

Bottle Nomenclature: A Glossary of Landmark Terminology for the Archaeologist

ABSTRACT

Recognizing the lack of uniformity in the literature with regard to bottle nomenclature, an attempt is made to provide some degree of consistency. The problem does not lie entirely with the terminology currently being used but rather with a lack of a precise definition of that terminology. Although not exhaustive, the glossary should be of assistance to the average archaeologist.

Introduction

Some efforts more than others take their rise out of necessity. So it is with the following—a respectfully complete, though somewhat short of exhaustive, glossary of bottle nomenclature.

Recent work carried out at two historic archaeological sites in Northeastern Ohio, the Eaton (Hopewell) Furnace (33MH9) and the Austin Log House complex (33MH11) led to the recovery of hundreds of bottles and bottle fragments of various ages dating from the present back to the 1840's. When the time came to describe these ubiquitous artifacts, the writer found himself in a quandary of fair proportions, being totally unprepared for the abundance of terms being used to define and describe just the landmarks on glass bottles and jars. The examination of texts and treatises on bottles and bottlemaking soon led to the inevitable conclusion that: 1) authors often have their own idiosyncratic terms for some landmarks; 2) some terms are used in different ways (some slightly different, some grossly different) by different authors; 3) terms in common usage by the layman are often (if not usually) too imprecise (or even incorrect) for

use in descriptive reports, and 4) somehow, some degree of uniformity had to be brought to the material. Answers to letters written to numerous experts reinforced this need.

The problem does not lie in the terminology used in describing types of containers or types of materials. There are, fortunately, a number of experts who can tell the archaeologists new to the field almost everything they need to know about shapes, uses, dates, material, styles, makers, and methods of bottle or glassmaking. Unfortunately for most archaeologists—and again this is especially true of the investigator newly arrived in the field of historic sites archaeology—the question they need most answered is that for which the answer is least available—the correct term to use in describing the bits and pieces of the artifact itself. In short, there is a need for a lexicon of bottle nomenclature.

It is true that at the back of some (but certainly not most) longer articles and texts there is a glossary of terms. But a perusal of these glossaries leaves the reader with the distinct impression that while the more unusual terms or those being applied in a unique way are defined, the more casual (and what end up being most vague) terms are the ones which most often are left undefined. Terms such as base, neck, lip, bead, collar, etc. are assumed to be part of the reader's vocabulary and are ignored. It seems that these "easy" words are by far the most difficult to grasp, the most elusive. Their elusiveness lies in their generality, their universality, their ultimate simplicity.

It is the goal of this paper to contain some of this elusiveness. Some of the definitions given herein can be found elsewhere in other forms, some stated in ways which the reader might perhaps find preferable to those here listed. However, most readers will find this lexicon more complete than most, at least in the area of bottle landmarks. As stated at the outset, this endeavor arose out of need; it is not exhaustive, especially to the bottle expert, but it should help the average archaeologist.

GLOSSARY

Applied lip: A lip applied to the neck after the bottle has been formed. It might be straight (Figure 1a), flaring (Figure 1b), or contracting (Figure 1c) or just a ring of glass trailed around the opening. Many forms exist.

Bail: That part of a toggle device which is connected to the lever wire and passes over the lid holding it in place on the bottle or jar. Also called *yoke*. (Figure 3).

Basal diameter: The diameter across the base of round or polygonal bottles.

Base: The surface of the bottle on which it rests when in an upright position; the bottom (Figure 3).

Bead: A raised ridge of glass having a convex section which encircles the neck of a bottle. The term itself can be applied to any such circle or molding; also a modifier indicating its specific location e.g. closure bead (Figure 1d), collar bead, (or beaded collar) (Figure 1e), etc.

Beaded seal: A bottle that makes its seal or point of maximum contact on a beaded ridge which encircles the bottle neck (Figure 1f).

Bernadin disc: A metal (usually tin) disc placed over wired cork stoppers to prevent them from being cut deeply by the taut wire. These discs were often made with scalloped edges to prevent slippage (Figure 1g).

Black glass: The name given to a thick, dark olive green glass. Often a container for porter or ale.

Blob top: The name given to the thick, rounded lip usually applied to the neck of bottles containing carbonated liquids (Figure 1h).

