Uroscopy flasks

(a summary by Roman Glassmakers) (All drawings are at scale 1:2)

In her classification of medieval glass vessels, Tyson groups uroscopy flasks (urinals) together with other globular flasks as many of the fragments in her list may equally be from plain flasks or urinals.

Uroscopy flasks were used in diagnosing illnesses and complaints. In a healthy person, the four humours: blood, choler (yellow bile), melancholy (black bile) and phlegm, were in balance. Illness was seen as an imbalance of these humours, and comparing the colour of the patient's urine to a well-established colour chart, along with testing its smell and taste and noting its general state, would determine which of the humours were out of balance in the patient's body.

There are many surviving illustrations of urinals in use, a few of which are reproduced in this summary (Chaucer's Physician, or 'Doctour of Phisik,' uses one whilst on horseback!). They show simple globular flasks with convex bases and wide necks, some with a wide, out-turned rim. These shapes appear in the archaeological record in the 13th century and continue almost to the start of the 17th century with very little alteration.

They are common in the medieval period, reflecting the importance of uroscopy in daily life, and have been found throughout England on monastic sites, castles and manors, as well as on domestic town sites, although, as with other medieval glass vessels, none have been found on lower status sites.

They may have had other uses, such as in alchemy and in distillation and industry in general.

Many urinals are of a generous size, commonly measuring over 20cm in height. They are not to be confused with 'jordans', which were usually ceramic vessels used as chamber pots or to collect urine for various uses in the medieval world, including tanning, cloth-making, and as an ingredient in medical recipes.

Several fragments of urinals have been found on medieval English forest glasshouse sites, such as Blunden's Wood in Surrey. This, together with the large quantity of finds, points to their likely manufacture in England.

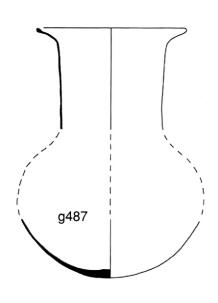
For a detailed discussion of uroscopy and the uses to which these vessels may have been put, see *Tyson* (2000), pp.149-153.

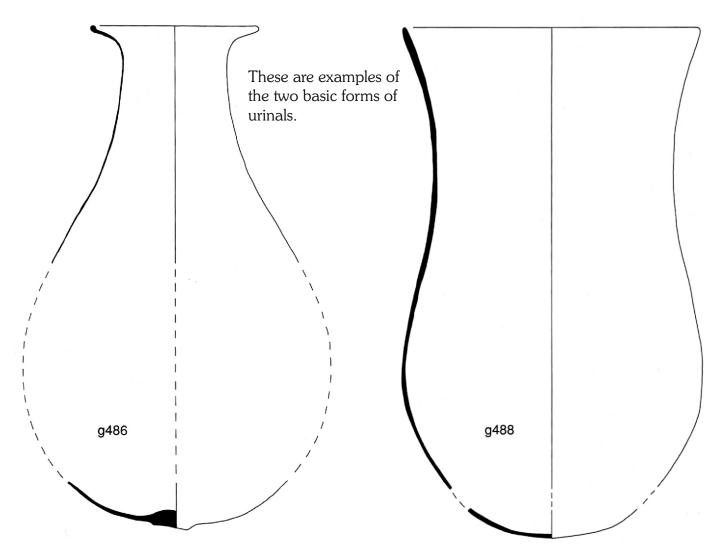
Tyson Type F1, g487:

Assize Court Ditch, Winchester, Hampshire. Mid 14th century.

Rim, neck and base fragments of wide-necked flask/urinal of green glass with patchy surface weathering, which has eaten through the glass in some places to leave holes. Cylindrical neck and horizontally-everted rim, inturned at edge. Convex base with pontil mark on underside.

Note that it is possible to reconstruct this vessel with a longer and wider body





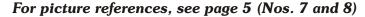
Tyson Type F1, g486:

Ludgershall Castle, Wiltshire. 14th century. Complete rim of a wide-necked flask/urinal. Green glass, with some opaque brown surface weathering. Horizontally-everted rim, inturned at the edge. Part of the neck attached. Pear-shaped profile, the neck gradually flaring towards the body. Small, thin unattached body fragments. Large fragment of convex base, with pontil mark on the underside.

Tyson Type F1, g488:

Salisbury Franciscan Friary, Wiltshire. 13th - mid 14th centuries.

Fragments from a flask/urinal of weathered opaque brown glass. Bulbous body with convex base, and slightly everted rim, but the vessel narrows very little at the neck. Profile similar to Italian urinals.





