Firing Glasses: Identification and Chronology

Bro. Dr Rod G. Taylor

Firing glasses form part of the social history of Freemasonry. They were first used in the early eighteenth century and are still made and used today. I have collected antique drinking glasses for more than thirty-five years, and have over 200 firing glasses, most of which are Georgian or Victorian. They form the basis of this paper, which is about the identification and chronology of eighteenth and nineteenth century firing glasses. It fills a void, as the only previous academic paper on the subject[1] deals with Masonic glass in general. I assembled my collection principally by buying from dealers who specialize in antique glass. I deliberately based the content of this paper on my collection, so I could weigh and measure the glasses and examine them at close hand, and photograph them, which is difficult and requires specialist equipment.[2] Having visited a number of Masonic and non-Masonic museums, I am confident that my collection is a fair representation of the firing glasses of the period, and for those interested there are catalogues of museum collections in London[3] and Worcester.[4] The provenance for my glasses comes from information I obtained from antique glass dealers and Secretaries of lodges, from my own online research, and from illustrations in the many books on glass I own, which are listed in my references.

---

[1] D. Stuart, 'Masonic Glass in England', *The Glass Circle Journal*, 8 (The Glass Circle, 1995), 39-43.
[2] All the glasses illustrated in this paper come from my personal collection. They are not all shown to the same scale.
[3] Major Sir Algernon Tudor-Craig, *Catalogue of the Contents of the Museum at Freemasons' Hall in the possession of the United Grand Lodge of England* (London: United Grand Lodge of England, 1938).
[4] G. Taylor (ed) *Catalogue of Exhibits Province of Worcester Masonic Soiree and Exhibition* (Kidderminster: Hepworth, 1884).

Many firing glasses are engraved with symbols or inscriptions which identify them as having Masonic connections. This paper researches these links and is intended to help the reader understand what a firing glass is, how it is produced, and the qualities that make it a firing glass. It also considers when firing glasses were first used, how they have developed and changed over time, how to estimate the date when a particular firing glass was made, and the potential problems encountered in doing so.

Definition of a firing glass

A firing glass is a glass that is banged on the table after drinking a toast. This definition derives from the 1760 English Masonic exposure *Three Distinct Knocks*, which describes how after drinking a toast and making certain gestures with their glasses, the brethren '... all set their Glasses down together, which they call firing.'[5] The use of a firing glass to celebrate a toast is held to have replaced gunfire. An alternative explanation, that the glass was banged on the table to prove it had been drained to honour the toast (no heel-taps)[6] seems unlikely, as it takes no account of the military terms used to describe the glasses, their contents, and the gestures employed. Toasting and firing procedures have been reviewed by Harry Carr,[7] and they will not be discussed further here.

Strictly speaking, a firing glass is defined by how it is used rather than what it looks like, though the one is clearly connected to the other. One knowledgeable dealer who sold items that most would describe as firing glasses always referred to them as dram glasses. He insisted this was because he was sure each glass held a dram, but he had no proof it had ever been used for firing. The functional definition says a glass is a firing glass if it is banged on the table after drinking a toast, irrespective of what it looks like, a definition which could apply to any glass; the structural definition says a firing glass is one made in a strong and sturdy style, even in the absence of evidence it was banged on the table. The structural definition is the one used almost exclusively nowadays. It requires no documentary proof, or trial and potential damage to the glass, and is readily applied to a glass of characteristic appearance, as described below.

Making a firing glass

Any glass that is to be banged repeatedly on the table must be of the right material, manufacture, and design for the purpose. A description of these requirements will help the

[5] A. C. F. Jackson, *English Masonic Exposures 1760-1769* (London: Lewis Masonic, 1986), 61.
[6] G. W. B., 'Replies to Queries. Query 183 (XXVIII, 72, Fire after a Toast)', *Miscellanea Latomorum* 28 (1948), 120-1.
[7] H. Carr, 'Masonic Fire', *AQC* 79 (1966), 273-83.

reader to understand the dating of firing glasses described later. Glass is a super-cooled liquid which is known as 'metal', perhaps because when molten it resembles molten metal. In times gone by, glass was made from silica (sand, flint or quartz) to which was added an alkaline flux which lowered its melting point by around half. Potash and soda were the fluxes most used, and lime was added as a stabilizer to produce a harder and whiter metal.[8] In antique glass nomenclature, the word white in this context refers to the absence of any generalized discolouration rather than to the colour itself.

In 1674 the English glassmaker George Ravenscroft patented a new method of making glass, using crushed calcined black flints and refined potash instead of soda.[9] Within a few months of manufacture this glass displayed 'crizzling', a foggy whitish opacification which had to do with the proportions of the ingredients.[10] In 1675 Ravenscroft introduced lead oxide in place of some of the silica, which prevented the crizzling.[11] The lead content of glass was increased over subsequent years, reaching thirty four percent or more in the eighteenth and nineteenth centuries. The addition of lead oxide also conferred on the glass useful properties not found in soda glass. The metal stiffened slowly as it cooled, giving it a long working range: it annealed[12] at lower temperatures, saving fuel, the cooled glass was softer and so easier to cut and engrave, it had a higher refractive index, which increased its brilliance, and it increased the density of the glass.[13] Almost all English Georgian drinking glasses were made of lead glass.

All Georgian and most Victorian firing glasses were made by hand, sometimes using intricate techniques, so each one is unique. The way a drinking glass is produced has not changed for centuries. John Brooks described it concisely:

> ... only the simplest tools are necessary - a metal tube on which to gather and blow the molten glass, pincers to stretch and draw it, shears to cut it and a holder to carry it when it is completed ... [the glass] is traditionally made by a team of three or four men called a chair. This takes its name from the chair or bench on which the leader of the team sits, and which has long arms extending in front of him ... the leader, or gaffer, blows the glass bubble which will become the bowl, other members of the team apply the stem and foot to this bubble and then an iron bar termed the pontil iron, heated at one end, is applied to the underside of the foot. The bubble is then

[8] J. Brooks, *The Arthur Negus Guide to British Glass* (London: Hamlyn, 1981), 9-10.
[9] G. B. Hughes, *English, Scottish and Irish Table Glass* (London: B. T. Batsford, 1956), 42.
[10] Brooks, *The Arthur Negus Guide to British Glass*, 26.
[11] D. Ash, *Dictionary of British Antique Glass* (London: Pelham Books Ltd, 1975), 158.
[12] Annealing is the process of heating and slowly cooling a material to remove internal stresses. D. Ash, *How to Identify English Drinking Glasses and Decanters 1680-1830* (London: G. Bell and Sons Ltd, 1962), 39.
[13] *The Glassmakers.* Available at: http://www.theglassmakers.co.uk/leadoxide.htm. (Accessed 29 October 2024).

