

THE LEVIN CATALOGUE OF MID-19TH-CENTURY BEADS¹

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The Levin Catalogue is composed of two similar collections of glass and stone beads assembled by Moses Lewin Levin, a London bead merchant whose business operated from 1830 to 1913. A total of 1021 beads of 128 different varieties makes up the collections which can be dated to the period 1851-1869. Although the beads are recorded as having been used in the African trade, several have counterparts at North American sites, thereby making the catalogue a potentially valuable research tool for those involved in the study of North American trade beads as well.

INTRODUCTION

The Levin Catalogue consists of two similar bead collections acquired by the Museum of Mankind in 1863 and 1960. The 1863 collection is composed of four small cardboard sheets to which are affixed a total of 124 short strands of beads (Pls. IIIC, IVA-B, and VA). The statement "Presented by M.L. Levin, manufacturer, Bevis Marks, London" is handwritten in ink at the top of each sheet. A caption for each set of beads is similarly written at the bottom of each card (*see* plate captions for specifics).

The 1960 portion of the catalogue consists of three glass-topped display cases ca. 20 x 30 cm containing a total of 57 strands of beads (Pls. VB and VIA-B), most of which are duplicated in the 1863 collection. Two of the cases are marked "Beads such as are used by Traders in West Africa, & given in exchange for Palm Oil & other African produce. Presented by M.L. Levin Esq., Manufacturer, Bevis Marks E.C." The remaining display case is marked "Beads such as have been used by Traders in West Africa as barter for Palm Oil and other African produce. Presented by M.L. Levin Esq., Manufacturer, Bevis Marks E.C." on the cover, while the former caption appears on the back of the case.

Although no information concerning the Levin Catalogue or M.L. Levin himself was on file at the museum, follow-up research at several libraries in London and Birmingham resulted in the compilation of a brief but comprehensive history of Mr. Levin and his bead business. This information was instrumental in dating the two collections that make up the catalogue.

M.L. LEVIN AND COMPANY

Moses Lewin Levin made his commercial debut in 1830 as an "importer of French fancy goods" at 12 Jewry Street, Aldgate, London (Robson's London Commercial Directory 1830). The following year Levin was the proprietor of a "Bead and Foreign toy-warehouse," and had been joined by Ephraim L. Levin, a "Dealer in Clock and Watch-tools, etc." (Critchett 1831:240).

In 1838, the Levins moved to 16 Great Alie Street in Goodman's Fields, London, where they carried on business for the next ten years as "importers of fancy french jewellery, toys, beads, clocks, music boxes, and other foreign manufactures; also Birmingham and Sheffield goods of every description" (Kelly 1838:348; 1840:161; 1845:828; 1847:341). Then, in 1848, Ephraim Levin went on his own as an importer of fancy goods, beads, and toys, leaving Moses Levin to carry on the existing import-export business alone (Kelly 1848:920; 1849:875). The following year, Moses Levin is described as having "a large supply of beads and cutlery in bond for the indian and african trade" (Kelly 1849:875).

In 1851, M.L. Levin removed his prospering business to 1 Bevis Marks in east London (Kelly 1851:850). Within three years, Levin had expanded his market to include America, in addition to India and Africa (Kelly 1854:1009). By 1862, Levin was designated a "manufacturer and importer of beads, coral, german cutlery, arms etc. for the african, american and indian markets" (Kelly 1862:1072). As it was, however, common practice at this time to designate oneself as a "manufacturer" regardless of whether one made anything or not, it is by no means certain that Levin actually produced any beads. In fact, considering the specialized facilities, the degree of skill, and the number of workers required to produce glass beads on a commercial basis, it is probable that he did not.

Moses Levin's company continued as a "manufacturer" of beads until 1869, in addition to importing "coral, amber and glass beads, muskets and musket flints, mother-o'-pearl shell, cowries and african ivory" (Kelly 1866:1192;

1869:1034). Thereafter, Levin is listed only as an “importer.” In 1876, the imports included “corals for the african and india trade, beads for trimmings etc.” (Kelly 1876:1108).

Moses L. Levin and Company remained at its 1 Bevis Marks address as importers of “beads, coral, agate, amber and glass for african and home trade; guns, arms and military stores of every description” until 1893 (Kelly 1885:1072; 1893:1136). The following year, the business was located at 101 Leadenhall Street, just a few blocks from the previous location (Kelly 1894:1150). In 1898, Levin’s company is listed as an importer of Venetian, Bohemian, and German beads (Kelly 1898:1230).

For the next 13 years the company was involved primarily in the importation of beads, amber, corals, and cowrie shells, as well as the sale of old firearms (Kelly 1905:1362; 1911:1029). Then, in 1912, M.L. Levin’s establishment moved to 9 Hills Place in central London, and once again became a “manufacturer” of bugles (short tubular beads) and beads (Kelly 1912:1045). This endeavor was short-lived, however. Two years after the move, Moses Lewin Levin and Company were no longer in business.

THE BEAD INVENTORY

The Levin Catalogue contains 186 drawn beads of 43 varieties, 784 wound beads of 76 varieties, 34 mold-pressed beads of 7 varieties, and 17 carnelian beads of 2 varieties. The glass specimens are classified using an expanded version of the system developed by Kidd and Kidd (1970) as presented in Karklins (1985). Beads that do not appear in the Kidds’ lists are marked by an asterisk (*) because they lack variety numbers. The type codes of these have sequential letters appended to them for ease of reference. Shapes not listed by the Kidds are described using Beck (1928).

Colors are designated using the names used in the *Color Harmony Manual* (Container Corporation of America 1958). Their respective codes are listed in Table 1. As this is a relatively obscure system, the equivalent code in the better-known Munsell color notation system (Munsell Color 1976) is also included in the table.

The diaphaneity of the beads is described using the terms opaque (op.), translucent (tsl.), and transparent (tsp). Simply defined, beads that are opaque are impenetrable to light except on the thinnest edges. Translucent specimens transmit light, yet diffuse it so that objects viewed through them are indistinct. Objects viewed through transparent beads (such as a pin in the perforation) are clearly visible.

Although the shape nomenclature is basically self-explanatory, a few brief comments may help clarify some of the terms used. All tubular beads have round cross-sections unless otherwise noted. Circular specimens are shaped like a torus (ring); i.e., the shape of most embroidery (seed, pound, and pony) beads. The round category includes beads that are not only spheroidal, but also oblate and barrel-shaped. Flat “disc” beads are oval or round specimens pressed flat parallel to the perforation while the glass was still viscid.

Drawn Glass Beads

These are made from sections of glass tubing that was drawn out from a hollow globe of molten glass. The ends of the beads may be broken, or rounded as a result of subsequent heating and agitation.