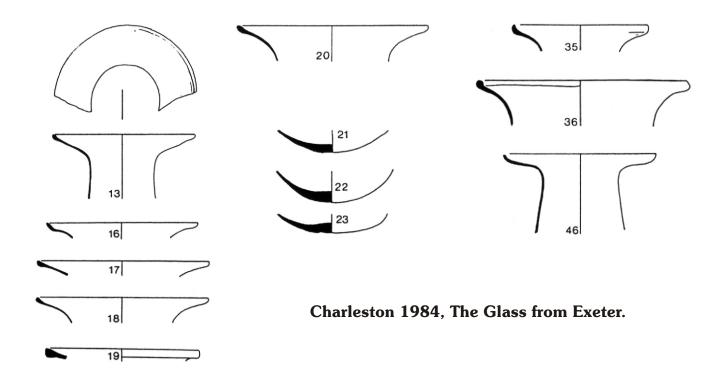


From Charleston (1984), The Glass from Exeter, p.258:

A. MEDIEVAL GLASS:

...... Of the urinals, the characteristic convex thickened base-fragments survive in **G.21-3**, together with a number of spreading mouth-fragments (**G.13**, **16-20**, **35-36**, **46**), showing in some instances the often recurring upturned rim (**G.13**, **16**, **35-36**, **46**). Urinals have hitherto been recognized in two forms, to which has now been tentatively added a third. The first shape, which seems to have lasted from the 14th until at least the 17th century, had a wide, flat rim often with upturned lip, cylindrical neck and globular body; the apparently rarer second form had a piriform body with conical neck and wide, flat rim like that of the first. The first type is probably represented at Exeter by **G.13**, the second possibly by **G.46**. The third type seems to have been blown thicker and had a globular body with shortish wide neck leading to a splayed mouth without the horizontal rim. At Exeter this type may be represented by **G.36**.

The first form appears to be equivalent to Willmott Type 34.1, the second to Tyson Type F1/g486, g489, and the third to Tyson Type F1/g487. The form represented by Tyson Type F1/g488 does not appear to have been mentioned by Charleston in this particular article.



- **G.13:** Rim fragment of a urinal of pale green glass with pronounced brown enamel-like weathering. Perhaps English. 13th 14th century.
- **G.16-20:** Rims of urinals in heavily weathered brown glass, probably originally green. English. 14th century or later.
- **G.21-3:** Three examples of at least twelve urinal bases of green glass with heavy brown encrusted weathering. English. 14th century or later.
- **G.35:** Rim of a urinal as **G.16-20**. Probably English.
- **G.36:** Rim of a wide-necked urinal of heavily bubbled green glass with enamel-like weathering. Urinals of this form are Nottingham, Ipswich, Battle and Bayham in later medieval contexts; the type is discussed in the report on the glass from Bayham (Charleston 1983). Late 13th century.
- **G46:** Fragments from the neck and rim of a urinal in brown denatured (weathered/devitrified) glass, probably once green. English, late medieval.



1 13th century



2 c. 1283-1400



3 Mid 15th century



4 Early 16th century



Early 16th century

For picture references, see page 5



6 1517



7 Mid 16th century



8 1555



Tyson Type F1, g489:

St. Swithin's House, Walbrook, City of London. 14th century.

Almost complete wide-necked flask/urinal of rejoined fragments. Light green glass with some beige pitting. Horizontally-everted rim, pearshaped profile with neck gradually flaring out to a bulbous body, and convex base. Fragments from the body are missing. Pontil mark on underside.



From Charleston (1984), The Glass from Exeter, p.261:

B. POST-MEDIEVAL GLASS:

...... As for the English country-made glasses of this epoch, the old-established catergories may be seen continuing - the urinals (**G.63-4, 98, 101** and **102(?), 135**),



Exeter G63:

Base of a urinal of pale green glass with heavy brown encrusted weathering. English, 1500-1550.

Exeter G64:

Base of a urinal; glass as G63. English, 1500-1550.

Exeter G98:

Base of a urinal; pale green glass with light iridescent surface weathering. Probably English, 17th century.

Exeter G135:

Base of a urinal; bubbled pale green glass with iridescent surface weathering. English.

Exeter G101-102:

Rims of two bottles; pale green glass with iridescent surface weathering. English, probably 17th century.