> cut away from the blowing iron leaving the glass, with a bowl of irregular shape, supported on the pontil iron. The gaffer supports this across the arms of his chair and whilst rolling it back and forth with one hand, manipulates the bowl to the desired shape with a small forming tool … The glass is then separated from the pontil iron and because the reheating process induces internal stresses in the glass it is … annealed by reducing the temperature gradually.[14]

The process is illustrated in this eighteenth-century drawing:[15]

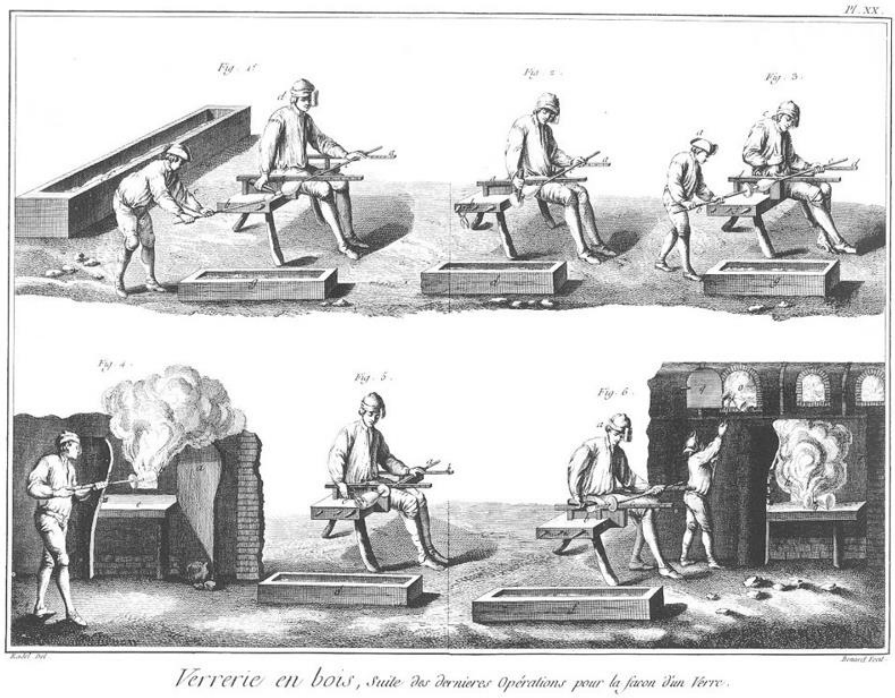

Fig 1: A sketch showing the stages in making a drinking glass by hand, *c.*1765. Note the use of the pontil iron (top right).

The final stage in the making of the glass is annealing. If this is not performed adequately, permanent stresses are set up as some parts of the metal cool more quickly than others, rendering the glass liable to shatter as it cools further or is subjected to minor trauma.[16] Firing

[14] Brooks, *The Arthur Negus Guide*, 11.
[15] *The Encyclopaedia of Diderot & D'Alembert Collaborative Translation Project*, 'Glass making—Wood glass making or bottle glass making.' Available at: http://hdl.handle.net/2027/spo.did2222.0001.643. (Accessed: 27 November 2024).
[16] Ash, *Dictionary of British Antique Glass*, 18.

glasses would be particularly susceptible to the consequences of poor-quality annealing because of how they are used. Until the 1740s, glass was annealed in a kiln or oven heated by a fire; the oven was then sealed and its contents allowed to cool.[17] This process was hard to regulate, and not entirely satisfactory.[18] A new method of annealing was introduced to England from the Continent in the 1740s.[19] This was the 'tunnel leer',[20] in which glasses were drawn slowly on iron pans through a long tunnel.[21] A paper read to the Royal Society described how glasses annealed in the leer '... were found to acquire such a Toughness or Tenacity, as fitted them for the several Uses for which they were respectively designed.'[22]

Thus, by the late 1740s the requirements were in place to enable firing glasses of sound quality to be made. The addition of lead gave the firing glass a good weight, and the use of the tunnel leer made the finished product stronger. Even so, glasses used for firing were not indestructible. The accounts of a Wakefield lodge for 1767 record two brethren each being fined a shilling for breaking a glass:

> 17th June Rec^{d}. for a Glass from Bro. W^{m}. Walker burst in a fire
> Rec^{d}. from Bro. Kilvington for another Glass broke in a Fire[23]

The glasses were thought to have been broken in a hearty fire, suggesting it was excessive enthusiasm on the part of the users rather than faulty glassware that was to blame.

A firing glass is made in the same way as any other glass but differs significantly in design because of its special purpose. It generally has a small bowl, because the drinker must empty it each time before he fires with it. A firing glass is usually of a small height which makes it easier to balance and grasp firmly, and its stem is commonly thicker than that of its cousin the dram glass. The foot is the most characteristic part of a firing glass, because it must be thick enough to withstand being banged on the table. This foot is often simply a more substantial version of that on a dram glass, but it may be modified in additional ways: for example, by being terraced (which also occurs on dram glasses) or flanged (which does not). A tumbler used for firing generally has a base which is thicker than usual.

---

[17] G. B. Hughes, *English Glass for the Collector, 1660-1860* (London: Lutterworth Press, 1958), 21.
[18] Ash, *Dictionary of British Antique Glass,* 19.
[19] Ash, *How to Identify English Drinking Glasses,* 92.
[20] From the German *leer ofen,* empty oven.
[21] E. Chambers, *Cyclopaedia, or an Universal Dictionary of Arts and Sciences* (London: W. Innes et al., 1750), 846.
[22] Royal Society, 'An account of some Experiments, lately made in Holland, upon the Fragility of Unannealed Glass Vessels. Communicated to the President.' *Philosophical Transactions of the Royal Society* 43 (1745), 505-16.
[23] J. R. Rylands, 'Early Freemasonry in Wakefield', *AQC* Vol. 56 (1943), 227.

Fig 2: A late eighteenth-century dram glass (left) and for comparison a firing glass of similar date, both with ovoid bowls and plain stems. The dram glass is slightly taller than the firing glass, but weighs much less than the latter, whose stem, foot and bowl are thicker.

Fig 3: Left: a terraced foot firing glass with a trumpet bowl on a plain stem containing a basal tear, with air bubble *c.*1750. Right: a plain stem funnel bowl firing glass on a flanged foot engraved with the square and compasses, sun and moon *c.*1770.

A glass which does not match this design would be unlikely to be used for firing, because it might not survive being banged repeatedly on the table, and would produce insufficient noise even if it did. On the other hand, even if a glass is robustly made, this does not necessarily prove it was used for firing, but there would be little point in acquiring such a substantial glass if this potential was not realised, particularly since the cost of glass rose as successive Excise Acts from 1745 increasingly taxed the raw materials.[24]

The introduction of firing glasses

When were firing glasses first introduced, when did Freemasons first use them, and when did they start to embellish them with Masonic symbols? These events may not have occurred at the same time. Firing glasses were used not just by Freemasons but in other circles too. It does not necessarily follow that specially modified glasses were adopted by Masons and non-Masons at similar times, or that they were given similar names. If those drinking toasts did not use military expressions for their customs, they might well have used a descriptor other than firing for the specialized glasses or the way they were deployed. There is evidence this is the case. In verse seven of a song he published in 1719, Thomas D'Urfey described a heavy drinking session in which a group of women drank bumpers and used thumping glasses:

> So long top'd these Lasses,
> Till Tables, Chairs, and Stools went round,
> Strong Wine, and thumping Glasses,
> In three short Hours their Senses drown'd:
> Then home to her Grannum reel'd *Nell,*
> And *Joan* no more Brimmers could fill,
> And off from her Chair drop'd *Gillian* of Croyden...
> A Bumper to Master Will.[25]

It is possible D'Urfey used the term thumping simply to describe a glass that was large, rather than one which was banged on the table. A song from 1765 also tells us Freemasons used both bumper and thumper in referring to a glass used for toasting, and it is noteworthy that the procedure was described in military terms and accompanied by fire:

> (From *A Defence of Masonry,* 1765)
> Charge, then, with Liquid Powder,
> Each his sound-bottomed bumper;

[24] D. P. Lanmon, *The Golden Age of English Glass 1650-1775* (Woodbridge: Antique Collectors' Club Ltd, 2011), 39.
[25] T. D'Urfey, 'Gillian of Croyden, a New Ballad.' *Wit and Mirth: or Pills to Purge Melancholy 2* (1719), 48.