Ia — Tubular Monochrome Beads

Ia16. Tubular; op. shadow blue; 1 specimen (Pl. IVA, right column, row 2). Broken ends.

Length: 27.8 mm Diameter: 8.6 mm

Ia19. Tubular; tsp. bright navy; 1 specimen (Pl. IVA, left column, row 1). Broken ends.

Length: 32.4 mm Diameter: 10.2 mm

Ia*(a). Tubular; tsl. sunlight yellow; 1 specimen (Pl. IVA, central column, row 1). Broken ends.

Length: 19.9 mm Diameter: 5.0 mm

Ia*(b). Tubular; tsp. mustard brown; 1 specimen (Pl. IVA, central column, row 4). Broken ends.

Length: 22.0 mm Diameter: 5.3 mm

Ia*(c). Tubular; tsl. cinnamon; 4 specimens (Fig. 2; central column, rows 2 and 9). Broken and rounded ends.

Length: 14.6-17.6 mm Diameter: 6.2-7.2 mm

Ia*(d). Tubular; tsp. copen blue; 8 specimens (Pl. IVA, left column, row 2). The glass has a slight golden cast. The ends are well rounded.

Length: 3.5-5.5 mm Diameter: 3.6-4.2 mm

Ia*(e). Tubular; op. dark palm green; 1 specimen (Pl. IVA, right column, row 1). Flat ends.

Length: 23.5 mm Diameter: 8.8 mm

Table 1. Levin Catalogue Color Index.

Color Harmony Name	Color Harmony Code	Munsell Equivalent	Color Harmony Name	Color Harmony Code	Munsell Equivalent
olive yellow	1 le	10.0Y 5/6	medium blue	13-1/2 ng	5.0PB 3/6
sunlight yellow	1-1/2 ga	5.0Y 8.5/8	shadow blue	14 ie	2.5PB 5/4
light gold	2 ic	2.5Y 7/8	deep blue	14 pc	2.5PB 3/8
mustard gold	2 ne	2.5Y 6/8	pale blue	15 ca	7.5B 8/2
mustard brown	2 pi	2.5Y 4/6	cerulean blue	15 nc	7.5B 4/8
amber	3 lc	10.0YR 7/8	robin's egg blue	16 ic	5.0B 6/6
cinnamon	3 le	10.0YR 5/6	bright blue	16 lc	5.0B 5/7
russet orange	4 nc	5.0YR 6/12	medium turquoise blue	17 le	2.5B 5/5
maple	4 ng	7.5YR 4/4	turquoise	17 pa	10.0BG 4/8
lead gray	5 ih	10.0YR 4/1	aqua blue	18 gc	2.5B 6/4
redwood	6 ne	10.0R 4/8	bright turquoise	18 la	7.5BG 6/8
barn red	6 pg	10.0R 3/8	dark jade green	21 ng	10.0G 4/5
scarlet	7 pa	7.5R 4/14	surf green	22 ie	5.0G 5/4
dark rose brown	7 pn	2.5YR 2/2	bright green	22 nc	2.5G 5/10
rose wine	8 le	10.0RP 4/6	dark green	22 pi	2.5G 3/6
ruby	8 pc	2.5R 3/10	apple green	23 ic	10.0GY 6/6
orchid mist	9 ec	2.5RP 7/4	dark palm green	23 ni	10.0GY 4/4
bright Dutch blue	13 la	7.5PB 4/11	white	a	N 9/0
ultramarine	13pa	6.25PB 3/12	oyster white	b	N 8/0
bright navy	13 pg	7.5PB 2/7	light gray	c	N 7/0
copen blue	13-1/2 ic	5.0PB 5/7	black	p	N 1/0

Ib — Tubular Monochrome Bodied Beads with Straight Simple Stripes

Ib*(a). Tubular; op. white body with 4 straight tsp. copen blue stripes set in a very thin layer of clear glass; 1 specimen (Pl. IVA, central column, row 3). Broken ends.

Length: 23.7 mm Diameter: 4.3 mm

Ib' — Tubular Monochrome Bodied Beads with Spiral Simple Stripes

Ib'*(a). Tubular; op. black body decorated with 2 spiral op. medium turquoise blue and 2 spiral aventurine stripes that alternate around the bead; 1 specimen (Pl. IVA, right column, row 4). Broken ends.

Length: 41.0 mm Diameter: 6.9 mm

Ibb' — Tubular Monochrome Bodied Beads with Spiral Compound Stripes

Ibb'*(a). Tubular; tsp. rose wine body decorated with 3 spiral compound stripes of op. lead gray on op. redwood; 1 specimen (Pl. IVA, central column, row 10). The body appears black unless held up to a strong light. The ends are broken.

Length: 47.1 mm Diameter: 6.6 mm

Ibb'*(b). Tubular; tsp. rose wine body decorated with 3 spiral compound stripes of op. black on op. white on op. redwood; 1 specimen (Pl. IVA, central column, row 11). The body appears black unless held up to a strong light. The ends are broken.

Length: 40.6 mm Diameter: 7.0 mm

If — Tubular Monochrome Beads with Surfaces Modified into Facets by Grinding

If* (a) Tubular, cornerless hexagonal; tsp. bright navy; 5 specimens (Pl. IVB, right column, row 6). This type consists of a short section of hexagonal tubing with a triangular facet cut on each corner. The body facets are composed of unaltered tube faces in the shape of elongated hexagons. There are 18 facets in all. The broken ends are relatively flat. These are the so-called “Russian beads.”

Length: 6.6-7.9 mm Diameter: 6.6-7.5 mm

If*(b). Elongate, multi-faceted; tsl. redwood; 1 specimen (Pl. IVB, central column, row 2). The bead has a total of 50 cut facets; 30 diamond-shaped facets around the middle and 10 elongate pentagonal facets around either end. The latter have been cut flat.

Length: 49.4 mm Diameter: 9.1 mm

If*(c). Elongate, multi-faceted; tsp. ruby; 6 specimens (Pl. IVB, left column, row 2; Pl. VIA, row 7). These beads are covered with 47-50 cut facets; 29-30 irregular diamond-shaped facets about the middle and 9-10 elongate pentagonal facets around either broken end.

Length: 37.2 mm Diameter: 15.7 mm

If* (d). Elongate, multi-faceted; tsp. bright navy; 1 specimen (Pl. IVB, left column, row 7). This variety has the same form as the previous one. The ends are broken but flat.

Length: 27.3 mm Diameter: 13.8 mm

If*(e). Elongate, multi-faceted; op. copen blue; 4 specimens (Pl. VIA, row 5). This variety has the same form as the previous one.

