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THE BEADS FROM FORT LENNOX, QUEBEC

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Abstract

The collection of beads from Fort Lennox, Quebec, is composed of eight glass and non-glass necklace beads, as well as 231 small embroidery beads which form a beaded garniture. These specimens represent nine distinct types.

The beads were recovered from the Navy barracks (5G22), the shipwrights' hut (5G32), and the extant men's barracks (5G58). None of the beads are distinctive enough to be useful as chronological indicators and can only be said to have been deposited at some time during the 19th or 20th centuries.

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Introduction

A small quantity of beads was recovered from Fort Lennox during the excavation of the Navy barracks and the shipwrights' hut during the summer of 1965 and the renovation of the extant men's barracks in 1967-68. The inventory consists of one wood bead, seven wound glass beads and a garniture composed of small, drawn glass embroidery beads. The glass beads were classified utilizing the system developed by Kenneth and Martha Ann Kidd (1970) to facilitate future intersite comparisons of bead assemblages. Their identifying code precedes the detailed description of each bead type in this report. Bead types in the collection which are not listed in the Kidds' type lists are marked by an asterisk (*) since they do not, as yet, have type numbers.

Colour and size notations used herein correspond to those employed by the Kidds in their system. Colours were designated using the names and codes in the Color Harmony Manual (Jacobson et al. 1948). The equivalent colour code in the Munsell colour notation system (Munsell Color Company 1960) was also provided for the benefit of those who may not be familiar with the manual. The size categories used refer to bead diameter and have the following numerical values: very small, under 2 mm; small, 2 mm to 4 mm; medium, 4 mm to 6 mm; large, 6 mm to 10 mm; very large, over 10 mm. Although Kidd uses "clear" in lieu of "transparent," the latter term was used herein since it was felt to be more descriptive.

A brief survey of the methods employed to manufacture glass beads is presented here to indicate the differences between the beads in the two categories mentioned above.

In the manufacture of drawn beads a long tube is drawn out from a hollow globe of molten glass by two men. After cooling, the tube is broken into short sections to facilitate handling. These are then annealed to strengthen the glass. The tube is subsequently broken into bead lengths by placing it on a sharp, broad chisel set in a block of wood and striking it with another chisel-like tool ("On the Manufacture of Glass Beads" 1825: 120).

The beads may be left unaltered, or their broken ends may be rounded. The latter process is accomplished by placing the rough beads in an iron drum containing a mixture of plaster and graphite, or clay and charcoal dust (Orchard

1929: 85). The drum is then heated and rotated simultaneously. In another process, the beads are put in a large pan with sand and wood ash, or plaster and graphite. The pan is then heated over a charcoal fire and the contents are stirred continually with a spatula resembling a hatchet with a round end ("On the Manufacture of Glass Beads" 1825: 120). In both processes the heat and agitation round the broken ends while the various "packing" mixtures keep the beads from sticking together and prevent their perforations from collapsing as the glass becomes viscid. Depending on the length of time that the beads are treated in this manner, they may range from practically unaltered tube fragments to almost perfect spheroids.

Drawn beads have certain characteristics due to their method of manufacture. Beads may consist of unaltered tube sections with uneven, broken ends, commonly referred to as "bugle" beads. Bubbles in the glass and striations on the surface, if present, are oriented parallel to the axis, an imaginary line passing through the centre of the perforation. The perforation is parallel-sided and usually has a smooth surface.

Wound beads are produced in a totally different manner. In this process, a thin filament of glass is drawn from a molten rod and repeatedly wound around a rotating metal mandrel until the desired size and shape is achieved (Murray 1964: 16). The remainder of the filament is then cut from the bead which is heated and turned to further fuse the glass and create a smoother surface. This procedure is continued until several beads have been formed. After cooling, they are removed from the mandrel, which is sometimes tapered to facilitate this step.

The surfaces of wound beads usually exhibit swirl marks that are at right angles to the axis. Bubbles in the glass are either round, or elongate and perpendicular to the axis. The perforation may taper and have an uneven surface.

Drawn Glass Beads

Four types of small embroidery beads form an almost complete beaded garniture (Fig. 2):

IIa*. Circular; small; transparent, light gray (c; N 8/0); 38 specimens.

IIa*. Circular; small; translucent, cerulean blue (15 nc; 10B 5/8); 191 specimens.

IIa*. Circular; small; transparent, bright blue (16 lc; 5B 5/7); one specimen.