As to the KING,
And CRAFT we sing,
It should be with a *Thumper.*

Off with it; clap; huzza boys!
As do our rites require;
Thrice three make nine;
mind discipline,
And all as one give fire.[26]

The description sound-bottomed suggests the bumper had a substantial base to it. The term bumper here refers to the glass itself, and perhaps thumper the action performed with it. A bumper is otherwise taken to be a glass which is filled to the brim and more, so that the surface of its contents is convex. The name is thought to come from the French bomber, to bulge out.[27] D'Urfey used the word bumper in 1677 in a song which describes a heavy drinking session, but with no mention of thumping:

Happy the Man that takes delight,
In Banquetting the Sences;
That drinks all day, and then at night,
The height of Joy commences.

With Bottles arm'd, we stand our ground,
Full Bumpers crown our blisses;
They rore and sing the Streets around,
In Serenading Misses.[28]

Dating firing glasses

It is not easy to attribute a firm date to most old drinking glasses. Many experts quote the date when a particular style of glass was apparently first made, but most styles were produced for a generation or more and almost certainly did not suddenly come into or go out of fashion, so a single date does not give the full picture. Unlike ceramics, glass seldom bears identifying

[26] J. T. Thorp, 'Masonic Convivialities.' In *British Masonic Miscellany*, compiled by G. M. Martin (Dundee: David Winter and Son, undated), xii and 107.
[27] C. Brewer, *The Dictionary of Phrase and Fable* facsimile of 1894 enlarged and revised edn. (Leicester: Galley Press, undated), 187.
[28] T. D'Urfey, *Madam Fickle: or the Witty False One.* (London: T. N. for James Magnes and Rich. Bentley, 1677), 52.

marks, so evidence for the date must be sought elsewhere. One glass historian described the problem:

> It may be said that the history of English glass divides itself into two periods. For the first [pre-eighteenth century] we have abundant documentary evidence – patents for new processes ... to say nothing of notices in contemporary journals and memoirs – but against this an almost total absence of examples of the glass actually made ... In the second period, on the other hand – and this includes nearly the whole of the eighteenth century – the documentary evidence almost completely fails us; but in its place a fairly rich material harvest is available.[29]

Another thought it was useless for experts to disagree when attempting to date antique drinking glasses because 'The data available for constructing a reliable record of the provenance and succession of English drinking glasses are so few, and in some cases, so uncertain.'[30]

The dates given for firing glasses illustrated here should be regarded as reasonable approximations, except for those few to which dates can be ascribed more accurately. Reference books on antique glass give different opinions regarding when specially designed firing glasses were introduced, though frustratingly they do not cite evidence or say if these glasses were used by Freemasons. Hughes says the thumping foot (a tumbler would not be described thus, and he does not call it a firing glass) can be traced back to 1710,[31] and Francis records a firing glass dating to before 1720.[32] The earliest firing glass illustrated by Bickerton is described as belonging to the Beefsteak Club in London and dating to 1720,[33] but The Sublime Society of Beef Steaks, identifiable by its motto 'Beef and Liberty' engraved on the glass, was not founded until 1735.[34] Another author puts the introduction of firing glasses at 1730.[35] An older work dates them from the end of the first quarter of the eighteenth century.[36] Hughes later writes it is highly improbable that straw-shanked (two-piece plain stem) glasses with thickened feet were ever used for thumping until after the introduction of the annealing

[29] E. Dillon, *Glass* (London: Methuen and Co., 1907), 300-1.
[30] H. J. Powell, *Glass-making in England* (London: Cambridge University Press, 1923), 47.
[31] Hughes, *English, Scottish and Irish Table Glass*, 231.
[32] G. R. Francis, *Old English Drinking Glasses: their chronology and sequence* (London: Herbert Jenkins Ltd, 1926), 118.
[33] L. M. Bickerton, *Eighteenth Century English Drinking Glasses: an Illustrated Guide* 2nd edn revised (London: Barrie and Jenkins Ltd, 1986), 323.
[34] W. Arnold, *The Life and Death of the Sublime Society of Beef Steaks* (London: Bradbury, Evans & Co., 1871), 2.
[35] Ash, *Dictionary of British Antique Glass*, 105.
[36] A. Hartshorne, *Antique Drinking Glasses: a Pictorial History of Glass Drinking Vessels*. Reprint *of Old English Glasses: an Account of Glass Drinking Vessels in England from Early Times to the End of the Eighteenth Century* (London: Edward Arnold, 1897), (New York, Brussel and Brussel, 1968), 323.

tunnel (1740s), as oven-annealed glass stems could not possibly have stood the use.[37] The earliest firing glasses in my collection date from around 1730-40, are of a style not seen later in the century, and are undecorated.

Fig 4: Left: a bell bowl firing glass with a thickened teared base, on a flattened knop (a swelling in the stem) set on a solid conical foot, in a dark metal showing tool marks. Right: a narrow bell bowl firing glass, on a flattened teared knop set on a terraced foot. Both glasses *c.* 1730-40.

Firing by Masons and use of the term firing glass

Anderson's *Constitutions* of 1738 tells us that on 24 June 1719, Dr John Desaguliers was proclaimed Grand Master and '... forthwith reviv'd the old regular and peculiar Toasts or Healths of the *Free Masons*.'[38] The use of the word 'reviv'd' tells us these toasts had been practised previously, and the fact they were peculiar as well as regular hints there was something special about them: could this have been firing? Early descriptions of the toasting procedure, including the gestures but not the term firing to refer to the glass-banging, appeared in 1737 in the French exposure *Réception d'un Frey-Maçon*[39] and in a very similarly worded account of the proceedings of a lodge in Paris in 1738 in *The Gentleman's*

[37] Hughes, *English Glass for the Collector*, 71.
[38] Quatuor Coronati, 'Masonic reprints of the Lodge Quatuor Coronati No. 2076, London: the New Book of Constitutions, by James Anderson D.D., MDCCXXXVIII, in the Vulgar Year of Masonry, 5738, with an Introduction by William James Hughan, P.M.' *AQC* 7 (1890), 110.
[39] H. Carr (ed) *The Early French Exposures* (London: Quatuor Coronati Lodge No. 2076, 1971) 8 and 38.

Magazine.[40] Freemasonry travelled from England to France in the 1720s and 1730s, and the latter is thought to describe an English Masonic ceremony.[41]

When was the term 'firing glass' first used by Freemasons? *Réception d'un Frey-Maçon* (1737) describes the toasting procedure on two separate pages; one suggests the glasses are called firelocks, but the other does not name them. The *Gentleman's Magazine* (1738) calls them firelocks. *Three Distinct Knocks* (1760) does not attribute any specific name to the glasses used, and the term firing glass does not seem to have been used in period advertising. The first American advertisements for Masonic glasses, which were imported from Britain, included 'Engrav'd Free Mason glasses (1761), Right Free Masons (1769) and Truly Masonic heavy-bottomed wines, well adapted in part to celebrate the ever glorious St. Johns (1790).'[42] When firing glasses were presented to Neptune Lodge No. 22 in 1836 and 1842, they were referred to as drinking glasses.[43] A search of English Masonic periodicals for the first reference to firing glasses yielded a date of December 1842, when '... four dozen beautiful cut firing glasses' were presented to The Worcester Lodge.[44]

The above accounts do not tell us if glasses of any particular material were used, but later French exposures do. *La Désolation des Entrepreneurs Modernes du Temple de Jerusalem* (1747) states:

> the beakers from which they drink are Cannon (which are Crystal Goblets, because ordinary glasses would not be strong enough to withstand the treatment that they get) ... a great blow, which they give all together on the Table with their *Cannon*.[45]