Length: 37.6-39.6 mm Diameter: 15.4-16.5 mm

If*(f). Teardrop, multi-faceted; tsp. light gray; 3 specimens (Pl. IVB, central column, row 8). The tapered end is hexagonal in cross-section and exhibits 6 elongate pentagonal facets set parallel to the perforation. The bulbous portion is covered with numerous, small pentagonal to diamond-shaped facets.

Length: 19.1-20.0 mm Diameter: 6.0-6.2 mm

Io — Tubular Hexagonal Beads with Monochrome Bodies Exhibiting an “Alternating Twist”

This pattern was apparently produced by alternately twisting a heated hexagonal tube one way and then the other until a series of undulations had been formed in the body facets.

Io* (a). “Alternating twist” beads; tsp. cinnamon; 1 specimen (Pl. IVB, central column, row 4, left bead). The specimen displays four undulations. Its ends are tapered and jagged.

Length: 37.9 mm Diameter: 4.9 mm

Io*(b). “Alternating twist” beads; tsp. maple; 1 specimen (Pl. IVB, central column, row 4, right bead). This variety has the same form as the previous one.

Length: 35.0 mm Diameter: 4.6 mm

Io* (c) “Alternating twist” beads; tsp. rose wine; 2 specimens (Pl. IVB, central column, row 6). This variety has the same form as the previous one.

Length: 37.3-38.6 mm Diameter: 4.6-4.9 mm

Io* (d). “Alternating twist” beads; tsp. ultramarine; 2 specimens (Pl. IVB, central column, row 3). This variety has the same form as the previous one.

Length: 36.3-40.0 mm Diameter: 5.8-6.1 mm

Io*(e). “Alternating twist” beads; tsp. bright navy; 2 specimens (Pl. IVB, central column, row 5). This variety has the same form as the previous one.

Length: 32.3-36.6 mm Diameter: 4.7-4.9 mm

Iib — Non-Tubular Monochrome Bodied Beads with Straight Simple Stripes

Iib*(a). Circular; tsp. bright navy body decorated with 4 straight op. white stripes; 12 specimens (Pl. IVA, left column, row 4).

Length: 2.0-3.2 mm Diameter: 4.1-4.4 mm

Iib*(b). Circular; medium size; tsp. bright navy body decorated with 5 extremely narrow, straight, op. white stripes; 10 specimens (Pl. IVA, left column, row 8).

Length: 2.4-4.0 mm Diameter: 4.8-5.7 mm

IIIa — Tubular Polychrome (Multi-Layered) Beads

IIIa5. Tubular; tsp. scarlet outer layer; op. white core; 6 specimens (Pl. IVA, right column, rows 5 and 7). All specimens are slightly bent and have “orange peel” surfaces. The ends are well rounded. Two size populations are represented.

Length: 21.6-23.7 mm Diameter: 5.4-6.0 mm
20.7-23.8 mm 8.4-9.4 mm

IIIa*(a). Tubular; tsp. bright navy outer layer; tsl. copen blue middle layer; tsp. bright navy core; 7 specimens (Pl.

IVA, right column, row 9; Pl. VB, row 11). The surfaces are dull and pitted; the ends are cut flat.

Length: 26.6-27.6 mm Diameter: 10.6-11.1 mm

IIIb' — Tubular Polychrome (Multi-Layered) Bodied Beads with Spiral Simple Stripes

IIIb'*(a). Tubular; op. redwood outer layer decorated with 4 broad, spiral, op. white stripes; op. black core; 1 specimen (Pl. IVA, right column, row 3). The ends are jagged.

Length: 45.7 mm Diameter: 7.9 mm

IIIbb' — Tubular Polychrome (Multi-Layered) Bodied Beads with Spiral Compound Stripes

IIIbb'*(a). Tubular; op. redwood outer layer decorated with 3 spiral, compound stripes of tsp. rose wine on op. white; tsp. apple green core; 1 specimen (Pl. IVA, central column, row 12). The ends are broken.

Length: 45.5 mm Diameter: 6.2 mm

IIIc — Tubular Polychrome (Multi-Layered) Beads with Square Cross-Sections

IIIc*(a). Tubular (square cross-section); tsp. medium blue outer layer and core; very thin, op. white middle layer; 1 specimen (Pl. IVB, central column, row 9). The ends have been cut flat, and the edges and corners of the ends have been ground down.

Length: 88.0 mm Diameter: 15.7 mm

IIIf — Tubular Polychrome (Multi-Layered) Beads with Surfaces Modified into Facets by Grinding

IIIf*(a). Tubular, cornerless hexagonal; tsp. ultramarine outer layer; tsl. bright Dutch blue core; 5 specimens (Pl. IVB, right column, row 4). This variety consists of a short section of hexagonal tubing with a diamond-shaped facet cut on each corner. The body facets are formed by unaltered tube faces in the shape of elongated hexagons. Each specimen has a total of 18 facets. The broken ends are practically flat. This is another style of the so-called "Russian bead."

Length: 7.4-9.0 mm Diameter: 7.8-8.2 mm

IIIf*(b). Tubular, semi-cornerless hexagonal; tsp. ultramarine outer layer and core; tsl. bright Dutch blue middle layer; 3 specimens (Pl. IVB, central column, row 7). This variety consists of a hexagonal tube with a triangular facet cut on every other corner. The space between each of the former facets is occupied by a cut, elongate diamond-shaped facet.

Six elongate hexagonal facets formed by unaltered tube faces encircle the middle. Each specimen has a total of 18 facets. The ends are broken but flat.

Length: 21.3-21.4 mm Diameter: 4.5-4.7 mm

IIIf*(c). Tubular, semi-cornerless hexagonal; tsp. bright navy outer layer and core; tsl. bright Dutch blue middle layer; 1 specimen (Pl. IVB, central column, row 1). This bead has the same form as the previous variety.

Length: 57.5 mm Diameter: 7.1 mm

IIIf*(d). Elongate, multi-faceted; tsp. bright navy outer layer; tsl. bright Dutch blue core; 2 specimens (Pl. IVB, left column, row 3). This variety has a total of 50 cut facets: 30 irregular diamond-shaped facets encircling the middle and 10 elongate pentagonal facets around the ends. The latter are broken but flat.

Length: 32.3-32.7 mm Diameter: 12.4-12.9 mm

IIIf*(e). Elongate, multi-faceted; tsp. ultramarine outer layer; tsp. light gray middle layer; thin op. white core; 2 specimens (Pl. IVB, left column, rows 4 and 6). There are two sizes of this variety. The smallest is covered with 55 cut facets: about 33 irregular diamond-shaped facets about the middle and 11 elongate pentagonal facets around the ends. The larger size has 65 corresponding facets (39 encircling the middle and 13 at either end). The end facets have been ground into the light gray layer, leaving the ultramarine glass as a medial band. The ends have been cut flat.