Bottle glass green: The natural aquamarine color of bottle glass resulting from the presence of iron oxides in the sand.

Bottom plate: The shallow depression in the bottom of machine-made bottles and jars designed to allow for stability and to serve as a nest for the closure of another bottle when stacking containers.

Bull's eye: The small, thick, translucent concentration of glass occurring on pieces of crown glass. It is the point at which the pontil was attached during rotation.

Bust-off and grind lip: Found on wide-mouthed bottles, it consists of a lip which was broken or sheared from the blowpipe and subsequently ground to a satin smoothness (Figure 1i).

Buttons: Small knobs or protruberances on the neck of bottles around which the lever wire of a toggle device was wrapped (Figure 1j).

Chip marks: See *whittle marks*.

Closure: A device, such as a cork, cap, stopper, etc., used to seal a bottle.

Closure Sidewall: The portion of the closure between the rolled edge and the top of the skirt (Figure 1k).

Closure skirt: The vertical part of a closure which fits to the outside of the bottle finish. It includes the *closure sidewall*, *curl* or *rolled edge*, and/or *flange* (Figure 1k).

Codd ball stopper: See *Codd stopper*.

Codd "face": The appearance of a "face" given to Codd stopper bottles by virtue of the addition of a pair of indentations in the bottle below the neck. These indentations served to catch the marble before it could reseal the bottle.

Codd stopper: (After Hiram Codd) A closure consisting of a glass marble held by pressure against a ring of cork or rubber which rested in a groove which encircled the inside top of the neck. The seal was broken by pressing down on the marble and sending it down into the bottles' contents (Figure 1l). Also *Codd ball stopper*.

Coil: See *continuous thread*.

Cold mold marks: See *whittle marks*.

Collar: A band, bead, or ring of glass applied to and encircling the finish of a bottle. It may sit immediately adjacent to the lip or some distance below it (Figure 2i).

Continuous thread (C.T.): A continuous spiral projecting glass ridge encircling the finish of

