sign into Snow Hill.

Go past two ponds, one on each side, and go 3 blocks. Turn right at Colonnades. Bill's house is on the near right corner. There will be space in the driveway for handicapped parking and unloading bulky and or heavy boxes. If you are dropping off boxes, please move your car from the driveway as soon as possible.

Treasurer's Report

As of the transfer of the position of Treasurer from Mark Maceira to Norm Paratore, the Gambrinus Stein Club has $6,788 and change in the bank. Thank you Mark, for your years of service.

As a reminder, 2023 dues are now due. In fact, the individual notices are actually overdue and will be sent out in the next week. Many of you have paid multi-year dues and that, in my opinion, is the way to go and does away with all that yearly bother. Please consider paying $25 for three years if you last paid dues in 2022. I will be at the next meeting with the records and to receive your payments – cash or checks. Write me at SLRShooter@yahoo.com or SLRShooter@comcast.net if you have a question regarding your status.

2023 Convention Reminder

Stein Collectors International is pleased to announce plans for the 2023 convention in Dayton, OH, Thursday July 27 through Saturday July 29 at the Marriott at the University of Dayton.

Early Bird events on July 25 and 26.

- July 25 – Tuesday (early bird) ~~~ Optional tours – Dayton City Tour, National Museum of the USAF
- July 26 – Wednesday(early bird) ~~~ Board of Trustees meeting, Ron Fox auction
- July 27 – Thursday – General Membership meeting, two main-tent presentations, stein sale room, dinner
- July 28 – Friday – Three round-table sessions, optional afternoon tea or (on your own) view Roger Glass' stein collection
- July 29 – Saturday – One main-tent speaker, three round-table sessions, members' auction, dinner

Click here to go to the SCI full 2023 Convention write up. Hack tip: If you click on the link and it doesn't open, hover the cursor over the word "here", right click the mouse button, and select "open hyperlink". This works anytime you think there is a link and you can't get it to open by simply clicking on it.

An aside to the convention. Dick Strom has been the SCI VP of Conventions for years, not to mention running the last several Gambrinus Conventions. He has done an outstanding job heading these conventions up, doing all the leg work to get contracts in place, convention trips set up, speakers, and a host of other duties. This is the last convention that he will be responsible for and I think he deserves a thank you from every member who has attended these conventions. It is a tireless and thankless job. But, I for one would like to say "Thank you very much, Dick. You did a wonderful job".

Update on Barney

Barney continues to be in an assisted living facility and I know he would greatly appreciate either hearing from you via a card or an actual visit. His address is: W. R. Barney, Lavender Hills Front Royal Campus, 106 Westminster Dr, Front Royal, VA 22630. Their phone number is 541-612-5056 but I'm not sure about phone privileges. He has good days and bad days, kinda like all of us.

Debunking a Myth

During a Gambrinus meeting a while back, a respected SCI member talked about how glass flows or "slumps" and how you can tell an older piece of glass by the thickness of the base. I didn't want to start an argument there, or embarrass this person, thus this article. What he said is a myth that has been going around for a long time and like the tide, ebbs and flows with time. You absolutely cannot tell old glass because the base is thicker for one simple reason – it doesn't slump.

If the bottom is thicker, it is because the glass blower made it that way, perhaps for balance. How many steins do you think would survive if the base were as thin as the walls of the stein? Air bubbles or "pegging" was popular 150 years ago and that required a regular base, which was then "pegged" by using a soaking wet wooden paddle with pegs, and was pushed into the soft glass. A second base was then added to seal the air bubbles. Just one example of why you would have a thick base

When I was doing research on this subject years ago, I found many articles confirming that glass did not slump but was really simply someone else's opinion. I finally found this article, which I consider the most scientifically accurate and by someone who has the credentials to be considered an expert on the subject. In addition, he worked for Corning Glass for 28 years, including as Director of the Corning Glass Museum.

CORNING MUSEUM OF GLASS

All About Glass by Dr. Robert Brill

Does Glass Flow?

(No, It Doesn't Flow (or slump) —read on for details)

Early one spring morning in 1946, Clarence Hoke was holding forth in his chemistry class at West Side High School in Newark, New Jersey. "Glass is actually a liquid." the North Carolina native told us in his soft Southern tones. "You can tell that from the stained glass windows in old cathedrals in Europe. The glass is thicker on the bottom than it is on the top." Now, more than half a century later, that is the only thing I can actually remember being taught in high school chemistry. I didn't really believe it then, and I don't believe it now. In the years that followed, I came across the same story every now and then. Most often it popped up in college textbooks on general chemistry. And now, thanks to the Internet, our Museum has received dozens of inquiries about whether or not this is true. Most people seem to want to believe it.

Glass Is a Liquid, and Naturally Flows, Right?

It is easy to understand why the myth persists. It does have a certain appeal. Glass and the glassy state are often described by noting their similarities with liquids. So good teachers, such as Mr. Hoke was, like to quote the story about the windows. As is the case with liquids, the atoms making up a glass are not arranged in any regular order—and that is where the analogy arises. Liquids flow because there are no strong forces holding their molecules together. Their molecules can move freely past one another, so that liquids can be poured, splashed around, and spilled. But, unlike the molecules in conventional liquids, the atoms in glasses are all held together tightly by strong chemical bonds. It is as if the glass were one giant molecule. This makes glasses rigid so they cannot flow at room temperatures. Thus, the analogy fails in the case of fluidity and flow.

Why the Myth Doesn't Make Sense

There are at least four or five reasons why the myth doesn't make sense.