Length: 34.2 mm, 32.2 mm Diameter: 7.5 mm, 12.0 mm

IIIf*(f). Elongate, multi-faceted; tsp. bright green outer layer; tsp. light gray middle layer; thin op. white core; 1 specimen (Pl. IVB, left column, row 5). This bead has the same configuration as the smaller size of the previous variety and the same comments apply.

Length: 36.0 mm Diameter: 8.0 mm

IIIk — Tubular Multi-Layered Chevron Beads with Plain Outer Layers

IIIk*(a). Tubular (discoidal); chevron bead with 4 starry layers: 1) tsp. bright navy outer layer; 2) op. white layer; 3) op. redwood layer; and 4) op. white core; 13 specimens (Pl. IVA, left column, row 6). The ridges of the second layer show through as straight stripes. These beads are formed of extremely short tube sections with rounded ends.

Length: 1.8-4.0 mm Diameter: 6.3-7.3 mm

IIIk*(b). Tubular; chevron bead with 4 starry layers: 1) tsp. turquoise outer layer; 2) op. white layer; 3) op. redwood

layer; and 4) op. white core; 6 specimens (Pl. IVA, right column, row 6). The ridges of the second layer show through as straight stripes. All of the specimens have "orange peel" surfaces. Their ends are well rounded.

Length: 10.4-10.9 mm Diameter: 6.7-7.7 mm

IVa — Non-Tubular Polychrome (Multi-Layered) Beads

IVa*(a). Circular; tsp. scarlet outer layer; op. white core; 10 specimens (Pl. IVA, left column, row 11).

Length: 3.0-3.9 mm Diameter: 5.3-6.1 mm

IVb — Non-Tubular Polychrome (Multi-Layered) Bodied Beads with Straight Simple Stripes

IVb*(a). Circular; op. white outer layer decorated with 22 straight, alternating stripes of tsp. scarlet and op. bright navy; op. shadow blue core; 8 specimens (Pl. IVA, left column, row 12).

Length 4.6-5.8 mm Diameter: 5.6-6.2 mm

IVb*(b). Circular; op. redwood outer layer decorated with 6 straight op. white stripes; tsp. apple green core; 17 specimens (Pl. IVA, left column, rows 7 and 10). Two size populations are represented.

Length: 2.9-4.1 mm Diameter: 4.5-4.8 mm
4.6-6.0 mm 6.2-6.7 mm

IVbb — Non-Tubular Polychrome (Multi-Layered) Bodied Beads with Straight Compound Stripes

IVbb*(a). Circular; op. white outer layer decorated with 6 straight, compound stripes composed of a tsp. scarlet stripe adjacent to an op. bright navy stripe; op. shadow blue core; 7 specimens (Pl. IVA, left column, row 9).

Length: 4.4-6.0 mm Diameter: 6.0-7.0 mm

IVbb*(b). Circular; op. redwood outer layer decorated with 4 straight, compound stripes of tsp. bright navy on op. white; tsp. apple green core; 11 specimens (Pl. IVA, left column, row 3).

Length: 2.4-3.3 mm Diameter: 3.6-3.9 mm

IVbb*(c) Circular; tsp. medium turquoise blue outer layer decorated with 4 straight, compound stripes of op. redwood on op. white; tsl. light gray core; 13 specimens (Pl. IVA, left column, row 5).

Length: 2.1-2.8 mm Diameter: 3.6-4.0 mm

Wound Glass Beads

The beads in this group were produced by repeatedly winding a filament of glass around a rotating mandrel until the desired size and shape were achieved.

WIa — Cylindrical Monochrome Beads

WIa*(a). Cylindrical; op. olive yellow; 11 specimens (Pl. IVA, right column, row 8; Pl. VB, row 12). There are streaks in the glass.

Length: 17.6-18.7 mm Diameter: 11.5-12.6 mm

WIa*(b). Cylindrical; tsl. medium blue; 3 specimens (Pl. IVA, central column, row 8). The beads have irregular outlines and dull surfaces.

Length: 12.7-14.5 mm Diameter: 8.2-8.3 mm

WIB — Round Monochrome Beads

WIB1. Round; tsp. light gray; 17 specimens (Pl. IIIC, central column, row 7; Pl. VIB, row 12).

Length: 10.2-10.7 mm Diameter: 10.7-11.2 mm

WIB5. Round; tsl. pale blue; 27 specimens (Pl. IIIC, right column, rows 5 and 13; Pl. VIA, row 1; Pl. VIB, row 28). The glass has a golden cast. Two size populations are represented.

Length: 8.1-10.0 mm Diameter: 10.2-10.5 mm
26.7-28.8 mm 29.3-31.0 mm

WIB7. Round; tsp. amber; 19 specimens (Pl. IIIC, right column, row 2; Pl. VIB, row 6). The surfaces are shiny.

Length: 7.2-9.3 mm Diameter: 10.4-10.6 mm

WIB16. Round; tsp. bright navy; 17 specimens (Pl. IIIC, central column, row 4; Pl. VIB, row 8).

Length: 9.7-10.6 mm Diameter: 11.2-11.5 mm

WIB*(a). Round; tsp. light gray with a slight greenish cast; 17 specimens (Pl. IIIC, central column, row 3; Pl. VIB, row 22).

Length: 9.1-9.8 mm Diameter: 10.3-10.7 mm

WIB*(b). Round; tsl. oyster white; 3 specimens (Pl. IIIC, right column, row 9).

Length: 11.0-12.4 mm Diameter: 13.6-14.1 mm

WIB*(c). Round; tsl. light gray; 14 specimens (Pl. VIB, row 19). The glass is cracked.

Length: 8.0-9.7 mm Diameter: 9.8-10.8 mm

Wib*(d). Round; op. black; 24 specimens (Pl. IIIC, central column, row 10; Pl. VB, row 3; Pl. VIB, row 24). The surfaces are shiny. There are two size groups.

Length: 9.1-10.7 mm Diameter: 11.3-12.0 mm
13.2-14.1 mm 15.6-16.9 mm

Wib*(e). Round; tsl. mustard gold; 4 specimens (Pl. IIIC, central column, row 6).

Length: 7.8-9.3 mm Diameter: 10.7-12.3 mm

Wib*(f). Round; tsp. barn red; 19 specimens (Pl. IIIC, central column, row 2; Pl. VIB, row 16).

Length: 8.8-9.7 mm Diameter: 11.2-11.8 mm

Wib*(g). Round; tsp. scarlet; 3 specimens (Pl. IIIC, right column, row 4).

