

### 3. A FRAGMENT OF ROMAN GLASSWARE FROM TEALING, ANGUS.

In 1939 Dr J. D. Gilruth acquired a number of objects said to have come from the earth house at Tealing, from the heirs of an old man who had been present at its excavation in 1871. The most interesting of these is a fragment of polychrome glass which Dr Gilruth has kindly presented to the Museum (see p. 150). It is not indeed mentioned among the objects enumerated by Andrew Jervise in his account, in the *Proceedings*, of the clearing out of the chamber in 1871.<sup>1</sup> The list, which is not very satisfactory, contains a number of articles dating from the Bronze Age to modern times. As, however, a piece of a decorated Sigillata bowl (now in the Museum) was found, there is little reason to doubt that the glass fragment came from the same place. It was sent to Mr W. A. Thorpe, Assistant Keeper, the Victoria and Albert Museum, who kindly sends the following report.

The fragment is part of the side of one of the ribbed, low, circular bowls of Roman date familiarly, though inaccurately, described by the nineteenth-century name of "pillar-moulded bowls." Bowls of this form, made to compete with a well-known shape in silver and other metals, have been widely found both in the Near East and in Europe (Italy, Rhine, N.E. France, Britain) as fragments or, less frequently, as entire vessels. They fall into two main groups:—

- (1) Bowls of highly translucent *ice-green* glass, which occur frequently, but vary considerably in technical quality;
- (2) Bowls of almost opaque polychrome murrine glass (*murrina*) which are either:
  - (a) assembled in a vessel *mosaic* of polychrome cane sections of a kind known sometimes by the Renaissance name of *millefiori*. Each cane slice (like "Edinburgh rock") is individually defined. Or
  - (b) made from such cane, but worked into an irregular *streaky* pattern.

All three types have been found in Britain, group (1) being quite common, group (2) (b) much less common, and group (2) (a) comparatively rare.

The Tealing fragment belongs to group (2) (b), the "streakies." Its three colours (cobalt-blue, opaque-white, and yellow) are typical. Like all the members of this group that I have seen, the outer ribbed surface is finished with fire-polish (*i.e.* slight surface fusion by what the trade call "warming-in"), while the inner surface is rotary-polished. The narrower end of the fragment is the top, and I suspect not much below the plain rotary-polished border which surrounds the outside of the rim above the tops of the ribs.

*Murrina*, in various Alexandrian and Latin forms of the word, appears to have been a loose trade name for polychrome glasses made from cane to undersell

<sup>1</sup> *Proceedings*, vol. x. pp. 287-292.

coloured stones, largely of the agate and chalcedony groups. High-grade glasswares, whether *murrina* or *crystallina*, were regularly classified for commercial purposes as stones (cf. λίθος χυτή λιθία ἰαλή, etc.) at least until medieval times, and not always in ignorance. The murrine industry, long practised in Egypt in its sand-core types, became familiar in Italy, from mid 1st cent. B.C., from Alexandrian imports and otherwise, and in the course of late 1st B.C.—1st A.D. was brought by orientals to Italy, especially Campania (Surrentum region) and Rome, and possibly Aquileia. There is some reason for believing that it travelled, in the hands of orientals, to the Rhineland, especially Trier, but the mosaic types, being nearer to the Egyptian, can probably be regarded as Alexandrian exports, or at best Campanian. The "streakies" look more like derivative products made in Italy. Their discovery on service sites in Roman Britain (e.g. Caerleon) seems to favour Italy. As for date, the mosaic types, in Britain and generally, seem to be earlier in *range*, and largely late 1st B.C.—1st A.D., while the British-found streakies extend from mid 1st A.D. well into the second century.

The precise method of ribbing these bowls has been under discussion in the trade, and may not be always the same. There is, however, no question of blowing; but pressing, moulding, and possibly in some cases preliminary trailing. The cross-section of the Tealing rib shows that is done from cane.

Murrine types are illustrated by Kisa. D. B. Harden in *Karanis*<sup>1</sup> deals with late murrine in Egypt. Entire "streaky" bowls of Tealing type are illustrated in my *English Glass*, 1935, Plate I (from Berechurch, Essex, and from Silchester); and there are some notes on murrine in *Transactions of the Society of Glass Technology* (Sheffield), vol. 22 (1938).

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