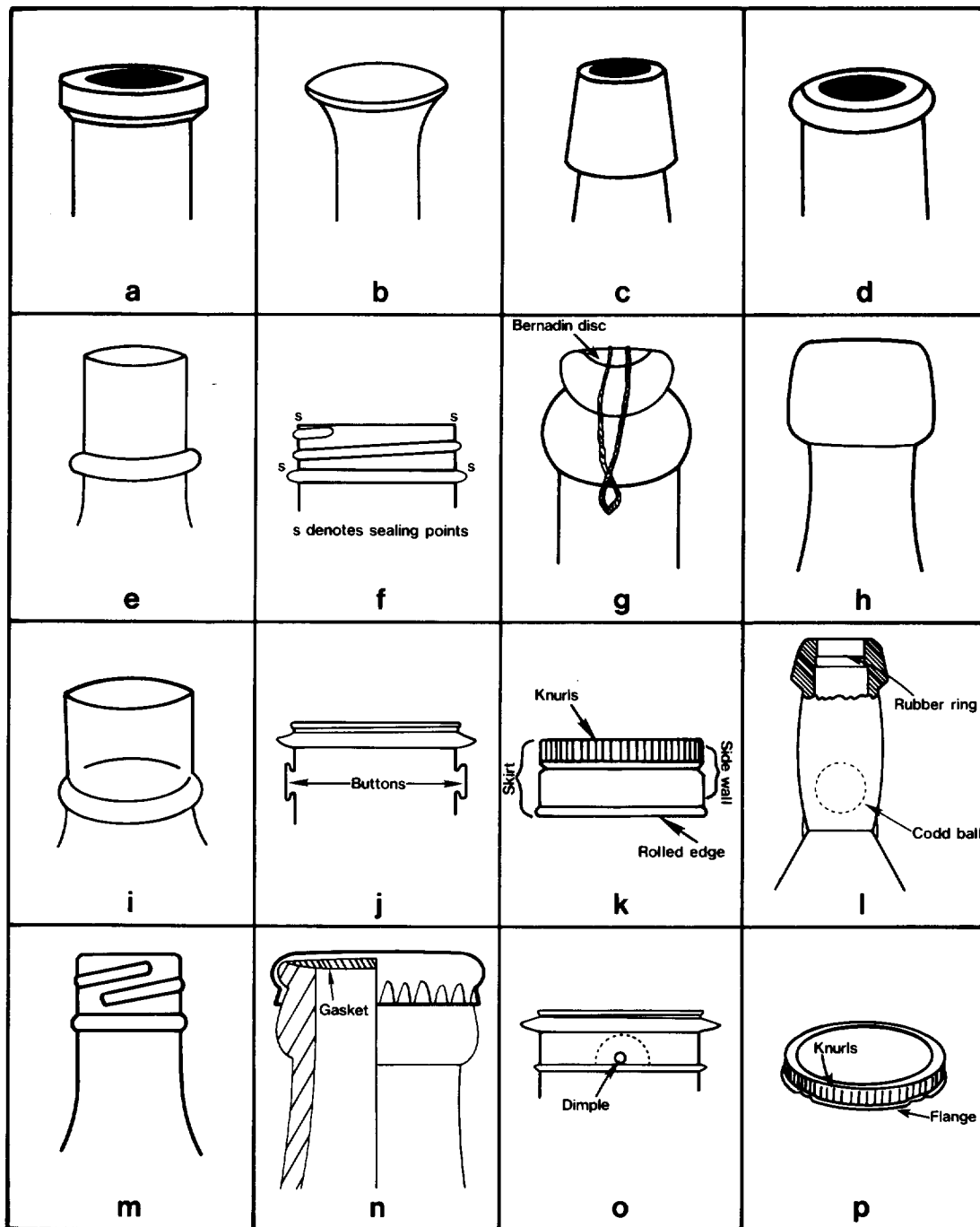


FIGURE 1. Illustrations of bottle landmarks and nomenclature.