Length: 10.1-10.7 mm Diameter: 10.4-11.4 mm

Wib*(h). Round; tsp. rose wine; 15 specimens (Pl. IIIC, central column, row 8; Pl. VIB, row 21).

Length: 10.2-12.4 mm Diameter: 12.4-13.5 mm

Wib*(i). Round, op. copen blue; 31 specimens (Pl. IIIC, right column, row 11; Pl. VB, row 13; Pl. VIB, row 29). The glass is swirled and the surfaces are shiny. Two size populations are represented.

Length: 9.3-11.0 mm Diameter: 10.5-11.1 mm
15.7-16.4 mm 15.6-16.2 mm

Wib*(j). Round; tsl. cerulean blue; 21 specimens (Pl. IIIC, right column, row 1; Pl. VIB, row 10).

Length: 7.4-8.8 mm Diameter: 9.2-9.7 mm

Wib*(k). Round; tsp. dark green; 19 specimens (Pl. IIIC, central column, row 5; Pl. VIB, row 26).

Length: 7.6-10.9 mm Diameter: 10.2-11.0 mm

Wib*(l). Round; tsl. apple green; 24 specimens (Pl. IIIC, central column, row 9, and right column, row 3; Pl. VIB, row 14). The glass is swirled and contains numerous bubbles. The surfaces are shiny. Two size populations are represented.

Length: 7.3-8.6 mm Diameter: 9.8-10.4 mm
9.9-12.7 mm 12.4-13.5 mm

Wic — Oval Monochrome Beads

Wic1. Oval; op. white; 4 specimens (Pl. VB, row 16).

Length: 28.4-29.5 mm Diameter: 16.1-17.0 mm

Wic5. Oval; tsp. amber; 13 specimens (Pl. IIIC, left column, row 11; Pl. VIB, row 11).

Length: 13.2-17.6 mm Diameter: 6.1-7.0 mm

Wic*(a). Oval; tsl. oyster white; 15 specimens (Pl. IIIC, left column, rows 13 and 15; Pl. VIB, row 9). Two size populations are represented.

Length: 13.2-14.9 mm Diameter: 7.9-8.8 mm
30.1-31.5 mm 19.8 mm

Wic*(b). Oval; op. black; 12 specimens (Pl. IIIC, left column, row 14; Pl. VIB, row 7). The beads are shiny and represent two size populations.

Length: 13.0-16.1 mm Diameter: 7.6-8.8 mm
18.5-19.2 mm 10.3-11.5 mm

Wic*(c). Oval; tsl. mustard gold; 12 specimens (Pl. IIIC, left column, row 8; Pl. VIB, row 27).

Length: 15.7-17.3 mm Diameter: 8.1-8.9 mm

Wic*(d). Oval; tsp. rose wine; 12 specimens (Pl. IIIC, left column, row 9; Pl. VIB, row 1).

Length: 14.5-17.5 mm Diameter: 6.5-7.7 mm

Wic*(e). Oval; op. ultramarine; 5 specimens (Pl. IIIC, left column, row 5).

Length: 10.6-12.0 mm Diameter: 6.1-6.6 mm

Wic*(f). Oval; tsl. bright navy; 12 specimens (Pl. IIIC, left column, row 10; Pl. VIB, row 3). The surfaces are shiny.

Length: 14.8-16.2 mm Diameter: 6.6-8.0 mm

Wic*(g)/Oval; tsp. bright navy; 10 specimens (Pl. VIB, row 17). Surfaces are shiny.

Length: 12.8-14.5 mm Diameter: 5.9-6.6 mm

Wic*(h). Oval; tsl./op. bright blue; 4 specimens (Pl. IIIC, left column, row 12). The glass is swirled and practically opaque.

Length: 13.0-14.3 mm Diameter: 6.8-7.8 mm

Wic*(i). Oval; tsl. robin's egg blue; 9 specimens (Pl. VIB, row 5). Surfaces are shiny.

Length: 14.1-16.5 mm Diameter: 7.6-8.6 mm

Wic*(j). Oval; tsl. light aqua blue; 4 specimens (Pl. IIIC, left column, row 7).

Length: 12.9-15.4 mm Diameter: 7.6-8.3 mm

Wic*(k). Oval; tsl. apple green; 12 specimens (Pl. IIIC, left column, row 4; Pl. VIB, row 25). There are swirls in the

glass and the surfaces are shiny. Two size populations are represented.

Length: 15.5-20.0 mm Diameter: 6.3-6.9 mm
14.0-16.9 mm 8.2-9.1 mm

WIIb — Monochrome Flat “Disc” Beads

WIIb*(a). Flat “disc” beads; tsp. dark green; 6 specimens (Pl. IVA, central column, row 5). These consist of round beads pressed flat while the glass was still viscid.

Length: 7.0-8.6 mm Diameter: 4.2-4.9 mm by
9.3-11.3 mm

WIIc — Monochrome “Ridged Tube” Beads

WIIc*(a). Ridged tube (square cross-section); tsp. bright navy; 5 specimens (Pl. IVA, left column, row 13). Their sides exhibit a “waffle iron” design.

Length: 7.3-8.5 mm Diameter: 6.6-7.3 mm

WIIk — Monochrome Circular Convex Bicone Beads

WIIk*(a). Circular convex bicone (Beck’s type I.B.I.e.); op. white; 22 specimens (Pl. VA, left column, row 3; Pl. VB, row 14). Shiny surfaces.

Length: 5.7-6.2 mm Diameter: 15.4-16.2 mm

WIIk*(b). Circular convex bicone; op. light gold; 5 specimens (Pl. VA, left column, row 2). Dull surfaces.

Length: 5.0-7.1 mm Diameter: 16.2-17.0 mm

WIIk*(c). Circular convex bicone; op. cinnamon; 29 specimens (Pl. VA, central column, row 1; Pl. VB, row 1). The beads have a dull luster.

Length: 4.5-5.4 mm Diameter: 13.7-14.8 mm

WIII* — Monochrome Standard Circular Truncated Convex Bicone Beads

WIII*(a). Standard circular truncated convex bicone (Beck’s type I.C.I.f.); op. light gold; 6 specimens (Pl. VA, central column, row 5). Dull surfaces.

Length: 9.4-10.3 mm Diameter: 9.9-11.0 mm

WIIIa — Class WI Beads with a Surface Coating of a Different Color or Material

WIIIa*(a). Round-ribbed; tsl. oyster white body covered with an interconnected series of identically colored, ca. 0.8-

mm-wide glass filament rings that encircle the bead; the equator is further decorated with 2-3 tsl. rose wine rings; 5 specimens (Pl. IVB, right column, row 5).