The term crystal might refer to a transparent form of quartz called rock crystal, or to a type of fine clear soda-based glass of the type made in Venice; the first record of English lead glass, otherwise known as lead crystal, being produced in France was not until 1784.[46] *Le Maçon Démasqué* (1751) calls the glass a cannon rather than a firing glass, and says it is an ordinary goblet, but with a thick bottom so it can be banged hard on the table. An illustration shows it to be a tumbler.[47]

---

[40] S. Urban, 'The Secret of the Order of Free-Masons, and the Ceremonies observed at the Reception of members into it', *Gentleman's Magazine* 8 (1738), 54-5.
[41] C. Powell, 'An English Masonic Ceremony Description Published in January 1738' *AQC* Vol. 137 (2024), 334-7.
[42] Stuart, 'Masonic Glass in England', 43.
[43] F. W. Golby, *History of the Neptune Lodge of Ancient Free and Accepted Masons 1757-1909* (London: privately printed, 1910), 86.
[44] *The Freemasons' Magazine and Masonic Mirror* July 16, 1870, 41-2.
[45] Carr, *The Early French Exposures*, 367-8.
[46] Brooks, *The Arthur Negus Guide*, 30.
[47] Carr, *The Early French Exposures*, 472-3.

Dating an individual firing glass

In addition to using the guidance from specialist books, another way to date the firing glasses used by Freemasons is to examine glasses which have Masonic engraving on them. A word of caution here. When you attempt to date an engraved glass, you are seeking two dates: the date when the glass was made, and the date when the engraving was done. Quite clearly, the glass must have been made first and the engraving done afterwards, but there can occasionally be a misleadingly big difference between the two dates. The only safe conclusion is that the engraving was probably correct at the time it was done.

From the late seventeenth century, continental engravers decorated glassware with stippling, diamond point or wheel engraving, but the first two styles are seen much more rarely than wheel engraving on English firing glasses. Wheel engraving started to be carried out by English engravers around 1725[48] to 1735,[49] with several engravers established in London by the 1750s,[50] but a purely English school of engraving did not arise until about 1760.[51] In wheel engraving, the glass is cut by applying an oily abrasive to a rotating spindle-mounted copper wheel, originally powered by a foot treadle. The size and shape of the cut are determined by the diameter and width of the wheel.[52] The cuts could be left matt, or from about 1740 polished using progressively finer abrasives, a practice which became commoner as the century progressed.[53] Polishing was generally applied to Masonic symbols rather than to engraved lettering.

It might be hoped that engraving would be present on most Masonic firing glasses and enable their provenance to be established easily and accurately, but until the end of the eighteenth century and for most glasses, this is far from the case. Stuart observes that little Masonic engraving is seen on drinking glasses before about 1760, which is surprising considering secretive Jacobites had engraved glasses from around 1740.[54] This early engraving is predominantly of Masonic symbols rather than the name or number of a lodge. It can be rather crudely done and often takes the form of the square and compasses, which are easier to engrave as they consist largely of straight lines.

[48] Bickerton, *Eighteenth Century English Drinking Glasses*, 30.
[49] R. J. Charleston, *English Glass and the Glass used in England, circa 400-1940* (London: George Allen and Unwin, 1984), 152.
[50] D. P. Lanmon, *The Golden Age of English Glass*, 136-9.
[51] E. B. Haynes, *Glass through the Ages* reprinted revised edn (Harmondsworth, Middlesex: 1966), 205-7.
[52] Charleston, *English Glass*, 150.
[53] Hughes, *English, Scottish and Irish Table Glass*, 141-2.
[54] Stuart, *Masonic Glass in England*, 39.

Examples of early firing glasses with Masonic engraving date to around 1750-60. The arrangement of the Masonic symbols on them is unusual. The stemless firing glass shown in Figure 5 is engraved with a variety of symbols, not all of which are obviously Masonic. A flaming sword is a Masonic symbol, but the heart pierced by an arrow is not commonly associated with Freemasonry.

Fig 5: Two views of a stemless firing glass. Left: engraved with a square, a plumb rule, a level, plumb line, compasses, mallet and trowel. Right: diametrically opposite a wavy (flaming) sword, and a heart pierced by an arrow. Several details are polished, and the engraving is crisp and of fine detail, *c.*1750.

The high quality of the engraving and the polished symbols suggest this glass may have been engraved later than it was made, especially when compared with the engraving on the slightly later glass shown in Figure 6. Stuart also notes that few glasses have lodge numbers before about 1790. The earliest Masonic firing glass in my collection with a lodge number is engraved with the square and compasses and No. 329 (Figure 6). *Lane's Masonic Records* shows the earliest date this number was held, and by which lodge - it was held by a Norfolk lodge which was consecrated in 1764 and renumbered in 1770.[55] The number 329 might relate to a later lodge, though the appearance of the metal and of the pontil mark, the conical foot and overall style are all consistent with this date.

[55] J. Lane, *Masonic Records 1717-1894* (London: Edward Letchworth 1895), 138.

Fig 6: Left: an ovoid bowl plain stem firing glass, engraved with a square (splayed to 115°), compasses with arms of unequal length, and a plumb rule. Although a detail on the latter is polished, this and the engraving are rather crudely done, *c.*1760. Right: a plain stem flared trumpet bowl firing glass, engraved with N°. 329 and a small square and compasses, *c.*1765.

Fig 7: Left: a facet cut stem ovoid bowl firing glass, engraved with R.A. Maybole, N°. 264 and a small square and compasses, 1797-1814. Right: a plain stem round funnel bowl firing glass, engraved with Bezaleel, Select, Lodge, N° 179 and an inverted square and compasses, 1804-17.

The earliest glasses I have which I can firmly identify as belonging to lodges date from later. One is Scottish, and another Irish; the Scottish glass, which despite its name bears the square and compasses, comes from Lodge Royal Arch No. 264, founded in Maybole, Ayrshire, in 1797 and renumbered in 1814.[56] The Irish glass comes from Bezaleel Select Lodge, which held the number 179 from 1804-17.[57]

Early examples which can be dated and attributed to specific English lodges include those from Hiram's Lodge No. 458 and Alfred Lodge No. 649, both of which held their numbers from 1814-32.

Fig 8: Left: a plain stem trumpet bowl firing glass, engraved with Hirams Lodge N°. 458, the sun and moon, and the square and compasses enclosing the letter G, 1814-32. Right: an ovoid bowl firing glass on a very thick plain stem and flat foot, engraved with Alfred Lodge Oxford 649, and No in tiny diamond point script, the square and compasses, a level and plumb rule, sun and moon, 1814-32.

From the late eighteenth century, Masonic engraving is seen more commonly on firing glasses, and in addition to the square and compasses may include other Masonic symbols, especially the sun, the moon and stars, the jewels of the Master and Wardens, a trowel, heavy maul, the name of the lodge or rarely of one of its members, and very occasionally a date, but pillars, a pedestal, and volume of the sacred law are uncommon. In general, the quality of the engraving also improves, and the engraved symbols are more often polished. Engraving is only useful in helping to establish the date of a Masonic firing glass if it includes the date, the name or number of a lodge, or the name of a person. Otherwise,

[56] *Freemasonry in Maybole*. Available at: http://www.maybole.org/history/books/carricks%20capital/freemasonry.htm#google_vignette. (Accessed 21 November 2024).

[57] *British Military Lodges. Grand Lodge of Ireland-Warranted Military Lodges*. Available at: https://www.1723constitutions.com/wp-content/uploads/2021/02/British-Military-Lodges-1.pdf. (Accessed 21 November 2024).

additional information is needed. This can be sought from the appearance of the metal, the pontil mark and particularly the style in which the glass was made, but it only yields approximate dates.