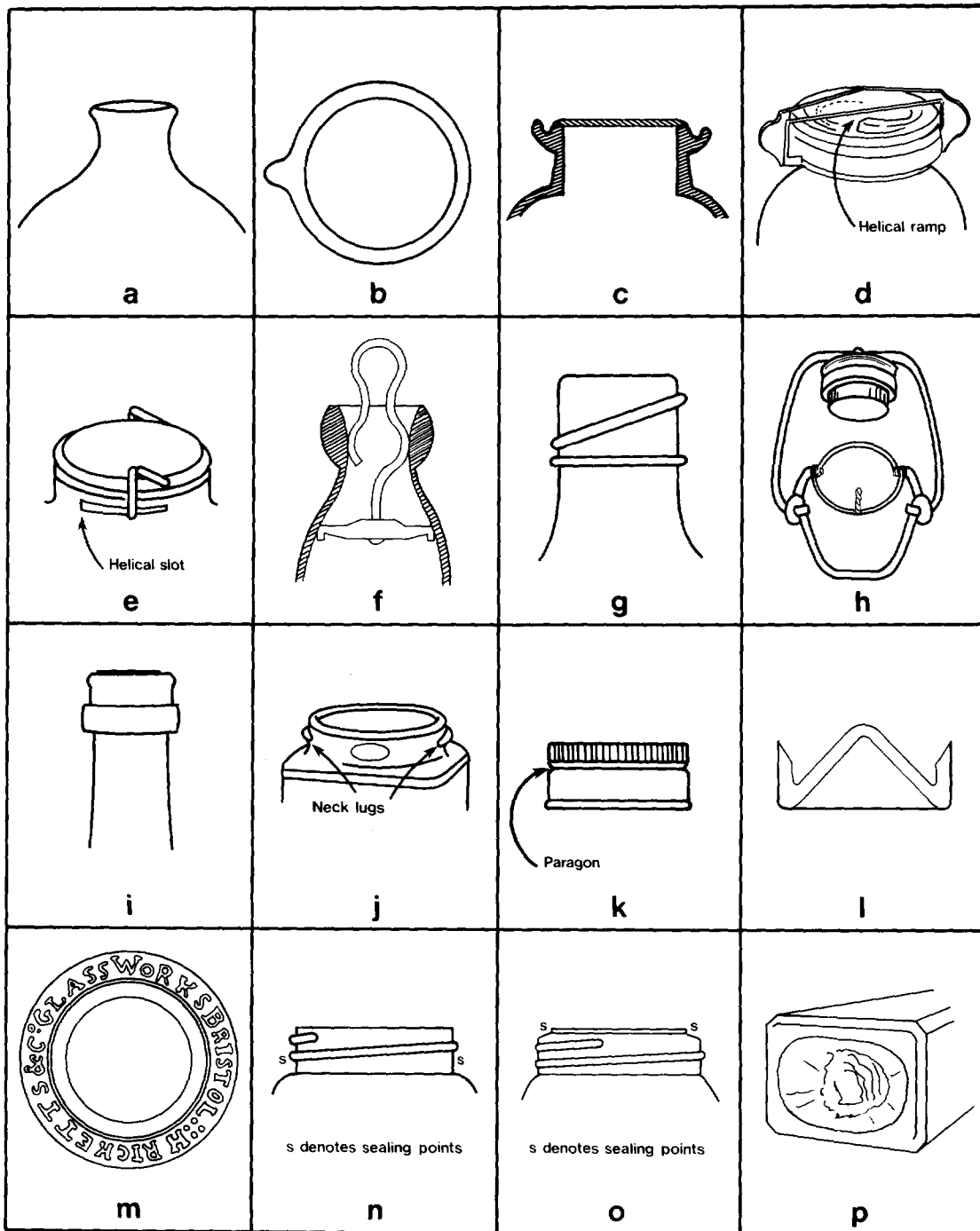
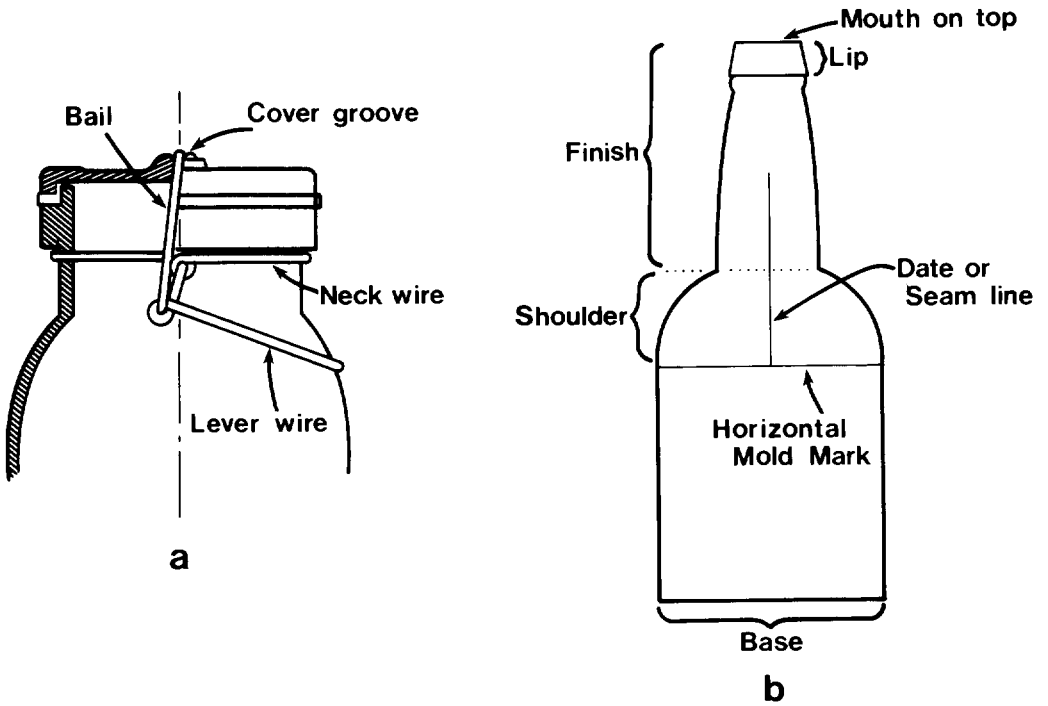


FIGURE 2. Illustrations of bottle landmarks and nonnomenclature.