Length: 7.3-7.9 mm Diameter: 7.4-8.5 mm

WIIIa*(b). Round; tsp. scarlet outer layer; op. white core; 21 specimens (Pl. IIIC, central column, row 11, and right column, row 8; Pl. VB, rows 2 and 15). Two size populations are represented.

Length: 12.6-13.1 mm Diameter: 13.2-13.5 mm
16.7-16.8 mm 19.5-19.8 mm

WIIIa*(c). Oval; tsp. scarlet outer layer; op. white core; 14 specimens (Pl. IIIC, left column, row 6; Pl. VIB, row 2).

Length: 10.2-11.8 mm Diameter: 6.4-7.6 mm

WIIIb — Class WI Beads with Inlaid Decoration

WIIIb*(a). Cylindrical; tsl. light gray body decorated with a compound stripe of tsp. scarlet on op. white around the middle, and 4 compound dots of tsp. bright navy and op. white glass swirled together around either end; 5 specimens (Pl. VA, left column, row 6). Shiny surfaces.

Length: 9.2-11.0 mm Diameter: 5.6-6.0 mm

WIIIb*(b). Cylindrical; op. light gold body decorated with 9 tsp. scarlet dots, and 9 short, compound stripes of tsp. bright navy on op. white on op. barn red on op. dark rose brown; 13 specimens (Pl. VA, right column, row 6; Pl. VIA, row 12). The surfaces are shiny.

Length: 14.2-15.4 mm Diameter 9.0-10.1 mm

WIIIb*(c). Cylindrical; op. light gold body decorated with 2 op. barn red and 2 tsl. dark palm green stripes that alternate around the bead; a tsl. dark palm green stripe encircles the middle; a dot of the same color is situated in the center of each of the square areas produced by the intersecting stripes; 4 specimens (Pl. VA, right column, row 3). The beads have a dull luster.

Length: 12.0-13.3 mm Diameter: 7.8-8.4 mm

WIIIb*(d). Cylindrical; op. mustard gold body decorated with 2 pairs of loops composed of a tsl. dark palm green stripe next to an op. white stripe next to a tsp. scarlet stripe; the two sets of loops are separated from each other by a short, diagonal, compound stripe of tsp. bright navy next to op. white; the loops in each set are separated from each other by two tsl. dark palm green dots; 4 specimens (Pl. VA, right column, row 5). The specimens have dull surfaces.

Length: 14.2-15.0 mm Diameter: 7.7-7.8 mm

WIIIb*(e). Cylindrical; op. mustard gold body decorated with: 1) a spiral, compound stripe of op. mustard gold (formed by the body of the bead) bordered on one side by an op. barn red stripe and by an op. dark palm green stripe on the other; 2) a wavy, spiral, compound stripe of op. white and tsp. scarlet filaments twisted together; and 3) 15-17 scattered, op. dark rose brown dots; 7 specimens (Pl. VA, right column, rows 2 and 4). The beads, all of which are dull-surfaced, represent two size populations.

Length: 14.3-14.7 mm Diameter: 7.5-8.0 mm
15.7-16.8 mm 9.1-9.6 mm

WIIIb*(f). Cylindrical; op. barn red body decorated with approximately 20 op. white loops with an op. light gold dot or dash in the center of each; 11 specimens (Pl. VA, right column, row 1; Pl. VB, row 10). The surfaces are dull.

Length: 18.0-19.9 mm Diameter: 8.1-8.9 mm

WIIIb*(g). Cylindrical; tsl. bright navy body decorated with 3 compound dots of tsp. scarlet on op. white which encircle the middle, and 3 op. light gold dots around either end; 4 specimens (Pl. VA, left column, row 4). The bright navy glass appears black unless held up to a light and its surface is dull.

Length: 6.2-7.3 mm Diameter: 4.6-5.0 mm

WIIIb*(h). Round; op. white body decorated with 6-9 tsp. bright navy dots; 3 specimens (Pl. IIIC, central column, row 1).

Length: 10.5-11.7 mm Diameter: 12.8-13.4 mm

WIIIb*(i). Round; op. white body decorated with 2 tsp. scarlet and 2 tsp. bright navy floral motifs set parallel to the perforation; 11 specimens (Pl. VIB, row 4). Surfaces are shiny.

Length: 10.3-11.7 mm Diameter: 8.9-9.5 mm

WIIIb*(j). Round; tsl. light gray body decorated with 6 tsp. bright navy dots; 3 specimens (Pl. IIIC, right column, row 7).

Length: 9.5-12.0 mm Diameter: 13.7-13.9 mm

WIIIb*(k). Round; op. black body decorated with a combed design of tsp. ruby on op. white; 1 specimen (Pl. IIIC, left column, row 1).

Length: 14.8 mm Diameter: 15.1 mm

WIIIb*(l). Round; op. black body decorated with approximately 25 compound dots or eyes of tsp. scarlet on op. white and op. turquoise on op. white; 14 specimens (Pl. IIIC, right column, row 6; Pl. VIB, row 20).

Length: 11.1-11.3 mm Diameter: 10.6-11.0 mm

WIIIb*(m). Round; tsp. scarlet body decorated with 8 large, op. white dots; 13 specimens (Pl. VIB, row 13).

Length: 6.9-9.6 mm Diameter: 7.7-9.5 mm

WIIIb*(n). Round; tsp. ruby body decorated with 11 compound dots of tsp. scarlet on op. white; 1 specimen (Pl. IIIC, left column, row 3).

Length: 16.3 mm Diameter: 18.0 mm

WIIIb*(o). Round; tsp. ruby body decorated with 6 floral motifs set parallel to the perforation: 3 motifs have op. white leaves and op. russet orange stalks; the others are solid russet orange; 12 specimens (Pl. IIIC, right column, row 12; Pl. VIA, row 4).

Length: 14.0-15.4 mm Diameter: 16.0-16.4 mm

WIIIb*(p). Oval; op. white body decorated with 4 floral motifs set parallel to the perforation; 2 motifs have tsp. scarlet leaves and faint op. bright navy stalks; the other two are solid bright navy; 12 specimens (Pl. IVA, central column, row 6; Pl. VIB, row 15).

Length: 14.3-15.1 mm Diameter: 7.8-8.4 mm

WIIIb*(q). Oval; tsp. ruby body decorated with: 1) a compound, spiral stripe composed of entwined op. white and tsp. bright navy filaments, and 2) a spiral series of 10 compound dots of op. white and tsp. bright navy swirled together; 11 specimens (Pl. IVA, central column, row 7; Pl. VIB, row 18).

