

## Cowle Museum, Stroud.

LEAFLET No. 4.

ROMAN, SAXON AND 15TH CENTURY GLASSWARE.  
17TH, 18TH AND 19TH CENTURY BOTTLES

Glassware was imported into England during the period of the Roman occupation in considerable quantity both for drinking vessels and for windows, and such glass has been found in Gloucestershire. In the Stroud Museum there is a small glass bottle (Unguentarium) which was dug up at Pitchcombe, in which cosmetics were imported from Rome.

A beautiful glass bowl has been found on the site of the Hucclecote Villa near Gloucester, but the only fragments of a glass vessel of this period in this museum come from near Lechlade and from the side of the rampart, known as the Bulwarks, on Minchinhampton Common.

In Anglo-Saxon times glass was once more imported into this country and, as might be expected from its nearness to the Continent, Kent is the county in which the largest number of glasses of this period have been found. Others have been discovered near Cambridge and Oxford and in Northamptonshire, Suffolk and Sussex. Early in 1939 a glass tumbler was dug up in the grounds of Sudgrove House near Miserden, which is very like a specimen in the Dover Museum. It is 1.4 inches high and has a lip, whose external diameter measures 2.8 inches. The only damage which this has suffered is that a piece has been broken off from the lip.

There is a record that in 1226 there existed a house for the making of glass at Chiddingfold in Surrey and glass continued to be turned out from here in the 16th century.

Such glass houses were temporary structures of wood with large openings in the roof to allow for the escape of smoke. In order to make glass two ingredients are necessary, sand and an alkali, when these are roasted together in a furnace they fuse and form glass. The alkali used by these 16th-century glass makers was obtained by burning the wood of beech-trees and then placing the ashes in

cauldrons of water. The solution thus obtained yielded, on evaporation, crude Carbonate of Potash, the alkali required.

Brake fern cut when green, if treated in the same way, gave the same alkali.

Sand not only contains the Silica, which combines with the alkali to make glass, but usually some compound of Iron as well and this gives the glass the green tint, so commonly seen in ancient glass and in bottle glass to-day.

The mixture of sand and alkali was placed in a crucible which was put into a kiln and roasted over a coal fire.

Though Surrey and Sussex may have been the first counties to have glass works in them the glass industry spread to others where the desired beech trees grew. For we know that some were in the New Forest and in the 16th century there was one in what is now Collier Wood, Inchbrook, Nailsworth, near Stroud, where there is sand in abundance. The site of a glass house at this spot was laid bare early in the 20th century and the bases of glass kilns discovered. During the excavations great quantities of charcoal were found, many fragments of crucibles, innumerable bits of green glass and much slag. In all the scrap heaps the window glass fragments are, with few exceptions, of a greenish tint and of broad or sheet glass. It was found possible to build up some of the drinking vessels from their fragments, so Mr. B. Marmont who unearthed them, sent them to the glass-making firm of Powells in Whitefriars and they made many replicas. Several of these are to be seen in this museum.

Some of the glasses were decorated with little glass rosettes or "prunts" and many of these are on view. Besides the drinking glasses there are fragments of a thick object and a mushroom-shaped reconstruction of the article from which they came. This may have been used for a pestle or to smooth linen after it had been washed and so was the "iron" of the 16th and 17th centuries.

One result of building these glass houses in England was the extensive deforestation which occurred. As a consequence of this the use of wood as fuel for glass houses was ultimately forbidden in a proclamation of 1615 and after that date coal was used instead of wood and the Nailsworth glass house came to an end.

Another source of the alkali so precious to the glass maker had then to be found. The beech wood ash is particularly rich in Potassium. The amount however varies with the season of the year, being highest in the summer and lowest in the winter. Ash from the May beech wood on analysis was found to contain 42.1% of Potassium Oxide and a sample of the October wood 7.1%.

#### OLD ENGLISH BOTTLES

In the 17th century there were five glass houses in Bristol that made bottles and three in Gloucester. The glass from which their bottles were made, was of a dark green, amber or black colour. The earlier bulb-shaped bottle was later replaced by one with a glass ring round the neck to strengthen it for corking and to make it safer to handle, while its stability was strengthened by the base being pushed upwards and inwards. By the 18th century a cylindrical bottle was made and the black bottle was succeeded by a colourless one owing to the need of showing the colour of port wine and of detecting its beeswing.

There are examples of 17th-century bottles in the Stroud collection. An 18th century one has "E. Griffen Edgeworth" on it. This is the name of the rector of Edgeworth near Stroud from 1707-29. There are also shown other cylindrical black glass bottles, one with the arms of the Estcourt family and the date 1809 on it. This family then lived at Pinkney Park, near Malmesbury.