IIa*. Circular; small; transparent, bright mint green (22 ia; 2.5G 7/8); one specimen.

The shape of the beads is oblate spheroidal. Tiny bubbles are present in the glass. Surfaces are shiny.

	<u>Length</u>	<u>Diameter</u>	<u>Perforation</u>
Range:	1.25 mm - 2 mm	2 mm - 2.75 mm	0.75 mm
Average:	1.75 mm	2.25 mm	0.75 mm

Provenience: 5G58R1.

The beads are strung on a single strand of white thread which is recurved and entwined so as to produce four courses of beads (Fig. 2). This was accomplished by running the thread of two adjacent courses through the perforations of all the light gray beads at the centre of the garniture, as well as alternate light gray specimens along the edges of the garniture.

The colour pattern consists of groups of three cerulean blue beads separated from each other by a light gray bead. This pattern is constant except at the ends of the garniture where the strand recurves twice, forming two loops composed of six cerulean blue beads and two loops of six cerulean blue beads separated from three more blue beads by a light gray specimen. The bright mint green and bright blue beads were substituted for two cerulean specimens, suggesting the possibility that this garniture was homemade, rather than factory produced.

The garniture is 12.5 cm long and 2 cm wide, or about 5 in. by 3/4 in.

Wound Glass Beads

W1b7. Round; very large; transparent, amber (3 lc; 7.5YR 7/8); one specimen (Fig. 1a). The surface is smooth. Several small, round bubbles are present in the glass. A section of thick cord is situated in the perforation.

<u>Length</u>	<u>Diameter</u>	<u>Perforation</u>
12 mm	13 mm	2 mm

Provenience: 5G58P1.

W1b*. Round; large and very large; translucent, copen blue (13-1/2 ic; 5PB 5/7); three specimens (Fig. 1b, e-f). Bubbles in the glass are scarce to abundant. Swirl marks are visible.

<u>Length</u>	<u>Diameter</u>	<u>Perforation</u>
4.5 mm - 9.5 mm	7.25 mm - 10.5 mm	1.0 mm - 3 mm

Provenience: 5G22F1, 5G32A1, 5G58R1.

W1b*. Round; large and very large; opaque, black (p; N1/0); two specimens (Fig. 1c). Surfaces are smooth.

<u>Length</u>	<u>Diameter</u>	<u>Perforation</u>
6.5 mm - 10.5 mm	8 mm - 12.5 mm	1.9 mm - 2.5 mm

Provenience: 5G58R1, 5G58S1.

W1b*. Round; large; translucent, bright blue (16 lc; 5B 5/7); one specimen (Fig. 1d). The surface is smooth. The glass is swirled and contains an abundance of tiny, round bubbles.

<u>Length</u>	<u>Diameter</u>	<u>Perforation</u>
7.5 mm	8.5 mm	2 mm

Provenience: 5G58S1.

Non-Glass Bead

Wood Bead. Round; large; dark brown (2 pn; 2.5Y 3/1); one specimen (Fig. 1g). The ends and portions of the body have been gnawed by rodents.

Length

4.5 mm

Diameter

6.25 mm

Perforation

2.5 mm

Provenience: 5G58Pl.

Discussion and Conclusion

Only two beads (type W1b*: round, translucent, copen blue) were retrieved from excavated features at Fort Lennox. One of these came from the uppermost level of the fill in the Navy barracks (5G22F1) which was erected at some time during the period from 1814 to 1816, and destroyed by fire in 1864 (Lee 1965: 5). The other was found in the uppermost level of a test trench situated about nine feet to the west of the shipwrights' hut (5G32A1) which is documented as being in existence in 1829 (Lee 1965: 6). This bead type is not presently diagnostic of any specific time period and, considering its archaeological contexts, a definite date cannot be assigned to it.

The remaining specimens were recovered from the still-standing men's barracks (5G58) when the upstairs and downstairs floors were removed and replaced in 1967-68. Beads were found under the ground floor (5G58P1), under the upstairs floor (5G58R1), and in the general area of the barracks (5G58S1). In this context they could date to any time after 1829, the year the structure was erected (Lee 1969: 31).

References Cited

Jacobson, Egbert, et al.
1948

Color Harmony Manual. 3rd ed. Container Corporation of America, Chicago.

Kidd, Kenneth E., and Martha A. Kidd
1970

"A Classification System for Glass Beads for the Use of Field Archaeologists." Canadian Historic Sites: Occasional Papers in Archaeology and History, No. 1, pp. 45-89. Ottawa.