Length: 14.7-15.4 mm Diameter: 8.3-8.5 mm

WIIIb*(r). Oval (barrel-shaped); op. light gold body decorated with 3 straight, compound stripes of tsp. bright navy on op. white on op. barn red, and a compound stripe of op. barn red on op. white on op. dark palm green that encircles the middle and extends over the other stripes; 3 specimens (Pl. VA, central column, row 2). Bead surfaces are dull.

Length: 11.7-12.2 mm Diameter: 7.8 mm

WIIIb*(s). Oval (barrel-shaped); op. cinnamon body decorated with 3 straight, compound stripes of tsp. bright navy on op. white on op. barn red; an identical stripe encircles the middle and extends over the other stripes; 14 specimens (Pl. VA, central column, row 3; Pl. VIA, row 11). Dull luster.

Length: 11.7-12.1 mm Diameter: 8.8-9.5 mm

WIIIb*(t). Oval (barrel-shaped); op. cinnamon body decorated with 8 short, straight, compound stripes of tsp. bright navy on op. white on op. barn red, and a compound stripe of tsp. bright navy on op. white on op. barn red on tsl.

dark palm green which girds the equator; 4 specimens (Pl. VA, right column, row 7). Surfaces are dull.

Length: 14.6-15.7 mm Diameter: 10.6-11.4 mm

WIIIC — Class WII Beads with an Inlaid Decoration

WIIIC*(a). Flat “disc” beads; op. mustard gold body decorated with 16 loops composed of a tsp. dark rose brown stripe next to an op. orchid mist stripe; a compound dot of tsp. bright navy and op. white swirled together occupies the center of each loop; 16 tsl. dark palm green dots occupy the interstices between the loops; 11 specimens (Pl. VA, right column, row 9; Pl. VB, row 5). Dull surfaces.

Length: 16.2-17.0 mm Width: 19.4-19.7 mm
Thickness: 6.5- 7.0 mm

WIIIC*(b). Flat “disc” beads; op. mustard gold body decorated with several elements: 1) a wavy compound stripe of bright turquoise and op. white filaments twisted together encircles the middle and is bordered by 10 near op. dark rose brown dots; 2) 5 loops of op. white on tsp. scarlet with a compound dot of tsp. dark palm green and op. white swirled together in the center of each encircle either end; and 3) identical dots occupy the spaces between adjacent loops; 12 specimens (Pl. VA, right column, row 8; Pl. VB, row 7). Surfaces are dull.

Length: 14.6-16.3 mm Width: 16.4-17.6 mm
Thickness: 6.1- 6.9 mm

WIIIC*(c). Flat “disc” beads; op. deep blue body decorated with 16 loops composed of tsp. scarlet and op. white threads twisted together; an op. mustard gold dot is situated in the center of each loop; 16 op. white dots cover the rest of the surface; 11 specimens (Pl. VA, right column, row 10; Pl. VB, row 6). The surfaces are dull.

Length: 17.1-17.5 mm Width: 19.2-20.0 mm
Thickness: 7.0- 7.2 mm

WIIIC*(d). Short circular barrel (Beck’s type I.B.1.b.); op. sunlight yellow body; a compound stripe of tsp. dark jade green and tsp. scarlet on op. white encircles the middle; a compound stripe composed of a series of short, alternating tsp. dark jade green and scarlet diagonals on an op. white background encircles either end; 5 specimens (Pl. VA, central column, row 4). They exhibit a dull luster.

Length: 7.4-8.0 mm Diameter: 11.6-13.7 mm

WIIIC*(e). Short circular barrel; op. aqua blue body decorated with 5 compound dots of tsp. scarlet on op. white that gird the middle, and 5 compound dots of tsp. bright navy on op. white around either end; 8 specimens (Pl. VA, left column, row 8). Surfaces are dull.

Length: 5.1-5.8 mm Diameter: 7.5-8.8 mm

WIIIC*(f). Short circular barrel; op. surf green body decorated with a compound stripe of tsp. scarlet on op. white that encircles the middle and is bordered on either side by a wavy, op. mustard gold stripe; 10 tsl. rose wine dots are situated in the area between the central stripe and the lateral ones; 5 op. white dots encircle either end; 5 specimens (Pl. VA, left column, row 7). They have a dull luster.

Length: 5.9-6.4 mm Diameter: 10.8-12.9 mm

WIIIC*(g). Short circular truncated convex bicone (Beck’s type I.B.1.f.); op. light gold body decorated with two identical sets of very narrow, straight, simple stripes: an op. barn red stripe situated between 2 tsl. dark palm green stripes; a very narrow, op. barn red stripe extends along the equatorial ridge; 4 specimens (Pl. VA, central column, row 9). Surfaces are dull.

Length: 14.3-14.7 mm Diameter: 17.0-18.0 mm

WIIIC*(h). Standard circular truncated convex bicone (Beck’s type I.C.1.f.); op. black body decorated with 6 irregular, op. cinnamon blotches with an op. barn red loop in the center of each; 13 specimens (Pl. VA, central column, row 6; Pl. VB, row 9). Surfaces are dull.

Length: 15.7-16.0 mm Diameter: 15.1-15.5 mm

WIIIC*(i). Standard circular truncated convex bicone; op. black body decorated with 8 eyes composed of an op. bright blue dot enclosed by an op. mustard gold ring with 2 crossed compound stripes of op. black next to op. mustard gold next to op. barn red in the center of each; a compound stripe of op. mustard gold on op. barn red extends around the equator, and an op. white ring encircles either end; 4 specimens (Pl. VA, central column, row 7). Surfaces are shiny.

Length: 15.7-16.3 mm Diameter: 15.2-16.6 mm

WIIIC*(j). Standard circular truncated convex bicone; op. cinnamon body decorated with 4 straight, compound stripes of tsl. dark palm green on op. cinnamon, bordered on one side by an op. barn red stripe and by an op. dark rose brown stripe on the other; a tsl. dark palm green stripe girds the middle and extends over the compound stripes; 11 specimens (Pl. VA, central column, row 10; Pl. VB, row 4). They have a dull luster.

Length: 16.0-16.2 mm Diameter 17.7-19.0 mm

WIIIC*(k). Standard circular truncated convex bicone; op. dark jade green body decorated with 3 to usually 4 straight, compound stripes of op. light gold bordered on one side by an op. black stripe and by an op. barn red stripe on the other; an op. light gold stripe extends along the equatorial ridge

and crosses the other stripes; 4 specimens (Pl. VA, central column, row 8). The beads have dull surfaces, and the ends are irregular and not very wide.

Length: 13.7-15.0 mm Diameter: 14.3-16.5 mm

WIIIC*(l). Standard circular truncated convex bicone; op. dark palm green body decorated with 4 straight, compound stripes of op. light gold bordered on one side by an op. black stripe and by an op. barn red stripe on the other; an op. light gold stripe encircles the equator and extends over the other stripes; 1 specimen (Pl. VA, left column, row 1). Surfaces are dull and the ends are irregular and not very wide.