The appearance of the metal can give a rough guide as to the age of a glass but is a blunt instrument. Imperfections may be seen in any drinking glass made by the process described above. Early eighteenth-century glass often contains small pieces of undissolved raw materials or impurities known as seeds, and has a faint greyish tinge, inherent in its ingredients.[58] This becomes less common by the third quarter of the century. Manipulation of the molten metal can cause horizontal striations and flow lines and vertical toolmarks in the bowl. might also be present.[59] An antique drinking glass will usually show signs of natural wear on the underside of its foot, and of course firing glasses were likely to receive more wear than others because of how they were used.

A feature of any hand-made glass which is not an imperfection is the pontil mark. This is a small, circular, rough and sometimes quite sharp raised scar in the centre of the underside of the foot, left when the finished glass is detached from the pontil iron. Evidence of it is present in any glass made in the way described above, including modern glasses. At some point, glassmakers began to grind out the pontil mark and polish the saucer-shaped depression that resulted.

Fig 9: The underside of the feet of two late eighteenth-century firing glasses, that on the left with a rough pontil mark and a conical foot, that on the right with the pontil mark polished out, and a flatter foot.

Experts give different dates for when this practice began, ranging from around 1750 to 1775. Like other modifications in the way glasses were made, polishing out the pontil mark would

[58] Hughes, *English, Scottish and Irish Table Glass*, 50-4.
[59] Brooks, *The Arthur Negus Guide*, 34-9.

probably have taken some years after it was introduced to become widespread. By the turn of the century, it was used increasingly, especially on glasses with facet cut stems, following the introduction of improved cutting and polishing techniques. Removing the pontil mark allowed the foot to change from a conical to a flatter, more disc-like one. After around 1800, a few firing glasses have the whole of the underside of the foot polished.

Changes in style

In the eighteenth and early nineteenth century, drinking glasses were made in different shapes and styles, principally for two reasons. Firstly, different shapes were adopted for glasses used for different drinks. For example, the bowl of the ale glass was tall and relatively narrow to allow sediment to settle to the bottom. Wine glasses had bowls which were often trumpet or funnel shaped, ovoid or rounded. Dram glasses for the drinking of spirits were commonly scaled down versions of standard wine glasses. The second reason for the difference in appearance of glasses, and one which is much more relevant in dating firing glasses, was the alteration in style, and particularly in stem type, as fashions changed and glass-making techniques evolved over the years.

The most widely used classification of eighteenth-century glasses is based on the stem formation of wine glasses rather than firing glasses and works well until the last quarter of the century.[60] It has the advantage that the stem forms follow each other in chronological order, albeit overlapping. The wine glass is parent to the dram glass, which is the cousin of the firing glass, so this classification can be applied to the dating of stemmed firing glasses. It has the added benefit that a simple inspection will immediately allow a rough estimate to be made of the date when certain glasses were made. The principal types of eighteenth-century wine glass stems are listed below and shown in Figures 10 and 11. For simplification, I have rounded estimates of the date ranges when they were widely produced from the reference books by Haynes[61] and Bickerton:[62]

Plain stem glasses	1730 to 1775
Air twist stem glasses	1745 to 1770
Opaque twist stem glasses	1755 to 1780
Facet cut stem glasses	1760 to 1820

[60] Haynes, *Glass Through the Ages*, 205-7.
[61] Haynes, *Glass Through the Ages*, 245, 254, 267 & 284.
[62] Bickerton, *Eighteenth Century English Drinking Glasses*, 13-15.

There is considerable overlap between the dates when different styles were popular, and even experts disagree. An estimate of the date might be out by ten years or more in either direction.

In plain stem glasses, the stem consists of a simple unmodified column of glass. It is by far the commonest type seen on firing glasses (Figure 12) and persisted into the nineteenth century, well beyond when it was used for wine glasses, so this classification although easy to apply is of limited use in dating them.

Fig 10: Left: a plain stem round funnel bowl wine glass; height 14.3cm, weight 123g, *c.*1740. Right: a drawn trumpet bowl wine glass on a multiple spiral air twist stem, *c.*1750.

Fig 11: Left: an ogee bowl wine glass on a double series opaque twist stem, *c.*1765. Right: a pan topped round funnel bowl wine glass on a facet cut stem, *c.*1785.

Fig 12: Left: a plain stem trumpet bowl firing glass with a substantial firing foot, engraved with the square and compasses enclosing a star, level, plumb rule and trowel, *c.*1765. Right: a plain stem funnel bowl firing glass, engraved with the square and compasses enclosing a letter G, a sun and moon, and L=6=F, possibly for the Lodge of Friendship.

Air twist stems are made by introducing small bubbles of air into the molten metal and twisting it as the stem is drawn out. They are most commonly seen in two-piece glasses, in which the bowl and stem are formed from a single gather with a separate foot, and are less common in three-piece glasses, in which the bowl, stem and foot are made separately. Air twist stem firing glasses are uncommon.

Fig 13: Left: a drawn trumpet bowl firing glass on a multiple spiral air twist stem. Right: a bell bowl firing glass on a multiple spiral air twist stem, the spiral extending into the base of the bowl, both glasses *c.*1750.

To make opaque twist stems, a series of coloured (most commonly white, other colours are very rare) glass rods are set into a mould which is then filled with molten glass. This is removed when set and coated with colourless glass which is then reheated, twisted and drawn out, perhaps to a length of sixty or seventy feet, before being cut into the desired length[63] (rather like seaside rock). One layer of rods is used for the rarer single series opaque twist stem, and two layers for a double series.

Fig 14: Left: an ogee bowl firing glass with a single series opaque twist stem on a terraced foot, *c.*1765. Rear: a trumpet bowl firing glass with a double series opaque twist stem, *c.*1770. Right: an ogee bowl firing glass on a double series opaque twist stem with a terraced foot, engraved with the square and compasses and Mother Kilwinning, *c.*1770.

Fig 15: Left: an ovoid bowl firing glass on a facet cut stem, the cutting extending halfway up the bowl. Right: a funnel bowl firing glass on a facet cut stem, the facets extending onto the base of the bowl, which is decorated with cut and polished swags, both glasses *c.*1785.

[63] Brooks, *The Arthur Negus Guide to British Glass*, 59-60.

There are other stem styles of eighteenth-century drinking glasses, but these are rarer and seldom if ever associated with firing glasses. This classification cannot of course be applied to a glass that does not have a stem, including some firing glasses in which the bowl is set directly onto the foot, or to firing tumblers, which have neither a stem nor a foot.

The bowls of firing glasses come in several different shapes.[64] The trumpet and funnel bowls are by far the commonest on plain stem firing glasses in the eighteenth century, but ogee bowls are commoner on opaque twist stem firing glasses, and round funnel or ovoid bowls predominate on facet stem firing glasses. New bowl shapes appeared early in the nineteenth century. The terraced foot (not all are firing feet) is a distinctive feature of drinking glasses that appeared first on dram glasses from about 1720 and is not uncommon on plain stem firing glasses from around 1730 up to 1770, so its presence scarcely narrows the date range. Terraced firing feet are common on opaque twist stem firing glasses, but again this does not help in dating as these glasses already have a narrow date range. The flanged foot is only seen on firing glasses, perhaps exclusively those with plain stems, and dates from around 1770 to the early nineteenth century, so the presence of a flanged foot also adds little to the dating estimate.