Lee, David
1965

"Archaeological Prospectus for the Buildings Outside Fort Lennox, Isle Aux Noix, P.Q., (Revised)." Manuscript on file, National Historic Parks and Sites Branch, Ottawa.
1969

"Structural History of the Remaining Buildings of Fort Lennox." Manuscript on file, National Historic Parks and Sites Branch, Ottawa.

Munsell Color Company
1960

Munsell Book of Color. Pocket ed. Baltimore.

Murray, Robert A.
1964

"Glass Trade Beads at Fort Laramie." Wyoming Archeologist, Vol. 8, No. 3, pp. 13-9.

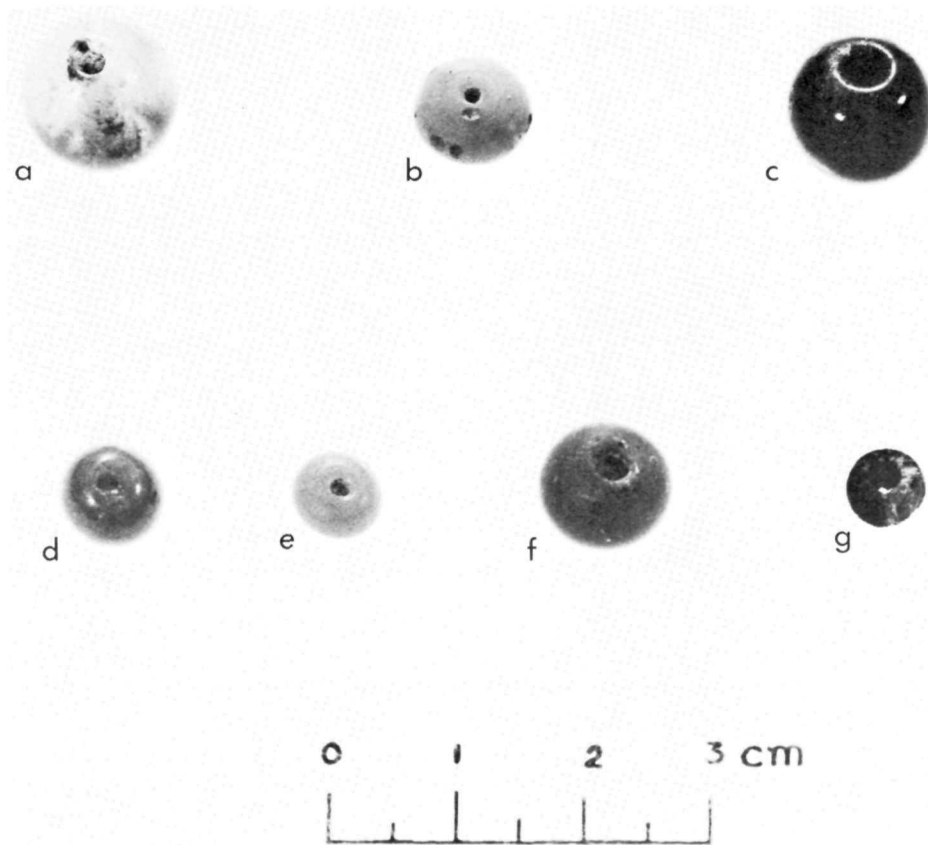
"On the Manufacture of Glass Beads."
1825

American Mechanics' Magazine, Vol. 2, No. 34, p. 120. New York.

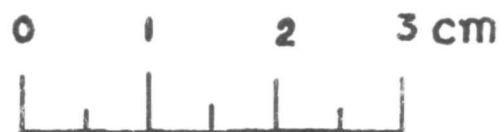
Orchard, William C.
1929

"Beads and Beadwork of the American Indians." Contributions from the Museum of the American Indian, Heye Foundation, Vol. 11. New York.

ILLUSTRATIONS



- 1 The beads from Fort Lennox are: a, W1b7, round, transparent, amber; b, W1b*, round, translucent, copen blue; c, W1b*, round, opaque, black; d, W1b*, round, translucent, bright blue; e, W1b*, round, translucent, copen blue; f, W1b*, round, translucent, copen blue, and g, wood bead.
 (Photo by G. Lupien.)



2 The beaded garniture found in the men's barracks at Fort Lennox. (Photo by G. Lupien.)