

## Rock crystal: the key to cut glass and *diatreta* in Persia and Rome

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The invention of glass-blowing in the 1st c. B.C., coupled with the expansion of trade under Augustus, wrought great changes in the glass industry, which, hitherto limited to relatively expensive surrogates for luxury goods, now became capable of cheap mass production;<sup>1</sup> by Pliny the Elder's day (he wrote in the early second half of the 1st c. A.D.) the most highly valued glass was 'colourless and transparent, as closely as possible resembling rock crystal'.<sup>2</sup> Elsewhere, Pliny states that 'today we have cups and vessels of glass that rival those of crystal: but it is extraordinary that, notwithstanding the resemblance, glass cups have not lowered the price of crystal [cups] but have rather caused them to increase in price'.<sup>3</sup> Much extant ancient glass comes from tombs. Much of it is flimsy and was arguably made to serve as grave furniture from the start. Occasionally, however, some very fine glass indeed is preserved in the archaeological record, and few pieces are finer than the vessels of the 2nd c. A.D. found carefully wrapped in a basket in the Cave of the Letters near the Dead Sea. The largest vessel (fig. 1) is a shallow bowl measuring 33.8 cm in diameter, made by means of moulding, grinding and cutting, the latter two techniques being common to the crafts of rock crystal working and glass-

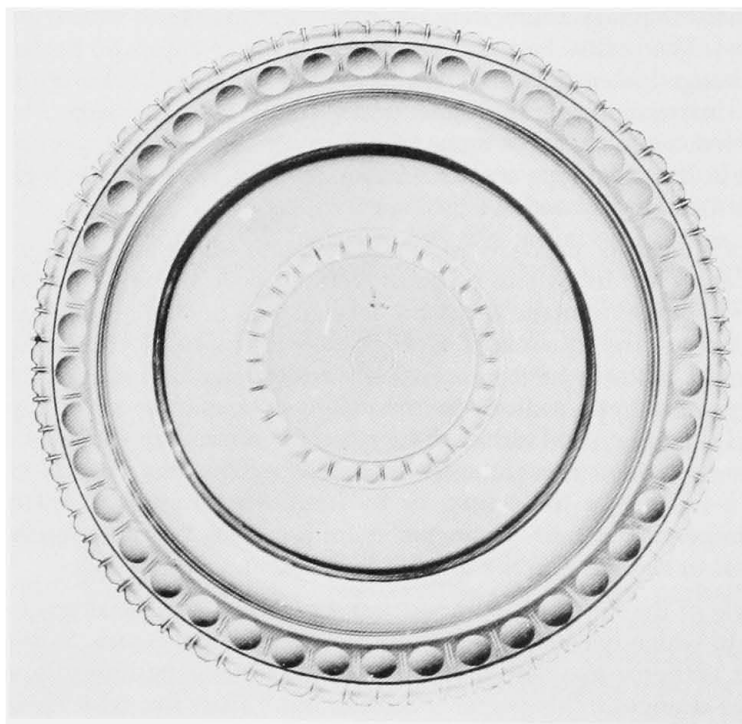


Fig. 1. Glass plate from the Cave of the Letters (after Yadin)

- 1 D. Grose, "Innovation and change in ancient technologies: the anomalous case of the Roman glass industry" in W. D. Kingery (ed.), *High technology ceramics*, (Ceramics and Civilisation 3, Westerville, OH 1986) 65-79; id., *Early ancient glass* (New York 1989) 241, 262.
- 2 Plin., *HN* 36.199; cf. Strab. 16.2.25, where Roman glass vessels are described as: "crystal look-alikes".
- 3 Plin., *HN* 37.29.