- a bottle intended to mesh with the thread of a screw-type closure. Also called *helix* or *coil* (Figure 1m).
- Cover groove:** In Lightning-type closures it is a groove of varying lengths which sits atop the closure and receives the yoke or bail. It keeps the closure from slipping (Figure 3).
- Crown cap:** A metal closure usually faced with cork which has its edges crimped over the rounded lip of a bottle (Figure 1n).
- Curl:** See *rolled edge*.
- Cut glass:** Glass decorated by incising the surface with iron or stone wheels.
- Date line:** The vertical mold seam or mold line on a bottle. Called such because it can often be used to approximate the date of manufacture. Also called *seam* or *seam line* (Figure 3).
- Dimple:** The small depression or hole on the bottle neck into which the lever wire of a toggle device is hooked (Figure 1o).
- Dish base:** A concavity in the base of a bottle which is somewhat shallower than a push-up or kick.
- Embossed lettering or embossing:** The raised letters, figures, trademarks, etc. on a bottle.
- Filamented ring:** A ring on the base of early machine-made bottles formed when a gob of glass was severed after being drawn into the mold.
- Finish:** The neck formation i.e., that part of the bottle between the shoulder and the top. Often used to designate specifically the upper portion of the neck to which the closure is affixed (Figure 3).
- Flange (closure):** That part of the closure that protrudes from the bottom of the sidewall and eventually becomes the rolled edge or curl (Figure 1p).
- Flared lip:** A lip that spreads outward so as to create an opening whose diameter is wider at the top than at any other point on the neck (Figure 2a).
- Flashing:** The method where a decorative effect is achieved by dipping white or clear glass in a batch of colored glass to coat it. Also called *plating*.
- Flat base:** A base which is as flat as production will allow.
- Flint glass:** A heavy, leaded glass of high quality with high refractive power, and great luster used in the choicest cut glass-ware.
- Frosted:** The sand-blasted or satiny appearance given to glass as a result of exposure to the abrasive nature of the elements.
- Gasket:** A liner applied between the sealing surface of the bottle lip and the closure to provide the ultimate seal (Figure 1n).
- Gilding:** The method wherein glass is decorated by painting brown gold oxide on it then refiring it.
- Goose pimples:** See *whittle marks*.
- Graphite pontil:** See *bare-iron pontil mark*, under *pontil scar*.
- Greatest diameter:** See *maximum diameter*.
- Green glass:** The relatively coarse glass used chiefly for utilitarian bottles. It is a silicate of lime and soda and is greenish in tint from the iron impurities in the sand.
- Griffen gasket:** A rubber ring gasket used on canning jars having a thumb tab or projection which allows graspability (Figure 2b).
- Ground pontil:** The smooth and often slightly concave circle which remains after the rough pontil scar has been ground off. Also called *polished pontil*.
- Grooved-ring:** A groove encircling the mouth of some early bottles into which a closure having a male counterpart was nestled and sealed (Figure 2c).
- Helical ramp:** A circular ramp on the outside top of glass lids which was designed to receive a neck yoke and was employed in tightening the seal by a rotating action (Figure 2d).
- Helical slot:** Slots or grooves in the bottle finish which were designed to receive a closure



IRD = Inside Rim Diameter
MD = Maximum Diameter
MH = Maximum Height
ND = Neck Diameter
NH = Neck Height
PH = Partial Height
 (fragments only)

c

FIGURE 3. Illustrations of landmarks and nomenclature. a, lever closure; b, bottle anatomy; c, points of measurement.