Length: 16.9 mm Diameter: 18.1 mm

WIIIC*(m). Ridged tube (square cross-section); tsl. oyster white body decorated with 6 very short, compound stripes of tsl. oyster white on tsp. bright navy with an op. amber dot in the approximate center of each stripe; the stripes are perpendicular to the axis of the perforation; 9 specimens (Fig. 4; left column, row 9; Pl. VB, row 8). The beads have shiny surfaces. They are equivalent to Beck's (1928) long square cylinders (type IX.D.2.b.).

Length: 18.6-18.8 mm Diameter: 8.1-9.1 mm

WIIIC*(n). Ridged tube (triangular to square cross-section); op. black body decorated with a wavy op. amber stripe around the middle, and a wavy op. white stripe around either end; 5 specimens (Pl. VA, left column, row 5). These are the equivalent of Beck's (1928) long square cylinder (type IX.D.2.b.) and long triangular cylinder (type VIII.D.2.b.). Surfaces are shiny.

Length: 9.1-10.1 mm Diameter: 5.4-5.9 mm

WIIIf — Class WI Beads with Internal Decorative Elements

WIIIf*(a). Round; tsl. maple body decorated internally with slightly spiral, op. white glass bands that encircle the perforation; 2 specimens (Pl. IIIC, left column, row 2).

Length: 14.0-15.4 mm Diameter: 14.7-16.8 mm

WIIIf*(b). Round; tsl. dark green body decorated internally with slightly spiral, op. white glass bands that encircle the perforation; 4 specimens (Pl. IIIC, right column, row 10).

Length: 11.0-11.6 mm Diameter: 12.0-13.2 mm

Mold-Pressed Glass Beads

These beads were manufactured by pressing molten glass in a two-piece mold and then letting it harden. The

surfaces of most specimens were subsequently modified by grinding.

MPIa — Monochrome Round Beads

MPIa*(a). Round; tsl. sunlight yellow; 9 specimens (Pl. VIB, row 23). The beads have slight equatorial bulges, shiny surfaces, and their perforations taper noticeably.

Length: 11.0-12.2 mm Diameter: 13.3-13.9 mm

MPIIa — Monochrome Round-Faceted Beads

MPIIa*(a). Round-faceted; tsl. sunlight yellow; 4 specimens (Pl. IVB, right column, row 1). The beads are covered with numerous, poorly cut, irregular facets. The perforation tapers noticeably.

Length: 11.5-12.0 mm Diameter: 13.6-14.3 mm

MPIIa*(b). Round-faceted; tsl. amber; 7 specimens (Pl. VIA, row 3). Numerous cut diamond-shaped facets cover the medial portion, whereas cut pentagonal facets extend around the flat ends.

Length: 19.4-20.0 mm Diameter: 23.8-25.0 mm

MPIIa*(c). Round-faceted; op. bright Dutch blue; 5 specimens (Pl. IVB, right column, row 3). This variety has approximately 26 diamond-shaped cut facets around the middle, and 8-10 irregular pentagonal cut facets at either end. The perforation is tapered and the ends are flat.

Length: 7.9-9.2 mm Diameter: 10.1-10.8 mm

MPIIa*(d). Round-faceted; op. dark green; 4 specimens (Pl. IVB, right column, row 2). This variety exhibits 54-60 neatly cut facets: 36-40 triangular facets around the middle, and 9-10 trapezoidal facets about either end. The perforations taper and the ends are flat.

Length: 10.8-11.3 mm Diameter: 12.6-13.1 mm

MPIIb — Monochrome Long Hexagonal Barrel Beads

MPIIb*(a). Long hexagonal barrel (Beck's type XIII. D.I.b.); tsl. light gray; 4 specimens (Pl. IVB, left column, row 1; Pl. VIA, row 6). This variety has a cut, hexagonal-sectioned body that tapers gradually towards either flat end. The glass contains elongate bubbles parallel to the axis of the perforation.

Length: 52.0 mm Diameter: 13.3 mm

MPIIb*(b). Long hexagonal barrel; tsl. deep blue; 1 specimen (Pl. VIA, row 2). This bead has the same form as the previous one.

Length: 105.0 mm Diameter: 20.8 mm

Stone Beads

Long circular barrel (Beck's type I.D.1.b.); banded carnelian; 7 specimens (Pl. VIA, row 10). The beads have polished surfaces.

Length: 19.2-22.9 mm Diameter: 6.7-7.8 mm

Long octagonal cone (Beck's type XIV.D.2.d); banded carnelian; 10 specimens (Pl. VIA, rows 8 and 9). The ends of every other facet have been ground down. The surfaces are polished. Two size populations are represented.

Length: 24.4-28.7 mm Diameter: 8.3-9.9 mm
40.0-43.2 mm 9.1-11.4 mm

DISCUSSION AND CONCLUSIONS

Although the exact date the display cards and boxes that comprise the Levin Catalogue were prepared is not known, fairly narrow relative dates can be assigned to the two component collections. The four display cards are attributable to the period 1851-1863. The latter year corresponds to the cards' museum accession date, whereas 1851 is the first year that M.L. Levin is recorded as being at the Bevis Marks address that appears on the bead cards. The three display boxes can be ascribed to 1857-1869. The former date is based on the presence of the city zoning designation "E.C." after the address on the display case labels. The use of such zones in London street addresses appears to have been implemented in 1857 (Kelly 1857). The other terminal date is founded on the fact that the designation "manufacturer," which appears after Levin's name on the box labels, is deleted from the London city directory listings after 1869. This implies the bead boxes were assembled before this date. Many of the beads themselves have counterparts at similarly dated archaeological sites in North America, suggesting the specimens exhibited in the Levin Catalogue represent current rather than old stock.

While there are no records to indicate exactly who produced the beads in the Levin Collection, it is known that Venice, Bohemia, and Germany supplied beads to the company during the 1890s and early 1900s (Kelly 1898:1230; 1911:1029). Certainly the bulk—if not all—of the wound specimens were produced in Venice/Murano. The faceted beads are probably the products of Bohemia as are the mold-pressed specimens, though Germany may also

have been a supplier. Germany likely provided the carnelian beads; the gem-grinding center at Idar-Oberstein being a major source of such beads.

ENDNOTE

1. This article was previously published in *Glass Beads* (Karklins 1985:7-39). It is being reprinted as it remains one of only a few sets of mid-19th-century sample cards in existence, and also shows the value of city directories in bead research. The text essentially remains the same. The major change is publishing the catalogue in color.

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