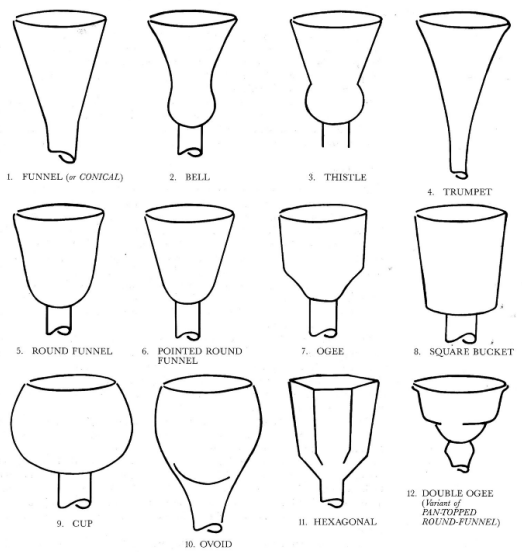

Fig 16: A diagram illustrating the types of bowls commonly found on eighteenth-century drinking glasses in general. Some types, such as the hexagonal and double ogee, occur rarely if at all on firing glasses.

[64] Bickerton, *Eighteenth Century English Drinking Glasses,* 29.

Masonic glass was not confined to England, and German or Bohemian firing glasses can occasionally be found. Their late nineteenth-century glasses are much taller than our Georgian glasses, and the rim is usually ground flat; the presence of this on an English glass would suggest it had been trimmed to remove chips.

Fig 17: Left: a German firing glass with a tall waisted bowl with a teared base set directly on the foot, decorated extensively with gilded Masonic symbols, *c.*1800. Right: a large Bohemian funnel bowl firing glass, the rim ground flat, set on a substantial bulb base cut with five-sided facets, decorated extensively with Masonic symbols, late nineteenth-century.

Firing glass tumblers

Firing glass tumblers mostly come in two bowl shapes: the waisted bowl, and the slightly tapering or straight sided. Both types are characterized by a thick base, which can be anywhere from a quarter to a third or more of the overall height of the tumbler. They first appeared around 1740 to 1750, became commoner from around 1770, and were produced until at least the late nineteenth century. Most have the pontil mark ground out after about 1800. Any waisting tends to be more pronounced in later glasses.

Fig 18: Left: a slightly waisted firing tumbler, engraved with an emblem resembling the jewel of a Grand Master, *c.*1765. Right: a straight sided firing tumbler, engraved with the square and compasses enclosing the number 680, and FAITHFUL, the lodge which bore this number from 1816-32.

An example is the glass donated by William (later Sir William) Preece, a distinguished pioneer of telegraphy and telephony, to New Forest Lodge No. 401 (now 319) when he was Junior Warden, an office to which he was appointed in 1860.[65] The Lodge of the Three Grand Principles No. 441 (after 1863) has carried the functional design of the waisted bowl firing glass tumbler to the extreme. Its glasses cannot be used at all for drinking, as they are solid glass with just a small dimple in the top.

Fig 19: Left: a firing tumbler showing pronounced waisting, engraved with the square and compasses enclosing the number 401, and GIFT OF BR. PREECE JW, *c.*1860. Right: what appears to be a waisted bowl firing tumbler, but is actually solid glass with a dimple in the top, engraved with the number 441 held by the Lodge of The Three Grand Principles after 1863.

[65] *The Freemasons' Monthly Magazine*, July 28, 1860, 71.

An uncommon and distinctive form of firing glass tumbler has a thick-walled cup shape bowl, sometimes decorated with printies (circular or oval wheel cut depressions) round the base. Figure 20 shows some which date from around 1864-1870. One is flashed in blue. Flashing is the coating of colourless glass with a thin layer of coloured glass, which is then cut to reveal the base layer.

Fig 20: Three thick-walled cup shape firing tumblers. Left: one with blue flashing and basal oval printies, engraved with a level and two stars, and the square and compasses enclosing the number 1036 of Bowyer Lodge, consecrated in 1864. Rear: a taller glass, cut with basal oval printies and engraved with a pentagram, plumb rule and level, and the square and compasses enclosing the number 1250 of Gilbert Greenall Lodge, consecrated in 1869. Right: a firing tumbler engraved with the square and compasses above Scarsdale 681, a lodge whose inventory recorded forty firing glasses being added in December 1870.

The absence of a stem or foot on a tumbler makes it hard to estimate when the glass was made, so dating is based on the appearance of the metal and the pontil mark, and to some extent the shape of the bowl. Experience is valuable, but even experts can be tested. In his monograph on tumblers, one of the country's most respected glass specialists illustrated a waisted bowl firing tumbler, engraved with the square and compasses and Lodge of Unity No. 71, which he dated to *c.*1780.[66] In fact, this lodge was not so named until 1811, and did not acquire the number 71 until 1863, so either he got the date of the glass wrong, or it was engraved more than eighty years after it was made, which is unlikely but not impossible.

From around the turn of the eighteenth century, new styles of firing glasses began to be made. Some resembled existing larger ordinary drinking glasses, but others were of new designs altogether. An uncommon type of firing glass is based on the rummer, a glass with a

[66] J. A. Brooks, *Glass Tumblers 1700-1900* (Leicester: A. B. Printers Ltd, 1987), 7.

large bowl, a rudimentary stem, and a foot often narrower than the bowl. Rummers were produced from around 1780 for about a hundred years. In rummer-style firing glasses, the bowl is a scaled down version of that on the parent glass but often thicker, the stem is proportionately thicker, and the foot is wider than the bowl, and thicker. I have only seen an ovoid bowl on a rummer-style firing glass.

Fig 21: Rear: a rummer with an ovoid bowl on a short capstan stem, the foot narrower than the bowl, which is engraved with multiple Masonic symbols, *c.*1810. Left: a rummer style firing glass, the ovoid bowl thicker than on the full-sized version and engraved with a level, on a very short stem and a substantial foot wider than the bowl, *c.*1800. Right: a rummer style firing glass with an ovoid bowl thicker than on the full-sized version and engraved with LODGE OF HARMONY, on a short stem, the foot and bowl of similar diameter, *c.*1800.

Styles particular to firing glasses

Another new style of firing glass, which had no previous counterpart, is illustrated in Figure 22. All three glasses shown have a thick-based bucket bowl over a large, flattened knop (a swelling on the stem, sometimes replacing it) on a thick, disc-shaped foot. Two can be dated accurately. The one from Temperance Lodge No. 281 is engraved with the date 1830. That from Neptune Lodge No. 22 can be dated from records which show that in 1836 Bro. S. Stevens donated to the lodge twenty-four Masonic drinking glasses engraved with the figure

of Neptune and 22, and in 1842 Bro. F. Walker donated twelve similar glasses.[67] The third glass is engraved with the number 198 which the lodge had from 1832-63, but its similarity in style suggests it dates to the early part of this period. This is one of the heaviest firing glasses in my collection, it weighs as much as a can of soup.

Figure 22: Rear: a firing glass with a thick-based bucket bowl engraved with LODGE OF TEMPERANCE and 198 on a flattened knop on a very thick foot, c.1840. Left: a firing glass with a thick-based flared bucket bowl engraved with LODGE OF TEMPERANCE, the square and compasses enclosing the number 281, and PRESENTED BY BRO^{s} W^{m} BROOKS AND T. BICKFORD W. M above 1830 on a flattened knop and thick foot. Right: a firing glass with a thick-based bucket bowl finely engraved with the figure of Neptune above the number 22 on a flattened knop and thick foot, 1836-42.