Some years ago, I heard a remark attributed to Egon Orowan of the Massachusetts Institute of Technology. Orowan had quipped that there might, indeed, be some truth to the story about glass flowing. Half of the pieces in a window are thicker at the bottom, he said, but, he added quickly, the other half is thicker at the top. My own experience has been that for earlier windows especially, there is sometimes a pronounced variation in thickness over a distance of an inch or two on individual fragments. That squares with the experience of conservators and curators who have handled hundreds of panels. Although the individual pieces of glass in a window may be uneven in thickness, and noticeably wavy, these effects result simply from the way the glasses were made. Presumably, that would have been by some precursor or variant of the crown or cylinder methods.

One also wonders why this alleged thickening is confined to the glass in cathedral windows. Why don't we find that Egyptian cored vessels or Hellenistic and Roman bowls have sagged and become misshapen after lying for centuries in tombs or in the ground? Those glasses are 1,000–2,500 years older than the cathedral windows.

Speaking of time, just how long should it take—theoretically—for windows to thicken to any observable extent? Many years ago, Dr. Chuck Kurkjian told me that an acquaintance of his had estimated how fast—actually, how slowly—glasses would flow. The calculation showed that if a plate of glass a meter tall and a centimeter thick was placed in an upright position at room temperature, the time required for the glass to flow down so as to thicken 10 angstrom units at the bottom (a change the size of only a few atoms) would theoretically be about the same as the age of the universe: close to ten billion years. Similar calculations, made more recently, lead to similar conclusions. But such computations are perhaps only fanciful. It is questionable that the equations used to calculate rates of flow are really applicable to the situation at hand.

Viscosity

This brings us to the subject of viscosity. The viscosity of a liquid is a measure of its resistance to flow—the opposite of fluidity. Viscosities are expressed in units called poises. At room temperature, the viscosity of water, which flows readily, is about 0.01 poise. Molasses has a viscosity of about 500 poises and flows like ... molasses. A piece of once proud Brie, left out on the table after all the guests have departed, may be found to have flowed out of its rind into a rounded mass. In this sad state, its viscosity, as a guess, would be about 500,000 poises.

In the world of viscosity, things can get rather sticky. At elevated temperatures, the viscosities of glasses can be measured, and much practical use is made of such measurements. Upon removal from a furnace, ordinary glasses have a consistency that changes gradually from that of a thick house paint to that of putty, and then to that of saltwater taffy being pulled on one of those machines you see on a boardwalk. To have a taffy-like viscosity, the glass would still have to be very hot and would probably glow with a dull red color.

At somewhat cooler temperatures, pieces of glass will still sag slowly under their own weight, and if they have sharp edges, those will become rounded. So, too, will bubbles trapped in the glass slowly turn to spheres because of surface tension. All this happens when the viscosity is on the order of 50,000,000 poises, and the glasses are near what we call their softening points.

Below those temperatures, glasses have pretty well set up, and by the time they have cooled to room temperature, they have, of course, become rigid. Estimates of the viscosity of glasses at room temperature run as high as 10 to the 20th power (10^{20}), that is to say, something like 100,000,000,000,000,000,000 poises. Scientists and engineers may argue about the exact value of that number, but it is doubtful that there is any real physical significance to a viscosity as great as that anyway. As for cathedral windows, it is hard to believe that anything that viscous is going to flow at all.

It is worth noting, too, that at room temperature the viscosity of metallic lead has been estimated to be about 10 to the 11th power, (10^{11}) poises, that is, perhaps a billion times less viscous—or a billion times more fluid, if you prefer—than glass. Presumably, then, the lead caning that holds stained glass pieces in place should have flowed a billion times more readily than the glass. While lead caning often bends and buckles under the enormous architectural stresses imposed on it, one never hears that the lead has flowed like a liquid.

Glass Doesn't Flow

When all is said and done, the story about stained glass windows flowing—just because glasses have certain liquid-like characteristics—is an appealing notion, but in reality it just isn't so.

Thinking back, I do recall another memorable remark by Mr. Hoke. One day, our self-appointed class clown sat senselessly pounding a book on his desk at the back of the room. "Great day in the mawnin', son!" shouted Hoke "Stop slammin' your book on the desk. Use your head!" That was good advice—no matter how you read it.

About the Author

Dr. Robert Brill, Research Scientist (Emeritus)

In 1960, Dr. Robert Brill joined the staff of The Corning Museum of Glass as its second research scientist. He has collaborated with scientists, curators, conservators, and archaeologists the world over, conducting chemical analyses and other scientific investigations of historical glass objects. The goal has been to determine when and where particular glass objects were made, how glass was made, what it was used for, and how it was traded. Since 1979, Dr. Brill has taken a special interest in Asian glass, and now focuses his studies on glass found along the Silk Road, a trade route connecting the Mediterranean World with East Asia.

From 1972–1975, Dr. Brill served as director of the Museum, leading its recovery from the disastrous flood of 1972. He has published more than 190 works in various journals and symposia. Most notably, he is the author of Chemical Analyses of Early Glasses, a major work in glass research published in 1999 by The Corning Museum of Glass.

Since 1962, Dr. Brill has served on the International Commission on Glass (ICG), the world's leading organization of glass scientists and technologists. He organized their Committee on Archeometry of Glass, dedicated to the scientific study of historical glass and to its conservation. He was chairman of the committee until 2004. That year, he received the ICG's William E. S. Turner Award. In 1990, he received The Pomerance Award for Scientific Contributions to Archaeology from the Archaeological Institute of America.

Prior to joining the Museum, Dr. Brill taught chemistry at Upsala College, where he had also earned his bachelor's degree in chemistry. He holds a Ph.D. in physical chemistry from Rutgers University.

Dr. Brill retired from The Corning Museum of Glass in 2008.