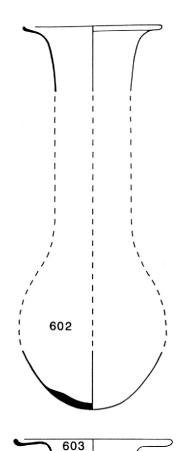
Picture References:

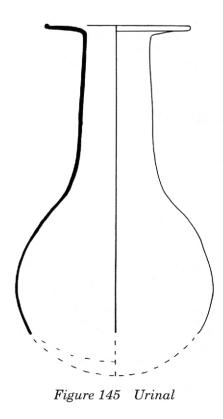
- 1: Illustration from Hunayn ibn Ishaq al-'Ibadi (Joannitius): Isagoge Johannitii in Tegni Galeni (called Articella), Oxford, 13th century ms (DeRicci NLM [78], Fol. 42v, National Library of Medicine)
- **2:** Illustration from Avicenna, Canon medicinae, trans. from Arab by Gerard of Cremona) France, 1283; decoration added c. 1350-1400 (The Hague, MMW, 10 B 24, fol. 8r, National Library of the Netherlands)
- **3:** Mid 15th century image of Medicine as a Woman. www.stanford.edu/class/history13/femalebody.html
- **4:** Cosmas and Damian, the twin saints and Christian patrons of medicine; miniature from "Heures d'Anne de Bretagne", early sixteenth century (Bibliothèque Nationale, Paris, Richelieu Manuscripts Latin 9474, Fol. 173v)
- **5:** Thomas Murner: Narrenbeschwörung (1512), "Der Kälberarzt" (The calf doctor) (repr. from Holländer 1905, p. 89)
- **6:** Feldtbuch der Wundtartzney by Hans Von Gersdorff, 1517
- **7:** Pieter Brueghel the Elder (c.1525-1569), detail from a satirical drawing of medicine (repr. from Holländer 1905, p. 52
- 8: Historia of Olaus Magnus 1555, p.569
- **9:** Illustration from The Ellesmere Manuscript of The Canterbury Tales by Geoffrey Chaucer, c.1410, (The Huntington Library, San Marino, California, USA)



For picture references, see opposite (No. 4)







For picture references, see page 5 (No. 6)

Haslam 1993, The Glass from Norwich

602: Part of rim, neck and base of urine inspection vessel; pale bluish-green glass, with slight surface weathering. 15th/16th century type.

This vessel could, perhaps, be better reconstructed with a wider body and shorter neck.

603: Fragment of rim of urine inspection vessel; pale green glass, with surface weathering.

Willmott Type 34.1:

Nonsuch Palace. 16th century.

Urinals (in green-tinted glass) have thick convex bases with external pontil marks, very thin spherical bodies and vertical necks with an everted rim. The rim often has a slight upturn on it's edge. They are never decorated.

Museum of London 10196:

Summary: Green glass urinal with recurving rim, funnel shaped neck tapering towards a misshapen rounded body. The base has a slight kick and a pontil mark.

Height: 138mm, Body diam: 80mm, Lip diam: 58mm, Return on mouth: 8mm-15mm

This vessel may be a jordan, not a urinal.



An extract from Hardwick, 2002:

Indeed, so ingrained is the iconography of the urine flask that it even occurs in the famous illustration of Chaucer's Physician in the Ellesmere manuscript of the Canterbury Tales. For whilst it is perhaps fitting for the Host to signal his approbation of the Physician's tale by exclaiming,

I pray to God so save thy gentil cors, And eek thyne urynals and thy jurdones, Thyn ypocras, and eek thy galiones, And every boyste ful of thy letuarie,²

drawing attention first and foremost to this most important of professional tools, it is still rather surprising to see the figure engaged in the unlikely act of horseback uroscopy as he makes his way to Canterbury. Unlikely though this equestrian diagnosis may be, the iconography is unproblematic for the reader. The flask is a clear badge of professional calling, identifying this horseback figure as a physician.

²G. Chaucer, The Canterbury Tales, in The Riverside Chaucer, ed. L.D. Benson (Oxford, 1988), VI 304-307.



For picture references, see page 5 (No. 9)

Selected references:

Tyson, Rachel (2000) 'Medieval glass vessels found in England c AD 1200-1500' Council for British Archaeology: CBA Research Report 121 pp.149-156 (figs. 29-31). Type F1: g477-g534

Willmott, Hugh (2002) 'Early post-medieval vessel glass in England c. 1500-1670' Council for British Archaeology: CBA Research Report 132 pp. 103-104. Type 34.1

Hardwick, Paul (2002) 'Through a Glass, Darkly: Interpreting Animal Physicians' Reinardus, Vol. 15, No. 1, 2002 John Benjamins Publishing Company, pp. 63-70

Charleston, R. J. (1984) 'The Glass', in Allan, J. 'Medieval and Post-Medieval Finds from Exeter, 1971-80' Exeter Arch. Report 3, pp.258-278. Exeter: Exeter City Council

Haslam, J. (1993) 'Glass Vessels' in Margeson, S. (ed) (1993) 'Norwich Households - Medieval and Post-Medieval Finds from Norwich Survey Excavations 1971-78' East Anglian Archaeology Monograph No. 58 (Norwich Survey) pp.97-117 (pp.104-105 (fig. 70, nos. 653-658))