Around the middle of the nineteenth century, a design of firing glass emerged which has remained popular since and has supplanted most other styles. It has a funnel bowl on a large bulb of glass as the base, but no stem. Writing in 1897, Hartshorne described this as a new form.[68] Stuart states that no glass of this shape has enumeration preceding 1863,[69] but an earlier glass close to this style was presented in 1856 to Leinster Lodge No. 387 (Irish Constitution) in Malta by the Lodge of Integrity No. 771 (English Constitution).[70]

[67] Golby, *History of the Neptune Lodge*, 86.
[68] Hartshorne, *Antique Drinking Glasses*, 323.
[69] Stuart, *Masonic Glass in England*, 47.
[70] A. M. Broadley, *History of Freemasonry in the District of Malta from the year 1800 to the Present Time* (London: George Kenning, 1880), 46.

Fig 23: Left: a firing glass with a funnel bowl set directly on a bulb foot, the bowl engraved with the square and compasses enclosing the number 387 and PRESENTED TO THE LEINSTER LODGE BY THE LODGE OF INTEGRITY N° 771 E.R., *c.*1856. Right: a firing glass with a funnel bowl set directly on a thick, rounded foot, the bowl engraved with the square and compasses enclosing the number 211 (that of St. James' Union Lodge from 1832-63), and 1842.

A glass from St. James' Union Lodge, then No. 211 (now 180) is engraved with the date 1842 and may represent a transition between this style and that of the traditional stemmed firing glass. Later in the century, the bowl became bigger and more flared, and the bulb base rounder and bigger. In modern versions, the bowl is only slightly flared, and its unnecessarily large size suggests the glass is not intended for drinking toasts before firing, but purely for the firing itself or as a keepsake.

Fig 24: Left: a firing glass with a funnel bowl set directly on a large bulb foot, the bowl engraved with PRESENTED BY BRO. J.H. WHADCOAT W.M. 1894 outlined on an acid etched background. Right: a modern firing glass with a tall, thin funnel bowl set directly on a bulb foot, the bowl engraved with the square and compasses, the arms of the Province of Yorkshire North & East Ridings, presented to the author as Provincial Lecturer 2007.

Fig 25: Left: a firing glass of unusual style, the funnel bowl blending into a thick stem swelling smoothly into the foot, the bowl engraved with the square and compasses above ALL SOULS, early nineteenth century. Right: a firing glass of unusual style, the straight sided bowl swelling into a thick, rounded foot, the bowl engraved with PRESENTED BY. BR° T. WILLIAMS S.D 1864 and a garter inscribed MAYBURY LODGE surrounding a square and compasses enclosing the number 969.

Press moulded glass

A distinctive style of firing glass emerged with a new method of shaping glass which evolved in the United States in the 1820s. This was press-moulding, in which molten glass was dropped into a metal mould and shaped by being pressed against it by a metal plunger. The first glass press in England was installed in 1833, and technical improvements followed over the decades.[71] From 1842 new patterns and designs could be officially registered. These can be identified from the diamond-shaped registration marks incorporated into the mould from then until 1884, when simple registration numbers were substituted.[72] I have only seen one pattern of press moulded Masonic firing glass (Fig 26). The diamond mark on its base indicates the design was registered on 21 January 1879, by Ramsey of London. He was a glassmaker in Farringdon Street, who from 1869 advertised his wares in the Masonic press, calling himself Bro. William Ramsey[73] even though he was not initiated (by George Kenning, into Lion and Lamb Lodge No. 192)[74] until March 1871.

[71] Hughes, *English Glass for the Collector*, 160-71.
[72] Brooks, *The Arthur Negus Guide*, 155-6.
[73] *The Freemason*, March 13, 1869, 8.
[74] *The Freemason*, March 18, 1871, 166.

Fig. 26. Left: a press moulded firing glass with moulded square and compasses. Right: the diamond registration mark moulded into the centre of the underside of the foot, showing R^{D}, RAMSEY and LONDON, *c.*1879.

Firing glasses in other organisations

Firing glasses were not used exclusively by Freemasons, but also by other clubs, societies and organisations, examples of which are given below. These can only be identified if the glasses have some decoration which links them to their users. A good number of firing glasses are completely plain, and it is not possible to attribute them to any particular body, but as Freemasonry was the most widespread, it is not unlikely they were used in our lodges.

A history of the Sublime Society of Beef Steaks, whose firing glass was mentioned earlier, contains scattered references to drinking bumpers, but no specific mention of firing or firing glasses.[75] The Jacobites also had firing glasses in the mid-eighteenth century, which can be identified by engraved cryptic symbols, mottoes, and portraits - over 140 Jacobite clubs have been recognised which may have used them.[76] Jacobite firing glasses are rare, attract high prices, and are unlikely to come readily into the hands of ordinary collectors. Fig 27 shows two firing glasses which are engraved with the name of a hunt. The Gorvin Hunt was founded in North Devon in 1769, and an antiquarian member of the Devonshire Association wrote that its firing glasses '... were made with exceptionally heavy and strong stems and feet, with

[75] Arnold, T*he Sublime Society of Beef Steaks.*
[76] G. B. Seddon, *The Jacobites and their Drinking Glasses* (Woodbridge, Suffolk: Antique Collectors' Club Ltd, 1995), 57-69 and 95-137.

the object of preventing breakage when they were banged on the table after drinking the toast of "The Gorvin Hunt".[77]

Fig 27: Left: a funnel bowl firing glass on a rather slender plain stem, the bowl engraved with ATHBOY HUNT[78]; height 11.2cm, weight 161g, *c.*1790. Right: a plain stem ovoid bowl firing glass, engraved with a rose and GORVIN.HUNT,*c.*1769.

Fig 28 is an image of a glass from George Heriot's Hospital, later school. The School Librarian stated the glass from George Heriot's School in Edinburgh was for the governors and headmaster to use at dinners and is presumed to have been used for firing. The exact date it was made is unknown but was said to be between 1710 and 1810, but probably close to the latter. The glass engraved with the Roman numerals XXVIII is something of a mystery. Only two lodges have used Roman numerals with any consistency: Royal Somerset House and Inverness Lodge No. IV, and Enoch Lodge No. XI. Alpha Lodge bore the number 28 from 1791 to 1813 and subsequently became Royal Alpha Lodge No. 16. John Hammill, formerly Librarian and Curator of Grand Lodge's Library and Museum, told me he had handled a considerable number of artefacts which might have been related to the lodge, but found no evidence to suggest the glass belonged to it. Roman numerals were also used by the 28th Regiment of Foot (the North Gloucestershire Regiment) in the Georgian period; the Curator of the regimental museum suggested they had no record of using firing glasses or any in their museum and that the glass might have been owned by an officer who wished to be reminded of the regiment.

[77] R. P. Chope, 'The Gorvin Hunt', *Notes and Queries* Twelfth Series, vol. 3 January-December (1917), 364.
[78] Athboy is in County Meath, and the Athboy Hunt firing glass dates to around 1790. I have not been able to find out anything about this hunt, let alone its drinking and toasting habits.

Fig 28: Left: a plain stem funnel bowl firing glass on a flanged foot, the bowl engraved with the School crest surrounded by GEORGE HERIOT'S HOSPITAL above 1628 (the date the School was founded), late eighteenth century. Right: a large firing glass with a trumpet bowl blending into a thick stem, the base of the foot ground flat and polished, the bowl engraved with XXVIII, early nineteenth century.

Fig 29 shows another firing glass whose provenance is unknown. Almost the entire glass is engraved to resemble frosting, and its rim is ground flat. The latter is unusual on an English glass, but the inscription on the base (BOTTOMS UP) indicates it is indeed English and used in convivial society.