- with a corresponding lug or other such projection (Figure 2e).
- Helix*: See *continuous thread*.
- Horizontal mold marks*: Mold marks which encircle the bottle (Figure 3).
- Hutchinson stopper*: An internal stopper composed of a stiff wire with a loop at one end and a rubber disc on the other. The disc served as a seal between the liquid and the neck and was dislodged by pushing downward on the exposed wire loop (Figure 2f).
- Improved pontil*: See *bare-iron pontil mark* under *pontil scar*.
- Infolded lip*: The lip is folded into the opening creating a smooth exterior surface and a slight interior ledge. This inner ledge can be detected by rotating a finger around the inside of the neck.
- Inside rim diameter*: The diameter immediately inside the mouth of the bottle (Figure 3).
- Interrupted thread (I.T.)*: Threads on the bottle that are not continuous throughout the circumference of the finish but are gapped to receive a cap with lugs (Figure 2g).
- Kick or kick-up*: See *Push-up*.
- Knurl*: Series of vertical indentations around the top of a closure skirt which allow for gripping during application and removal (Figure 1k, p).
- Lady's leg*: Collector's term for bottles with long curving necks.
- Laid-on ring*: Ranging from crude to refined, this consisted of a glass ring or bead trailed around and/or slightly below the opening and fused to the bottle. It was added to strengthen the opening or neck (Figure 2i).
- Lever*: A closure device, the movement of which, applies pressure to hold a lid against the sealing surface of the bottle (Figure 3).
- Lever wire*: That part of a toggle device which is raised or lowered to loosen or tighten a seal (Figure 3).
- Lightning stopper*: An external stopper, usually made of porcelain, with a rubber ring encircling it as a sealant and held in place on the bottle by a bent wire attached to the stopper and anchored to the outside of the neck just below the rolled lip (Figure 2h).
- Lip*: The edge or margin of glass immediately surrounding the bottle opening (Figure 3).
- Lipping tool marks*: See *swirling*.
- Looping*: Decoration made up of colored loopings or beads of glass of one or more colors added to a bottle body of a different color.
- Maximum diameter*: The maximum diameter in circular or polygonal bottles measured at any point. Also *greatest diameter*. (Figure 3).
- Maximum height*: The distance measured from the base of the bottle to the maximum height i.e., the top of the lip (Figure 3). Also called *total height*.
- Membrane*: The liner or secondary closure which adheres to the lip of a bottle or jar and is a separate unit from the lid. It usually is made from paper and must be peeled off or torn through to get to the product.
- Metal*: A glassmaker's term for glass either in the molten or finished state.
- Mold line*: Raised lines or ridges left on the body of a piece of mold-made glass. The marks are created when the hot glass is forced out the interstices between parts of the mold (Figure 3).
- Mouth*: See *top*.
- Neck*: See *finish*.
- Neck diameter*: The diameter measured at the point of junction of the shoulder and the neck (Figure 3).
- Neck height*: Distance measured from the junction of the shoulder and neck to the top of the lip (Figure 3).
- Neck lugs*: Projections or spurs on the bottle neck which act to engage the closure. Interrupted thread projections are often referred to as neck lugs (Figure 2j).
- Neck swirls*: See *swirling*.

Neck wire: In Lightning-type closures, it is the part of the wire holding device which articulates directly with the bottle neck (Figure 3).

Opalescence: Trait due to moisture on the glass surface leaching out or dissolving the soda within the glass and depositing it on the surface of the bottle. Opalescence may take the form of nacreous discoloration or whitish, scale-like patina.

Open pontil mark: See *blowpipe pontil* under *pontil marks*.

Overlay: A method of decorating glass by applying several layers of glass, usually of different colors, then cutting through one or more layers to provide a contrast of hues.

Panel: Square or rectangular insets on one or more sides of rectangular bottles on which are raised letters or figures giving content information, manufacturer, etc.

Paragon: The depression encircling the outside top of continuous thread bottle caps (just below the knurl) designed to give them rigidity (Figure 2k).

Partial height: The distance measured from the base to the maximum height extant short of total height. Used to denote fragment sizes only (Figure 3).

Plate glass: A refined silicate of lime and soda rolled into sheets and used in the better windows and mirrors.

Plating: See *flashing*.

Point of seal: See *sealing surface*.

Pointed base: A bottle base which rather than being round is more plummet- or torpedo-shaped. Also called *torpedo base*.

Polished pontil: See *ground pontil*.

Pontil scar or mark: The irregular scar left on the base of the finished bottle after removal of the pontil (Figure 2p). Pontil marks may be of various types, including a.) *glass-tipped pontil marks* are comparatively small (usually < 30 mm) and characterized by an excess of glass left on the base or by a scar caused by the removal of small bits of glass from the base; b.) *sand pontil marks* are

larger than the glass-tipped ones and consist of a thin line of glass chips encircling the push-up and enclosing a pebbled surface caused by the grains of sand, some sand may be embedded in the base; c.) *blowpipe pontil marks* are distinct ring-shaped marks with the same diameter as the neck; as with the sand pontil, scar glass may be left on or torn out of the base; as the only area of contact is the ring of glass, any markings, etc. remain as undisturbed on the inside as they do outside; also called *tubular pontil scars*; and *open pontil marks*; and d.) *bare iron pontil marks* are circular marks covered with a reddish or black ferric oxide deposit; the push-up associated with this scar is often distorted; also called *improved pontil* or *graphite pontil*.

Prunts: Blobs of glass added as decoration to bottles and glassware and molded into various shapes such as leaves, seals, etc.