Fig 29: An unusual firing glass, the funnel bowl and bulb foot heavily frosted and with rope decoration, the rim ground flat, late 19th century.

Fig 30: Left: a firing glass with a funnel bowl on a bulb foot, decorated with gilded(?) lettering commemorating the formation in 1915 of the Provincial Grand Lodge of the Southern Counties of England in the Royal Order of Scotland;. Right: a straight-sided firing glass tumbler commemorating the 1999 Olde English Nite (sic) of the Lodge of Truth No. 521.

Eighteenth and nineteenth century Masonic firing glasses in my collection come from Craft lodges and not connected to another Masonic Order. More recent firing glasses which do come from other Orders or are commemorative. Most have a funnel bowl on a bulb base. Contemporary firing glasses may simply be diminutive straight-sided thick-bottomed tumblers with transfer-printed decoration. They are mass-produced, and consequently of little interest from the point of view of the glass collector.

Fig 31: Right: A firing glass with a funnel bowl on a bulb foot, engraved with Royal Arch symbols commemorating the bicentenary of Constitutional Chapter No. 294 in 1994. Right: A firing glass with a funnel bowl on a bulb foot, engraved with MALLET AND CHISEL R.A.M. NO. 5, and 50 on an equilateral triangle, perhaps to celebrate the 50th anniversary of the Royal Ark Mariner lodge of that name, founded in 1931.

Pitfalls in establishing the provenance of firing glasses

Anyone trying to establish the date when a firing glass was made, or attribute it to a particular lodge, may encounter problems related to the renumbering of lodges and the duplication of names, and misleading or misinterpreted engraving. I have a firing glass engraved with the square and compasses and No. 329, and another with Lodge of Harmony. Lane's *Masonic Records* shows that, because of renumbering, 329 was borne by no fewer than nine different lodges in the space of a hundred years, and the name Harmony was held by fifty-six different lodges.

Contacting the secretary of a potential source lodge is an obvious step to establishing provenance. It is sensible to submit a photograph of the glass. The best confirmation is when the discovery of identical glasses in the lodge's possession, but such an enquiry often draws a blank. It is not uncommon for lodge minutes to be lost, or not to record when firing glasses were acquired, probably because they only played a part in the after-proceedings and not the ritual. A written history of the lodge is only a little more likely to record a relevant date. Some lodges cannot supply information because they no longer exist.

As mentioned above, engraving on a firing glass was not necessarily done at the time the glass was made. An example of this is a firing glass from a set of seventeen presented to the Lodge of Harmony, Fareham, in 1840, when its number was 387. The glass is engraved with the number 309, which the lodge did not acquire until 1863, meaning the engraving was done at least twenty-three years after the glass was made. It could have been misidentified without this information, which was provided by the lodge's secretary. An even longer interval between the date of the glass and that of the engraving is evident in a firing glass engraved with the square and compasses and St John's 2811. The glass dates from the late eighteenth century, but the lodge was consecrated in 1900.

I have a firing tumbler engraved with the square and compasses and the number 230. The first of seven lodges which have held this number was consecrated in 1754 in Germany and closed within two years. The lodge's short life span and its distance involved make it unlikely the glass came from this lodge. Furthermore, the appearance of the metal, the marked waisting of the bowl and the fact the foot has been ground flat and polished over most of its surface are all consistent with a much later date. This example shows how important it is to consider all the information about a glass, and not just the number engraved on it, when trying to establish its date.

Fig 32: Left: a late eighteenth-century plain stem funnel bowl firing glass, engraved with S^{T} JOHN'S above 2811, the lodge consecrated in 1900. Right: a plain stem trumpet bowl firing glass, engraved with SUCCESS TO WIL^{M} & MARY, *c.*1765.

Another firing glass is an example of later engraving which proves useful. It is a waisted bowl tumbler, engraved with the square and compasses and the number 380. This number has been held by seven different lodges, which together with the style of the glass would have made its provenance hard to establish; but the glass has also been engraved with the number 303, and only one lodge has held both these numbers: Benevolent Lodge in Teignmouth, No. 380 from 1832-63, and 303 thereafter. The reason why a firing glass was engraved much later than it was made is not clear. One possible explanation is that it was too expensive to add the cost of the engraving at the time the glass was purchased.

An enthusiastic observer can misinterpret or place too much emphasis not just on the number, but also on the wording engraved on a glass, perhaps out of eagerness to establish its provenance or to identify it as important or rare. The engraving SUCCESS TO WIL^{M} & MARY on the firing glass above might suggest it dates to between 1688 and 1694 when these two monarchs reigned jointly, but glasses from that period are very rare and look different. Despite this, at least one author claimed the inscription proved firing glasses were produced as early as the late seventeenth century. In fact, it probably refers not to the joint monarchs themselves but to a royal yacht named after them, originally launched in 1694 and completely

rebuilt in 1765.[79] The glass is typical in appearance of that date, and may have been engraved to commemorate the new ship.

Forgeries and reproductions

It would almost certainly not be worth the cost and trouble of forging an antique firing glass, and the appearance of the metal and the absence of signs of natural wear on the foot would give the game away to an experienced observer. This emphasises the importance of being able to handle and inspect a firing glass when you want to assess it. A genuine period glass could become a forgery if it started life undecorated but was later embellished to increase its value. Mid-eighteenth century glasses, including firing glasses, are potential targets for having Jacobite engraving added, as Jacobite glass attracts a high price. An unremarkable firing glass engraved with Jacobite symbols and words will set you back thousands of pounds. Forgeries of this type are rare but not unheard of. There are modern glassmakers who make very good reproductions of Georgian drinking glasses, including firing glasses, but these are honest endeavours and not forgeries, and can be seen on their website.[80]

Conclusion: Collecting antique firing glasses

Antique firing glasses can be obtained from several sources, including antiques shops and general antiques fairs, live auctions and internet auction sites. Be cautious of the latter, as you cannot examine the glass properly. The best advice to an aspiring collector is to visit a good quality antiques fair where specialist dealers in glass will be standing. They usually welcome a genuine approach from an interested potential customer and are happy to share their knowledge and experience. They will often allow you to handle the glass, which is invaluable for getting a feel for the weight and balance and examining the metal closely, an experience it is impossible to gain from a book or a glass displayed in a museum. Do your homework first by consolidating your knowledge about antique glass; the book by John Brooks[81] is an excellent introduction and can be bought inexpensively online. Glass is a wonderful item to collect; it does not deteriorate or require polishing and can be kept in good display condition with a light dusting or occasional tepid bath. If you are interested in antiques as well as in Freemasonry, collecting antique firing glasses allows you to combine the two interests.

---

[79] *British Yacht 'William and Mary (1765)*. Available at: https://threedecks.org/index.php?display_type=show_ship&id=7417. (Accessed 6 January 2025).

[80] *The Glassmakers*, Available at: http://www.theglassmakers.co.uk/leadoxide.htm. (Accessed 29 October 2024).

[81] Brooks, *The Arthur Negus Guide to British Glass*.

This paper gives an account of the identification and chronology of eighteenth and nineteenth century firing glasses in general, and Masonic firing glasses in particular. It illustrates not only how different styles of Masonic firing glasses developed, but also how the engraved decoration on them evolved during the period in question. Although glass is a potentially fragile material, an intact antique firing glass will often look almost as good as the day it was made. Firing glasses that have survived can be a source of accessible and well-preserved information about the representation of Masonic symbolism from the eighteenth and nineteenth centuries. This paper also points towards areas for future research. These include comparing the engraving on Masonic firing glasses with that on other Masonic glass such as rummers and tumblers, and on materials other than glass, such as ceramics and silver.