Push-up: The characteristic wherein the base of the bottle is pushed up into the body of the bottle forming a more or less deep basal concavity; also called *kick*, *kick-up* (Figure 2l).

Quilting: Wavy lines or ribbons of glass swirled or cross-notched on the outside of a still-hot blown flask as decoration. Also called *trailing*.

Quatrefoil: The impression left in the top of the push-up by a pontil-like rod having its end divided into quadrants.

Ribbing: Protruding ridges on bottles and other glass objects produced either by the use of molds or by tooling.

Rickett's ring: A lettered ring encircling the push-up on the underside of a bottle base usually bearing such information as the address of the manufacturer or the volume of the bottle (Figure 2m).

Rigaree: Parallel lines of ribbons added as decoration to the sides of bottles and glassware.

Rolled edge: The turned in (or out) portion of

- the open end of the closure skirt, usually to form a tubular structure. Also called *curl* or *wire* (Figure 1k).
- Round base:** A bottle base which is completely round having no flat surface at all. This bottle cannot stand on its own.
- Screw band:** A screw-cap, generally used with canning jars, with a cut-out center. It is used to hold down a sealing disc.
- Screw thread, inside:** Where the screw threads for holding the closure are on the inside of the neck.
- Screw thread, outside:** Where the screw threads are on the outside of the bottle neck. They receive screw-on caps rather than stoppers.
- Sealing surface:** The surface of the bottle or jar on which the closure makes maximum or sealing contact. Also called *point of seal*.
- Seam or seam line:** See *date line*.
- Sheared top:** A bottle top that has been cut off by shears while still in a soft state. It may be fire-polished or not.
- Shoulder:** The part of the bottle between the base of the neck and the point on the bottle at which the sides turn inward toward the neck (Figure 3).
- Shoulder seal:** A bottle that makes its seal or point of maximum contact on the apex of the shoulder (Figure 2n).
- Sick glass:** Glass whose surface has been corroded by long exposure to moisture.
- Snap case mark:** Barely noticeable and shallow indentations in the sides of a bottle caused by the snap case grasping the hot, pliable glass.
- Spot crown:** A cork lined crown cap having a smaller disc of aluminum or other material centrally located on the cork liner. These spots prevented the imparting of an off-taste to the bottle contents.
- Stopper:** A closure which fits inside the neck of a bottle rather than atop or outside e.g. a cork, bung, plug, etc.
- Straps:** Flat, wide ridges (or "straps") of glass running vertically up both sides of bottles which are narrower fore and aft than they are left to right. The straps usually measure between $\frac{1}{4}$ and $\frac{1}{2}$ inch in width and up to $\frac{1}{8}$ " thick depending on the bottle size.
- Sun coloring:** Glass turned either amethyst or amber by the action of the sun on manganese oxide and selenium contained therein.
- Swirling:** The vague marks encircling the neck of bottles which have had lips applied by the rotation of a lipping tool. Also called *lipping tool marks*.
- Tears:** Bubbles of air imprisoned in the glass.
- Toggle:** A bottle locking and sealing device consisting of at least two elements, usually wires or bails, which present three fulcrums or centers of force. The familiar lightning closure is one type of toggle (Figure 3).
- Top:** The part of the bottle incorporating the lip and the opening the lip surrounds. Also called *mouth* (Figure 3).
- Top seal:** A bottle that makes its seal or point of maximum contact on the top (Figure 2o).
- Torpedo base:** See *pointed base*.
- Total height:** See *maximum height*.
- Trailing:** See *quilting*.
- Tubular pontil scar:** See *blowpipe pontil scar* under *pontil scar*.
- Vertical mold marks:** Mold marks which run in the direction of the bottle's length.
- Whittle marks:** Rough marks of a stippled or wavy nature on the surface of a hand blown bottle. Actually a misnomer as these marks result from blowing the bottle in a mold which has not been properly warmed. Also called *chip marks* or *cold mold marks*.
- Window glass:** A relatively crude silicate of lime and soda made into window panes.
- Wire:** See *rolled edge*.
- Wired cork stopper:** Cork stoppers which are wired into place on the bottle neck. Modern champagne bottles are usually corked in such a manner (Figure 1g).
- Yoke:** See *bail*.

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